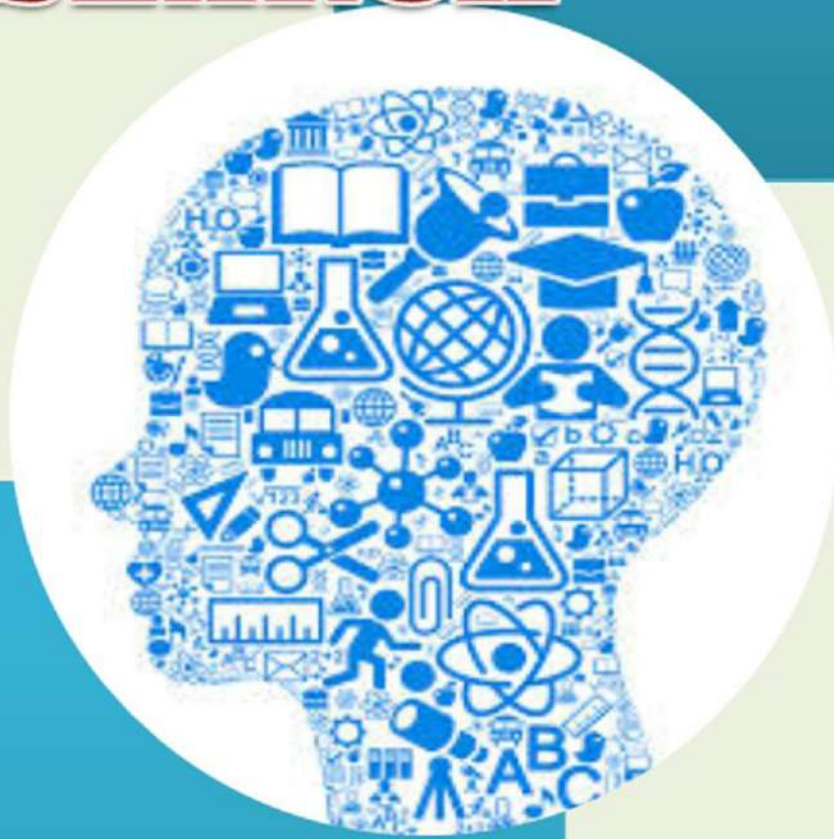


ISSN(O)2347-7075

Impact Factor - 8.141

**INTERNATIONAL  
JOURNAL of  
ADVANCE and  
APPLIED  
RESEARCH**



January- February 2025

Volume - 6 Issue - 16

**YOUNG RESEARCHER ASSOCIATION**

# **International Journal of Advance and Applied Research (IJAAR)**

*A Multidisciplinary International Level Referred and Peer Reviewed  
Journal*

**ISSN-2347-7075**

**Impact Factor-8.141**

**January- February 2025**

**Volume-6**

**Issue- 16**

**Publishedby:**

Young Researcher Association, Kolhapur, Maharashtra, India

**Website:** <https://ijaar.co.in>

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## Principals Desk....

It gives me great pleasure to extend to you all a warm welcome on behalf of all those who have accepted our invitation to convene this One Day's National Conference on 25<sup>th</sup> Feb-2025, an National conference “Sustainable Development In Commerce and Management: Challenge and Opportunities” was organized by Department of Commerce and Management, Savitribai Phule Mahila Mahavidyalaya, Satara, First and foremost, I would like to thank the Guest of honor Hon’ble Shri. Sarang Patil Saheb for Inaugurator of this National Conference as well as Hon’ble Prof. Dr. S. S. Mahajan Dean, Faculty of Commerce and Management, Shivaji University, Kolhapur, our Resource persons Prof. (Dr.) P.M. Kulkarni, Professor in KLS IMER Belgavi (Karnataka), Dr. G. J. Salunkhe, Assistant Professor/Assistant Director, YCSR, Shivaji University, Kolhapur, Dr. Jyoti Howale, Associate Professor, Sinhgad Institute, Pune, Mamata Shaha, Director and Head, Nilaya Foundation, Pune, As well as Dr. T. D. Mahanvar, Head, Department of Commerce, D G College, Satara. Dr. Sarang Bhole Associate Professor, KBPIMSR, Warye, Satara. Also, my sincere thanks owe to Hon’ble Chairman, Shri. Chandrakant Dalavi (IAS Rtd) Vice-Chairman Adv. Bhagirath Shinde, Secretary Shri. Vikas Deshmukh (IAS Rtd) Dr. Anil Patil Sanghatak, Joint Secretary (Hig-Edu) Hon. Prin. Dr. Shivling Menkudale for giving us an opportunity to organize this National event and providing valuable guidance regarding the Conference. Moving further, I would like to appreciate the kindness and sincere efforts of our National advisory and local organizing committee’s members. My team would like to be indebted to all the scholars who have submitted their research papers for publication and showed their sincere interest in the success of this conference. Your genuine feeling is also highly appreciated by our Management. I really appreciate the efforts of Convener Prof. Dr. S.S. Pawar, Co-ordinator Dr. N.D. Banasode and Mr. N. K. Awatade Organizing Secretary and his colleagues, IQAC Chairman Dr. Jayshree Aphale, and Vice Principal Dr. G. S. Bhosale of this college have made painstaking efforts to plan this conference. I also owe due recognition to everyone who is directly or indirectly associated with the organization of this conference.

**JAY KARMAVEER!**

Thank you very much.



From the Editors' Desk .....

It is moment of pride to place before you the issue of *International Journal of Advance and Applied Research* which is focusing on Sustainable Development in Commerce and Management: Challenges and Opportunities. Research can be defined as the search for knowledge to establish novel facts, solve new or existing problems, prove new ideas, or develop new theories, generally using scientific method. Excellence is a performance that is both qualitatively and unquestionably above average. We now live in a push-button era when life is more comfortable and convenient than ever before. This development was made possible by research advances. Excellence in research entails producing work of exceptional quality and originality, as well as producing work that has influenced the agenda for future study and inspired others. The world is changing quickly in the 21st century, and this can be seen in the many ways it is changing. The rapid pace of development has generated numerous issues for which researchers will need to discover answers in the near future. The continuous decline of creativity, innovation, and creative thinking in all fields, including education, is one of our biggest challenges today. Research fosters innovation, creativity, and logical reasoning for the benefit of societal well-being. Academic practice that never ends is research. The field of transformation and helping any country or civilization advance depends heavily on research. This issue contains a collection of academic research articles that highlight topics like artificial intelligence, content analysis in social research, best research practices, innovations in banking, tourism, and a wide range of business and societal issues. We hope the articles contributed by P G students; research scholars and academicians would be immensely readable and beneficial to stakeholders.

**Prof. Dr. S. S. Pawar**

Professor, Head and Vice-Principal  
Deptt. of Commerce and Management  
Savitribai Phule Mahila Mahavidyalaya,  
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## Role of Language in Sustainable Development

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Prin. Dr. Shivling Menkudale<sup>1</sup> & Dr. Naganath Banasode<sup>2</sup>

<sup>1</sup>Principal, Savitribai Phule Mahila Mahavidyalaya, Satara

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DOI - 10.5281/zenodo.15130049

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### Abstract:

*Language plays a crucial role in sustainable development by facilitating communication, enabling access to knowledge and opportunities, and fostering cultural understanding and inclusivity, ultimately contributing to the achievement of the Sustainable Development Goals. Languages are essential for both education and sustainable development, shaping the way people learn, communicate, and engage with society. The world is increasingly aware of its rich cultural, linguistic and biological diversity and their interlinkages. language plays a significant role in the achievement of virtually all the Sustainable development goals (SDGs)- from quality education to healthy living, promotion of peace and inclusive societies, industrialization and innovations ,implementation and revitalization of global partnership and others for the purpose of world transformation.*

**Key Words: Language, Education and Sustainable Development.**

---

### Introduction:

Language is the unique characteristics of human species which serves as a medium of communication. According to Yule (1989), language is a wholly human and non-instinctive way of using intentionally created symbols to communicate thoughts, feelings, and wishes. To communicate both inside and outside of his surroundings, a person needs language. Both verbal and nonverbal forms of language are possible. In contrast to nonverbal language, which uses body language and signals like gestures, facial expressions, and other expressions in communication without using sounds, verbal language uses sounds and symbols in expressions. According to Widowson (1979), all languages are extremely complex and advanced communication systems that can satisfy societal demands for information transmission and reception

as well as emotional expression. Given the importance of human interaction and negotiation in promoting global sustainable development, language as a common language is one that merits consideration. Discussing the importance of language and literacy in sustainable development is the main goal of the article. First of all, it presents the idea of sustainable development and frames language in relation to it. The relationship between language, literacy, and development is then examined, along with how this contributes to the achievement of sustainable development objectives.

### Indian Languages:

Hindi and English are the official languages of India, which has 22 more languages recognized by the Eighth Schedule to the Constitution. Assamese, Bengali, Bodo, Dogri, Gujarati, Hindi,

Kannada, Kashmiri, Konkani, Maithili, Malayalam, Manipuri, Marathi, Nepali, Odia, Punjabi, Sanskrit, Santali, Sindhi, Tamil, Telugu, and Urdu are among the languages spoken here.

### **Concept of Development:**

Development can be defined as the process of improving people's lives on a qualitative level. It is a type of social transformation that results in advancement, knowledge acquisition, and access to resources for a good standard of living. It suggests greater freedom and talent and capability on an individual basis. At the societal level, it entails making use of the resources at hand in order to create a more successful and sustainable society. At the individual level, it encompasses creativity, self-discipline, responsibility, and material well-being.

### **Sustainable Development:**

According to the UN, sustainable development is the organizing principle for achieving human development goals while maintaining natural systems' capacity to deliver the ecosystem services and natural resources that are essential to the economy and society. A civilization where resource utilization and living circumstances continue to satisfy human needs without compromising the stability and integrity of natural systems is the ideal outcome.

### **Importance of Language**

Language is crucial for human communication, cultural preservation, and cognitive development, serving as a foundation for learning, expressing thoughts, and fostering social connections.

#### **1. Communication and Connection:**

Promotes Social Cohesion, Facilitates Interaction, and Transmits Knowledge.

#### **2. Identity and Cultural Preservation:**

Preserves Linguistic Diversity, Reflects

Worldview, and Carry Cultural Heritage.

**3. Cognitive Development and Learning:** The Basis for Literacy, The development of oral language abilities is crucial for literacy, which includes writing and reading. It also improves academic performance and thinking.

**4. Global Understanding and Collaboration:** Opens doors to opportunity, fosters cross-cultural understanding, and facilitates international communication.

### **Role of Languages:**

#### **1. Communication and Knowledge Sharing:**

**Promoting Dialogue:** Since language is the main means of communication, it allows people to exchange ideas, talk about difficulties, and work together to find solutions for problems pertaining to sustainable development.

**Access to Information:** Language competency gives people access to resources, information, and knowledge about sustainable development, enabling them to take part in development processes and make well-informed decisions.

**Crossing Cultural Divides:** Language can help people from various cultures communicate and work together, which is crucial for reaching sustainable development goals.

#### **2. Education and Empowerment:**

**Good Education:** Access to high-quality instruction in one's native tongue or a language that is understood is essential for sustainable growth. Language is a basic educational instrument.

**Development of Skills:** Language proficiency improves economic prospects and employment, supporting long-term livelihoods and economic expansion.

**Empowerment:** Being able to communicate in a language allows people,

especially those from underrepresented groups, to contribute to their communities and engage more fully in society.

### **3. Cultural Preservation and Identity:**

#### **Maintaining Linguistic Diversity:**

Languages are essential to cultural identity and legacy in addition to being a medium of communication. Maintaining cultural legacy and fostering social cohesiveness depend on protecting linguistic diversity.

**Indigenous Knowledge:** Traditional customs, sustainable resource management, and regional ecosystems—all of which are critical to sustainable development—are frequently covered in indigenous languages.

### **4. Economic Growth and Development:**

#### **Foreign Trade and Investment:**

Communication and cooperation between companies and nations are made easier by language proficiency, which is crucial for international trade and investment.

**Tourism:** Being able to communicate in another language might improve travel by fostering cross-cultural interactions and opening up business prospects.

**Innovation & Creativity:** These qualities are essential for sustained development and can be fostered by exposure to many languages and cultures.

### **5. Language's Role in Achieving SDGs:**

Language is crucial to delivering high-quality education in order to guarantee that every student has access to learning in a language they can comprehend. Intergroup cooperation and understanding can be promoted by language, which promotes peace and stability.

Language facilitates collaboration and communication, two essential skills for partnerships to meet the SDGs.

### **Conclusion:**

Language is crucial for sustainable development, enabling communication,

knowledge sharing, and intercultural understanding, which are vital for achieving the UN's Sustainable Development Goals (SDGs). Recognizing the importance of language, particularly local languages, is essential for inclusive and equitable development.

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## The Code On Social Security, 2020 : Challenges And Perspective

---

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DOI - 10.5281/zenodo.15130103

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### **Abstract:**

*THE CODE ON SOCIAL SECURITY, 2020 defines "social security" means the measures of protection afforded to employees, unorganised workers, gig workers and platform workers to ensure access to health care and to provide income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner by means of rights conferred on them and schemes framed, under the Code of social security 2020; also it define "gig worker" means a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship. THE CODE ON SOCIAL SECURITY, 2020 is an Act to revise and combine social security legislation with the intention of providing social security to all workers, whether they are employed by organizations or not, or in any other sector, and for issues related to 29 key legislation pertaining to the welfare of the labor sector, including gig workers and other unorganized workers, are intended to be consolidated under the Code. With the goal of providing social security benefits to as many workers as possible in both the organized and unorganized sectors, the Central Government passed the Code on Social Security, 2020 ("Code") in order to update the antiquated labor and employment law laws pertaining to social security.*

---

### **Introduction:**

THE CODE ON SOCIAL SECURITY, 2020 defines "social security" means the measures of protection afforded to employees, unorganised workers, gig workers and platform workers to ensure access to health care and to provide income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner by means of rights conferred on them and schemes framed, under the Code of social security 2020; also it define "gig worker" means a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-

The fast expansion of the internet and the employee relationship. THE CODE ON SOCIAL SECURITY, 2020 is an Act to revise and combine social security legislation with the intention of providing social security to all workers, whether they are employed by organizations or not, or in any other sector, and for issues related to 29 key legislation pertaining to the welfare of the labor sector, including gig workers and other unorganized workers, are intended to be consolidated under the Code. With the goal of providing social security benefits to as many workers as possible in both the organized and unorganized sectors, the Central Government passed the Code on Social

Security, 2020 ("Code") in order to update the antiquated labor and employment law laws pertaining to social security.

The Code has repealed the following 9 (nine) major labour law legislations: (i) The Employee's Compensation Act, 1923; (ii) The Employees' State Insurance Act, 1948; (iii) The Employees' Provident Funds and Miscellaneous Provisions Act, 1952; (iv) The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959; (v) The Maternity Benefit Act, 1961; (vi) The Payment of Gratuity Act, 1972; (vii) The Cine-Workers Welfare Fund Act, 1981; (viii) The Building and Other Construction Workers' Welfare Cess Act, 1996; and (ix) The Unorganized Workers' Social Security Act, 2008.

### **Important Points in the 2020 Social Security Code:**

The Code expands the definition of employees to encompass platform workers, construction workers, migrant workers from other states, and workers in the film sector.

Additionally, it allows for the registration of all three types of workers: platform, gig, and unorganized workers. People who don't fit into the traditional "employer-employee relationship" are known as gig workers. Similar to gig workers, platform workers use an online platform to reach businesses or individuals and offer their skills in exchange for cash.

Any employee who works in the unorganized sector is considered an unorganized worker, including those who are exempt from the Industrial Disputes Act of 1947 or other Bill provisions (such as provident fund or gratuity). It also includes self-employed workers. In order to give workers these benefits, the Code calls for the establishment of a social security

fund. Both the federal and state governments, as well as CSR financing, will contribute to this fund. Digital middlemen that hire gig workers, known as aggregators, will be required to pay at least 1-2 percent of their yearly revenue to this social security fund, with a maximum contribution of 5% of the total amount owed to the workers.

The government may announce programs for gig workers, platform workers, and unorganized sector workers (such as independent contractors and home-based workers). A 'National Social Security Board' is also to be established, according to the Code. Among the Board's duties are suggesting programs to the federal government, keeping an eye on the programs for various worker kinds, and Consult the government on issues related to code management

### **The Significance of the Social Security Code:**

The code is more than just the consolidation of previous legislation. It expands coverage, expands the benefits for all employees of organized/unorganized sectors, introduces the concept of providing maximum advantages in minimal management and reflects uniformity in four labor codes.

#### **Expanded coverage:**

With the advent of new companies based on e-commerce, new types of jobs have been created. Some employees of these new companies are not covered by any of the existing laws. The new social insurance code widens the social security sphere, providing the registration of all types of employees, including concert workers and platform workers. The recognition of non-traditional forms of work apart from the scope of the traditional employer and employee



agreement is a positive step, as there is a global tendency to self-employment, to work during A concert and to work on the platform. Concert agents have the rights to life and disability insurance, pregnancy services, and pensions.

This code extends coverage by including unorganized sectors, fixed-term workers, inter-letarily migrant workers, and more. In addition to contract employees. From a coating perspective, the volume has increased significantly.

Social Security Code, 2020, will provide these employees within the framework of the Social Security Scheme, including Life and Life Insurance and Disability Insurance, Medical and Material Benefits, Support Funds, Advanced Training.

#### **Protection of employee rights with a fixed deadline:**

The code extends the coating to include employees of a fixed contract, which will now have the right to reward; Previously, only regular employees were covered.

The battle wind is given in a pension, a retirement, a resignation, a death or a handicap due to an accident or an illness, a termination of the contract in accordance with the fixed employment or the occurrence of a event notified by the central government. Including fixed employment periods is the right to compensate workers who have signed a fixed emergency contract. This is a positive development.

#### **Penal provisions:**

The validity of the law lies in its simplicity, as well as fines that limit non-compliance. The code includes these two aspects: The code contains criminal provisions in the event of non-comparison for employees or the inability to pay the contributions.

#### **Digitalization:**

The law requires that all records and refunds be stored electronically. Dokidori Digitalization contributes to the exchange of information between various stakeholders/funds created by the government, ensuring compliance and management support.

#### **Uniform definition:**

This code provides uniformity in determining Social Security benefits pay and eliminates current regulations ambiguity. A wide range of definitions of salary are provided. Certain exclusions with ceilings are provided to discourage inappropriate structuring of wages to minimize social security services.

#### **Advisory Approach:**

The code introduces power capabilities. Unlike the existing roles of inspectors, the code offers an expanded role for inspectors and facilitators thanks to the ability of employers to seek support and tips for improving compliance.

#### **Challenges of the Code on Social Security, 2020:**

##### **Ignoring important recommendations of the National Commission on Labour:**

Recommendations by the National Commission on Labour

The National Commission on Labour (2002) (NCL) underscored the need for universal and comprehensive social security coverage to prevent workers from being deprived of their basic needs. It recommended the simplification and consolidation of existing laws to achieve this. The NCL has recommended that: (i) the social security system should apply to all establishments, (ii) existing salary ceilings for coverage must be deleted and (iii) there should be a functional integration of the Administration of existing diagrams. In

addition, each employer and employee can make a single contribution to all the advantages, with a ceiling prescribed for such contributions.

The code largely retains the existing configuration and does not fully implement the NCL recommendations.

The code continues to keep thresholds according to the size of the establishment to make certain advantages compulsory. Benefits such as pensions and health insurance are only required for institutions with a minimum number of employees (e.g. 10-20 employees). All other categories of employees (i.e., unorganized workers are those who work in agencies with fewer than 10 employees or self-employed employees in government-informed discretionary systems. Can be covered. Thus, a large number of workers may continue to be excluded.

The code continues to treat employees within the same establishment differently based on the amount of wages earned. For example, the support fund, pension and medical insurance benefits are required only for employees who make a higher threshold (as the government can be notified) in the relevant institutions.

The code continues to maintain the existing fragmented settings to provide social security benefits.

#### **Unknown provisions on concert employees and platform workers:**

The code introduces definitions for an employee of concerts, a platform employee and requires various schemes for all these categories of employees. However, there may be some coincidence between their definitions. With such a coincidence, it is unclear between the definitions how the schemes specific to these categories of employees will be applied.

#### **Unknown provisions on remuneration for workers with a fixed deadline:**

The Code of Social Safety and the Code in relation to industrial relations, 2020 has various provisions on remuneration for workers with a fixed date. It is unclear whether fixed-term employees with contracts of less than one year are entitled to save money pursuant to Social Security Act 2020.

#### **Mandatory binding with Aadhaar may violate the decision of the Supreme Court:**

The code prescribes an employee or an employee (including an unorganized employee) to provide his Aadhaar number to receive social security benefits. This may violate the decision of the Supreme Court in the Puttasvami case. In its decision, the court held that the Aadhaar card is mandatory only for the costs of grants, allowances or services incorporated from the Integrated Fund in India. Certain rights, such as the Compensation and Support Fund (PF), are funded by employers and employees, and must be violated by Aadhaar's decision regarding the use of such rights, not by the Integrated Fund of India. Because of that.

#### **Conclusion**

Social Security Act, 2020, covers most working groups, and is definitely a positive step to ease fitness and versatility. Creating a regulatory body to manage the code will help you separately monitor the presence of wells in your employees, and we recommend monitoring the effectiveness of the scheme.

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**Sustainable Entrepreneurship Development: Challenges, Opportunities,  
and the Path to a Resilient Future in Commerce and Management**

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DOI - 10.5281/zenodo.15130115

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**Abstract:**

*Sustainable entrepreneurship development has emerged as a pivotal element in contemporary commerce and management, aiming to integrate economic growth with environmental and social responsibility. In the face of global challenges such as climate change, resource depletion, and social inequalities, sustainable entrepreneurship provides a viable approach for businesses to align profitability with sustainability. This paper explores the multifaceted nature of sustainable entrepreneurship development, analyzing the various challenges and opportunities it presents within the framework of commerce and management.*

*Entrepreneurs play a critical role in fostering sustainable business practices by integrating eco-friendly operations, innovative business models, and ethical management. The objective of this paper is to highlight the key elements of sustainable entrepreneurship, emphasizing its significance in promoting long-term business viability while addressing societal and environmental concerns. Through an in-depth analysis, this study delves into the objectives of sustainable entrepreneurship development, its core components, and how businesses can strategically implement sustainable practices to gain competitive advantages.*

*Additionally, this paper investigates the challenges entrepreneurs face in adopting sustainable strategies, including financial constraints, market resistance, and policy limitations. At the same time, it sheds light on the vast opportunities that sustainable entrepreneurship presents, such as green innovation, government incentives, and changing consumer preferences. By examining real-world case studies and empirical evidence, this paper aims to provide a comprehensive understanding of how sustainable entrepreneurship can be a game-changer in modern commerce and management. The study concludes by emphasizing the need for a holistic approach involving policymakers, businesses, and consumers to drive sustainable entrepreneurship forward.*

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**Introduction:**

Sustainability has become an indispensable aspect of modern business practices, transforming the traditional paradigms of commerce and management. The advent of globalization and technological advancements has facilitated rapid industrial growth; however, this progress has also raised significant concerns regarding

environmental degradation, climate change, and social inequalities. As a result, sustainable entrepreneurship has emerged as a promising approach that balances economic growth with social and environmental responsibility.

Sustainable entrepreneurship is a business approach that seeks to create long-term value by integrating economic, environmental, and social considerations

into business operations. Unlike conventional entrepreneurship, which primarily focuses on profit maximization, sustainable entrepreneurship emphasizes responsible business practices that benefit society and the planet. Entrepreneurs engaged in sustainable development prioritize ethical sourcing, green innovations, renewable energy, and circular economy models to reduce their carbon footprint and create positive social impacts.

In commerce and management, sustainable entrepreneurship is gaining traction as businesses realize the potential of aligning their strategies with sustainability goals. Governments and international organizations are increasingly advocating for sustainable business models through regulatory frameworks, incentives, and policy support. In this context, understanding the role of sustainable entrepreneurship in commerce and management is crucial for fostering a resilient and responsible business ecosystem.

This paper aims to explore the various dimensions of sustainable entrepreneurship development, focusing on its objectives, challenges, and opportunities. By analyzing the core principles of sustainable entrepreneurship and providing empirical evidence, this study seeks to demonstrate how businesses can integrate sustainability into their operations to achieve long-term success. Moreover, the paper highlights the need for collaboration between entrepreneurs, policymakers, and consumers to drive sustainability initiatives effectively.

### **Objectives of Sustainable Entrepreneurship Development:**

#### **1. Promote Environmental Sustainability**

Sustainable entrepreneurs focus on reducing environmental degradation by adopting eco-friendly business practices, minimizing waste, utilizing renewable resources, and promoting a circular economy.

#### **2. Encourage Ethical Business Practices**

Business ethics and corporate responsibility play a significant role in sustainable entrepreneurship. Entrepreneurs are encouraged to ensure transparency, fair trade, and ethical labor practices in their business operations.

#### **3. Enhance Economic Growth and Innovation**

Sustainable entrepreneurship fosters economic growth by introducing innovative solutions that address environmental and social challenges. Green technologies and sustainable business models contribute to overall economic progress.

#### **4. Create Employment Opportunities**

Sustainable businesses generate employment in various sectors, including renewable energy, waste management, and green technologies, thereby enhancing economic development and improving livelihoods.

#### **5. Foster Social Responsibility and Community Development**

Sustainable entrepreneurs engage with communities, supporting social causes, fair wages, and inclusive business practices to foster social equity and well-being.

#### 6. **Encourage Policy and Regulatory Compliance**

Government regulations and sustainability policies require businesses to adopt responsible business practices. Sustainable entrepreneurs align their strategies with local and global regulations to ensure long-term business viability.

#### 7. **Facilitate Access to Sustainable Finance and Investment**

Entrepreneurs require financial support to implement sustainable business models. Access to green investments, impact funds, and government grants facilitates sustainable entrepreneurship.

#### **Sustainable Entrepreneurship Development:**

Sustainable entrepreneurship development integrates economic, environmental, and social factors to create a balanced and progressive business model. Entrepreneurs leverage sustainability principles to drive innovation, efficiency, and long-term growth. Implementing sustainable entrepreneurship involves multiple strategies, including:

- **Green Technology Adoption:** Utilizing energy-efficient and renewable energy sources.
- **Sustainable Supply Chains:** Ensuring responsible sourcing and waste reduction.
- **Corporate Social Responsibility (CSR):** Engaging in social and environmental welfare programs.
- **Circular Economy Practices:** Reducing waste by reusing and recycling materials.

- **Consumer Awareness and Education:** Promoting sustainable products and services.

#### **Challenges in Sustainable Entrepreneurship Development:**

Despite its benefits, sustainable entrepreneurship faces several challenges:

1. **Financial Constraints** Sustainable entrepreneurship often requires significant initial investment in green technologies, renewable energy sources, and sustainable production methods. Accessing capital remains a major hurdle for many entrepreneurs, as traditional investors and financial institutions often hesitate to fund projects with long-term sustainability goals over short-term profitability. The high costs associated with sustainable infrastructure, certification processes, and compliance further exacerbate the financial burden on startups and small businesses.
2. **Market Resistance** Despite growing awareness of environmental concerns, many consumers remain skeptical about sustainable products due to perceived high costs, lack of trust in eco-labeling, or limited availability. Overcoming market resistance requires strategic consumer education, transparent communication about product benefits, and competitive pricing to shift purchasing behaviors towards sustainability-focused brands.
3. **Regulatory Barriers** Governments across the globe are enforcing stringent sustainability regulations to combat environmental degradation. However, compliance with these regulations often demands significant effort and resources. Entrepreneurs must navigate complex legal

frameworks, obtain multiple certifications, and invest in environmentally friendly processes, which can be challenging, particularly for small enterprises.

4. **Lack of Awareness** Many entrepreneurs lack the necessary knowledge and understanding of sustainable business practices. Limited access to sustainability education, training programs, and resources prevents businesses from fully leveraging sustainability principles in their operations. Addressing this challenge requires extensive knowledge-sharing initiatives and capacity-building programs for aspiring entrepreneurs.
5. **Technological Challenges** The development and implementation of sustainable technologies involve significant research and innovation. The high costs of developing renewable energy solutions, waste management technologies, and biodegradable materials make it difficult for small businesses to adopt these advancements. Additionally, the lack of technical expertise in handling sustainable technologies poses another major challenge.
6. **Cultural Resistance** Many traditional business models are deeply ingrained in profit-driven strategies that do not prioritize sustainability. Changing this mindset requires a fundamental shift in corporate culture, where sustainability is embedded into core business values and operational frameworks. Resistance from stakeholders, employees, and customers can make this transition difficult.

### **Opportunities in Sustainable Entrepreneurship Development:**

Sustainable entrepreneurship presents numerous opportunities:

1. **Green Innovation** The rise of green technology has opened new avenues for sustainable entrepreneurship. Innovations in clean energy solutions, such as solar and wind power, as well as advancements in sustainable packaging and biodegradable materials, offer immense growth potential for businesses adopting eco-friendly practices.
2. **Government Incentives** Many governments are providing financial support, tax benefits, and grants to promote sustainability-focused businesses. Entrepreneurs can leverage these incentives to offset initial costs, invest in green technologies, and expand their sustainable business models.
3. **Changing Consumer Preferences** The increasing awareness of environmental issues has led to a shift in consumer preferences toward sustainable products and ethical brands. Businesses that adopt sustainable practices stand to gain a competitive edge by aligning with consumer values and tapping into emerging green markets.
4. **Global Sustainability Initiatives** International organizations such as the United Nations and the World Bank support sustainable entrepreneurship through collaborative programs, policy advocacy, and funding opportunities. Entrepreneurs can benefit from these initiatives to scale their sustainable ventures.
5. **Corporate Partnerships** Businesses are increasingly engaging in

collaborations to promote sustainability. Large corporations partner with startups and SMEs to enhance sustainability goals, providing opportunities for knowledge-sharing, resource pooling, and joint innovation.

6. **Technological Advancements** Digital tools and AI-driven analytics enable businesses to monitor, optimize, and improve their sustainability performance. Entrepreneurs can leverage these advancements to enhance operational efficiency, reduce waste, and track carbon footprints.

### Conclusion:

Sustainable entrepreneurship development is essential for achieving economic growth while ensuring environmental and social sustainability. Despite the challenges, the opportunities for sustainable entrepreneurs are vast. Businesses that embrace sustainability not only contribute to societal well-being but also gain competitive advantages in the global market. Governments, businesses, and consumers must work together to foster an ecosystem where sustainable entrepreneurship can thrive. By prioritizing sustainability in commerce and management, we can pave the way for a more responsible and resilient future. Here are some references that you can use to support your paper on sustainable entrepreneurship development:

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These references include academic journals, books, and reports from authoritative sources. You may need to format them in a specific citation style (APA, MLA, Harvard, etc.) based on your requirements. Let me know if you need further assistance!





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## Recent Trends and Challenges in Commerce

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DOI - 10.5281/zenodo.15130123

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### **Abstract:**

*Communication is considered an important tool of commerce. Communication can be done properly based on the concept of commerce. Commerce sector is now considered very important. The field of commerce is getting wider and wider. Commerce and management are two sides of the coin. The commercial sector has gained special importance in the context of modernization. There have been many changes since the barter stage till now. Transactions are completed with cash as well as credit. While working in the field of commerce, many functions like planning, controlling, coordinating, directing, coordinating, communicating are completed in management.*

**Keywords-** e-commerce, e-banking etc.

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### **Introduction:**

Globalization, privatization and liberalization policies have increased the competition to a fierce and deadly nature. At the same time, many problems have arisen in front of the business due to the use of advanced technology, continuous changes in the business environment, changing perception of customers, global events etc. Many different activities are performed in business. Due to commercial activities it will be possible to make many different changes in the society. The researcher has made an honest attempt to introduce new changes and methods that will be in the field of commerce.

### **Significance of the study:**

Commerce sector is helping to get many types of employment. It has become necessary to study the field of commerce in a very comprehensive manner. Through this research, the researcher has tried to make a commercial presentation very honestly. The changes taking place in the commerce sector are sure to be very useful

and employment generating. This research topic will definitely be an inspiration to the youth in the future.

### **Research Methodology:**

The present study is based on secondary source of data. Secondary data is collected through various books, Journals, Websites and Internet. For the collection of primary data the researcher has paid visit to market committees (Secretary), farmers and agents. It is after having detailed discussion the present data is collected.

### **Data collection:**

#### **1. Primary Data:**

For the collection of primary data the researcher has paid visit to research related institutions. It is after having detailed discussion the present data is collected.

#### **2. Secondary Data:**

The secondary data is derived from the following sources:

1. Books

2. Magazines
3. Journals
4. News paper

**Meaning:**

The commerce sector has been evolving rapidly, influenced by technological advancements, changing consumer behavior, and global economic conditions. Here are some recent trends and challenges:

**Recent Trends:**

**1. E-commerce Growth:** The shift towards online shopping has accelerated, with more consumers preferring the convenience of digital purchases. Mobile commerce (m-commerce) is also on the rise, driven by smartphone usage.

**2. Omni channel Retailing:** Retailers are adopting Omni channel strategies, integrating physical stores with online platforms to provide a seamless shopping experience. This includes click-and-collect services and unified inventory management.

**3. Personalization:** Businesses are leveraging data analytics and AI to offer personalized shopping experiences. Tailored recommendations and targeted marketing help enhance customer engagement and loyalty.

**4. Sustainability:** Consumers are increasingly prioritizing sustainability. Brands that adopt eco-friendly practices, such as sustainable sourcing and reducing carbon footprints, are gaining favor.

**5. Social Commerce:** The use of social media platforms for direct sales is growing. Features like shoppable posts on Instagram and Facebook are enabling brands to reach consumers where they spend a significant amount of time.

**6. Subscription Models:** Subscription services are becoming popular across

various sectors, providing consumers with convenience and exclusive offerings. This trend is seen in beauty, food, and entertainment sectors.

**7. Digital Payment Solutions:** The adoption of digital wallets, contactless payments, and crypto currencies is changing the payment landscape, making transactions faster and more secure.

**Challenges:**

**1. Supply Chain Disruptions:** Global events, such as pandemics and geopolitical tensions, have exposed vulnerabilities in supply chains, leading to delays and increased costs.

**2. Cyber security Threats:** As commerce increasingly moves online, businesses face heightened risks of cyber-attacks. Protecting customer data and ensuring secure transactions are critical.

**3. Changing Consumer Expectations:** Consumers expect fast shipping, flexible return policies, and excellent customer service, putting pressure on retailers to meet these demands.

**4. Regulatory Compliance:** Businesses must navigate a complex landscape of regulations, including data protection laws (like GDPR), which can vary by region.

**5. Market Saturation:** With the low barrier to entry in e-commerce, many markets are becoming saturated, making it difficult for new entrants to compete.

**6. Adapting to Technology:** Keeping up with rapid technological advancements requires continuous investment in new tools and training for staff, which can be a challenge for smaller businesses.

**7. Economic Uncertainty:** Fluctuating economic conditions, inflation, and changing consumer spending patterns can impact sales and profitability.

Commerce refers to the activity of buying and selling goods and services,

typically on a large scale. It encompasses all the processes involved in the exchange of products, from production and distribution to marketing and sales. Commerce can occur in various forms, including:

**1. Retail Commerce:** Selling goods directly to consumers through physical stores or online platforms.

**2. Wholesale Commerce:** Selling goods in bulk to retailers or other businesses rather than to individual consumers.

**3. E-commerce:** Conducting business transactions over the internet, which includes online retailing, digital marketplaces, and electronic payment systems.

**4. B2B Commerce:** Business-to-business transactions where companies sell products or services to other businesses.

**5. B2C Commerce:** Business-to-consumer transactions where businesses sell directly to consumers.

**6. C2C Commerce:** Consumer-to-consumer transactions, often facilitated by online platforms (e.g., eBay, Craigslist). Overall, commerce plays a crucial role in the economy by facilitating trade, contributing to economic growth, and providing consumers with access to a wide variety of goods and services.

The future of commerce is expected to be shaped by several emerging trends and technological advancements. Here are some predictions on what might happen:

**1. Increased Automation and AI Integration:** Artificial Intelligence: More businesses will leverage AI for personalized shopping experiences, customer service (like chatbots), inventory management, and data analytics.

**Robotics:** Automation in warehouses and fulfillment centers will streamline

operations, reduce costs, and improve efficiency.

**2. Expansion of E-commerce:** Continued Growth: E-commerce will likely continue to grow, with more consumers opting for online shopping. This growth will be driven by advancements in logistics and delivery services. Augmented Reality (AR) Retailers may use AR to enhance online shopping experiences, allowing customers to visualize products in their own environments before purchasing.

**3. Sustainability Focus:** Eco-friendly Practices: Companies will increasingly prioritize sustainable practices in sourcing, production, and packaging, responding to consumer demand for environmentally responsible products. Circular Economy: More businesses may adopt circular economy models, emphasizing recycling, reusing, and reducing waste.

**4. Omni channel Experience Enhancement -Seamless Integration:** Retailers will work towards providing a seamless shopping experience across online and offline channels, using technology to unify customer interactions. Personalized Customer Journeys: Enhanced data analytics will enable businesses to create more tailored shopping experiences, improving customer satisfaction and loyalty.

**5. Rise of Social Commerce:** Shopping on Social Media: Social media platforms will further integrate shopping features, allowing consumers to make purchases directly from their feeds.

**Influencer Marketing:** Brands will continue to collaborate with influencers to reach broader audiences and engage consumers in authentic ways.

**6. Digital Payment Innovations: Cryptocurrencies:** The acceptance of crypto currencies and block chain technology may become more mainstream, offering

new payment options and enhancing transaction security. Contactless Payments: The use of contactless payment methods will likely increase, driven by consumer preferences for convenience and safety.

**7. Globalization and Localization:** Cross-border E-commerce: Businesses will increasingly cater to global markets, facilitated by improved logistics and payment solutions. Localized Offerings: At the same time, there will be a trend towards tailoring products and marketing strategies to local markets and cultures.

**8. Enhanced Customer Experience:** Frictionless Shopping: Businesses will strive to eliminate friction in the shopping process, making it easier for customers to find, purchase, and receive products.

**9. Customer Engagement:** Interactive and immersive experiences, such as virtual try-ons and live shopping events, will become more prevalent.

**10. Cyber security Enhancements:** Focus on Security: As online commerce grows, businesses will invest more in cyber security measures to protect customer data and build trust.

### **Conclusion:**

The commerce sector is dynamic, with ongoing trends that bring both opportunities and challenges. Businesses that innovate and adapt to these changes while prioritizing customer experience and sustainability are likely to thrive in this evolving landscape. The future of commerce is likely to be characterized by technological innovation, a focus on sustainability, and an emphasis on customer experience. Adapting to these

changes will be crucial for businesses aiming to thrive in an increasingly competitive landscape.

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## The Significance of Ethical Leadership in Contemporary Organizations

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**DOI - 10.5281/zenodo.15130129**

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### **Abstract:**

*Ethical leadership is essential in cultivating a responsible and positive organizational culture. At its heart, ethics involves the ability to distinguish between right and wrong, and leaders who embrace ethical principles steer their organizations with integrity. Ethical leaders champion values such as transparency, fairness, and accountability—critical elements for long-term success. As corporate social responsibility gains prominence, the need for strong ethical practices becomes even more vital. This paper examines the role of ethical leadership in modern organizations, emphasizing the creation of a values-driven environment that fosters ethical decision-making, learning, and organizational growth.*

**Keywords:** *Ethical leadership, organizational culture, employee motivation, corporate social responsibility and leadership values.*

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### **Introduction:**

In today's rapidly evolving business world, ethical leadership has become a cornerstone of responsible management. Grounded in self-awareness, moral integrity, and fairness, ethical leadership enables leaders to shape organizational cultures where trust, motivation, and collaboration thrive. Leaders who prioritize ethical practices emphasize the collective success of their organization over individual gain, leading to higher productivity, greater employee engagement, and long-term sustainability. The increasing visibility of organizations in the digital and globalized era makes ethical leadership more crucial than ever. Ethical missteps are quickly exposed, making strong leadership in this area not only necessary for maintaining a reputation but also for achieving success in the modern business environment.

This paper investigates the impact of ethical leadership on organizational effectiveness and the importance of leaders consistently demonstrating their

commitment to ethical standards in both decisions and actions.

### **Literature Review:**

- 1. Ethical Leadership and Organizational Trust** Brown and Treviño (2006) highlight that ethical leadership is essential for building trust within organizations. Leaders who demonstrate fairness, transparency, and integrity inspire trust among employees, fostering a positive organizational culture. This trust leads to higher employee commitment, satisfaction, and overall organizational success.
- 2. Corporate Social Responsibility and Ethical Leadership** Maak and Pless (2006) discuss the connection between ethical leadership and corporate social responsibility (CSR). Ethical leaders advocate for CSR initiatives that benefit society and the environment, aligning the organization's values with societal expectations. This approach not only ensures long-term sustainability but also contributes to organizational success by addressing broader stakeholder concerns.

**3. Ethical Leadership and Organizational Culture** Northouse (2021) emphasizes the role of ethical leadership in shaping organizational culture. Ethical leaders set an example by modeling responsible behavior, which influences employee values and actions. This results in a culture centered around accountability, transparency, and responsibility, ultimately leading to improved organizational performance and success.

#### Objectives of the Study:

1. To assess the impact of ethical leadership on organizational culture and employee motivation.
2. To examine the contribution of ethical decision-making to sustainable growth and corporate social responsibility.

#### Hypothesis:

"Ethical leadership is crucial for cultivating a positive organizational culture,

improving employee motivation, and ensuring long-term organizational success."

#### Research Methodology:

This study examines ethical leadership across industries using a mixed-methods approach. Primary data was collected through a survey of 250 respondents in Dhule District, Maharashtra, focusing on ethical practices, leadership styles, and organizational culture. Secondary data from academic sources and industry reports provided context and comparisons. Quantitative analysis was used for survey data, while qualitative techniques interpreted secondary data, offering a comprehensive view of ethical leadership's impact on organizational performance.

#### Findings:

Survey results reflect diverse views on ethical leadership from professionals, industrialists, and managers. The key findings include:

**Table 1: Industrialist/Management Persons Responses**

Ethical Leadership Aspect	Yes (%)	No (%)
Integration of ethics into daily business practices	82	18
Necessity of managerial ethics in organizations	93	7
Ethical leadership contributes to increased productivity	75	25
Ethics positively influence employee motivation	68	32
Support for adopting ethical leadership in organizations	88	12

(Source: Personnel Interview)

The following chart represents the findings of the survey conducted on ethical leadership in organizations.

**Graph 1: Industrialist/Management Persons Responses**



### Analysis of Findings:

- **Strong Support for Managerial Ethics:** A large 93% of respondents emphasized the importance of managerial ethics in maintaining organizational integrity and achieving long-term success. This shows that a majority of respondents recognize the central role ethics play in leadership and organizational culture.
- **Ethics and Productivity:** While 75% of respondents agree that ethical leadership enhances productivity, 25% expressed skepticism. This suggests that while ethical practices are recognized for their positive effects on productivity, some believe that other factors (such as technology, skills, or market conditions) may have a greater influence on organizational performance.
- **Employee Motivation and Ethics:** 68% of respondents believe ethical leadership positively influences employee motivation, although the remaining 32% disagree. The discrepancy might reflect varying perceptions of how organizational ethics are implemented or the influence of other motivational factors such as compensation and career development opportunities.
- **Adoption of Ethical Leadership:** A majority (88%) of respondents support adopting ethical leadership in organizations. This strong response highlights a growing awareness of the benefits of ethical practices, with organizations more likely to implement them as part of their long-term strategic goals.

### Leadership Values in Ethical Leadership:

To successfully integrate ethical leadership, organizations must define their core values and encourage open communication. Ethical leadership involves not only making the right decisions but ensuring these decisions align with the organization's mission and values. Core

leadership values are pivotal in shaping an ethical culture, including:

- **Proactive Decision-Making:** Ethical leaders must not only react to immediate challenges but also anticipate potential issues and opportunities. By analyzing both short-term and long-term impacts, they make informed, forward-thinking decisions that are aligned with the organization's vision and strategic objectives. This proactive stance helps prevent ethical dilemmas before they arise and ensures consistency in decision-making.
- **Personal Accountability and Efficiency:** Ethical leaders are role models of responsibility. They hold themselves accountable for both their successes and failures, creating an environment where others feel encouraged to do the same. When leaders exhibit personal accountability, it fosters a culture of responsibility throughout the organization. Furthermore, ethical leaders help ensure that employees understand their role in contributing to the organization's goals, leading to higher efficiency and overall performance.
- **Recognition of Ethical Behavior:** Acknowledging and rewarding ethical decision-making is a critical aspect of ethical leadership. Leaders should not only set expectations but also celebrate individuals or teams who exemplify ethical behavior. This recognition can take the form of formal awards, public acknowledgment, or integration into performance evaluations. Such efforts signal to employees that ethical behavior is as highly valued as business outcomes, reinforcing the desired organizational culture.
- **Integrity, Reliability, and Compassion:** Integrity is the cornerstone of ethical leadership. Leaders who demonstrate integrity build trust and inspire confidence among

employees and stakeholders. Reliability means fulfilling promises and commitments, creating a stable and predictable environment. Compassion reflects the leader's concern for the well-being of employees, encouraging a supportive work atmosphere that promotes emotional and mental wellness, leading to higher levels of employee satisfaction.

- **Commitment to Inclusivity and Diversity:** Ethical leaders actively foster an inclusive workplace where diverse perspectives are valued. This diversity enriches the decision-making process and enhances creativity, enabling organizations to respond more effectively to a wide range of challenges. Inclusivity also ensures that employees from all backgrounds feel respected, which boosts morale, reduces turnover, and enhances collaboration. By prioritizing inclusivity, leaders demonstrate that the organization values the contributions of all employees.
- **Ethical Role Modeling:** Ethical leaders set the tone for the entire organization through their actions, not just their words. By embodying the ethical standards they set for the organization, they create a "trickle-down effect" where employees replicate the behaviors and practices they observe in their leaders. This role modeling is one of the most powerful tools in embedding an ethical culture across all levels of the organization.

By adopting and promoting these leadership values, ethical leaders help shape a work culture built on trust, respect, and fairness. This not only improves decision-making and workplace morale but also drives sustainable growth and innovation.

### **Organizational Advantages of Ethical Leadership:**

Adopting ethical leadership brings several organizational benefits, impacting

areas beyond profit generation. These advantages include:

1. **Competitive Advantage:** Ethical organizations enjoy strong reputations that resonate with today's ethically conscious consumers. As more people make purchase decisions based on corporate values, ethical behavior becomes a competitive differentiator. Ethical leadership can attract loyal customers who align with the company's values, resulting in increased sales, customer loyalty, and sustainable growth. A commitment to ethical practices also positions the organization as a preferred business partner, enhancing its network and market presence.
2. **Attraction and Retention of Top Talent:** Organizations that demonstrate ethical leadership and social responsibility are more likely to attract and retain top talent. Employees seek workplaces where they feel their values align with the organization's mission and where they can contribute to meaningful work. Ethical leadership fosters an environment where employees are motivated, engaged, and satisfied with their roles, significantly reducing turnover and recruitment costs. High ethical standards also support a positive employer brand, helping companies secure top candidates in a competitive labor market.
3. **Investment Appeal:** Ethical leadership makes organizations more attractive to investors who are increasingly seeking companies with sustainable, responsible business practices. Investors are wary of companies with ethical lapses, as they can negatively impact profitability, brand reputation, and stock value. Ethical companies not only appeal to socially conscious investors but also demonstrate a commitment to long-term financial health, which can result in more stable and diverse investment. The ability to secure ethical investments



supports sustainable business operations and growth.

4. **Enhanced Employee Morale and Organizational Culture:** Ethical leadership positively affects employee morale, job satisfaction, and overall organizational culture. When leaders prioritize ethical practices, employees feel more secure in their work environment, leading to increased trust, collaboration, and innovation. A strong ethical culture fosters a sense of belonging and loyalty among employees, which translates into improved job performance, higher productivity, and a positive organizational climate.
5. **Improved Reputation:** A well-established reputation for ethical conduct is one of the most valuable assets an organization can have. Ethical organizations are less likely to experience public scandals or crises, and when challenges do arise, they are better equipped to handle them transparently and responsibly. Companies with a solid ethical reputation often benefit from public forgiveness in times of crisis, whereas organizations that engage in unethical practices may suffer irreversible reputational damage. A positive reputation enhances customer loyalty, attracts investors, and fosters goodwill within the community.

### Conclusion:

In today's dynamic business environment, ethical leadership is not merely a moral obligation but a strategic asset that drives long-term success. By prioritizing ethical principles such as transparency, fairness, and ethical decision-making, leaders create organizations that are more resilient, innovative, and trusted by stakeholders. Ethical leadership not only builds trust and enhances performance but

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6. **Legal and Regulatory Compliance:** As global standards for corporate responsibility and transparency continue to evolve, organizations will be required to meet stricter legal and regulatory requirements concerning ethics and social responsibility. Ethical leadership ensures that an organization stays ahead of regulatory changes, minimizing the risk of fines, legal actions, or damage to reputation. By fostering a culture of ethics, companies can navigate the complex legal landscape with confidence, ensuring compliance and avoiding legal pitfalls.
7. **Creating a Lasting Legacy:** Ethical leadership contributes to creating a positive, long-lasting legacy for organizations. In an age where corporate greed and irresponsibility are increasingly criticized, ethical organizations are well-positioned to leave behind a legacy of sustainability, fairness, and social impact. Leaders who focus on ethical governance prioritize long-term success and the well-being of society, ensuring that their organization's impact extends beyond financial performance. Ethical organizations are remembered for their positive contributions to society, creating a lasting impact that goes beyond profits

also secures the organization's reputation and ensures its viability in a competitive market. As we look toward the future, the role of ethical governance will continue to shape a business landscape that is responsible, inclusive, and sustainable, underscoring the importance of ethical leadership in creating a better world for future generations.

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## A Study on Correlation With Entrepreneurial Innovation and Gross Domestic Product of Selected States

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**DOI - 10.5281/zenodo.15130141**

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### **Abstract:**

*The creativity among the human being is the important for being success in entrepreneurship. Entrepreneurs are always trying to searching new and useful ways and means to make human life happier and bring materially richer. Entrepreneurs are taking efforts for rising standard of living of the people through launching innovative ideas in business and industry. Such peoples are real creators of wealth and prosperity. Providing new kind of product and services, upgrading and modernising the existing process of production of commodities is treated as innovation. Entrepreneur has perception and also aware about the wants and desires of consumer and try to increase the satisfaction level. Entrepreneurs are common people but they are thinking different. They are different from ordinary people in regards with vision, attitude, perspectives and efforts. Most of the entrepreneurs are self-oriented about their overall business activity and have complete and comprehensive understanding. They try to work out solution on troubles of common people by innovative way. Entrepreneurship transforms problem in to opportunity. They are not order takers on the other hand they the order makers. This paper is prepared for developing healthy competition among the state in innovation and it will be help full for strengthening entrepreneurship of India.*

**Key words: creativity, innovation, new idea, sustain, level up.**

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### **Introduction:**

Entrepreneurship and innovation are closely related concepts that involve creating new ideas and putting them into action. Innovation can lead to higher productivity, meaning that the same input generates a greater output. As productivity rises, more goods and services are produced – in other words, the economy grows. Entrepreneurs have perception and also aware about the wants and desires of consumer and try to increase the satisfaction level. Entrepreneurs are common people but they are thinking different. Innovation allows businesses to thrive as it brings in creative solutions to problems and allows the business owners to apply their creativity to the max to make their presence valuable in the market.

Innovation is crucial for success in business since both humans and customers are attracted to new things or ideas. Time must be given to finding innovative and practical solutions to improve human happiness and material well-being. Entrepreneurs are working to raise the standard of living for the population by introducing novel concepts in trade and business. These affects actually produce riches and prosperity. Innovation is defined as the creation of novel goods and services as well as the improvement and modernisation of the current methods for producing them. Innovation allows companies to make continuous improvements and helps in enhancing the creativity of the business.

**Objectives of the Study:**

1. To understand the role of innovation in industry and gross domestic product.
2. To research the GDP shares and innovation rankings of a few states.
3. To offer advice on how to innovate effectively.

**Methodology of the study:**

This paper is based on secondary sources of information, including books, study guides, journals, government papers, websites, and to some extent, the researchers' own first-hand observations.

**Conceptual framework:**

**1. Gross Domestic product:** Gross Domestic Product (GDP) is a measure of a country's economic output. It's calculated by adding the value of all goods and services produced within a country over a specific period of time. GDP is used to compare the health of economies across countries and over time. Innovation is a key driver of economic growth, which is measured by gross domestic product (GDP). Innovation can boost productivity, consumer spending, and profits, and it can also create new jobs.

**2. Correlation with Gross Domestic Product (GDP):** One of the major benefits of innovation is its contribution to economic growth. Simply put, innovation can lead to higher productivity, meaning that the same input generates a greater output. As productivity rises, more goods and services are produced – in other words, the economy grows.

If nations with environments conducive to innovation witness higher GDP growth rates than their peers who lack these conditions. By fostering innovation, we can create entirely new industries and revenue streams.

1. **Increased productivity:** Innovation can increase productivity by automating tasks or by making machines more useful to humans.
2. **New industries:** Innovation can create new industries and revenue streams, such as the internet, which has changed how businesses operate.
3. **Consumer confidence:** Innovation can boost consumer confidence and spending.

**India can encourage innovation following ways:**

**Research and development:** Countries can encourage innovation by supporting research and development.

**Education:** Countries with a highly educated workforce can invest more in innovation.

**Intellectual property management:** Countries can encourage innovation by protecting intellectual property rights.

**Competition and trade:** Countries can encourage innovation by promoting competition and international trade.

**Concept of Innovation:** Innovation is idea of bringing new product and idea in business. Innovation frequently sounds more like a magic formula for business success than a genuine business concept.

But problem-solving is all that innovation is, really.

Finding novel solutions to problems for which there is no existing answer, an inadequate solution, or a solution that is only accessible to a certain group of customers. Innovation has the power to alter how that industry operates. It might even entirely change the sector. It is essential for maintaining the company's viability and market competitiveness.

The ability to innovate will be necessary for entrepreneurs to deal with the entrepreneurship, innovation, and creativity go hand in hand. It is essential for maintaining the company's viability and

market competitiveness. To meet the problems of the market, entrepreneurs must possess the quality of innovation. If you want to run a successful business, you must first be somewhat original in your approach and possess any viewpoints, ideas, and opinions necessary to introduce a unique concept into the market that will help you draw clients to your goods and services. Systematic innovation will enable you to gain an edge over your competitors and improve the profitability of your business. It has become necessary to invest in research and development and talent management.

#### **Innovation functions in entrepreneurship.**

1. **Creative Development:** Innovation helps organizations grow by introducing original solutions to issues and enabling business owners to use their imagination to the fullest in order to differentiate their offerings from those of competitors.
2. **Constant Improvement:** Innovation helps businesses become more creative and enables them to make ongoing improvements.
3. **Deliver the best product or service:** In line with the kaizen philosophy of “Good Change” or “improvement” in relation with lean technique and its tenets, it means constant improvement.
4. One of the most crucial aspects of operating a corporation is implementing fresh, constructive modifications and launching new goods. However, organizations should also maintain and improve the quality of their existing products. Where creativity is really important
5. **Reacting to Trends and Competition:** Adopting market trends and facing fierce competition both require innovation. Innovation is important regarding cope up with the market trends and also face the tough competition. Having an idea of the future trends and being able to keep

up with them helps the grooming the business.

6. **To boost the sale:** any company with an inventive culture gives its products a special touch. Additionally, it aids in the organization's increased market exposure.
7. **Social media promotion:** social media is a fantastic medium for increasing brand awareness for the business. This is not only aids in marketing but also draws attention to the business's creative idea from the general public. Business houses can launch their creative campaigns through social platforms to that will draw project image among the customer as well as regular individuals.

#### **Innovation implementation Philosophy:**

**These idea focusses on changing management perspective in order to apply innovation in company.**

- A. Viewing challenge as a change
- B. Find additional resources to solve the issue
- C. Resist maintaining the status quo.
- D. Form an evaluation mindset regarding the causes of adaptive change.
- E. Find solutions when you discover errors.
- F. Encourage everyone to participate by sharing your ideas.
- G. Determine the underlying reasons for innovation and change.
- H. Gather data and suggestion form the group
- I. Incorporate imagination in to minor upgrades.
- J. Use creativity in little improvements.
- K. Create culture akin to Kaizen.

#### **Measurement Criteria for innovation:**

Innovation is crucial to the survival and growth of business in the Indian economy in order to comprehend Indian's current innovation state. The NITI Ayog ha taken the initiative to assess India's performance. Seven criteria have been

chosen by NITI Ayog to assess the performance of innovation. By using these criteria, it may be able to foster healthy rivalry between the states to raise their performance in terms of the innovation index.

Knowledge partner, the business environment, safety precautions, the legal environment, human resources and capital,

output of knowledge and knowledge dissemination.

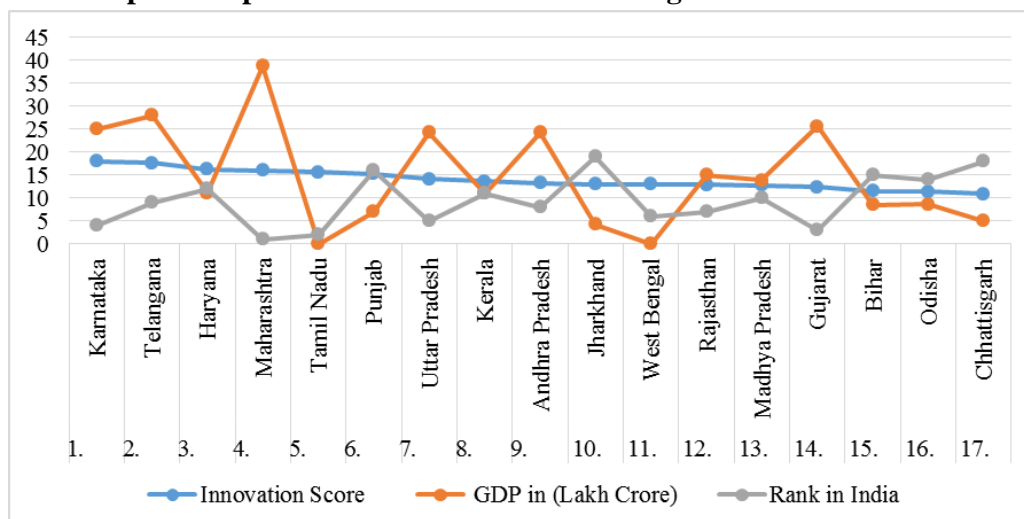
Innovation index is an extensive tool assessing and developing India's ecosystem. Niti Aayog has taken lead for developing state level innovation index. In the context of the Indian economy, the primary goal is to create an ecosystem and a plan for rising the states innovation index.

**Table No -1: In India, innovation and GDP Share are ranked by state**

Rank No.	State	Innovation Score	GDP in (Lakh Crore)	Rank in India
1.	Karnataka	18.01	25	04
2.	Telangana	17.66	28.03	09
3.	Haryana	16.35	11.2	12
4.	Maharashtra	16.06	38.79	01
5.	Tamil Nadu	15.69	28.3	02
6.	Punjab	15.35	6.98	16
7.	Uttar Pradesh	14.22	24.29	05
8.	Kerala	13.67	11.02	11
9.	Andhra Pradesh	13.32	24.29	08
10.	Jharkhand	13.10	4.23	19
11.	West Bengal	12.98	17.29	06
12.	Rajasthan	12.88	15.07	07
13.	Madhya Pradesh	12.74	13.87	10
14.	Gujarat	12.41	25.62	03
15.	Bihar	11.58	8.59	15
16.	Odisha	11.42	8.65	14
17.	Chhattisgarh	10.97	5.07	18

(Source: Niti Ayog report of innovation 2021 and report of GDP in India)

**Graphical representation of state wise ranking in innovation in India**



It has been determined that Karnataka holds the top spot in the large state category of the Indian innovation index. Chhattisgarh, on the other hand, is at the bottom of the list. In the Indian innovation index, Maharashtra is ranked fifth in terms of industrialization, employment creation and contribution to India's GDP, Maharashtra is basically the top state. However, Maharashtra has not made an effort to encourage innovation. Another state where strong infrastructure is major contributor to success is Gujrat, which ranks first in the NITI Aayog India innovation index's major states category. Because it attracted FDI and significant venture capital agreements, Karnataka is through to have received the highest grade.

### Conclusion:

It may be said that is concluded NITI Ayog's efforts in calculating the innovation index led to the realisation that the state of Karnataka had attained the highest rank in innovation.

1. Maharashtra is first in GDP contribution and third in terms of area. This state is renowned as India's creative capital and is a leader in the engineering and cinema, IT, automotive and service sectors.

Maharashtra is ranked fifth in the innovation index for India. Maharashtra basically leads the way in terms of industrialization, employment creation, and contribution to India's GDP.

However, Maharashtra has not taken the lead in fostering innovation.

2. Gujrat ranks fourth in terms of GDP and fifteenth in terms of innovation index. The state's main industry is agriculture, although it also depends on the chemical, cotton, milk and dairy, and sugarcane industries for income.

3. Managers should create an innovation strategy that outlines how their business will approach innovation activities and how the ecosystem will support to plan as whole.
4. Benchmarking techniques should be used by all industries: It is a method for comparing an organization's best and most innovative practices to those of competitors when evaluating their processes, services, and products. The group receives this knowledge from this area.
5. Government and non-government organisations should take the lead in developing fresh concepts and adding value to goods and services.
6. Supporting centres for innovation and incubation (III Centre) to find amazing, unique ideas that need the right environment to thrive. The HR department should particularly encourage talented and innovative individual for research and innovation. Small modification or additions are made to existing goods, procedures, or services at the primary stage. Then innovation might advance gradually and eventually the industry might accept this new shift.

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## An Empirical Study of Challenges pertaining to the Input Tax Credit (ITC) under the Goods & Service Tax Regime

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DOI - 10.5281/zenodo.15130151

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### Abstract:

*This review paper critically examines the empirical challenges faced by businesses in claiming Input Tax Credit (ITC) under the Goods and Services Tax (GST) regime. One of the key provisions of the GST law is the Input Tax Credit (ITC). ITC aims to eliminate cascading taxes by allowing businesses to offset the tax paid on inputs ( Purchases ) against the tax collected on outputs ( Sales ). The paper highlights key challenges such as complex compliance procedures, technical issues in the GST portal, mismatches in supplier and buyer data, and lack of awareness among taxpayers. Furthermore, it discusses the legal ambiguities surrounding the eligibility criteria for claiming ITC. The efficiency of the ITC mechanism, such as improving technological infrastructure, simplifying procedural requirements, and increasing awareness campaigns. This paper serves as a comprehensive review of the challenges faced by businesses under the current GST regime and offers insights for policy improvements to ensure a more effective tax credit system.*

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### Introduction:

The Goods and Services Tax (GST) regime, introduced in India on July 1, 2017, was intended to create a unified indirect tax structure, replacing multiple state and central taxes. Input Tax Credit ( ITC ) is a backbone of GST. An ITC under the Goods and Services Tax (GST) regime refers to the credit a business can claim for the taxes paid on inputs (goods and services purchased) that are used to produce or provide taxable goods and services. In simpler terms, it's a mechanism that allows businesses to offset the tax they've paid on inputs against the tax they collect on their sales.

It is very important for the registered person to understand how he can claim the input tax credit?, where he can claim?, which he cannot claim?, etc. the wrong submission of an input tax credit claim may attract penal tax, interest and penalty. The aspect of claiming 'correct ITC' will reduce

cost to the business. I have tried to explain this concept in a simple language where you may find out about the input tax credit that suppliers might set off. ITC prevents double taxations. This mechanism in which tax paid on inward supply is adjusted towards tax paid on outward supply is known as input tax credit. This ITC availability reflects in the electronic credit ledger of tax payer maintained at GST common portal.

However, the implementation of ITC has been fraught with challenges. Issues related to eligibility, documentation, compliance, and reconciliation have been widely reported, particularly in the early years of GST. This empirical study seeks to examine these challenges by analyzing data, business practices, and feedback from various GST Professionals.

**How ITC Works:**

**Purchase Stage:** A business buys goods or services from a supplier and pays GST on those purchases to supplier.

**Selling Stage:** The business then sells goods or services to its customers and collects GST from them.

**Claiming ITC:** The business can claim a credit for the GST paid on the purchases (input tax) against the GST collected on the sales (output tax).

This reduces the overall tax burden because under GST businesses only need to pay tax on the value added to the product or service, rather than on the full sales price.

**Example:**

Suppose a manufacturer buys raw materials for Rs. 50,000 plus 18% GST (Rs.9,000). Later, they sell finished goods for Rs. 60,000 plus 18% GST (Rs. 10800).

The manufacturer can offset the Rs. 9000/- input GST ( GST paid on purchases ) with the Rs. 10800/- output GST ( GST collected on sales ), so they only need to pay the difference Rs. 1800/- to the government.

**Objectives of the Study:**

The primary objectives of the empirical study include:

1. **Identify Challenges:** To examine and categorize the various challenges that businesses face related to Input Tax Credit (ITC) under the GST framework.
2. **Impact Assessment:** To assess the implications of these challenges on business operations, financial performance, and compliance behaviour.
3. **Recommendation Development:** To develop actionable recommendations aimed at mitigating these challenges and enhancing ITC utilization.

**Literature Review:**

The concept of Input Tax Credit has been extensively discussed in academic

literature and reports from policy think tanks. Several studies have explored the theoretical benefits of ITC in reducing tax cascading, improving compliance, and promoting efficiency in the economy. However, empirical studies on the implementation challenges of ITC under the GST regime remain limited.

According to a study by Jain (2018), businesses often face issues where suppliers fail to upload the correct tax details or delay submissions, causing the ITC claim process to be delayed or blocked. Furthermore, mismatches between the GSTR-1 (supplier's return) and GSTR-2A/2B (buyer's return).

Sharma (2017) focused on the favourable and unfavourable impacts of GST on micro, small and medium enterprises [MSME]. The study found that GST would lead to an increase in job opportunities and economic development of the nation. The author opined that GST reduces the tax burden for both manufacturers and end consumers by taking advantage of input tax credit.

Gupta and Agarwal (2020), studies the reconciliation of invoices, tax returns, and matching of credit details between buyers and sellers creates significant compliance burdens for businesses, particularly small and medium enterprises (SMEs). The need to file multiple forms and submit detailed documentation increases the risk of errors, leading to denial of ITC or penalties.

According to a report by the National Institute of Public Finance and Policy (NIPFP, 2020) technical challenges hamper the smooth filing of returns and the proper matching of data, creating unnecessary delays and causing frustration among taxpayers.

**Eligibility and conditions for taking input tax credit U/s 16 of CGST Rules, 2017 -**

**Sec.16(1):** Every registered person shall be entitled to take credit of input tax charged on any supply of goods or services or both to him which are used or intended to be used in the course or furtherance of his business. It means, input tax credit ( ITC ) will not be available for the supply of goods and services which are used for personal use e.g. motor vehicles, food and beverages, etc.

**Sec.16(2)** Registered person shall be entitled to the credit of any input tax in respect of any supply of goods or services or both to him if,—

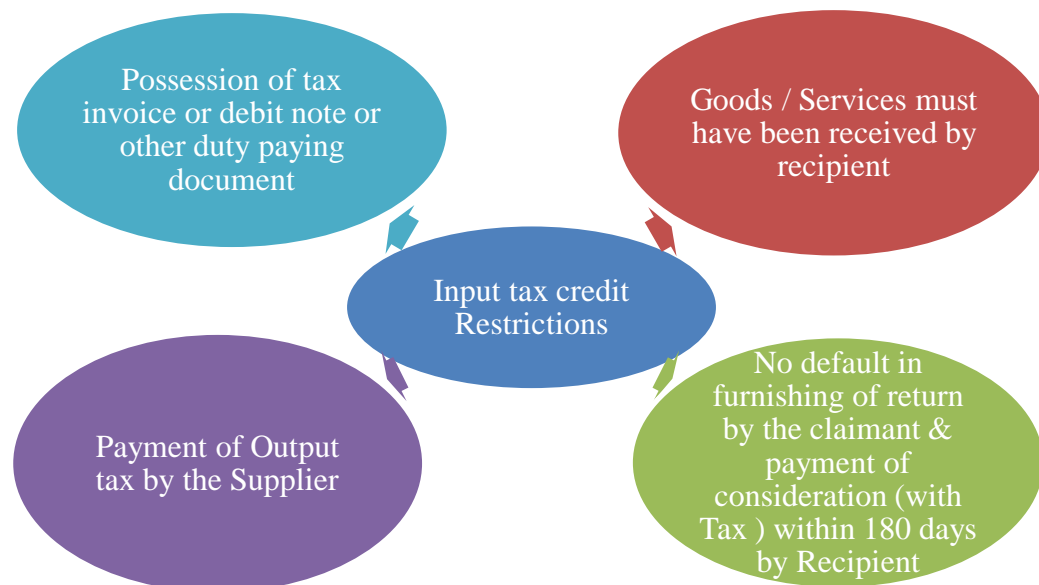
(a) He is in possession of a tax invoice or debit note issued by a supplier registered under this Act

(b) He has received the goods or services or both. Explanation.—For the purposes of this clause, it shall be deemed that the registered person has received the goods where the goods are delivered by the supplier to a recipient

(c) The tax charged & collected by supplier in respect of supply of goods and services has been actually paid by supplier to the Government, either in cash or through utilisation of input tax credit admissible in respect of the said supply; and

(d) He has furnished the return under section 39 & pay to the supplier of goods or services or both, the amount towards the value of supply along with tax payable thereon within a period of one hundred and eighty days from the date of issue of invoice by the supplier.

**ITC claim- Eligibility and conditions U/s 16(2)**



**Sec.16(3)** Where the registered person has claimed depreciation on the tax component of the cost of capital goods and plant and machinery under the provisions of the Income-tax Act, 1961, the input tax credit on the said tax component shall not be allowed.

**Sec.16(4)** A registered person shall not be entitled to take input tax credit in respect of

any invoice or debit note for supply of goods or services or both after 30th November of the year following the end of financial year to which the invoice or debit note pertains or date of furnishing the relevant annual return, whichever is earlier.

**Key Challenges Identified:****1. Complex Documentation and Compliance Requirements:**

One of the most cited challenges is the complexity of documentation and compliance procedures. Businesses are required to maintain detailed records of their transactions, including invoices, GST returns, and reconciliation statements. Inadequate record-keeping or errors in documentation can result in the denial of ITC claims.

**2. GST Portal Issues:**

Technical glitches and system downtime on the GST portal have been a significant barrier to claiming ITC. Many businesses, particularly in rural areas, have reported difficulties in uploading invoices and reconciling input tax credits due to connectivity and software issues. These technical challenges have led to delayed credit claims and penalties for non-compliance.

**3. Mismatch Between GSTR-1 and GSTR-2B:**

Section 16(2)(aa) of CGST Rules, 2017 restricts the claim of input tax credit. It restricts the tax payer to claim ITC not more than what is being reflecting in his GSTR-2B. The reasons for a particular transaction not reflecting in the recipients GSTR-2B is mainly because of fault made by the supplier, either he would have wrongly mentioned the GSTIN of the recipient or he would have omitted that particular transaction in his GSTR-1, in some cases the supplier might have failed to file his GSTR-

Hence for the default made by the supplier, the government is penalizing the recipient by not allowing claiming ITC. In some circumstances even though the supplier has filed GSTR-3B and paid the tax to government which was collected from the recipient, this rule does not permit the recipient to claim ITC. Thus, a common issue arises when there is a mismatch

between the details provided in the supplier's GSTR-1 and the recipient's GSTR-2B. This discrepancy prevents the smooth flow of ITC and creates confusion for businesses that rely on the timely availability of ITC.

**4. Restrictions on ITC for Ineligible Expenses:**

The GST law imposes restrictions on ITC claims for certain types of expenses, such as those related to personal consumption or blocked goods and services. Businesses often struggle to interpret these provisions, leading to confusion about the eligibility criteria for claiming ITC. Similarly, as per section 17(5) [Blocked Credit] regarding works contract service, a registered person cannot claim input tax credit on certain specified goods and services even though such goods and services are used in the course or furtherance of business. Works contract means a contract of building, construction, erection, installation, etc. of any immovable property. Let us assume, there is a situation where an assessee gets a building constructed and let out the same for rent. It is a taxable supply and he has to charge GST at 18 percent on rent that he collects from his tenant. In this case the assessee does not have any input tax except the tax that he paid on works contract service and he cannot set off that credit against the output tax to discharge his liability. This leads to cascading effect.

**5. Cash Flow Issues for SMEs:**

Small and medium-sized enterprises (SMEs) face particular challenges in managing cash flow due to delays in receiving ITC credits. The delay in credit claims can disrupt the working capital cycle of businesses that rely on timely ITC claims to reduce their tax liabilities.

**6. Utilization of ITC available in Electronic Credit Ledger:**

Rule 86B of CGST Rules, 2017 restricts the utilization of ITC available in

electronic credit ledger. Electronic credit ledger reflects the input tax credit available for a registered person. As per this rule if a taxpayer's aggregate turnover exceeds Rs.50 lakhs per month, he cannot utilize more than 99 percent of input tax credit that is reflecting in his credit ledger. In other words, the said registered person should pay at least one percent of his output tax liability in the form of cash. This rule ultra vires all the provisions relating to input tax credit. Even though the said rule does not affect small and medium businesses, it creates a burden on the working capital of large taxpayers. This rule unnecessarily forces the large taxpayers to discharge their liability only in the form of cash which in turn affects their liquidity.

#### **7.180 days payment criteria:**

Second proviso to section 16(2) read with rule 37 of CGST Rules, 2017 says that in order to claim ITC, the recipient must have paid the entire value of goods or services within the 180 days from the date of issue of invoice. The basic intention of this provision is to protect the liquidity position of small businessman. But this condition adversely affects the large-scale business sector because the value involved in their transaction will be huge and it is very difficult to settle the entire amount within 180 days. In some cases even if the supplier and recipient both agree to extend the credit for a longer period, this rule forces the recipient to make the payment within 180 days so that the said recipient will be allowed to claim his input tax credit.

#### **Research Methodology:**

This study adopts an empirical research methodology, using a combination of qualitative and quantitative data. The research involves:

- **Surveys and Questionnaires:** Distributed among tax professionals, GST consultants, and accountants across

different sectors, with a focus on their experiences with ITC under GST.

- **Interviews:** Conducted with tax professionals, GST consultants, and accountants to gain expert insights into the challenges faced.
- **Case Studies:** Detailed case studies of businesses that encountered difficulties in claiming ITC.

The data collected is analyzed to identify recurring patterns and key issues related to ITC claims under the GST framework.

#### **Findings:**

##### **1. Inadequate record-keeping or errors in documentation:**

Businesses are required to maintain detailed records of their transactions, including invoices, GST returns, and reconciliation statements. Inadequate record-keeping or errors in documentation can result in the denial of ITC claims.

##### **2. Lack of Awareness:**

**Inadequate Knowledge among Small Businesses:** Smaller enterprises and businesses, especially in rural or underdeveloped areas, face challenges due to lack of knowledge or misunderstanding of the ITC provisions under GST. This results in errors, non-compliance, and missed opportunities for claiming credits.

##### **3. Incorrect GST returns filed by Suppliers:**

Incorrect GST returns filed by Suppliers restricts the claim of input tax credit. The reasons for a particular transaction not reflecting in the recipients GSTR-2B is mainly because of fault made by the supplier, either he would have wrongly mentioned the GSTIN of the recipient or he would have omitted that particular transaction in his GSTR-1, in some cases the supplier might have failed to file his GSTR-1. Hence for the default made by the supplier, the government is penalizing

the recipient by not allowing claiming ITC. In some circumstances even though the supplier has filed GSTR-3B and paid the tax to government which was collected from the recipient, this rule does not permit the recipient to claim ITC.

#### **4. Ineligibility Due to Non-filing by Suppliers:**

Small suppliers or unregistered entities may not file GST returns, which can lead to recipients not being able to avail ITC, as credit is only allowed if the supplier has filed the relevant returns.

#### **5. Input Tax Credit Blockage:**

**Restricted Credit on Certain Goods/Services:** Under the GST regime, certain goods and services do not qualify for ITC, such as motor vehicles (with exceptions), food and beverages, and personal expenses. This creates limitations for businesses, especially in service sectors.

#### **Conclusion:**

The findings from the empirical study highlight several key areas where the implementation of ITC under GST needs improvement. While the ITC mechanism is designed to encourage tax neutrality and reduce cascading, it is evident that businesses, especially those with limited resources, face significant compliance burdens.

The complexity of the compliance process and the lack of adequate training on GST provisions are areas that need urgent attention. Simplifying documentation requirements and improving the efficiency of the GST portal could go a long way in mitigating the challenges faced by businesses.

Moreover, addressing the mismatch issue between GSTR-1 and GSTR-2B through better reconciliation processes and automated systems could reduce the uncertainty surrounding ITC claims. Additionally, clear guidelines on the types of

expenses eligible for ITC will help businesses navigate the complex tax landscape.

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2. **Taxmann's - GST Input Tax Credit** by V.S. Datey: Offers a comprehensive guide on the Goods and Service Tax (GST). Specifically focusing on the input tax credit (ITC) & covers critical aspects of ITC.
3. **Goods and Services Tax (GST) in India: A Comprehensive Analysis** by Bimal Jain: Offers a comprehensive analysis of GST in India, including its impact on businesses and challenges related to ITC.
4. Include all relevant articles, books, and reports.



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## Trends and Challenges in Digital Banking and Fin-Tech

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**DOI - 10.5281/zenodo.15130160**

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### **Abstract:**

*There has been noticeable development in the economy of India since past decade. Banking and finance sector has very substantial role in development process. These sectors has changed with changing demographics and priorities of public, also are greatly been effected by fast changes in technology and the regulations. Banks and financial institutes have to change the way of its operations. Banking and finance sector are both public and private sector. This paper makes an attempt to highlight the challenges faced by Banking and finance and suggests some possible measures for its growth. The study found that public sector banks are still behind the private sector banks in terms of modernization, overworked service offerings, lower profitability, loads of NPA. This study is based on secondary data.*

**Keywords:** *Digital Banking, Innovation, Fin-tech, Banking, Finance, Artificial*

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### **Introduction:**

Banks are the support of every economy, backbone of any country. Therefore, it is very important that banks remain healthy. Otherwise, a financial crisis can hit a country leading to collapse. This is particularly true for developing countries like India. Banks play a vital role in activating and sustaining economic growth, mostly in developing countries. The banks are the lifelines of the economy. However, in India banks face different kinds of problems like profitability and financial stability. The banking and financial industry is undergoing a systematic change. The competition from Fin-techs, moving business models, rising regulation and agreement pressures, and difficult technologies are changing the financial businesses. The development of Fin-tech or non-bank start-ups is changing the competitive scene in financial services. The traditional institutions have to rethink the way they do business. The regulatory and compliance requirements become more

restraining. The data privacy concerns are deepened. Now days the customer demands are growing. They are interested in round-the-clock personalized service. All these banking and finance industry challenges can be fixed by the very technology which has caused this trouble. But it is not an easy task. Banks need digital and technological transformation. To survive and flourish in the current scenery it is must for the Banking and finance sector to come out of traditional practices to modern one.

### **Objectives:**

The objectives of this research are to study:

1. Digital Banking and Fin-tech in India.
2. Trends in Banking and Challenges Banking and Finance industries facing now a days.
3. Suggestions to overcome the challenges in banking and finance.

**Methodology:**

The data is collected from various reports, journals, news articles, various bank portals, RBI portal and internet sources, various reports published on Banking and finance, reports and information published by IRDA and RBI, relevant statistical study for numbers and study of previous research papers published on Banking and finance. The study for this paper is based on secondary data. This paper tries to look into Banking and finance sector of India.

**Discussion:**

**Recent Changes** in Banking, Finance and Insurance sectors

- 1) New Fin-tech firms are now a days creating danger to the traditional financial institutions. The main reason behind this is the changing customer demography and expectations.
- 2) The ways of transactions have changed today. Electronic payment services, Real Time Gross Settlement, electronic fund transfer, electronic clearing services, ATM's , mobile-banking, are some new ways which in turn has changed the way of banking practices. Also finance companies are now using online payment, telephonic and online advisory services, and cross-processes with Banks etc., this follow-on into multi-distribution, product innovation, claim management etc.
- 3) As digital infrastructure becomes more forceful and more consumers become comfortable with online transactions, the banking industry inevitably have to move lending services, whether business-to-consumer or business-to-business, online.
- 4) Regulators have put additional stress on the sector with open-banking initiatives, consumer protection initiatives, and strengthened regulatory capital requirements.

**Challenges:**

Challenges before the Banking and Financial Services industries are growing at a rapid rate. New technology, new competitors, and a shifting digital landscape are placing increasing pressure on banking institutions. Fin-techs have targeted some of the most profitable areas in financial services. In order to maintain a competitive edge, traditional banks and credit unions must learn from Fin-techs. They are successful due to a simplified and intuitive customer experience.

Financial inclusion, business growth and customer engagement in urban India is well familiar with banking system but there is need to pay more focus on rural Banking. There is huge portion of the population that is unbanked or say under banked, they require financial literacy. With the help of Government, Indian Banks are focusing on it to increase the business growth.

**Cultural Shift:**

We have entered the Age of AI. Artificial intelligence (AI) extends to the banking industry. In this digital world, there's no room for manual processes and systems. Banks need to think of technology-based resolutions. Therefore, it's important that financial institutions promote a culture of innovation, in which technology is there to raise existing processes and procedures for maximum efficiency. This cultural shift toward a technology is for acceptance of digital transformation.

**Regulatory Obedience:**

Bank regulations have swollen after the 2008/9 Financial Crisis. More collaboration among banks, central banks and regulators is needed to work more effectively together. There is increase in regulatory fees relative to earnings and thus there is credit losses since the 2008 financial crisis.



**Rising Expectations:**

Today's consumer is smarter and more informed than ever before. He expects high convenience in banking. Changing customer demographics play a major role in higher expectations. New generation of banking customers has more understanding of technology and, as a result, an increased expectation of digitized experiences is there. The challenge is to satisfy older generations and younger generations of banking customers at the same time. This is possible when banking industry integrates digital experiences into traditional bank branches. In financial services customers expect custom-made and important experiences through simple and intuitive edges on any device, anywhere, and at any time.

**Customer Retention:**

Although customer experience can be hard to calculate. The customer loyalty is quickly becoming an endangered concept. Customer loyalty is a product of rich client relationships that begin with knowing the customer and their expectations, as well as implementing an ongoing client-centric approach.

**Security Breaches:**

With a series of high-profile breaches over the past few years, security is one of the leading banking industry challenges, as well as a major concern for bank and credit union customers. Financial institutions must invest in the latest technology-driven security measures to keep sensitive customers safe, such as: Authentication.

**Cyber security:**

A challenge that bank and finance companies face is cybersecurity. Due to the type of data and the sheer amount of data being collected, banks and finance companies must remain extremely vigilant against threats to be able to properly and

responsibly safeguard customers' data and their online platforms. For customers, the issue of cyber security is a key factor in their decision when choosing a bank.

**Continuous Innovation:**

Sustainable success in business requires insight, rich client relationships, and continuous innovation. Bench-marking effective practices throughout the industry can provide valuable insight, helping banks and credit unions stay competitive. The impact of Fin-tech on traditional banking models is transformation, affecting every facet of the industry. While challenges persist, the symbiotic relationship between Fin-tech and traditional banking models presents opportunities for enhanced efficiency, improved customer experiences, and a more resilient and adaptive financial sector. Innovation stems from insights, and insights are discovered through customer interactions and continuous organizational analysis. Insights without action, however, are impotent — it's vital that financial institutions be prepared to pivot when necessary to address market demands while improving upon the customer experience.

**Solution:**

With the right team to support the efforts, digital transformation is attainable. The financial services team has been helping banks. With a wide variety of products and services tailored to the financial services industry many challenges can be resolved. From data science expertise to business intelligence, AI, technology is here to help organization tackle banking industry challenges and embrace digital transformation. The banking industry has a lot to think about, its journey towards recovery and such challenges will remain for sure active beyond 2022. However by taking into consideration the above mentioned challenges, even during hard times such as a worldwide pandemic and by reflecting on

the best way to solve the operational and regulatory issues, the banking industry can still make a good kick start on this journey. Uncertainty about the effects of the pandemic will likely to remain for the foreseeable future but this should not prevent the banks from tackling the other challenges that might not allow to keep the pace with such an evolving industry. Banking, finance and Insurance sector has to keep in mind that sustainable success in business requires insight, agility, rich client relationships and continuous innovation.

**Conclusion:**

As banks and finance providers continue to implement their digital transformation plan or strategy, is essential to ensure new or updated services are tested before being launched. It is crucial for the banking industry to meet the increasingly complex savings and financing needs of the economy by offering a wider and flexible range of financial products tailored for all types of customers. With the increasing levels of globalization of the Indian banking industry, evolution of universal banks and bundling of financial services, competition in the banking industry will intensify further. The banking industry has the potential and the ability to rise to the occasion as demonstrated by the rapid pace of automation which has already had a profound impact on raising the standard of banking services. The financial strength of individual banks, which are major participants in the financial system, is the first line of defense against financial risks.

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## Electronic Marketing Strategies for Small and Medium-Sized Enterprises (SMEs)

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DOI - 10.5281/zenodo.15130179

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### Abstract:

*Small and medium-sized enterprises (SMEs) play a crucial role in the global economy, representing a significant portion of business activity across industries. With the increasing shift toward digitalization, e-marketing has emerged as a vital tool for SMEs to remain competitive and expand their reach. This research paper explores the role of e-marketing strategies for SMEs, focusing on the advantages and challenges of leveraging digital marketing channels. The study examines key e-marketing strategies, including social media marketing, search engine optimization (SEO), email marketing, content marketing, pay-per-click (PPC) advertising, and influencer marketing. Additionally, the paper investigates the specific challenges that SMEs face in adopting these strategies, such as limited budgets, lack of expertise, and competition with larger enterprises. Furthermore, the study presents successful case studies of SMEs that have effectively used e-marketing, highlighting lessons that others can learn from their success. Finally, the research addresses emerging trends in e-marketing, such as artificial intelligence (AI) and sustainability, and how SMEs can adapt to these changes to stay competitive in the ever-evolving digital landscape.*

**Keywords:** *E-Marketing, Small and Medium-sized Enterprises (SMEs), Social Media Marketing, Search Engine Optimization (SEO), Content Marketing, Pay-Per-Click Advertising, Influencer Marketing, Digital Marketing Strategies.*

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### Introduction:

E-Marketing, or electronic marketing, refers to the use of internet-based technologies and platforms to promote products, services, or brands. This type of marketing leverages digital channels such as social media, search engines, email, and websites to reach and engage target audiences. In the context of Small and Medium-sized Enterprises (SMEs), e-marketing strategies offer significant opportunities to increase visibility, engage with customers, and drive sales without the substantial budgets typically required for traditional advertising methods. As SMEs often face constraints in terms of resources,

e-marketing allows them to compete more effectively in the marketplace, enabling them to build brands, foster customer loyalty, and drive growth.

Small and Medium-sized Enterprises (SMEs) are the backbone of most economies worldwide, contributing significantly to employment, innovation, and economic development. These businesses, defined by their size in terms of the number of employees and annual turnover, vary greatly from one country to another. Generally, SMEs are defined as businesses that employ fewer than 250 people, with some classifications setting thresholds based on annual revenues. In the European Union, for

example, small enterprises employ fewer than 50 people, and medium-sized businesses employ fewer than 250. In the United States, the definition may vary by industry, but SMEs typically include businesses with fewer than 500 employees.

SMEs play a vital role in fostering innovation, creating jobs, and contributing to GDP. These businesses are often more agile and responsive to market changes compared to larger enterprises. Their ability to innovate and introduce niche products or services allows them to fill gaps in the market and cater to specific customer needs. Moreover, SMEs create a significant portion of the employment market, which is crucial for sustainable economic development. Despite their importance, SMEs often struggle with limited resources, such as financial capital, human resources, and infrastructure. This is where e-marketing becomes a game-changer, offering low-cost yet highly effective solutions for SMEs to reach their target audience and grow their business without needing a large budget.

#### **Objective:**

1. Identify Effective E-Marketing Tools and Platforms.
2. Evaluate Challenges Faced by SMEs in Implementing E-Marketing.
3. Understand the Impact of E-Marketing on SME Performance.
4. Develop Recommendations for SMEs to Maximize the Potential of E-Marketing.
5. Contribute to the Literature on E-Marketing for SMEs.

#### **The Rise of e-Marketing in the Digital Age:**

In today's fast-paced digital era, marketing practices have undergone a profound transformation, largely driven by technological advancements. E-marketing, or online marketing, has become a crucial aspect of business strategy, enabling

companies to connect with their target audiences more effectively and cost-efficiently. The rise of the internet, social media, and data-driven insights has redefined how businesses approach marketing, shifting from traditional methods to digital channels.

#### **Advancements in Technology: Changing Marketing Practices:**

Advancements in technology have revolutionized marketing practices by enabling businesses to reach audiences more efficiently and effectively. Digital platforms, social media, and data analytics allow for highly targeted advertising, personalized experiences, and real-time engagement with customers. Automation tools streamline processes like email marketing and customer relationship management, while artificial intelligence helps analyse consumer behaviour and predict trends. Augmented reality and virtual reality offer innovative ways to showcase products, enhancing customer experiences. These technological innovations have shifted marketing strategies from traditional methods to data-driven, interactive, and immersive approaches, fostering stronger customer connections and improving return on investment.

#### **Globalization and e-Commerce: Reaching International Markets:**

E-marketing offers small and medium-sized enterprises (SMEs) the opportunity to access global markets without large investments, using platforms like e-commerce sites, digital ads, and SEO. Traditional marketing methods no longer suffice, as consumers increasingly rely on digital channels for purchasing decisions (Chaffey, 2019). E-marketing strategies such as social media, email marketing, and content creation enable cost-effective engagement, allowing SMEs to compete with larger companies (Kotler & Keller,

2016). Furthermore, the rise of mobile commerce requires businesses to adopt mobile-friendly strategies for reaching growing mobile audiences (Statista, 2023). E-marketing ensures real-time performance analysis, enhancing ROI.

### **Key E-Marketing Strategies for Small and Medium-Sized Enterprises (SMEs):**

Small and medium-sized enterprises (SMEs) can significantly benefit from e-marketing strategies, enabling them to reach a broader audience despite limited resources. Social media platforms like Facebook, Instagram, and LinkedIn are pivotal for engaging customers, creating targeted ads, and fostering direct communication with followers (Tuten & Solomon, 2017). SEO helps SMEs increase organic traffic by optimizing websites and improving search rankings through keyword research and local SEO tactics (Moz, 2021). Email marketing allows businesses to communicate directly with customers, enhancing personalization and segmentation for higher engagement and conversions (Chaffey, 2019). Content marketing through blogs, videos, and infographics establishes authority and trust (Pulizzi, 2014). Additionally, PPC advertising offers SMEs a cost-effective way to target specific audiences, adjust campaigns, and track performance (Hollis, 2018). Influencer marketing, particularly with micro-influencers, helps SMEs reach niche markets and boost credibility at a lower cost compared to major influencers (Freberg, Graham, McGaughey, & Freberg, 2011). These digital marketing strategies enable SMEs to compete effectively in the global marketplace while staying within budget constraints.

### **Challenges SMEs Face in Implementing E-Marketing:**

Small and Medium-sized Enterprises (SMEs) face several challenges when implementing e-marketing strategies. These

include limited budgets and resources, which restrict their ability to afford advanced tools or high-quality services (Chaffey, 2019). Additionally, many SMEs lack in-house expertise, making it difficult to create and execute effective campaigns (Grewal et al., 2020). Competing with large enterprises is another hurdle, as bigger companies have extensive resources for aggressive marketing efforts (Grewal et al., 2020). Lastly, data privacy and security concerns, such as compliance with GDPR, add complexity, as SMEs often lack the necessary infrastructure (Laudon & Laudon, 2021).

### **Case Studies of Successful SMEs Using E-Marketing:**

The case studies of Urban Threads, Sweet Treats Bakery, and TechGen Innovations highlight the effectiveness of strategic e-marketing approaches for SMEs. Urban Threads increased sales by using Instagram ads and influencer marketing, effectively targeting audiences and refining engagement (Kotler et al., 2019). Sweet Treats Bakery saw a boost in foot traffic and online orders through local SEO optimization and Google My Business listings (Hollensen, 2020). TechGen Innovations built customer loyalty by combining content marketing and email campaigns, providing valuable educational content to nurture leads (Chaffey, 2020). These approaches demonstrate how SMEs can leverage digital tools for growth.

### **The Future of E-Marketing for SMEs:**

**Emerging Trends:** As digital technology evolves, SMEs should be ready to embrace emerging trends that will shape e-marketing strategies. Key trends on the horizon include:

**Artificial Intelligence (AI):** AI tools can automate customer service (e.g., chatbots), aid in data analysis, and improve personalized marketing strategies. By analysing customer behaviour, AI can enable

SMEs to tailor their marketing efforts more accurately, optimize customer experiences, and increase engagement.

### Conclusion:

E-marketing offers small and medium-sized enterprises (SMEs) a cost-effective way to compete on a larger scale. By using digital tools like social media, email marketing, and SEO, SMEs can reach targeted audiences, build brand awareness, and engage directly with customers. The ability to track and analyse campaign performance provides valuable data-driven insights, allowing for strategy refinement. Moreover, e-marketing's scalability enables businesses to grow and expand into new markets. However, SMEs must be mindful of challenges such as competition, evolving algorithms, and the need for expertise to optimize digital marketing strategies effectively.

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### Declaration of Conflicting Interests:

In research on E-Marketing Strategies for SMEs, a Declaration of Conflicting Interests is crucial for ensuring transparency. This section discloses any financial, personal, or professional interests that could influence the study's outcomes. For instance, financial ties to digital marketing tool providers, consultancy roles, or affiliations with agencies offering e-marketing services should be openly acknowledged. Professional interests, such as ownership or partnerships with SMEs or industry groups, also need to be disclosed to maintain credibility. Personal biases, such as preferences for specific marketing platforms, should also be transparently stated to safeguard the integrity and impartiality of the research.



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## An Analysis of Theories of Career Development

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DOI - 10.5281/zenodo.15130200

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### Abstract:

*The purpose of the article is to carry out an in-depth analysis of career development theories and to know the practical implications in modern organizations. Content analysis method has been implemented for studying published literature on career theories. The outcome of the study shows that no single theory can be applicable to all situations and necessitates a combination of approach. Moreover, the factors emphasized by different theories that regulate a person changes very often with the changing organizational contours in this volatility, uncertainty, complexity, and ambiguity (VUCA) world. As a result, the organizations need to adapt with the changing scenario with an appropriate modified model to reap the benefit of career development. The study is limited to only five career development theories and the theories are analysed on the evidences collected from secondary sources. This study provides an insight into the changing professional world with individual coping strategies to the volatile work environment. It prescribes a path towards occupational growth and professional wellbeing for an individual. It also attempts to provide systematic steps to create a platform for career development of employees.*

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**Keywords:** *Career Development, Process Theories, Content Theories*

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### Introduction:

Career development theories show the various paths towards improving professional growth and the career trajectory followed by individuals for an overall job satisfaction and goal achievement. Understanding these theories is an essential step in determining the strengths, weaknesses, fundamental values, and desirable path that are operative while choosing a career. There are various types of career development theories that focus on different factors, and quite dissimilar to one another. Still all the theories recognise the importance of cultivating a positive emotional relation with work or work environment for developing and achieving a meaningful professional goal. Career development theories can be divided into four categories: by using trait factor, a proper match between individual traits to

occupations is focused upon (like trait and factor theory by Frank Parson); it can be based on psychological structure, where the personality should correspond with the work environment (like Holland theory); it can be grounded on decision - situational factors (like social cognitive career theory); and it can be constructed on self-concept (like life span theory of Super). Besides this categorisation, another type of division can be noticed in the theories that are: process theories, content theories, and process-content theories. The process theories emphasise on communicating about the interaction and changes that occurs over a period of time. These theories deal with a sequence of stages through which people proceeds (example: Super's life-span, life-space approach to career development, Gottfredson's circumscription and compromise theory). The content theories

are connected with the features of an individual and the environment they live in. The impact on career development are thought to be either intrinsic to the individual or it is initiated from the context or surrounding in which they live. For example: Theory of Work Adjustment. The content and process theories have been moulded in response to accommodate with the requirements of process theory and content theory. These theories embrace both the characteristics of context and individuals, and the advancement and dealings between them (example: Krumboltz's social learning theory of career decision-making, social cognitive career theory, Roe's theory of personality development and career choice).

#### **Objectives and Methodology of the Study:**

The study is carried out to gain knowledge about the philosophy and theoretical underpinnings behind career development. Effort is also made to identify the various empirical research conducted by using these theories. As intrinsic as well as extrinsic factors impact career development, attention is provided to understand the same from existing literature. Finally attempt is made to understand the career path or stages adopted by the theories. Content analysis method has been implemented for studying published literature on career theories.

#### **Content Theories:**

##### ***(a) Theory of Work Adjustment or Person-Environment Correspondence Theory:***

The Theory of Work Adjustment (TWA) is based on the difference of individuals and vocational behaviour (Dawis, 2002, 2005; Dawis & Lofquist, 1984). It views career choice as an unbroken process consisting of adjustment and accommodation. The theory declares two processes that an individual adheres to. In the first case, an individual or person (P) searches for a work environment (E) that can

match with his requirement. In the second phase E searches for P having the skills that can tally with the needs of the organization. The amount of satisfaction of P depends on his needs and satisfactoriness of E is based on the operational skills of P helps to forecast the tenure of P. There are four types of adjustment maintained by person and environment (Dawis, 2005). The first one is flexibility that denotes to a person level of tolerance in environment. Next is activeness where P tries to modify E. The third is reactivity where P adopts a self-modification to the difficult situation without transforming E. The fourth is perseverance in which P determines to adjust before choosing to leave E.

##### ***(b) Holland's Theory of Vocational Personalities in Work Environment:***

The theory of Holland can be applied in career counselling and career guidance. Holland expressed that vocational interest and personality is organised in hexagonal structure in the order of RIASEC and can be codified into Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C). Generally, this six types of interest and personality can take two type of forms by producing three-letter code e.g., RIA, SIA that symbolizes one's career interest. The first letter of these two codes shows the chief interest of the person and the second and third alphabets denotes significant but secondary interest in the course of career choice. Holland used the word "congruence" to show the person-environment interaction where the personality and interest of the person and the work environment produces vocational stability and satisfaction and a low congruence causes vocational instability and dissatisfaction.

#### **Process Theories:**

##### ***(a) Self-concept Theory of Career Development:***



Among various theories of career development, the theory given by Super has received abundant attention in USA and other nations. Super established that career development and career choice is related with the self-concept of the person. A self-concept is a complex dealing among the mental and physical growth, environmental features, personal experience etc. (Super, 1990).

**(b) Gottfredson's Theory of Circumscription and Compromise:**

Gottfredson's theory of career development is a new input in the theory of career development. Gottfredson (1981,1996, 2002, 2005) supposed that the process of career choice demands for a greater level of cognitive ability. Gottfredson's (2002, 2005) expounded on the interplay between the concept of genetic makeup and environment. The theory have got little attention as it is problematic to test it empirically Swanson and Gore (2000) because (a) its variables like prestige, circumscription, compromise, sex type are tough to implement (b) the developmental process is suitable for longitudinal studies which requires ample time. But still the theory can be used for career guidance like gender stereotype found in the cultures of Asia, where a person chooses a profession which he consider suitable for his gender (Leung, 2002)

**Analysis of the theories:**

The theories of career development served a prominent role by encouraging research activity. By analysing the abovementioned theories of career development, it is found that most of them are related to the career behaviour of an individual. The theories are mostly descriptive in nature rather than explanatory even though they are tested by several researchers. Some theories has been applied much more (e.g. super theory of self-concept) as compared with other theories

have got a mixed result (e.g. Holland theory). There exist some contrasting factors among the theories.

Holland's theory (1959) identifies the factors that trigger the vocational behaviour of a person while other theories deal with the purpose and development of vocational behaviours. Trait factors associated with Holland's theory explains very little about vocational behaviour. This theory is also having certain limitations. The theory needs to settle up the inconsistencies of personality required for a proper operation in an occupation. The concept of role identification in career development has been approved by empirical evidences whereas the idea of psychic energy for vocational activity has acquired little support. A substantial amount of research on Super's theory has provided experimental confirmation of self-concept and career development task that is identified with a specific vocational decision.

**Findings:**

- The theories generally focus on individual, environment and interrelation between the two.
- The study of theories shows that no particular theory can be suitable for every situation and every person.
- One type of theory cannot be applicable to all types of individuals or environment.
- A particular theory may not be applicable in long run. When the needs of a person changes or the requirement of an organization changes then the theory lacks its ability to influence.

**Conclusion:**

By studying the above mentioned career related theories, we can find that these theories discourses about the career related outcome (Chen, 2001; Dik, Duffy, &

Eldridge, 2009). The study gives a detail vision into the various factors like personality, professional growth, self-concept, social situation etc. that sometimes performs as a source of encouragement and other time acts as barriers for an individual while choosing a career. The varied perspectives of career development theories offer valuable evidence that reflects employee development. These theories help to acquire knowledge about the ways by which an individual develops his career remaining in an organization and the methods that an individual adopts to adjust and achieves knowledge and skills accordance with various circumstances, needs, and social situations. It is suggested that while implementing a theory an organization should know about its employees' needs and should consider on the practicability of applying the theory. This study complements with Super (1992) who advised that no single theory is sufficient enough to show the career progress of a person, rather each theory advocates certain idea and neglects the other part of individual career choice (Krumboltz, 1994). This study concludes that one particular theory may be operative for a person in a particular time but may be dysfunctional during other time.

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## Sustainable Development in Commerce and Management: Balancing Profit and Environmental Responsibility

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**DOI - 10.5281/zenodo.15130203**

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### **Abstract:**

*Sustainable development in commerce and management is an evolving paradigm that integrates economic growth with environmental responsibility. This research paper explores the role of sustainable business practices in achieving a balance between profitability and ecological conservation. It delves into corporate social responsibility (CSR), green marketing, sustainable supply chain management, and ethical finance as key components that contribute to sustainable commerce. By analyzing case studies and empirical data, this paper underscores the importance of sustainable management in ensuring long-term business success and environmental preservation.*

**Keywords:** *Sustainable development, Commerce and management, Business*

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### **Introduction:**

The traditional business model prioritizes profit maximization, often at the expense of environmental degradation. However, the increasing awareness of climate change, resource depletion, and social responsibility has led to the emergence of sustainable business practices. The concept of sustainable development, as defined by the Brundtland Commission (1987), emphasizes meeting present needs without compromising the ability of future generations to meet theirs. In commerce and management, this translates into adopting strategies that foster economic, social, and environmental sustainability.

### **Objectives of Study:**

1. To study the concept of sustainable development.
2. To understand the importance of sustainable development in commerce and Management.

3. To identify the linkages between Business, environment, society and development.

### **Research Methodology:**

This research paper aims to give a better understanding about the theme of Sustainable Development in Commerce and Management in current scenario. The study is descriptive in nature. The literature and data are mainly based on secondary a source, which has been collected from various publications, magazines, journals and internet sources.

### **Meaning and Concept of Sustainable Development:**

Sustainable development is the process of establishing and implementing public policies and programs that take into account environmental, economic, and social objectives. It also includes taking into account both current and future generations' demands. In other words, sustainable

development is the application and implementation of sustainable techniques to manage available resources in a way that benefits current and future generations while preserving their fundamental structure. To achieve sustainable development, three key factors must be aligned: economic growth, social inclusion, and environmental conservation. These three factors are inextricably linked, and each is critical to the well-being of individuals and society. It's a method of handling and managing resources in a methodical way without damaging the environment or the ecosystem. As a result, another name for this idea is environmentally sustainable economic growth.

#### **Literature Review:**

Several scholars have contributed to the discourse on sustainable development in business. Elkington's (1997) Triple Bottom Line (TBL) framework advocates for measuring business success in terms of profit (economic sustainability), people (social sustainability), and the planet (environmental sustainability). Porter and Kramer (2011) introduced the concept of Shared Value, emphasizing that businesses can generate economic value while addressing societal and environmental issues. Recent research also highlights consumer preference shifts towards sustainable products and services, urging businesses to integrate green practices into their operations.

#### **Opportunities through Sustainable Development:**

The following are some benefits that sustainability brings to our company or organization:

- New Market Potential to strengthen export policies and lower imports.
- The strategy of competitive differentiation demonstrates how to thrive in this technology environment.

- It also provides a platform for innovation, allowing our young people to showcase and use their latent talents and abilities to launch businesses.
- It lowers operating expenses and energy bills.
- It also offers protection against a variety of risks, such as lawsuits, new environmental laws and taxes, changes in the market, etc.
- It boosts employees' spirits.
- It lowers employee absenteeism and boosts productivity.
- It enhances community and public relations. In essence, commerce depends on businesses and enterprises. Manufacturing is necessary in every industry; without it, servicing is impossible. Our nation's economy is expanding and improving at the same time thanks to the policies of globalization, privatization, and liberalization. As a result, we are also putting Industry 4.0 into practice. Information technology and operational technology are combined in Industry 4.0. Industry 4.0's frontiers include things like system integration, simulation and virtualization, the Internet of Things (IoT), big data and analytics, cloud computing, cyber security, augmented reality, autonomous robots, and additive manufacturing. Sustainable development is essential in this context.

#### **Pillars of Sustainable Development:**

Sustainable development in **commerce and management** is built upon three key pillars, often referred to as the **Triple Bottom Line**:

##### **1. Economic Sustainability:**

- Ensures long-term business growth and profitability without harming future generations.

- Encourages ethical business practices, fair trade, and corporate social responsibility (CSR).
- Promotes innovation, resource efficiency, and circular economy models.
- Supports financial inclusion and equitable wealth distribution.

## 2. Environmental Sustainability:

- Focuses on minimizing the ecological footprint of businesses.
- Encourages the use of renewable energy, waste reduction, and green supply chains.
- Implements sustainable production and consumption models.
- Adheres to environmental regulations and promotes corporate responsibility in climate action.

## 3. Social Sustainability:

- Emphasizes fair labour practices, employee well-being, and diversity & inclusion.
- Strengthens relationships with communities through CSR initiatives.
- Promotes consumer awareness and ethical marketing practices.
- Enhances stakeholder engagement and ensures transparent governance.

## Sustainable Business Practices:

### 1. Corporate Social Responsibility (CSR):

CSR initiatives help companies align their operations with ethical, social, and environmental values. Examples include renewable energy investments, fair labor practices, and community development programs. Businesses like Patagonia and Unilever have successfully embedded sustainability into their corporate strategies, enhancing brand reputation and customer loyalty.

### 2. Green Marketing:

Green marketing involves promoting products and services that are environmentally friendly. Companies use eco-labeling, sustainable packaging, and

transparency in sourcing materials to attract environmentally conscious consumers. Tesla, for instance, has revolutionized the automotive industry by producing electric vehicles that reduce carbon footprints.

### 3. Sustainable Supply Chain Management (SSCM):

Sustainable supply chains focus on minimizing waste, reducing emissions, and ensuring ethical sourcing. Companies adopt circular economy models, emphasizing recycling, reusing, and reducing waste in production processes. For example, IKEA has committed to using sustainable materials and renewable energy across its supply chain.

### 4. Ethical Finance and Investment:

Sustainable finance includes impact investing, green bonds, and socially responsible investing (SRI). Financial institutions now assess environmental, social, and governance (ESG) criteria before making investment decisions. Organizations like the World Bank and major financial corporations have launched green bonds to fund eco-friendly projects.

## Challenges in Implementing Sustainable Practices:

Despite the benefits, businesses face challenges in adopting sustainable practices. High initial costs, regulatory complexities, and resistance to change hinder the transition to sustainable models. Additionally, green washing—where companies falsely claim to be environmentally responsible—poses a significant concern, misleading consumers and investors.

### Case Studies:

1. **Unilever:** Unilever's Sustainable Living Plan aims to decouple growth from environmental impact by reducing carbon emissions, water use, and waste production while improving social well-being.
2. **Tesla:** Tesla's focus on electric vehicles and renewable energy solutions

exemplifies how sustainability can drive profitability and innovation.

3. **IKEA:** The company's sustainability initiatives, such as sourcing 100% renewable wood and committing to becoming climate-positive by 2030, highlight the integration of sustainability into core business strategies.

#### **Future Perspectives:**

The future of sustainable commerce and management depends on technological advancements, policy support, and consumer awareness. Innovations in renewable energy, block chain for supply chain transparency, and AI-driven sustainability solutions will further enhance sustainable business practices. Governments and international organizations must enforce stricter regulations and incentives to promote sustainability in business.

#### **Conclusion:**

Sustainable development in commerce and management is no longer an option but a necessity. Balancing profitability with environmental responsibility requires businesses to adopt CSR initiatives, green marketing strategies, sustainable supply chain management, and ethical financial practices. While challenges exist, the long-term benefits such as enhanced brand loyalty, risk mitigation, and regulatory compliance make sustainability a crucial aspect of modern business strategy. Companies that prioritize sustainable practices will not only contribute to a healthier planet but also secure a competitive advantage in the evolving market landscape.

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## Cryptocurrency Investment in India-Trends, Challenges and Regulatory Landscape

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**DOI - 10.5281/zenodo.15130219**

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### **Abstract:**

*A significant increase in the number of internet users has triggered virtual word concepts and generated a new economic phenomenon known as cryptocurrencies to enable financial transactions including purchasing, selling, and trading. In recent years, the usage of virtual currency has expanded across several platforms. Cryptocurrency investment in India has witnessed significant growth over the past decade, fuelled by technological advancements, market speculation, and a growing interest in decentralized finance. However, despite its popularity, the sector faces regulatory uncertainty, volatility, and skepticism from various quarters. Present study is based on Secondary data. This paper delves into the trends and challenges associated with cryptocurrency investments in India, the regulatory landscape, and the future outlook for the industry. The recent trends, challenges and regulatory aspects of cryptocurrencies are examined in this research.*

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**Keywords - Cryptocurrency, Virtual currency, Bitcoin, Block Chain, Digital Assets.**

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### **Introduction:**

Cryptocurrencies, primarily Bitcoin and Ethereum, have gained widespread popularity globally, and India has not remained immune to this trend. In 2020 and 2021, India saw an influx of retail investors and institutional interest, as global and local exchanges reported record user sign-ups. With the rise of fintech and blockchain technologies, India is increasingly adopting digital assets. The desire for alternative investment avenues in a low-interest-rate environment, along with the growth of digital payment systems, has pushed crypto adoption.

### **Review of Literature:**

Cryptocurrency investment in India has become a subject of intense research in recent years due to its rapid growth, challenges, and the evolving regulatory environment. Several studies have

documented the meteoric rise of cryptocurrency investments in India.

Shaikh Jani (2018) in his Research paper entitled “The Growth of Cryptocurrency in India: Its Challenges & Potential Impacts on Legislation” opined that Cryptocurrency presents a novel, efficient, and appealing model for payment methods that has the potential to enhance the revenues of companies and operators. Furthermore, researcher noted that the confidence and trust in using cryptocurrency is significantly high, as evidenced by various cases mentioned in this paper in addition to the results of the survey. The researcher concluded that the future of cryptocurrency holds promise, uncovering more opportunities to foster positive changes and advancements in the e-Business and e-Payment sectors. With the swift advancement and improvement of



technology, cryptocurrency will continue to evolve.

Dr. M. Srinivas, Dr. V. Ramachandra Murthy and Dr. Shathaboina Raju (2023) in their Research paper entitled “Impact of Cryptocurrency on Indian Economy” conducted a study with an objective of to outline the possible risks and advantages of adopting cryptocurrency within the Indian economy and to examine the factors contributing to its growth in India.

The influence of cryptocurrency on the Indian economy is a complex and dynamic issue. Although the underlying technology of cryptocurrencies, known as blockchain, has the capability to transform various industries, the Indian government has been prudent in its stance toward cryptocurrencies. Nevertheless, there are concerns about the role of cryptocurrencies in illicit activities such as money laundering and terrorism financing. Ultimately, the effect of cryptocurrencies on the Indian economy is still unclear. While it offers both potential benefits and challenges, a careful and measured approach is essential to leverage the possible advantages while addressing the associated risks.

Gupta & Agarwal (2020) argue that blockchain, with its promise of transparency, decentralization, and security, appeals to investors who are skeptical of traditional financial institutions. The growing acceptance of blockchain technology across various sectors—such as supply chain, healthcare, and digital identity—further bolsters its appeal as a foundation for cryptocurrencies.

Mishra and Kumar (2021) argue that cryptocurrencies like Bitcoin are increasingly being viewed as a hedge against inflation, especially in the context of high domestic inflation rates and the depreciation of the Indian Rupee. Investors are seeking alternative stores of value that are less

susceptible to central bank policies and government interventions.

According to Bansal and Chandra (2021), India saw a significant increase in cryptocurrency adoption, particularly post-2017 when global cryptocurrencies like Bitcoin, Ethereum, and Ripple gained global attention. The number of cryptocurrency holders in India surpassed 100 million by the end of 2021, making India one of the largest markets for cryptocurrency globally.

Kaur and Kapoor (2020) highlighted that many Indian investors, particularly millennials, were drawn to digital currencies as speculative investment instruments, largely driven by the global hype surrounding cryptocurrencies.

Verma and Mehta (2021) and Kumar and Sharma (2022) reveals that Indian cryptocurrency investors tend to be young, tech-savvy, and more likely to take risks. They also tend to be from urban areas with higher levels of education and disposable income.

Rao and Sharma (2022) note that the Indian population's growing disillusionment with traditional banking systems, combined with an increasing interest in peer-to-peer and decentralized financial systems, has driven up cryptocurrency adoption. The ability to transact without relying on government-controlled fiat currencies or banks is a key appeal of cryptocurrencies for many Indian investors.

The literature on cryptocurrency investment in India highlights the rapid growth and increasing adoption of digital assets, particularly among younger, tech-savvy investors. Despite its promising potential, the sector faces significant challenges, including volatility, security risks, and an uncertain regulatory environment.

### **Statement of the Problem:**

Cryptocurrency investment has witnessed exponential growth in India in

recent years, positioning the country as one of the largest and most dynamic markets for digital assets globally. However, the rapid rise of cryptocurrency adoption and investment has been accompanied by significant challenges that pose risks to both investors and the broader financial ecosystem. These challenges include high market volatility, security vulnerabilities, the absence of clear regulatory frameworks, and limited investor education.

Given these dynamics, the core problem lies in understanding the complex and rapidly changing nature of cryptocurrency investment in India, the challenges faced by investors, and the unclear regulatory environment that continues to evolve. A deeper understanding is needed of how these factors interplay to shape investment trends, the potential long-term effects on India's financial ecosystem, and the broader implications for the regulatory landscape.

In this light the present study is undertaken and entitled as "Cryptocurrency Investment in India - Trends, Challenges, and Regulatory Landscape".

### Objectives of Study:

The following are the key objectives that the research paper will aim to achieve:

1. Examine the Trends in Cryptocurrency Investment in India.
2. Identify Key Drivers of Cryptocurrency Investment in India.
3. Evaluate the Challenges Faced by Cryptocurrency Investors in India.
4. Explore the Future of Cryptocurrency Investment in India.
5. Suggest Policy Recommendations for cryptocurrency growth while addressing investor protection and market stability.

By meeting these objectives, the research paper will provide a comprehensive view of the cryptocurrency investment landscape in India and contribute valuable

insights on the future direction of this rapidly evolving market.

### Research Methodology:

Present study is based mainly on secondary data. Researcher compiled data available on numerous websites, including Forbes,

### Discussion:

#### 1. Market Trends:

Cryptocurrency investment in India has experienced significant growth, with notable trends and statistics emerging in recent years.

#### Market Size and Growth:

- **Market Valuation:** In 2024, the Indian cryptocurrency market was valued at approximately USD 2.6 billion. Projections indicate substantial growth, with the market expected to reach USD 13.9 billion by 2033, reflecting a compound annual growth rate (CAGR) of 18.48% from 2025 to 2033.
- **User Base:** The number of cryptocurrency users in India is projected to reach 107.30 million by 2025, with a user penetration rate of 7.41% in 2024, anticipated to rise to 7.35% by 2025.

#### Regional Distribution:

- **Top Cities for Crypto Investment:** Delhi-NCR leads India's crypto investments, accounting for 20.9% of the total, followed by Bengaluru at 9.6% and Mumbai at 6.5%.
- **Demographics and Investor Behavior:**

#### Gender and Age Distribution:

Between June 2023 and January 2024, there was a significant 300% increase in female participation in cryptocurrency investments in India. Approximately one in five investors is female, with a majority in the 18 to 34-year age bracket.

- **Income Levels:** Among survey participants, 49.5% had an annual income below INR 5 lakh. Notably, 58.5% of these individuals had investments in both equities and cryptocurrencies.

These statistics highlight the dynamic and rapidly evolving landscape of cryptocurrency investment in India, characterized by increasing adoption across diverse demographics and regions.

## 2. Drivers of Cryptocurrency Investment in India:

- **Economic Factors:** Cryptocurrencies are seen by many as a hedge against inflation, especially in a country like India, where inflation rates can fluctuate dramatically. Bitcoin, often referred to as 'digital gold,' is viewed as a store of value.
- **Technological Adoption:** India's increasing internet penetration, combined with the growth of mobile-first apps, has played a crucial role in the crypto investment boom. Blockchain technology, the foundation of cryptocurrencies, also appeals to a tech-savvy demographic.
- **Investment Diversification:** With limited access to high-return investment options like equities or real estate for the average investor, cryptocurrencies have presented an attractive alternative for risk-tolerant individuals seeking higher returns.

## 3. Regulatory Landscape:

- **Regulatory Uncertainty:** One of the most significant challenges for cryptocurrency investors in India is the lack of clear regulation. While there has been no formal ban on cryptocurrency, the government has been hesitant to provide clear guidelines.
- **The Supreme Court Ruling (2020):** In 2020, the Supreme Court of India overturned a banking ban by the

Reserve Bank of India (RBI) on cryptocurrency transactions, which had a significant impact on the market by allowing exchanges to operate freely. This ruling was seen as a positive step for the industry.

- **Proposed Legislation (2021-2023):** The Indian government has hinted at introducing a bill that would regulate cryptocurrencies, with speculations that it could include provisions to ban private cryptocurrencies while allowing a central bank digital currency (CBDC). However, as of 2023, there is no definitive policy on this front, and investors continue to face uncertainty.
- **Taxation:** In 2022, the Indian government introduced a 30% tax on cryptocurrency income, along with a 1% TDS (Tax Deducted at Source) on crypto transactions. This move was aimed at bringing clarity but also raised concerns about the implications on liquidity and market activity.

## 4. Challenges And Risks:

- **Volatility:** Cryptocurrencies are highly volatile assets. Investors in India have experienced large swings in the value of their investments, and while this volatility presents opportunities for short-term gains, it also exposes investors to significant risks.
- **Security Risks:** Crypto thefts, hacking of exchanges, and phishing scams have been on the rise. India has seen several high-profile cases of cybercrimes linked to cryptocurrency exchanges, causing concern about the safety of funds.
- **Lack of Investor Education:** There is a general lack of understanding of cryptocurrency and blockchain technology among Indian investors. Many newcomers enter the market driven by hype without fully understanding the risks or underlying technology.
- **Regulatory Risk:** As mentioned earlier, regulatory uncertainty remains a major

risk. Any negative legislation could severely impact the market, affecting both investors and exchanges.

### 5. Future Outlook:

- **Blockchain Adoption:** While cryptocurrencies themselves face regulatory hurdles, blockchain technology is expected to see widespread adoption in India, with use cases in supply chain, banking, and even governance. This may support the long-term growth of the crypto sector, as more blockchain-based solutions come to market.
- **Central Bank Digital Currency (CBDC):** India's Reserve Bank is exploring the possibility of launching a digital version of the Indian Rupee, which would likely impact the cryptocurrency landscape. A CBDC could offer a regulated alternative to decentralized cryptocurrencies, potentially mitigating some of the concerns about volatility.
- **Institutional Investment:** In the long term, there is growing speculation that more institutional investors will enter the Indian cryptocurrency market. While some banks and financial institutions are cautious, global firms like Fidelity and Tesla have expressed interest in entering the Indian market, which could signal positive changes ahead.

### Findings of the Study:

Present study reveals several key insights based on current market conditions, investor behavior, regulatory developments, and economic factors. These findings contribute to understanding the current state of cryptocurrency investments in India and provide a perspective on its future growth and challenges.

- **Significant Growth in Investor Numbers:** The number of cryptocurrency investors in India has surged in recent years. By 2021, over

100 million Indians were estimated to hold cryptocurrencies, making India one of the largest markets for digital currencies in the world. This growth has been primarily driven by young, tech-savvy investors, with a majority of them being between the ages of 18 and 35.

- **Shift Toward Diversified Investment Portfolios:** Many investors in India are increasingly incorporating cryptocurrencies into their portfolios as an alternative asset class. Bitcoin, Ethereum, and Solana are among the most popular assets, although interest in newer, smaller altcoins is also growing.
- **Retail Investors Dominating the Market:** Most of the cryptocurrency investments in India come from retail investors, rather than institutional investors.
- **Hedge Against Inflation and Currency Depreciation:** One of the key economic drivers for cryptocurrency investment in India is the desire to hedge against inflation and the depreciation of the Indian Rupee (INR).
- **Unclear Legal Framework:** One of the most prominent findings is the ongoing regulatory uncertainty surrounding cryptocurrencies in India. While the Supreme Court lifted the RBI's banking ban on cryptocurrency transactions in 2020, there has been no clear regulatory policy or legislation that explicitly defines how cryptocurrencies should be treated.
- **Proposed Cryptocurrency Bill:** The Indian government's proposed cryptocurrency bill has caused significant concern in the crypto community.
- **Security Vulnerabilities:** Cybersecurity continues to be a significant concern in the Indian cryptocurrency market.
- **Absence of Investor Protection Mechanisms:** India lacks comprehensive legal frameworks for

investor protection in the cryptocurrency space. Unlike traditional investments such as equities or mutual funds, there are limited avenues for investors to seek recourse in case of fraud or financial loss.

- **Lack of Investor Education:** A key challenge in the Indian cryptocurrency market is the lack of education and awareness. Many investors enter the cryptocurrency market without understanding the underlying technology, market dynamics, or the risks involved.
- **Need for Investor Education Programs:** To promote responsible investing and mitigate risks, education initiatives are crucial.

#### Suggestions of the Study:

Based on the findings of the research on cryptocurrency investment in India, several suggestions can be made to improve investor confidence, foster market growth, and address existing challenges.

#### 1. Establish Clear and Consistent Regulatory Framework:

- Separate Regulations for Private Cryptocurrencies and CBDCs:
- Collaborate with International Regulators:

#### 2. Strengthen Investor Protection Mechanisms:

- Introduce Investor Protection Policies:
- Create a Regulatory Body for Cryptocurrencies:

#### 3. Enhance Cybersecurity and Reduce Security Risks:

- Mandatory Security Standards for Exchanges:
- Investor Awareness About Security Best Practices:

#### 4. Expand Cryptocurrency Education and Awareness Programs:

- Public Awareness Campaigns on Risks and Benefits:
- Curriculum Integration: Universities and educational institutions should

integrate blockchain and cryptocurrency education into their curricula.

#### 5. Tax Clarity and Fair Taxation Policies:

- Simplify Tax Compliance:
6. Promote Blockchain Technology and Use Cases Beyond Cryptocurrencies
  7. Gradual Introduction of Central Bank Digital Currency (CBDC)
  8. Encourage Global Partnerships and Cross-Border Cooperation

#### Concluding Remark:

India's cryptocurrency investment landscape is characterized by rapid growth, regulatory uncertainty, and the promise of technological advancement. While challenges remain, such as market volatility and security concerns, the increasing adoption of blockchain technology and the potential for regulatory clarity could foster a more mature market. The future of cryptocurrency investments in India will depend heavily on how the government approaches regulation, investor education, and the broader acceptance of digital assets in the financial ecosystem.

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## Challenges and Opportunities for Sustainable Development in Commerce and Management

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DOI - 10.5281/zenodo.15130227

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### Abstract:

*The concept of sustainable development in commerce and management has gained significant momentum due to the increasing global focus on environmental preservation, social equity, and economic growth. Businesses today are expected not only to generate profit but also to operate in a socially and environmentally responsible manner. This paper explores the challenges and opportunities associated with integrating sustainable development principles into commerce and management. It examines the role of sustainability in business practices, the barriers companies face, and how they can leverage sustainability for long-term success. Through analysis of case studies and theoretical frameworks, this research paper outlines key strategies for fostering sustainable development in the business sector.*

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**Keywords:** *Financial Constraints, Regulatory and Compliance Issues, Cultural and Organizational Resistance, Innovation, Global Collaboration, Sustainable Development*

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### Introduction:

The concept of sustainable development in commerce and management has gained significant momentum due to the increasing global focus on environmental preservation, social equity, and economic growth. Businesses today are expected not only to generate profit but also to operate in a socially and environmentally responsible manner. This paper explores the challenges and opportunities associated with integrating sustainable development principles into commerce and management. It examines the role of sustainability in business practices, the barriers companies face, and how they can leverage sustainability for long-term success. Through analysis of case studies and theoretical frameworks, this research paper outlines key strategies for fostering sustainable development in the business sector.

### Objectives:

1. To understand the background and significance of entrepreneurship development.
2. To analyze recent insights into entrepreneurship and its evolving trends.
3. To identify the key components of a sustainable entrepreneurial ecosystem.
4. To examine the challenges and opportunities in entrepreneurship development.
5. To provide recommendations for fostering a conducive environment for entrepreneurs.

### Literature Review:

The following literature reviews provide a comprehensive understanding of the interplay between entrepreneurship development and global leadership:

1. Drucker (1985) emphasized the role of innovation in entrepreneurship, stating that entrepreneurs are agents of change

- and innovation, essential for global competitiveness.
2. Porter (1990) discussed the importance of competitive advantage through entrepreneurial strategies in international markets.
  3. Stevenson and Jarillo (1990) focused on the entrepreneurial process as a dynamic mechanism for economic growth.
  4. Audretsch (2003) stressed the importance of knowledge-based entrepreneurship for regional and global development.
  5. Kuratko and Hodgetts (2007) identified educational and policy interventions as critical enablers of entrepreneurship development.
  6. Gibb (2002) presented a framework for entrepreneurial education as a means to develop leadership skills.

### **Background of Entrepreneurship Development:**

Entrepreneurship development involves enhancing the skills, knowledge, and capabilities of individuals to create and manage businesses. Historically, entrepreneurship has played a crucial role in economic transformation, fostering competition, and driving technological advancements. Government policies, financial institutions, and academic institutions have contributed to entrepreneurship education and support initiatives.

### **Challenges for Sustainable Development in Commerce and Management:**

#### **Financial Constraints**

- **Initial Investment:**

Sustainable practices often require considerable initial investment. Companies need to spend on technology upgrades, new systems, research and development (R&D), renewable energy infrastructure, waste management systems, and sustainable product

designs. For many businesses, particularly small and medium enterprises (SMEs), these costs can be prohibitive. They may also face difficulty in securing the necessary funding or loans to support these investments. Sustainable alternatives—such as energy-efficient machinery or sustainable raw materials—are often more expensive than traditional options, which can deter businesses from adopting them.

- **Return on Investment (ROI):**

Achieving a positive ROI from sustainable practices may take several years. Many sustainability measures, like transitioning to renewable energy or implementing waste-reduction systems, show long-term benefits in terms of cost savings, but these returns might not be immediately apparent. This long-term nature of sustainability investments can create hesitation among businesses, particularly those under pressure to deliver quick returns to shareholders or stakeholders focused on short-term financial outcomes.

#### **Regulatory and Compliance Issues:**

- **Complex Regulations:**

Environmental and sustainability regulations differ significantly from country to country and even within regions of a country. This creates complexity, especially for multinational businesses operating across borders. For instance, environmental standards in the European Union might differ from those in the U.S. or Asia, requiring businesses to adapt their operations to meet each region's specific laws. In addition to environmental regulations, companies must also comply with social responsibility standards, fair labor practices, and product safety laws, adding to the burden.



- **Changing Regulations:**

Sustainability regulations are constantly evolving. Governments are progressively tightening rules around emissions, resource usage, and waste management. For example, carbon emissions laws or plastic usage bans may change based on environmental goals or political climates. These unpredictable changes create difficulties for businesses, as they must continuously adapt their practices to stay compliant, potentially incurring additional costs.

**Short-Term Profit Focus:**

- **Investor Expectations:**  
Investors often have a short-term profit focus, and this can clash with the long-term nature of sustainable development. Sustainable practices such as reducing carbon footprints, improving working conditions, or shifting to renewable energy sources require substantial investments, and their return on investment may not be immediately realized. This can be a deterrent for shareholders and investors who prioritize quarterly earnings and might be reluctant to back sustainability initiatives without immediate financial payoffs.

**Supply Chain Complexities:**

- **Global Supply Chains:**  
Companies often rely on global supply chains to source materials or distribute products. These supply chains can include numerous stakeholders—suppliers, manufacturers, distributors—that may not follow sustainable practices. In addition, supply chain logistics may contribute to a company's carbon footprint through transportation and waste generation. Companies aiming to implement sustainable practices must ensure that their entire supply chain follows similar

sustainability principles, which can be complex and resource-intensive.

- **Transparency Issues:**

Achieving transparency in the supply chain is another significant challenge. Many businesses do not have full visibility of their suppliers' operations, making it difficult to verify whether sustainable practices are being followed throughout the supply chain. Companies may struggle to confirm whether raw materials are responsibly sourced, whether workers are paid fairly, or whether environmental standards are adhered to at all stages.

**Cultural and Organizational Resistance:**

- **Employee Resistance to Change:**  
Transitioning to more sustainable practices may face resistance from employees who are accustomed to existing processes. Employees might view new practices as disruptive or unnecessary, especially if they perceive these changes as a threat to their job security or daily routines. Training and communication are required to overcome this resistance, but getting employees to adopt sustainability as a core value can take time.
- **Management Resistance:**  
Resistance to change at the top management level can also hinder the implementation of sustainable practices. Senior leaders may be reluctant to shift from traditional business models focused primarily on profitability to more holistic approaches that include social and environmental concerns. In many cases, management may view sustainability as a secondary goal, leading to insufficient resources being allocated to sustainability initiatives.

**Consumer Behavior and Awareness:**

- **Skepticism About Greenwashing:**

Consumers are increasingly concerned about the sustainability of the products they purchase. However, many businesses engage in **greenwashing**, falsely claiming to be environmentally friendly to capitalize on this demand without actually implementing significant sustainable practices. This has led to growing consumer skepticism. People are becoming more aware of misleading claims and expect businesses to be transparent about their sustainability efforts. This puts pressure on companies to deliver genuine sustainability rather than superficial or deceptive marketing.

- **Price Sensitivity:**

Sustainable products often cost more due to the increased costs associated with ethical sourcing, renewable energy, and sustainable manufacturing processes. However, many consumers remain price-sensitive, preferring cheaper products over those marketed as sustainable. This price sensitivity can limit the demand for sustainable goods, especially in developing markets where price is a more dominant factor in purchasing decisions.

**Lack of Practical Skills:**

- **Expertise Gap:**

Many businesses lack the in-house expertise required to develop and implement sustainable practices effectively. Sustainable management, green technologies, and carbon footprint calculations are highly specialized fields. Businesses often struggle to find employees or consultants with the necessary skills to lead sustainability efforts.

- **Lack of Knowledge:**

Sustainability encompasses various fields, including environmental science,

ethical sourcing, renewable energy, and social governance. Many business leaders and managers lack the deep understanding needed to integrate these practices into their operations. This knowledge gap can prevent businesses from making informed decisions and hinder effective implementation.

- **Education System:**

Many education systems do not sufficiently emphasize sustainability in business programs. This leads to a shortage of graduates with the necessary skills and knowledge to work in the growing field of sustainable development.

**Low Infrastructure Development:**

- **Lack of Global Collaboration:**

Achieving sustainability on a global scale requires collaboration between businesses, governments, and other organizations. However, infrastructure to support widespread adoption of sustainable practices—such as recycling facilities, renewable energy grids, and eco-friendly transportation—remains underdeveloped in many regions. Without this infrastructure, businesses face significant challenges in implementing their sustainability goals.

- **Undeveloped Eco-Systems:**

Some regions still lack access to clean energy, sustainable agriculture practices, or eco-friendly technologies. In these places, businesses may find it difficult to develop sustainable supply chains or adopt environmentally responsible practices without considerable investment in local infrastructure and systems.

## Opportunities for Sustainable Development in Commerce and Management:

### Innovation and Product and Service Innovation:

- **Circular Economy:**

The circular economy model is a major opportunity for businesses. Instead of the traditional "take-make-dispose" model, businesses can create products designed for reuse, repair, or recycling. This reduces waste and extends the life cycle of products. Companies adopting circular economy principles are not only helping the environment but also reducing costs and building new revenue streams. The development of reusable packaging or repairable consumer electronics are examples of how the circular model can create innovation.

### New Market Development:

- **Ethical Consumerism:**

As consumers become more environmentally and socially aware, the demand for ethically produced and environmentally sustainable products increases. Businesses that develop products that meet these growing ethical standards can tap into a new and expanding market segment. For example, eco-friendly products like organic foods, sustainable clothing, and electric vehicles are gaining popularity.

- **Brand Loyalty and Reputation:**

Brands that demonstrate a clear commitment to sustainability tend to build stronger relationships with their customers. Consumers value companies that prioritize environmental protection, ethical labor practices, and corporate social responsibility. This leads to enhanced brand reputation, customer loyalty, and repeat business, which are essential for long-term success.

## Access to Green Financing and Investments:

- **Green Bonds and Impact Investing:**

Green bonds are a growing way for businesses to secure funding for sustainable projects. They allow companies to raise capital specifically for environmentally sustainable initiatives. Similarly, impact investing focuses on companies that generate social or environmental benefits alongside financial returns. These sources of funding provide businesses with the necessary resources to pursue sustainability initiatives.

- **Sustainable Investment Funds:**

An increasing number of investment funds now focus on sustainable businesses. Investors looking to align their portfolios with their values may prefer funds that prioritize environmental, social, and governance (ESG) criteria. This provides an opportunity for businesses that adopt sustainable practices to attract more investors.

## Risk Management and Resilience:

- **Environmental Risk Mitigation:**

Businesses that prioritize sustainability are better equipped to mitigate environmental risks such as climate change, resource depletion, and natural disasters. Companies that reduce their carbon footprint and use renewable resources are less vulnerable to regulatory changes and supply chain disruptions caused by environmental factors.

- **Supply Chain Resilience:**

Businesses that create sustainable supply chains are often more resilient during economic downturns, natural disasters, and other global disruptions. By diversifying supply sources, focusing on local and sustainable suppliers, and reducing dependence on

non-renewable resources, businesses can improve their resilience.

#### **Employee Attraction and Retention:**

- **Millennial and Gen Z Preferences:**

Millennials and Gen Z are more likely to choose employers and brands that share their values. Companies that commit to sustainable practices are better positioned to attract top talent from these generations. Offering employees the chance to work for a company with a clear sustainability vision can also improve job satisfaction and retention.

- **Corporate Culture:**

A focus on sustainability can help build a positive organizational culture. Employees who are engaged in the company's sustainability mission are often more motivated, productive, and loyal, contributing to the overall success of the business.

#### **Cost Savings and Operational Efficiency:**

- **Energy Efficiency and Waste Reduction:**

Companies that invest in energy-efficient technologies, renewable energy sources, and waste-reduction strategies can significantly lower operating costs. For example, implementing LED lighting, energy-efficient HVAC systems, or reducing water usage can result in immediate savings.

- **Sustainable Supply Chain Management:**

By focusing on optimizing resources and reducing waste in the supply chain, companies can improve efficiency and reduce costs. Sustainable sourcing, reduced transportation emissions, and efficient inventory management are examples of areas where businesses can save money while helping the environment.

#### **Regulatory Compliance and Incentives:**

- **Government Incentives:**

Governments around the world are offering incentives for businesses that adopt sustainable practices. These include tax breaks, grants, subsidies, or low-interest loans for implementing energy-saving technologies, adopting renewable energy, or reducing emissions. Companies can take advantage of these incentives to reduce the financial burden of sustainability initiatives.

- **Regulatory Benefits:**

Early adoption of sustainable practices can help businesses stay ahead of stricter regulations. Companies that proactively meet or exceed environmental standards are likely to avoid penalties, reduce compliance costs, and establish a competitive edge in the marketplace.

#### **Global Collaboration and Partnerships:**

- **Sustainable Partnerships:**

Businesses can form partnerships with governments, NGOs, and other private sector players to address global sustainability challenges. Collaborative initiatives in renewable energy, sustainable agriculture, and climate change mitigation can drive large-scale positive environmental impacts while expanding market opportunities for businesses.

- **Adopting Global Standards:**

Aligning with global sustainability standards, such as the United Nations Sustainable Development Goals (SDGs), can help businesses ensure they are taking a holistic approach to sustainability. These standards also enhance a company's reputation and facilitate collaboration with international partners and organizations.

**Conclusion:**

Entrepreneurship development is a key driver of economic progress and societal change. To foster a robust entrepreneurial ecosystem, policymakers, financial institutions, and educational organizations must collaborate to provide necessary resources and support. By leveraging technological innovations and sustainable practices, entrepreneurs can contribute significantly to economic growth and job creation.

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## Entrepreneurship Development for Global Leadership

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**DOI - 10.5281/zenodo.15130240**

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### **Abstract:**

*The concept of sustainable development in commerce and management has gained significant momentum due to the increasing global focus on environmental preservation, social equity, and economic growth. Businesses today are expected not only to generate profit but also to operate in a socially and environmentally responsible manner. This paper explores the challenges and opportunities associated with integrating sustainable development principles into commerce and management. It examines the role of sustainability in business practices, the barriers companies face, and how they can leverage sustainability for long-term success. Through analysis of case studies and theoretical frameworks, this research paper outlines key strategies for fostering sustainable development in the business sector.*

**Keywords:** *Financial Constraints, Regulatory and Compliance Issues, Cultural and Organizational Resistance, Innovation, Global Collaboration, Sustainable Development*

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### **Introduction:**

The concept of sustainable development in commerce and management has gained significant momentum due to the increasing global focus on environmental preservation, social equity, and economic growth. Businesses today are expected not only to generate profit but also to operate in a socially and environmentally responsible manner. This paper explores the challenges and opportunities associated with integrating sustainable development principles into commerce and management. It examines the role of sustainability in business practices, the barriers companies face, and how they can leverage sustainability for long-term success. Through analysis of case studies and theoretical frameworks, this research paper outlines key strategies for fostering sustainable development in the business sector.

### **Objectives:**

1. To understand the background and significance of entrepreneurship development.
2. To analyze recent insights into entrepreneurship and its evolving trends.
3. To identify the key components of a sustainable entrepreneurial ecosystem.
4. To examine the challenges and opportunities in entrepreneurship development.
5. To provide recommendations for fostering a conducive environment for entrepreneurs.

### **Literature Review:**

The following literature reviews provide a comprehensive understanding of the interplay between entrepreneurship development and global leadership:

1. Drucker (1985) emphasized the role of innovation in entrepreneurship, stating that entrepreneurs are agents of change

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  5. Kuratko and Hodgetts (2007) identified educational and policy interventions as critical enablers of entrepreneurship development.
  6. Gibb (2002) presented a framework for entrepreneurial education as a means to develop leadership skills.

#### **Background of Entrepreneurship Development:**

Entrepreneurship development involves enhancing the skills, knowledge, and capabilities of individuals to create and manage businesses. Historically, entrepreneurship has played a crucial role in economic transformation, fostering competition, and driving technological advancements. Government policies, financial institutions, and academic institutions have contributed to entrepreneurship education and support initiatives.

#### **Challenges for Sustainable Development in Commerce and Management:**

##### **Financial Constraints Initial Investment:**

Sustainable practices often require considerable initial investment. Companies need to spend on technology upgrades, new systems, research and development (R&D), renewable energy infrastructure, waste management systems, and sustainable product designs. For many businesses, particularly small and medium enterprises

(SMEs), these costs can be prohibitive. They may also face difficulty in securing the necessary funding or loans to support these investments. Sustainable alternatives—such as energy-efficient machinery or sustainable raw materials—are often more expensive than traditional options, which can deter businesses from adopting them.

##### **Return on Investment (ROI):**

Achieving a positive ROI from sustainable practices may take several years. Many sustainability measures, like transitioning to renewable energy or implementing waste-reduction systems, show long-term benefits in terms of cost savings, but these returns might not be immediately apparent. This long-term nature of sustainability investments can create hesitation among businesses, particularly those under pressure to deliver quick returns to shareholders or stakeholders focused on short-term financial outcomes.

#### **Regulatory and Compliance Issues:**

##### **Complex Regulations:**

Environmental and sustainability regulations differ significantly from country to country and even within regions of a country. This creates complexity, especially for multinational businesses operating across borders. For instance, environmental standards in the European Union might differ from those in the U.S. or Asia, requiring businesses to adapt their operations to meet each region's specific laws.

##### **Changing Regulations:**

Sustainability regulations are constantly evolving. Governments are progressively tightening rules around emissions, resource usage, and waste management. For example, carbon emissions laws or plastic usage bans may change based on environmental goals or political climates. These unpredictable changes create difficulties for businesses, as they must

continuously adapt their practices to stay compliant, potentially incurring additional costs.

### **Short-Term Profit Focus:**

#### **Investor Expectations:**

Investors often have a short-term profit focus, and this can clash with the long-term nature of sustainable development. Sustainable practices such as reducing carbon footprints, improving working conditions, or shifting to renewable energy sources require substantial investments, and their return on investment may not be immediately realized. This can be a deterrent for shareholders and investors who prioritize quarterly earnings and might be reluctant to back sustainability initiatives without immediate financial payoffs.

### **Supply Chain Complexities:**

#### **Global Supply Chains:**

Companies often rely on global supply chains to source materials or distribute products. These supply chains can include numerous stakeholders—suppliers, manufacturers, distributors—that may not follow sustainable practices. In addition, supply chain logistics may contribute to a company's carbon footprint through transportation and waste generation.

#### **Transparency Issues:**

Achieving transparency in the supply chain is another significant challenge. Many businesses do not have full visibility of their suppliers' operations, making it difficult to verify whether sustainable practices are being followed throughout the supply chain. Companies may struggle to confirm whether raw materials are responsibly sourced, whether workers are paid fairly, or whether environmental standards are adhered to at all stages.

### **Cultural and Organizational Resistance: Employee Resistance to Change:**

Transitioning to more sustainable practices may face resistance from employees who are accustomed to existing processes. Employees might view new practices as disruptive or unnecessary, especially if they perceive these changes as a threat to their job security or daily routines. Training and communication are required to overcome this resistance, but getting employees to adopt sustainability as a core value can take time.

#### **Management Resistance:**

Resistance to change at the top management level can also hinder the implementation of sustainable practices. Senior leaders may be reluctant to shift from traditional business models focused primarily on profitability to more holistic approaches that include social and environmental concerns. In many cases, management may view sustainability as a secondary goal, leading to insufficient resources being allocated to sustainability initiatives.

### **Consumer Behavior and Awareness:**

#### **Skepticism about Greenwashing:**

Consumers are increasingly concerned about the sustainability of the products they purchase. However, many businesses engage in **greenwashing**, falsely claiming to be environmentally friendly to capitalize on this demand without actually implementing significant sustainable practices. This has led to growing consumer skepticism. People are becoming more aware of misleading claims and expect businesses to be transparent about their sustainability efforts.

#### **Price Sensitivity:**

Sustainable products often cost more due to the increased costs associated with ethical sourcing, renewable energy, and sustainable manufacturing processes.



However, many consumers remain price-sensitive, preferring cheaper products over those marketed as sustainable. This price sensitivity can limit the demand for sustainable goods, especially in developing markets where price is a more dominant factor in purchasing decisions.

**Lack of Practical Skills:****Expertise Gap:**

Many businesses lack the in-house expertise required to develop and implement sustainable practices effectively. Sustainable management, green technologies, and carbon footprint calculations are highly specialized fields. Businesses often struggle to find employees or consultants with the necessary skills to lead sustainability efforts.

**Lack of Knowledge:**

Sustainability encompasses various fields, including environmental science, ethical sourcing, renewable energy, and social governance. Many business leaders and managers lack the deep understanding needed to integrate these practices into their operations. This knowledge gap can prevent businesses from making informed decisions and hinder effective implementation.

**Education System:**

Many education systems do not sufficiently emphasize sustainability in business programs. This leads to a shortage of graduates with the necessary skills and knowledge to work in the growing field of sustainable development.

**Low Infrastructure Development:****Lack of Global Collaboration:**

Achieving sustainability on a global scale requires collaboration between businesses, governments, and other organizations. However, infrastructure to support widespread adoption of sustainable practices—such as recycling facilities, renewable energy grids, and eco-friendly transportation—remains underdeveloped in

many regions. Without this infrastructure, businesses face significant challenges in implementing their sustainability goals.

**Undeveloped Eco-Systems:**

Some regions still lack access to clean energy, sustainable agriculture practices, or eco-friendly technologies. In these places, businesses may find it difficult to develop sustainable supply chains or adopt environmentally responsible practices without considerable investment in local infrastructure and systems.

**Opportunities for Sustainable Development in Commerce and Management:****Innovation and Product and Service Innovation Circular Economy:**

The circular economy model is a major opportunity for businesses. Instead of the traditional "take-make-dispose" model, businesses can create products designed for reuse, repair, or recycling. This reduces waste and extends the life cycle of products. Companies adopting circular economy principles are not only helping the environment but also reducing costs and building new revenue streams. The development of reusable packaging or repairable consumer electronics are examples of how the circular model can create innovation.

**New Market Development:****Ethical Consumerism:**

As consumers become more environmentally and socially aware, the demand for ethically produced and environmentally sustainable products increases. Businesses that develop products that meet these growing ethical standards can tap into a new and expanding market segment. For example, eco-friendly products like organic foods, sustainable clothing, and electric vehicles are gaining popularity.

**Brand Loyalty and Reputation:**

Brands that demonstrate a clear commitment to sustainability tend to build stronger relationships with their customers. Consumers value companies that prioritize environmental protection, ethical labor practices, and corporate social responsibility. This leads to enhanced brand reputation, customer loyalty, and repeat business, which are essential for long-term success.

**Access to Green Financing and Investments:****Green Bonds and Impact Investing:**

Green bonds are a growing way for businesses to secure funding for sustainable projects. They allow companies to raise capital specifically for environmentally sustainable initiatives. Similarly, impact investing focuses on companies that generate social or environmental benefits alongside financial returns. These sources of funding provide businesses with the necessary resources to pursue sustainability initiatives.

**Sustainable Investment Funds:**

An increasing number of investment funds now focus on sustainable businesses. Investors looking to align their portfolios with their values may prefer funds that prioritize environmental, social, and governance (ESG) criteria. This provides an opportunity for businesses that adopt sustainable practices to attract more investors.

**Risk Management and Resilience:****Environmental Risk Mitigation:**

Businesses that prioritize sustainability are better equipped to mitigate environmental risks such as climate change, resource depletion, and natural disasters. Companies that reduce their carbon footprint and use renewable resources are less vulnerable to regulatory changes and supply

chain disruptions caused by environmental factors.

**Supply Chain Resilience:**

Businesses that create sustainable supply chains are often more resilient during economic downturns, natural disasters, and other global disruptions. By diversifying supply sources, focusing on local and sustainable suppliers, and reducing dependence on non-renewable resources, businesses can improve their resilience.

**Employee Attraction and Retention:****Millennial and Gen Z Preferences:**

Millennials and Gen Z are more likely to choose employers and brands that share their values. Companies that commit to sustainable practices are better positioned to attract top talent from these generations. Offering employees the chance to work for a company with a clear sustainability vision can also improve job satisfaction and retention.

**Corporate Culture:**

A focus on sustainability can help build a positive organizational culture. Employees who are engaged in the company's sustainability mission are often more motivated, productive, and loyal, contributing to the overall success of the business.

**Cost Savings and Operational Efficiency:****Energy Efficiency and Waste Reduction:**

Companies that invest in energy-efficient technologies, renewable energy sources, and waste-reduction strategies can significantly lower operating costs. For example, implementing LED lighting, energy-efficient HVAC systems, or reducing water usage can result in immediate savings.

**Sustainable Supply Chain Management:**

By focusing on optimizing resources and reducing waste in the supply chain, companies can improve efficiency and reduce costs. Sustainable sourcing, reduced

transportation emissions, and efficient inventory management are examples of areas where businesses can save money while helping the environment.

### **Regulatory Compliance and Incentives:**

#### **Government Incentives:**

Governments around the world are offering incentives for businesses that adopt sustainable practices. These include tax breaks, grants, subsidies, or low-interest loans for implementing energy-saving technologies, adopting renewable energy, or reducing emissions. Companies can take advantage of these incentives to reduce the financial burden of sustainability initiatives.

#### **Regulatory Benefits:**

Early adoption of sustainable practices can help businesses stay ahead of stricter regulations. Companies that proactively meet or exceed environmental standards are likely to avoid penalties, reduce compliance costs, and establish a competitive edge in the marketplace.

### **Global Collaboration and Partnerships:**

#### **Sustainable Partnerships:**

Businesses can form partnerships with governments, NGOs, and other private sector players to address global sustainability challenges. Collaborative initiatives in renewable energy, sustainable agriculture, and climate change mitigation can drive large-scale positive environmental impacts while expanding market opportunities for businesses.

#### **Adopting Global Standards:**

Aligning with global sustainability standards, such as the United Nations Sustainable Development Goals (SDGs), can help businesses ensure they are taking a holistic approach to sustainability. These standards also enhance a company's reputation and facilitate collaboration with international partners and organizations.

### **Conclusion:**

Entrepreneurship development is a key driver of economic progress and societal change. To foster a robust entrepreneurial ecosystem, policymakers, financial institutions, and educational organizations must collaborate to provide necessary resources and support. By leveraging technological innovations and sustainable practices, entrepreneurs can contribute significantly to economic growth and job creation.

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## Government Initiatives by the Ministry of MSME to Empower Small Businesses in India

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DOI - 10.5281/zenodo.15130248

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### Abstract:

*This paper examines the initiatives and policies put in place by India's Ministry of Micro, Small, and Medium Enterprises (MSME) to support in the expansion and advancement of small enterprises. MSMEs contribute significantly to economic growth and job creation. The study focuses on how these enterprises benefit from the Ministry's policies, which facilitate their access to markets, technology, and funding. It also covers the important role of Micro, small and Medium Enterprises in Indian economy. The study examines several government programs and how they affect MSMEs, emphasizing their advantages, disadvantages, and potential areas for development. Overall, the study highlights how crucial it is for the government to keep supporting MSMEs so they can expand and make a greater economic contribution to India.*

**Keywords-** MSME, Employment, Economy, Export.

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### Introduction:

Usually, small-scale industries are those that use tiny machinery and a small workforce to manufacture, produce, and provide services. These businesses have to abide by the rules established by the Indian government. Particularly in emerging nations like India, the SSI is the backbone of the economy. These sectors contribute significantly to job generation since they are often labor-intensive. Because they contribute to per capita income and resource use in the economy, SSI are an important sector of the economy from both a financial and social standpoint. Small businesses are often owned by a single person or occasionally by a partnership. The proprietor actively participates in the daily operations of the company. Our industrial structure is based on small-scale industries. The creation of jobs, an improvement in living standards, and an increase in income are the main goals of small business development. Bakeries, school supplies, water bottles, leather belts,

little toys, paper bags, picture studios, and beauty salons are a few examples of small-scale businesses.

In India, the Ministry of Micro, Small, and Medium Enterprises (MSME) is the government agency in charge of creating and carrying out policies, plans, and projects meant to encourage the expansion of MSMEs in the nation. The Ministry seeks to establish an environment that encourages innovation, entrepreneurship, and the creation of jobs in the MSME sector.

Through the state government's directorate of industries, the Ministry of Micro, Small, and Medium Enterprises (MSME) offer SSI registration. To be eligible for certain benefits, a business must register for SSI. Programs, grants, and other rewards offered by the government. Establishing a new SSI firm in India is the primary justification for SSI registration.

The Government of India oversees the Ministry of MSME, which collaborates with many departments and groups to put

policies and programs that assist MSMEs throughout the country into action. The Ministry works with a number of ministries and performs a number of tasks to foster an atmosphere that is favorable to the expansion of MSME.

#### Objectives:

1. To study the role of Micro, small and Medium Enterprises in Indian economy.
2. To analyze the policies of Ministry of Micro, Small & Medium Enterprises (MSME).

#### Research Methodology:

To accomplish research objectives to conduct this study, required data have been collected from secondary sources. Secondary data collected from reference books, journals, internet, research papers and relative thesis.

#### Review of Literature:

**1. Priyadarshan Zanjurne (2018)** Published research paper titled, "Growth and future prospects of MSME in India." This study examines government initiatives to regenerate the MSME sector and to evaluate the overall growth and development in the MSME sector in India. Researchers concluded that MSME contributed about 40% of total exports of the country, 45% industrial unit, 42 million employments and more than 8000 products in Indian economy.

**2. Dr. Ch. Hema Venkatasivasree & Dr. P. Vasari (2020)** made a study on, "MSME in India-growth and challenges." The goal of this research paper is to know the problems faced by MSME in India. According to the researcher MSME facing many challenges like the unawareness towards technological advancement, low cost credit to the MSME and foreign banks are not taking so much interest in sanctioning loan to the MSME sector.

**3. Soni Rathi & Dr. Praveen Kumar (2022)** published a research paper titled, "The impact of micro, small and medium enterprises on Indian economy in India." The objective of this research paper is to determine the contribution of micro, small and medium enterprises in country's economy (2014-2021)." Based on their findings it is stated that the segment of micro, small and medium enterprises has contributed negatively to business production, employment and trade of the nation.

**4. Rubinabibi Farukh Shaikh & Dr. Farida Rusi Mandviwala (2023)** Published research article titled, "A systematic literature review on role of micro, small and medium enterprises in Indian economy." The goal of this research paper is to assess the opportunities and challenges associated with micro, small and medium enterprises based on literature review. According to the researcher MSME face several challenges-difficulty to review timely finance for working capital, lack of sophisticated technology, non-availability of skilled workforce and poor infrastructure facility.

#### Role of Micro, small and Medium Enterprises in Indian economy:

In many respects, micro, small, and medium-sized businesses are crucial to the growth of the Indian economy. The MSME sector in India is responsible for between 60 and 70 percent of all inventions. Below is a quick explanation of MSME contribution to the nation's economic development-

**1. Job Creation:** The foundation of employment generation in India is MSMEs. Millions of people are employed by these companies, which include local service providers, manufacturers, and small stores. MSMEs employ a large number of people dispersed over many industries and regions, in contrast to large organizations that could only have a small number of workers in one place. In smaller towns and villages where

job opportunities are more limited, MSMEs offer jobs. People can find work closer to home, which reduces the migration from rural to urban areas.

**2. Export Potential:** MSMEs assist India in exporting, or selling goods to other nations. Many small enterprises manufacture specialized or distinctive products that are sought after in international markets. Products like clothing, handicrafts, food items, and electronics can fall under this category. These companies can generate foreign exchange by exporting to countries outside of India. MSMEs contribute to the nation's economy by exporting goods. This is significant because export revenue contributes to the growth of India's foreign exchange reserves, which are necessary to keep the country's economy stable.

**3. Contribution to GDP:** A significant amount of India's economy is composed of a variety of goods and services that are produced by MSMEs. Food, garments, electronics, handicrafts, and services like healthcare and education are all included in this. MSMEs immediately contribute to the GDP through the goods and services they produce. By assisting larger industries, MSMEs also indirectly contribute to the GDP. Many large corporations depend on small companies for parts, services, or supplies. This establishes a connection between small and large enterprises, and the GDP of the nation is increased by the total value of their output.

**4. Encouraging Innovation and Entrepreneurship:** Entrepreneurs with fresh concepts or inventive solutions for issues frequently lead MSMEs. Small firms are allowed to try out new goods, services, and business strategies, unlike large corporations that could have rigid policies and procedures. This adaptability fosters originality and innovation. MSMEs give people a place to launch their own companies. Whether they are in manufacturing, retail, services, or

technology, many entrepreneurs start out by establishing small enterprises. These tiny companies support economic growth and enable people to follow their entrepreneurial aspirations.

**5. Supporting Local Communities:** MSMEs frequently concentrate on generating employment in the neighborhood. They improve the well-being of the neighborhood and employ locals. This implies that persons in underserved or smaller areas can also take advantage of job possibilities that might not otherwise be accessible. MSMEs provide opportunities for success to persons from a variety of social backgrounds. Opportunities that may not be available in larger, more organized firms are frequently provided by MSMEs.

#### **Policies of Ministry of MSME:**

One of the most dynamic and vibrant sectors of the Indian economy is the Micro, Small, and Medium Enterprises (MSME) sector. The MSME Ministry operates a number of programs aimed at offering marketing support, infrastructural development, skill development training, and credit and financial aid. The following shows the Ministry of MSME's main policies-

**1. Credit Guarantee Fund Scheme (CGS):** A government program called the Credit Guarantee Fund Scheme (CGS) aims to assist small enterprises (MSMEs) in obtaining loans without having to provide collateral, such as real estate or other assets, as security. All MSMEs, whether they are manufacturing, service, or retail, are eligible for the program. The normal range of loans handled by CGS is between ₹10 lakh and ₹2 crore.

**2. Prime Minister's Employment Generation Programme (PMEGP):** A government program called the Prime Minister's Employment Generation Programme (PMEGP) supports entrepreneurs in launching their own micro-

enterprises (small firms) with the goal of creating jobs. It offers financial support to individuals who wish to launch new businesses, particularly in urban and rural areas. The scheme is open to all individuals, but **special categories** like women, Scheduled Castes (SC), Scheduled Tribes (ST), and backward classes may get extra benefits or subsidies.

**3. Stand-Up India Scheme:** To promote entrepreneurship among women and members of scheduled castes (SC) and scheduled tribes (ST), the Indian government introduced the Stand-Up India Scheme in 2016. The program's objective is to give them the chance to launch their own businesses and achieve independence. In the industrial, service, or trading industries, the loans are intended to assist in the establishment of greenfield enterprises—new companies that have never been before. To launch their own company, entrepreneurs can borrow anything from ₹10 lakh to ₹1 crore.

**4. Udyam Registration:** Micro, Small, and Medium-Sized Businesses (MSMEs) in India can register online with ease using Udyam Registration. It assists companies in becoming recognized as MSMEs, which entitles them to a range of government assistance, programs, and advantages. A number of government programs, including credit guarantees, subsidies, and easy loans, are available to registered enterprises.

**5. Credit Link Capital Subsidy Scheme:** The CLCSS is a government program that offers financial assistance to Micro, Small, and Medium-Sized Businesses (MSMEs) so they can upgrade their technology. In order to help MSMEs modernize their operations and increase production, the program provides a discount on loans they take out to purchase new machinery, equipment, and technology. There are subsidies of up to 15% available for the acquisition of new machinery and plants. The subsidy is offered on loans up to one crore rupees.

## 6. MSME Cluster Development

**Programme:** The Government of India launched the MSME Cluster Development Programme with the goal of enhancing the general competitiveness, quality, and productivity of Micro, Small, and Medium-Sized Enterprises (MSMEs) in certain clusters, or industries. A cluster is a collection of MSMEs that operate in the same sector or are situated in the same region. These companies frequently share resources, expertise, and markets, making them interdependent. The cluster development program's objective is to assist these companies in expanding collectively, exchanging knowledge, enhancing their infrastructure, and gaining access to funding and technology.

### Conclusion:

The growth, development, and sustainability of the MSME sector in India are significantly influenced by the policies of the Ministry of Micro, Small, and Medium Enterprises (MSME). The Ministry has made a substantial contribution to MSMEs' empowerment by easing their access to capital, technology, and market opportunities through a number of programs and projects. In addition to increasing MSMEs' competitiveness, the measures have aided in inclusive economic growth, rural development, and job creation. MSMEs have benefited greatly from the Ministry's initiatives, but their continued significant economic contribution to India will depend on ongoing oversight, flexibility in response to shifting market conditions, and efficient implementation. Future changes should concentrate on lowering operational barriers, encouraging innovation, and making sure that policy objectives and the actual requirements of MSMEs at the grassroots level are more closely connected.

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## Emphasizing Ergonomics: A Vital Component to Enhance the Productivity of Employees Working from Home and Office in IT Industry

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DOI - 10.5281/zenodo.15130263

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### Abstract:

*“Ergonomics” an often ignored but very crucial aspect that leads to a long term enhance employee productivity. This particular critical component uplifts efficiency and overall Well being of employees that contribute to optimum organizational growth and success and definitely showcases its impacts on the employees who may choose to work from home or work at office or choose a hybrid mode of work to perform their day-to-day tasks. Majorly it assists in vitalizing improved comfort, significant reduction in the injuries caused at the work place, engages employees into being healthier versions of themselves. The aim of this research article is to examine the various factors that depict as essentials of ergonomics to improve the efficiency and productivity of the employees, keeping the whole of focal view on the impact of ergonomics on employee health, their level of job satisfaction and an ever-outgrowing performance. The areas of discussion that this research article will focus on are the posture of employee when at work, design of the workstations lighting and noise control, the well being of the employee at the psychological level and the latest trends emerging in the context of ergonomics at the workplace. On the contrary, this research article shall also throw light on having hands on to better strategies in terms of cost control rather than focusing on managing expenses by simply optimizing a better ergonomics model at the work places that would ultimately result in higher productivity, controlled costs, enhanced employee performance, etc that would be suitable for both the categories of employees i.e. those who work from home and at office.*

**Keywords:** *Ergonomics, IT Industry, Work from Home, Work at Office, Employee Productivity.*

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### Introduction:

In order to maintain a comfortable workplace that combines efficiency, wellbeing of the employees and all-round organizational success, one of the most important component is ergonomics. While businesses strive so hard to optimize its level of performance, it is vital to prioritize ergonomics in order to reduce the workplace injuries, improved employee comfort at workplace so as to ensure fostering of better employee engagement. The aim of this research article is to examine the various factors that depict as essentials of ergonomics to improve the efficiency and productivity of the employees, keeping the

whole of focal view on the impact of ergonomics on employee health, their level of job satisfaction and an ever-outgrowing performance. The areas of discussion that this research article will focus on are the posture of employee when at work, design of the workstations lighting and noise control, the well being of the employee at the psychological level and the latest trends emerging in the context of ergonomics at the workplace. On the contrary, this research article shall also throw light on having hands on to better strategies in terms of cost control rather than focusing on managing expenses by simply optimizing a better ergonomics model at the work places that

would ultimately result in higher productivity, controlled costs, enhanced employee performance, etc that would be suitable for both the categories of employees i.e. those who work from home and at office. The concept of “Ergonomics” originated from the Greek words namely ‘ergon’ which means work and ‘nomos’ which means laws, which when combined together, precisely means the study of work efficiency. This involves upgradation of the workplace to fit the fulfilment of comfort and safety of the employees to improvise on their limitations and capabilities. The only reason to emphasize on this arena is to prevent musculoskeletal disorders (MSDs), excessive sick leaves of employees, low level of job satisfaction, reduction in the productivity of the employees, etc due to poor ergonomics witnessed by employees that work at office as well as those that work from office. This research article explores the basis of ergonomics needs that are crucial for enhancing productivity and also focuses on leveraging ergonomics design for improved performance and outcomes.

### **Requisites of Ergonomics in the Work and Home office spaces:**

#### **1. Enhancing Focus by reducing fatigue:**

Fatigue so mentioned here refers to both mental and physical that is caused by continuously sitting in the same position at one place in awkward postures or due to poor workstation designs. The recurrent occurrence of these issues results in employees getting out of focus and needing frequent breaks to combat the discomfort. Many researches have proved that introduction of ergonomics at the workplace (irrespective of Work at Home or Work at Office) has significantly shown improvements in the concentration as well as focus level of the employees, hence bringing about positive

change to minimize the mental and physical stress levels.

2. **Prevention of work related musculoskeletal disorders:** Often employees in the IT Sector complain of physical issues such as lower back pain, intense strain injuries, carpal tunnel syndrome, muscle cramps, etc, which are all a result of poor ergonomic conditions when the work is at par. This merely ends up into frequent absenteeism and reduced productivity employees. The only way to take a preventive care in the same regard is to introduce ergonomics and customize the workstation as per the need of the employee as an individual taking into consideration his/her height and weight.
3. **Increasing Job Satisfaction and boosting employee morale:** When the companies start giving importance to the needs of the employees by prioritizing them as the Human Resource with highest potential, and creates a well designed ergonomic workplace, it imparts a sense of job satisfaction among the employees which further inculcates a sense of responsibility in them to give their best while fulfilling the needs of the companies for the expected work done.
4. **Cost Benefits of the Organization:** As per researches conducted by the National Institute for Occupational Safety and Health, IT Companies witness immense growth in employee productivity with just paying a few bugs extra for the set up of ergonomic workstation for the employees. On the contrary it also results in reduction in absenteeism and compensation claims.

### **Key Factors to enhance productivity through Ergonomics:**

1. **Enhanced Workstation Design:** The most basic but the most important thing that an IT Company do for its employees is enhancing the workstation for

employees that work from office and from home. This includes a number of aspects that may sound simple but have huge impact on the employee's work performance such as - Adjustable Chairs, Placement of Monitor, Mouse & Keyboard Positioning, etc depending upon customized need of each employee.

2. **Proper Posture and Frequent Movements Breaks:** A proper posture is the key to a healthy body the often overlooked. There is need to undertake a set of measures such as ergonomics training to the employer and employee, Providing the human resource with time to time Micro breaks during working hours, etc to optimize the work focus of the employees.
3. **Visual and Lighting Ergonomics:** The ergonomics with relation to care taking of the optical organ is also often underrated but has greatly impact on the employee health and wellness. The IT Companies can take into consideration a number of visual and lighting ergonomics such as Anti glare screens to minimize the absorption of harmful rays from the computer systems, natural lighting for better comfort, task lighting on each employee desk to enable them to use it as when required by them, etc.
4. **Workplace Acoustics and Noise control:** Not all designations perform the same piece of work and so is the need of workspace which is different for different employees. Some work allotments need silence for focus and innovation. Keeping this mind, for the sake of employees that need quiet, the companies must include workplace acoustics and noise control measures such as Silent zones, usage of sound proof materials, etc.
5. **Air Quality and Temperature Control:** the largest impact causing distraction in any workplace is the temperature which create immense discomfort to employees

hindering them out of their focus and attention on task completions. Efficient ventilation systems, plantation of indoor plants, humidity control measures are some of the focus areas that a company can work on to ensure optimized productivity of the employees.

6. **Stress Reduction and Psychological:** It is merely impossible that each and every human resource can effortlessly hit the office with extensive efficiency every single. This is so because various boundaries interrupt this process which include social participations of employees on certain occasions, personal life traumas, emotional vulnerability of the employees, etc. To ensure adequate support employees with such interruptions, the IT companies can take certain measures such as provision of Flexible work mode, Wellness and Fitness programs, Relaxation spaces, etc.

**Challenges in the implementation of Workplace Ergonomics:** Despite the numerous benefits that ergonomics showcases three basic challenges as under,

1. **High Cost:** While ergonomics at the workstations may sound great when the focus is emphasized in the long term benefits that are expected to be fetched out, but on the other hand it is immensely expensive for the IT Companies when it comes introducing and implementing it because the employee turnover is extremely unpredictable. This results on higher side of the cost impact that may charge negatively on the IT Companies.
2. **Resistance Towards Change:** May it be from the employer point of view or from the employee point of view, resistance to any kind of change that imposes efforts to get out of the comfort zone, is rather quite natural. But this attitude to resist the acceptance and implementation of some

of the best practices as such can lead to stagnant growth and success.

3. **Lack of Awareness:** Many a times there is absence of awareness or negligence on the part of employers and employees to know about the new enhancing trends as famous as ergonomics and there is compulsion in holding on the tradition methods of business set up simply carried out from years together.

### Conclusion:

The most vital aspect in the creation of efficiency in the workstation installed for employees that may be working from office or from home, is the ultimate acceptance and implementation of ergonomics at the workstation to uplift the graphs of employee performance, productivity, work engagement, minimum absenteeism, reduced health care costs, high level of job satisfaction, etc. If the IT Industry that engages maximum of its employees in desk work, takes sufficient measure for improved workstation design, posture improvements of the employees, being capable enough to address and resolve psychological well-being of the employees, etc, the companies can be cent percent assured to retain the employees in good and satisfied physical and mental state for very long run as well as empower themselves with unwavering success in accomplishing the desired business goals within the set deadlines hence fostering innovation and long term success.

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## Farmers' Perception of Problems of Sugarcane Cultivation: A Pilot Study of Selected Villages of Kolhapur division

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DOI - 10.5281/zenodo.15130616

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### Abstract:

*Sugarcane Farming is one of the important segments of Indian Agriculture because it is raw material to sugar industry for which India ranks second in the world economy. Indian sugar industry provides employment opportunity to nearly 50 million growers (Mangala & Shrinivasa, 2012:21) Hence, sugarcane farming has significant role in the agro economy as a whole. The present study covers the farmers' perception regarding fertilizer, irrigation, seed, disease and soil problem of sugarcane farming with reference to Kolhapur division: Kolhapur, Sangli, Satara. The farmers' perception towards fertilizer, irrigation, seed, disease and soil problem was needed to be studied. This paper has made an attempt to study the farmers' perception towards some aspects like Soil erosion due to inadequate fertilizer management, availability of training to farmers for quality seed production, availability of scientific disease management system. The present study explores the different functional aspects of the sugarcane farming that will help to understand their different problems. This study is also helpful to sugar factories and Government authorities to make appropriate policies and it will help to uplift the life of poor farmers. This study is also helpful to develop knowledge based system so that IT based farming help to improve cultivation practices.*

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### Introduction:

Sugarcane is known from the earliest times and is referred to in historical records going back in the remote days in ancient civilization, which flourished long before the Christian era. However, the actual extraction of sugar has been discovered with later. Sugarcane Farming is one of the important segments of Indian Agriculture because it is raw material to sugar industry where India ranks second in the world economy. Indian sugar industry provides employment opportunity to nearly 50 million growers (Mangala & Shrinivasa, 2012:21). Hence, sugarcane farming has significant role in the agro economy as a whole. The present study covers the farmers' perception regarding fertilizer, irrigation, seed, disease and soil problem of sugarcane farming with reference to Kolhapur division: Kolhapur,

Sangli, Satara. But farmers' perception towards the problem in cultivation of sugarcane was needed to be studied.

### Literature Review:

#### Expert Systems for Sugarcane:

Aravinda Reddy and M. S. Prasad Babu, in their paper entitled “Semantic Web Based Sugarcane Expert System using Support Vector Machines” presents a Semantic web based expert system for sugarcane crop. The paper explains detail architecture of expert system which has two main modules namely informative system and Expert systems. Informative systems are designed by constructing ontologies by using Web Ontology Language. Jena framework is used to retrieve the data from OWL. SWRL rules are used to build Inference engine. This rule-based expert

system can be used to diagnose various diseases and pests, encountered in sugarcane crop by using support vector machine algorithm. (Babu, 2006)

F. Silva, S. Massruhá, R. Deus, A. Santos, V. Barbieri, S. Cruz and E. Malavolta, in their paper entitled "A web-based expert system for diagnosis of nutritional" presents a web-based expert system for diagnosis of plant nutrient disorders in sugarcane. The system can be useful to provide information for identification of essential and functional plant nutrient disorders in sugarcane to avoid deficiency and to solve nutritional problems arising from the development of this culture. The knowledge base created using expert knowledge of sugarcane farmer, research scientist, extension specialist, student, and consultant. The first version of system was developed using the virtual diagnosis framework developed by Embrapa and CENA/USP. The paper also discussed adopted development methodology and the current status of the system for diagnosis of nutritional deficiency in sugarcane. (F. Silva S. M., 2011.)

Knowledge based applications of artificial intelligence have enhanced productivity in varied fields of science and technology. Sugarcane, a long duration crop is ravaged by many insect and non-insect pests limiting the cane yield. T. Rajula Shanthy and N. Mukunthan in their paper "SUGAR-EX: An information and communication technology based decision making tool" focuses on an expert system for diagnosis of sugarcane pests and their management. This expert system takes into consideration sixteen major pests of sugarcane utilizing their symptoms/details of pest stages as identification cues. The primary goal of this expert system is to make expertise on sugarcane pests and their management available to sugarcane development personnel and cane growers in

a portable computer based kiosk. (Mukunthan, 2009.)

S S Hasan and R K Isaac in their paper entitled "An integrated approach of MAS Common KADS, Model-View-Controller and web application optimization strategies for web-based expert system development" presents a framework for development of web based expert system with integrated approach of MAS Common KADS agent oriented methodology, Model View Controller (MVC) architecture and Web application optimization strategies in order to achieve high usability. Study was also work out the plan of various modules, their content type and content structure for high usability and efficiency. The paper also guides in software engineering of developing such system with respect to Internet Technologies. Application of this framework for developing web-based expert system in sugarcane disorder diagnosis has been developed using proposed framework and demonstrated along with evaluation results. (Isaac, 2011)

#### **Statement of Problem:**

Now days, Sugarcane is the main source of sugar in India and holds a prominent position as a cash crop. Sugarcane is a renewable, natural agricultural resource because it provides sugar, besides biofuel, fiber, fertilizer and myriad of byproducts/co-products with ecological sustainability. Because of fluctuated rate of other crop, farmers have to increase yield of sugarcane to maintain profit ratio. (B\*, 2019) To increase yield, farmer should have complete knowledge of different Sugarcane crop management factors or they need expert who help or advise them to take decisions related to different crop management factors. Means if farmer got complete knowledge or an Expert then definitely they will get high yield which turns into high profit. To address these problems, there should be Knowledge Based

System which will help or guide farmers into management of different crop management factors and so Researcher intended to carry out the research entitled. Few questions raised into the mind of researcher like, What are the major problems facing by farmers regarding seed management, soil management, water management, fertilizer management and disease management.

#### Objectives of the Research:

1. The proposed study is undertaken with specific objective as under
2. To study problems faced by farmers while taking decision related to different Sugarcane crop management factors.

#### Hypothesis:

**H0**-There is no significant difference between Seed Selection, Soil Preparation, Water Management and Fertilizer Management and disease management problem faced by farmers in different districts.

**H1**: There is significant difference between Seed Selection, Soil Preparation, Water Management and Fertilizer Management and disease management problem faced by farmers in different districts.

#### Pilot Study:

Researcher carried out an initial pilot survey for pre-testing the questionnaires. The purpose of the pilot study was to test the quality of items in the questionnaires and to confirm the feasibility of the questionnaires. In the present study Cronbach's alpha test was applied to find the reliability of questionnaires.

#### A. About Cronbach's Alpha:

Reliability refers to the assessment of the degree of internal consistency between multiple measurements of a variable. The reliability can be increased by

providing questions which are clear about what respondents are being asked. The questionnaire should be designed such that the respondents are familiar with the questions and the questions themselves are relevant to the respondents. The most commonly used measure of reliability is internal consistency. The most accepted measure of a measure's internal consistency is the Cronbach's alpha. A value of 0.60 was used as the practical bound to demonstrate internal consistency.

#### B. Questionnaire:

The sugarcane irrigation, fertilizer, seed, disease, soil problems were studied with well-structured questionnaire. A comprehensive questionnaire was prepared in Marathi to collect data from farmers keeping in view the main objective and hypothesis of study. Questionnaire for the The details of the questionnaire are enclosed in Annexure 1 in English. The questionnaire incorporated different scaling techniques as demanded by the study.

#### C. Sample Data:

In the study farmers are at the centre place. They are respondents who provide information regarding their understanding, opinion, experiences and perception towards sugarcane irrigation problems. 70 farmers were selected for pilot study. The details are shown in Table No 1

**Table No 1: Sample Size**

Respondents	Farmers
Kolhapur	25
Sangli	15
Satara	10

D. Reliability Statistics Table No 2 shows case processing summary. Reliability of questionnaires was tested and found to be satisfactory by using Cronbach's alpha test as shown.

**Table No 2: Reliability Statistics**

Farmers	
Valid Cases	Cronbach's Alpha
70	.812

Source: Pilot data compiled by researcher through SPSS

**Table No 3: Demographic Profile of Sugarcane Growers**

Demographic variables	Classifications	No. of Respondent	Percentage (%)
District	Kolhapur	25	35.71
	Sangli	25	35.71
	Satara	20	28.57
Age group	20-30	8	11.42
	31-40	16	22.85
	41-50	21	30
	51-60	19	27.14
	61>	6	8.5
Qualification	Below SSC	1	1.42
	SSC	20	28.57
	HSC	19	27.14
	Diploma	10	14.28
	Graduation	17	24.28
	PG	3	4.28

Table no 3 shows demographic profile of sugarcane growers selected for the study.

It can be observed that out of total sample data 25 (35.71 %) farmers have been selected from Kolhapur, 25(35.71%) from Sangli and 20 (28.57 %) from Satara district. 30 % sugarcane growers belong to the 41-50 age group and 27.14 % sugarcane growers belong to the age group of 51-60. 70% farmers are above SSC.

Sugarcane growers are well matured by age as most of the farmers are between 41-60 years of age and are literate so that they can use any expert system if developed.

### Hypothesis Testing:

#### Hypothesis 1

Ho: There is no significant difference between irrigation problems faced by farmers in different districts.

H1: There is a significant difference between irrigation problems faced by the farmers in different districts

To test this hypothesis, 70 farmers were selected from 3 districts of Kolhapur division. Opinion of the respondents were recorded on a likert scale, where 1 = Strongly Disagree to 5 = Strongly Agree. The data is tabulated in SPSS. Table No. 3 shows the analyzed data of farmers.

**Table No. 4 Descriptive Statistics and District Wise Ranks of Respondents for Irrigation management problems**

Ranks					
Irrigation management problems	District	N	Mean Rank	Mean	Std. Deviation
1. Cannot get exact water requirement for sugarcane	Kolhapur	25	38.58	4.00	1.007
	Sangli	25	32.36		
	Satara	20	35.58		
	Total	70			



2. Cannot get sufficient water for irrigation	Kolhapur	25	33.06	1.89	.671
	Sangli	25	38.70		
	Satara	20	34.55		
	Total	70			
3. Cannot get water as and when required because of common irrigation schemes	Kolhapur	25	33.86	2.43	.791
	Sangli	25	38.70		
	Satara	20	33.55		
	Total	70			
4. Cannot implement new automation tools because of common irrigation schemes	Kolhapur	25	36.58	4.20	.861
	Sangli	25	34.02		
	Satara	20	36.00		
	Total	70			
5. No proper irrigation management	Kolhapur	25	38.20	4.19	.728
	Sangli	25	32.52		
	Satara	20	35.85		
	Total	70			
6. Cannot get electricity regularly for irrigation	Kolhapur	25	34.52	3.47	.793
	Sangli	25	33.22		
	Satara	20	39.58		
	Total	70			

Source: Data compiled by researcher using SPSS

Table No. 5 Test Statistics <sup>a,b</sup>						
	A1	A2	A3	A4	A5	A6
Chi-Square	1.326	1.258	1.149	.251	1.262	1.381
df	2	2	2	2	2	2
Asymp. Sig.	.515	.533	.563	.882	.532	.501

Source: Data compiled by researcher using SPSS

From table no 5 it is observed that the statistical significance level of the Kruskal Wallis test i.e., the p-value of all problem statements considered are more than 0.05 and, therefore, Ho accepted i.e There is no significant difference between irrigation problems faced by farmers in different

districts, i.e. Kolhapur, Sangli and Satara districts.

### Hypothesis 2

Ho: There is no significant difference between fertilizer problems faced by farmers in different districts.

H2: There is a significant difference between fertilizer problems faced by the farmers in different districts.

**Table No. 6 Descriptive Statistics and District Wise Ranks of Respondents for Fertilizer management problem**

Ranks					
Fertilizer management problems	V1	N	Mean Rank	Mean	Std. Deviation
1.No scientific fertilizer management system	Kolhapur	25	36.00	3.90	1.024
	Sangli	25	36.24		
	Satara	20	33.95		
	Total	70			

2. Cannot get exact fertilizer requirement for sugarcane	Kolhapur	25	36.46	3.91	1.004
	Sangli	25	32.26		
	Satara	20	38.35		
	Total	70			
3. Cannot get sufficient fertilizer for cultivation	Kolhapur	25	38.16	3.44	0.879
	Sangli	25	29.04		
	Satara	20	40.25		
	Total	70			
4. Soil erosion due to inadequate fertilizer management	Kolhapur	25	34.98	3.89	1.057
	Sangli	25	37.44		
	Satara	20	33.73		
	Total	70			
5. Sugarcane yield decrease due to chemical fertilizer	Kolhapur	25	37.70	4.19	1.011
	Sangli	25	38.88		
	Satara	20	28.53		
	Total	70			

Source: Data compiled by researcher using SPSS

**Table No. 7 Test Statistics<sup>a,b</sup>**

	B1	B2	B3	B4	B5
Chi-Square	.185	1.221	4.677	.446	3.951
df	2	2	2	2	2
Asymp. Sig.	.911	.543	.096	.800	.139

Source: Data compiled by researcher using SPSS

From table no 7 it is observed that the statistical significance level of the Kruskal Wallis test i.e., the p-value of all problem statements considered are more than 0.05 and, therefore, Ho accepted i.e There is no significant difference between fertilizer problems faced by farmers in different districts, i.e. Kolhapur, Sangli and Satara districts.

### Hypothesis 3

Ho: There is no significant difference between seed problems faced by farmers in different districts.

H2: There is a significant difference between seed problems faced by the farmers in different districts

**Table No. 8 Descriptive Statistics and District Wise Ranks of Respondents for seed management problems**

Ranks	V1	N	Mean Rank	Mean	Std. Deviation
1. Lack of high quality seeds	Kolhapur	25	39.26	3.81	1.067
	Sangli	25	30.72		
	Satara	20	36.78		
	Total	70			
2. Lack of availability of quality seeds to the growers by Sugar factories.	Kolhapur	25	37.34	3.57	.672
	Sangli	25	37.34		
	Satara	20	30.90		
	Total	70			

3.Lack of availability of training to farmers for quality seed production	Kolhapur	25	28.48	3.81	1.107
	Sangli	25	39.18		
	Satara	20	39.68		
	Total	70			
4.Use of sugarcane seed from own farm.	Kolhapur	25	32.30	4.10	.950
	Sangli	25	40.48		
	Satara	20	33.28		
	Total	70			
5.Lack of Scientific seed management deteriorates seed production strategies and methods.	Kolhapur	25	29.80	4.27	.883
	Sangli	25	35.08		
	Satara	20	43.15		
	Total	70			

Source: Data compiled by researcher using SPSS

**Table No. 9 Test Statistics<sup>a,b</sup>**

	C1	C2	C3	C4	C5
Chi-Square	2.656	1.764	5.283	2.792	5.825
df	2	2	2	2	2
Asymp. Sig.	.265	.414	.071	.248	.054

Source: Data compiled by researcher using SPSS

From table no 9 it is observed that the statistical significance level of the Kruskal Wallis test i.e., the p-value of all problem statements considered are more than 0.05 and, therefore, Ho accepted i.e. There is no significant difference between seed problems faced by farmers in different districts, i.e. Kolhapur, Sangli and Satara districts.

#### Hypothesis 4

Ho: There is no significant difference between disease problems faced by farmers in different districts.

H2: There is a significant difference between disease problems faced by the farmers in different districts.

**Table No. 10 Descriptive Statistics and District Wise Ranks of Respondents for disease management problems**

<b>Ranks</b>					
Disease management problems	V1	N	Mean Rank	Mean	Std. Deviation
1.Cannot get early warning of disease	Kolhapur	25	34.80	4.04	1.148
	Sangli	25	38.28		
	Satara	20	32.90		
	Total	70			
2.Cannot get exact Pesticides requirement for sugarcane	Kolhapur	25	36.84	3.89	1.234
	Sangli	25	24.50		
	Satara	20	47.58		
	Total	70			
3.Cannot get sufficient Pesticides for cultivation	Kolhapur	25	33.98	2.47	.737
	Sangli	25	38.52		
	Satara	20	33.63		

	Total	70			
4. Cannot use non-chemical /biological pest control	Kolhapur	25	28.60	4.50	.676
	Sangli	25	35.76		
	Satara	20	43.80		
	Total	70			
5.No scientific disease management system available	Kolhapur	25	33.80	4.46	.863
	Sangli	25	34.36		
	Satara	20	39.05		
	Total	70			

Source: Data compiled by researcher using SPSS

**Table No. 11 Test Statistics<sup>a,b</sup>**

	D1	D2	D3	D4	D5
Chi-Square	.944	16.099	1.100	8.205	1.178
df	2	2	2	2	2
Asymp. Sig.	.624	.000	.577	.017	.555

Source: Data compiled by researcher using SPSS

From table no 11 it is observed that the statistical significance level of the Kruskal Wallis test i.e., the p-value of all problem statements considered are more than 0.05 and, therefore,  $H_0$  accepted i.e. There is no significant difference between disease problems faced by farmers in

different districts, i.e. Kolhapur, Sangli and Satara districts.

#### **Hypothesis 5**

**Ho:** There is no significant difference between soil problems faced by farmers in different districts.

**H2:** There is a significant difference between soil problems faced by the farmers in different districts.

**Table No. 12 Descriptive Statistics and District Wise Ranks of Respondents for soil management problems**

<b>Ranks</b>	V1	N	Mean Rank	Mean	Std. Deviation	
Soil management problems						
	1.Addition of nonorganic matter is practiced.	Kolhapur	25	33.28	4.16	1.016
		Sangli	25	35.20		
		Satara	20	38.65		
Total		70				
2.erratic and imbalanced use of chemical fertilizer	Kolhapur	25	39.48	4.41	.807	
	Sangli	25	29.36			
	Satara	20	38.20			
	Total	70				
3.poor yield of sugarcane due to non-organic farming	Kolhapur	25	31.44	3.99	1.083	
	Sangli	25	33.48			
	Satara	20	43.10			
	Total	70				
4.Soil fertility gets deteriorating due to exceed the quantities of nutrients	Kolhapur	25	28.36	4.21	.976	
	Sangli	25	33.84			
	Satara	20	46.50			
	Total	70				

Source: Data compiled by researcher using SPSS

**Table No. 13 Test Statistics<sup>a,b</sup>**

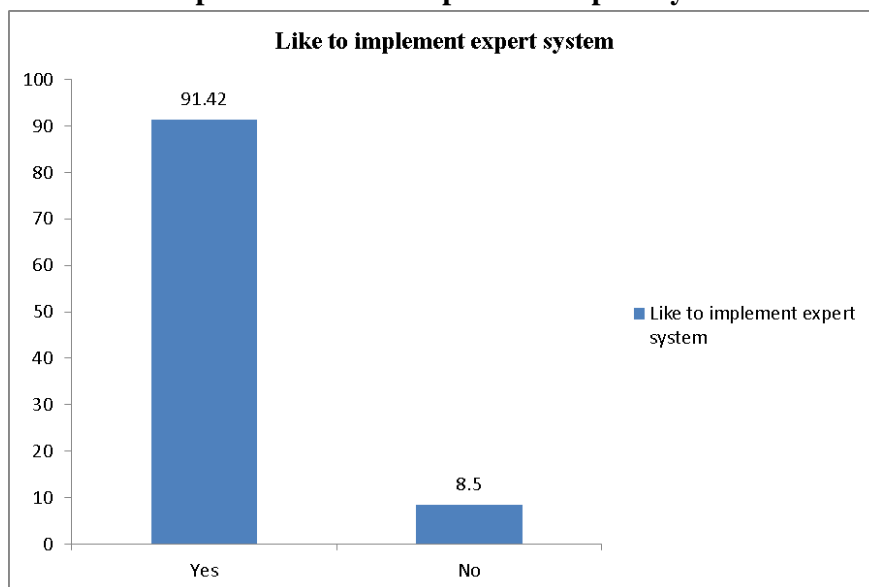
	E1	E2	E3	E4
Chi-Square	.918	4.586	4.601	10.852
df	2	2	2	2
Asymp. Sig.	.632	.101	.100	.004

Source: Data compiled by researcher using SPSS

From table no 13 it is observed that the statistical significance level of the Kruskal Wallis test i.e., the p-value of all problem statements considered are more than 0.05 and, therefore,  $H_0$  accepted i.e. There is no significant difference between

soil problems faced by farmers in different districts, i.e. Kolhapur, Sangli and Satara districts.

Like to implement expert system for sugarcane Crop for Fertilizer, irrigation, soil, seed and disease management in your farm

**Graph No:1 Like to implement Expert System**

From above graph it is observed that sugarcane growers from Kolhapur, sangli, satara districts are more inclined trend to implement expert system for Fertilizer, irrigation, soil, seed and disease management. Around 91.42 percent farmers said they will like to implement system which shows combined results for vital parameters of sugarcane in one application and should be user friendly and mobile based.

#### **Conclusion:**

Expert system pre-implementation study was carried out to identify irrigation,

fertilizer, seed, disease, soil problems of sugarcane faced by the farmers in Kolhapur division. These problems were considered as base for development of expert system. It was observed that irrigation, fertilizer, seed, disease, soil problems faced by farmers are similar in nature from one district to another district. It is concluded that practices adopted by different farmers from different district are in same nature result in facing similar structure of problems. Also upmost farmers are interested to implement expert system which give real time solution for different parameters in one application.

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## Electronic Customer Relationship Management (E-CRM): A Study of Its Role, Influence, and Benefits to E-Commerce

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DOI - 10.5281/zenodo.15130626

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### Abstract:

The research paper investigates the incorporation of electronic customer relationship management into e-commerce. It discusses how E-CRM systems improve customer satisfaction, loyalty, and retention through the use of digital technologies to customize interactions and facilitate communication. The research brings to light the strong business performance influence of E-CRM, highlighting the latter's capacity for building lasting customer relationships as well as for gaining a competitive edge in the digital market. This paper is qualitative in nature and describes the primary role, influences and impact of CRM in the attainment of success in E-commerce. This main paper studied key difference between CRM and E CRM, the importance of Customer Relationship Management (CRM) systems in the context of E-Commerce and the E CRM's role, influence & benefits to e-commerce studied effect of Customer Relationship Management (CRM) in E-Commerce and identified the advantages that Customer Relationship Management (CRM) offers to E-CRM.

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### Introduction:

Electronic Customer Relationship Management (E-CRM) is the strategy of using digital technologies to manage and enhance customer interactions. It employs websites, emails, and social media to foster customer relationships with the aim of increasing customer satisfaction and retention.

### Evolution of E-CRM:

**1. Pre-Internet Era:** Prior to the Internet, CRM was managed manually through face-to-face meetings, phone calls, and letters. CRM focused on interpersonal relationships with clients and maintained manual files.

**2. 1980s - Early Computerization:** Computers enabled new means for managing customer information, such as storing data in more sophisticated ways.

However, this advance had an array of limitations and did not go beyond data storage and retrieval.

### 3. 1990s – Emergence of CRM Software:

In the 1990s, companies began building dedicated contact management systems, CRM software with marketing and sales automation. These offer enhanced functionalities but were used only internally and were not fully integrated with external user interfaces.

### 4. 2000s – Integration with the Internet:

With the spread of the Internet, CRM Systems evolved as E-CRM platforms that build relationships on led with integrated digital channel interaction. This permitted businesses to connect with customers they had never met before. CRM (Customer Relationship Management)

**Objectives:**

1. To identify key difference between CRM and E-CRM
2. To study the importance of Customer Relationship Management (CRM) systems in the context of E-Commerce.
3. To study the E-CRMs role, influence & benefits to e-commerce
4. To study effect of Customer Relationship Management (CRM) in E-Commerce
5. To identify the advantages that Customer Relationship Management (CRM) offers to E-CRM.

**Research Methodology:**

This paper is qualitative in nature and describes the primary role, influences and impact of CRM in the attainment of success in E-commerce. It also tries to highlight the advantages that CRM provides in this electronic form of business. The study employed secondary data. The entire study is constructed solely on feasibility observation and documentary scrutiny. In addition, the necessary secondary data are collected from Research Papers, Journals, Publications & Websites.

**An Analysis of ECRMs Role, Influence & Benefits to E-Commerce:**

CRM encompasses the practices, strategies, and technologies that businesses use to manage and analyse customer interactions and data throughout the customer lifecycle. The primary goal is to improve customer relationships, retain customers, and drive sales growth. Traditional CRM systems often rely on manual processes and offline methods such as face-to-face meetings, telephone calls, and direct mail. These systems focus on managing customer information and interactions without extensive use of digital technologies.

**E-CRM (Electronic Customer Relationship Management):**

E-CRM is an extension of traditional CRM that leverages digital technologies to manage customer relationships. It utilizes online channels like email, social media, websites, and chatbots to interact with customers. E CRM systems automate data collection and analysis, providing businesses with deeper insights into customer behaviour and preferences. This approach allows for more personalized and efficient customer engagement, as it integrates multiple digital communication channels and offers advanced analytics capabilities.

**Key Differences Between CRM and E CRM:**

1. **Interaction Channels:** CRM: Relies on traditional methods such as direct mail, phone calls, and face-to-face meetings. E-CRM: Utilizes digital channels like email, social media, and chatbots.
2. **Data Management:** CRM: Often involves manual data entry with limited automation. E-CRM: Features automated data collection and advanced analytics.
3. **Customization and Personalization:** CRM: Personalization is achieved through manual processes. E-CRM: Offers automated tools for personalized customer experiences.
4. **Operational Scope:** CRM: Focuses on managing relationships through offline and in-person interactions. E-CRM: Emphasizes digital interactions, enabling businesses to reach a wider audience more efficiently.

While CRM provides a foundation for managing customer relationships, E-CRM enhances these efforts by integrating digital technologies, enabling more efficient, personalized, and scalable customer interactions. E-commerce is to commerce what working on a computer is to a traditional business. It involves the buying and selling of goods and services through



the use of communication technologies such as the internet. Where traditional businesses rely heavily on face-to-face interactions, online or e-commerce businesses rely on websites or portals for conducting business activities. Retail shopping, online auctions, and internet banking are all forms of e-commerce. Tablets, palm pilots, smartphones, and computers have enabled business transactions to be conducted anywhere at anytime. E Business has evolved the Traditional Business models, Framework and structure of the company as a whole set out for business activities. They have reaped the benefit of conducting business on the go, and as long as each employee has internet, they are able to work on their tasks.

#### Types of E-commerce:

- 1. Business-to-Consumer (B2C):** A form of e-commerce whereby a business sells its products or services directly to the end users through the internet. Often a B2C company sells its products via a website. Ex: Amazon.com.
- 2. Business-to-Business (B2B):** Business transactions that are conducted between companies, such as a manufacturer selling to a wholesaler. Transactions in e-commerce are not limited to just retailers but include anyone who deals in sales.
- 3. Consumer-to-Consumer (C2C):** Consumers trading with each other and can take place on websites such as eBay. On such sites a consumer can auction or sell their used items to other consumers.
- 4. Consumer-to-Business (C2B):** Where individuals do have goods or services available for the general public service, such as freelance and gig platforms. Those seeking work can register on the platform and businesses seeking for workers can register and find the right freelancer for the job.

CRM is essential in e-commerce for building and maintaining strong customer

relationships, enhancing personalized experiences, and driving business growth through data-driven strategies.

Customer Relationship Management (CRM) is an important influence on e-commerce, as it allows for customer interactions, builds loyalty, and generates sales. The CRM system collects and analyses data about customers, which means the business can personalize experiences and satisfy customers better.

Customer Relationship Management (CRM) is one of the most crucial aspects of e-commerce, enabling businesses to efficiently manage and analyse customer interactions and data throughout the customer lifecycle. This approach will enhance customer satisfaction, retention, and ultimately lead to sales growth.

#### Key Roles of CRM in E-commerce:

- 1. Personalized Customer Experiences:** CRM systems collect and analyse customer data, allowing businesses to tailor marketing strategies and product offerings to individual preferences and behaviours.
- 2. Improved Customer Service and Support:** By providing comprehensive customer information, CRM systems empower support teams to offer prompt and personalized assistance. Effective customer service is crucial for retaining customers and building long-term loyalty.
- 3. Enhanced Marketing Strategies:** CRM systems enable businesses to segment their customer base and develop targeted marketing campaigns. This segmentation ensures that marketing efforts are more effective and efficient, leading to higher conversion rates.
- 4. Streamlined Communication Channels:** CRM integrates various communication channels, such as email, social media, and live chat, providing a unified platform for customer interactions. This integration ensures consistent and timely

communication, improving the overall customer experience.

**5. Data-Driven Decision Making:** By analysing customer data, CRM systems provide valuable insights into purchasing patterns, preferences, and behaviours. This information aids businesses in making informed decisions regarding inventory management, product development, and sales strategies.

**6. Loyalty Program Management:** CRM systems facilitate the creation and management of loyalty programs, rewarding repeat customers and encouraging continued engagement. These programs can significantly boost customer retention and lifetime value.

#### Major Influences of CRM on E-Commerce:

**1. Centralized Customer Data Management:** CRM systems gather data like purchase history, preferences, and communication records to give businesses a better understanding of customers and offer them personalized experiences.

**2. Enhanced Customer Service and Support:** By providing support teams with comprehensive customer information, CRM systems enable prompt and personalized assistance, leading to improved customer satisfaction and retention.

**3. Personalized Marketing Efforts:** CRM systems allow businesses to tailor marketing strategies to individual customer preferences, increasing engagement and the likelihood of repeat purchases.

**4. Customer Retention:** CRM systems help businesses in implementing strategies that enhance customer loyalty and reduce churn by understanding customer needs and behaviours.

5. Sales Opportunities' systems identify cross-selling and up-selling opportunities by analyzing customer data, which increases sales and revenue.

CRM systems are very important for e-commerce businesses to develop strong customer relationships, improve satisfaction, and achieve growth.

#### E-CRMs Benefits to E-Commerce:

Electronic Customer Relationship Management (E CRM) leverages digital tools to enhance interactions between businesses and their customers. For e-commerce platforms, implementing E CRM offers several key benefits:

**1. Enhanced Customer Understanding:** E CRM systems collect and analyse customer data, providing insights into preferences, behaviours, and purchasing patterns. This information enables businesses to tailor their offerings and marketing strategies to meet customer needs more effectively.

**2. Personalized Customer Experiences:** By utilizing customer data, E CRM allows for the customization of interactions, such as personalized product recommendations and targeted marketing campaigns. This personalization fosters stronger customer relationships and increases the likelihood of repeat purchases.

**3. Enhanced Customer Retention and Loyalty:** E -CRM allows for proactive customer engagement, prompt resolution of their complaints, and the provision of personalized solutions. This helps increase customer satisfaction and results in greater retention and loyalty.

**4. Simplified Marketing and Sales Operations:** E CRM automates tasks like personalized emails, customer interactions, and customer journey tracking. This enhances the efficiency of operations, saves time, and provides consistent messaging across channels.

**5. Data-Driven Decision Making:** E CRM systems provide customizable reporting options, enabling businesses to identify successful and ineffective actions. These insights assist in refining strategies and making informed decisions to drive growth.

**6. Cost Reduction:** By automating routine tasks and improving operational efficiency, E-CRM helps businesses reduce costs associated with manual processes and customer service operations.

E-CRM empowers e-commerce businesses to understand their customers better, deliver personalized experiences, enhance retention and loyalty, streamline operations, and make data-driven decisions, all of which contribute to increased sales and profitability.

### Conclusion:

The Electronic Customer Relationship Management (E-CRM) remains as a keystone to the e-commerce industry. Besides, with the ever-changing digital sphere, e-commerce companies have no other choice but to connect, know, and satisfy the needs of their customers to remain competitive. E-CRM as a technique offers a lot of benefits, like a happier customer, a bigger sense of integrity, and a greater profit, by using the customer data gathered to make rational decisions. The research has revealed that E-CRM systems are designed to be not only about automation of the transactions, but also about setting up those transactions to rise into valuable customer-lifetime relationships. With tools as dynamic as customer segmentation, behaviours analysis, and interested communication, e-commerce businesses can definitely cater to the expectations of the customer base with different tastes and ways of buying goods. In addition, E-CRM can be widely accepted by businesses as it is a way to make their processes leaner, speed up their operations, and stay ahead of their competitors in an ever-changing market.

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## India's Cross-Border E-Commerce and Trade Policy

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**DOI - 10.5281/zenodo.15130639**

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### **Abstract:**

*Cross-border e-commerce is a transformative driver of global trade, enabling businesses to expand internationally and offering consumers diverse product choices. This paper explores the rapid growth of this sector, supported by technological advancements, innovative logistics, and government initiatives. It highlights its significance for SMEs, economic development, and consumer accessibility. The study also examines challenges, including regulatory complexities, data privacy, logistical bottlenecks, and cyber security threats. Regional policies from China, the EU, India, and the US are reviewed to understand their influence on global trade. Recommendations focus on policy harmonization, infrastructure investment, and capacity building for sustainable and inclusive growth.*

**Keywords:** *Global Trade Policy-Commerce Market Trends, SMEs in Global Trade, Trade Facilitation, Logistics and Supply Chain Innovation, Digital Payment Systems, Data Privacy and Security, Intellectual Property in E-Commerce, Customs Regulations.*

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### **Introduction**

Cross-border e-commerce refers to the process of selling and buying goods and services across international borders through online platforms. It has become a significant driver of global trade, enabling businesses of all sizes to access international markets while offering consumers a wide variety of products. This sector has grown exponentially due to advances in technology, globalization, and evolving consumer behavior. However, cross-border e-commerce also presents unique challenges, particularly in the context of trade policies, regulations, and logistics. It is a rapidly growing segment of global trade, enabling businesses to expand their market reach while offering consumers access to a wider range of products. Governments and organizations worldwide are devising policies to regulate and facilitate such trade effectively.

### **Research Objective:**

1. To analyze the India's cross border e-commerce trade.
2. To analyze the structure, key characteristics of domestic and global e-commerce trade.
3. To assess the impact of government initiatives.
4. To explore the growth and challenges of E-Commerce.

### **Data Collection:**

The study based on secondary data such as published books, government reports, trade journals and research papers.

### **Importance of Cross-Border E-Commerce:**

**1. Market Expansion:** Offers businesses access to international markets, enhancing growth potential. E.g., Amazon, Alibaba, and Flipkart have enabled SMEs to connect globally.

**2. Consumer Benefits:** Greater variety of goods at competitive prices.

E.g., Chinese platforms like AliExpress dominate in affordable electronics.

**3. Economic Growth:** Drives GDP growth through increased trade and technology integration. Global cross-border e-commerce market size was valued at \$3.16 trillion in 2022, growing at 27% CAGR.

**4. Support for MSMEs:** Simplifies the process for Micro, Small, and Medium Enterprises (MSMEs) to participate in global trade.

**Global Growth Trends in Cross-Border E-Commerce**

Cross-border e-commerce is expanding rapidly. According to a report by the United Nations Conference on Trade and Development (UNCTAD), global e-commerce sales were estimated at \$26.7 trillion in 2020, with a substantial portion attributed to cross-border trade. Key regions driving this growth include Asia-Pacific, North America, and Europe, with China

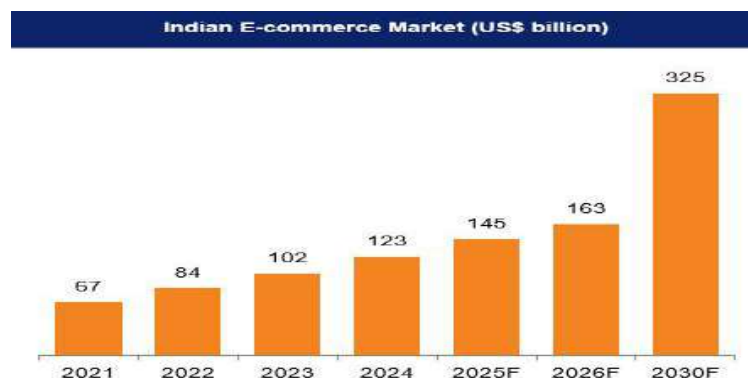
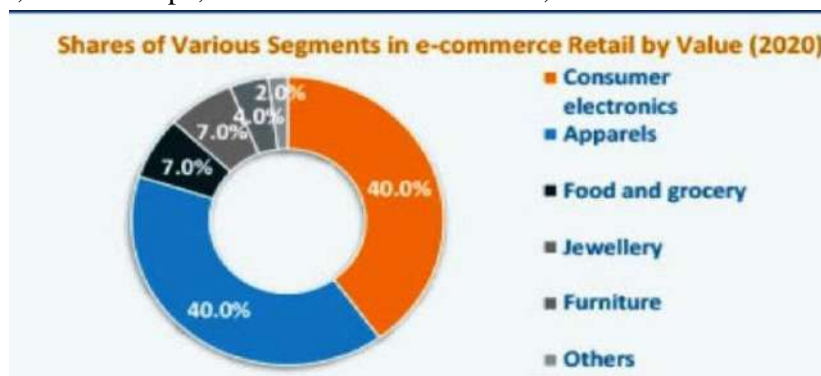
leading as the world’s largest e-commerce market.

**Key statistics: Market Size:** The cross-border e-commerce market was valued at approximately \$578.57 billion in 2019 and is projected to grow to \$4.8 trillion by 2026, at a CAGR of 27%.

**Consumer Behavior:** Around 57% of online shoppers worldwide made cross-border purchases in 2022, driven by competitive pricing, availability of unique products, and improved delivery services. Approximately 70% of global online shoppers purchased from international sellers in 2022.

**SME Participation:** Small and medium enterprises (SMEs) are increasingly participating in cross-border trade, benefiting from platforms like Amazon, Alibaba, and eBay.

**Market Data:** Cross-border e-commerce accounted for 23% of global e-commerce sales in 2023, expected to grow to 30% by 2026. Top countries: China, the United States, and the EU dominate the market.



Source: News articles, F- Forecasted

[source- E-Commerce-Infographic-September-2021]

**SME Growth:** In 2023, SMEs contributed 60% of India's cross-border e-commerce exports, driven by textiles, jewelry, and handicrafts.

**Consumer Behavior: Logistics Innovations:** Companies like DHL and FedEx report 40% revenue growth from cross-border deliveries.

### **Trade Policies and Regulations:**

Trade policies play a critical role in facilitating or hindering cross-border e-commerce. These policies encompass tariffs, customs procedures, data protection regulations, and intellectual property rights.

**Tariffs and Customs:** Tariffs and customs regulations are significant considerations for cross-border e-commerce.

**Challenges:** Tariffs increase the cost of imported goods, making them less competitive. Inconsistent customs procedures and lack of harmonization across countries can lead to delays and increased costs.

**Facilitation Measures:** Initiatives like the World Trade Organization's (WTO) Trade Facilitation Agreement (TFA) aim to simplify customs procedures and reduce associated costs. Many countries are also adopting simplified duty thresholds for e-commerce transactions, such as the US de minimis rule, which exempts imports valued below \$800 from tariffs.

### **Logistics and Supply Chain Innovation:**

Efficient logistics are crucial for cross-border e-commerce success:

**Warehousing and Fulfillment Centers:** Companies like Amazon have established global networks to ensure faster delivery.

**Last-Mile Delivery Innovations:** Partnerships with local delivery services have streamlined the final leg of deliveries.

### **Data Protection and Privacy:**

Data protection regulations impact how businesses handle customer data during cross-border transactions. For example:

**GDPR (Europe):** The General Data Protection Regulation governs the transfer and use of personal data, affecting e-commerce platforms operating within or exporting to the EU.

**Cross-Border Data Transfers:** Policies like data localization laws in countries like China and India add complexities to cross-border e-commerce.

### **Intellectual Property Rights (IPR)**

Protection of intellectual property is essential for cross-border e-commerce. Counterfeit goods remain a significant challenge, prompting governments to enhance enforcement mechanisms and encourage collaboration among e-commerce platforms.

### **Key Drivers of Cross-Border E-Commerce:**

#### **Technological Advancements:**

**1]Digital Payment Systems:** The rise of payment gateways like PayPal, Alipay, and Stripe facilitates secure cross-border transactions.

**2]Block chain Technology:** Block chain ensures transparency and security in transactions, reducing fraud and enhancing consumer trust.

#### **Government and Multilateral Initiatives**

**Asia-Pacific Economic Cooperation (APEC):** APEC promotes digital trade and e-commerce cooperation among its member countries.

**Trade Agreements:** Agreements such as the United States-Mexico-Canada Agreement (USMCA) include provisions aimed at reducing barriers for cross-border e-commerce.

**Challenges in Cross-Border E-Commerce**  
**Regulatory Complexity:** Different countries have varying standards for product safety, labeling, and returns, complicating cross-border transactions.

**Fraud and Cyber security:** Cross-border transactions are susceptible to fraud, counterfeit goods, and data breaches. Strengthened cyber security measures are essential to maintain consumer trust.

**Logistics Bottlenecks:** Shipping costs, delivery times, and customs clearance remain significant challenges, especially for SMEs.

**Currency Fluctuations:** Exchange rate volatility can affect pricing strategies and profitability in cross-border trade.

**Future Trends:**

**1. Artificial Intelligence (AI):** AI will optimize supply chains, improve customer targeting, and personalize shopping experiences.

**2. Sustainability:** E-commerce companies are focusing on eco-friendly packaging and carbon-neutral delivery options to meet consumer demands for sustainability.

**3. Expanding Payment Options:** Crypto currencies and localized payment methods are gaining traction in cross-border trade.

**Global Trade Policies and Frameworks:**

**1. China's Cross-Border E-Commerce Policy:** Preferential tax rates and customs clearances for specific zones. In 2022, China's cross-border e-commerce market exceeded \$300 billion.

**2. European Union (EU):** Enforced the Digital Services Act (2022) to ensure safer e-commerce. Comprehensive VAT reforms enhance compliance.

**3. India:** Focused on expanding MSMEs' reach via the Foreign Trade Policy 2023. Initiatives like ONDC (Open Network for Digital Commerce) aim to enhance market inclusivity.

**4. United States:** Prioritizes security and IPR in e-commerce trade agreements. Supports SMEs through platforms like eBay's Global Shipping Program.

**Benefits of Cross-Border E-Commerce:**

**1. Economic Opportunities:** Enhances exports for developing nations. E.g., Bangladesh leveraged e-commerce to grow its garment exports by 12% in 2023.

**2. Technological Advancement:** I and block chain simplify customs and logistics management.

**3. Inclusivity:** Women entrepreneurs and rural MSMEs gain access to global markets.

**4. Cultural Exchange:** Encourages global exposure to diverse products and traditions.

**5. Cyber security Threats:** Fraud and data breaches pose risks to businesses and consumers

**India's Cross-Border E-Commerce Initiatives:**

**1. Foreign Trade Policy 2023:** Simplified export procedures for e-commerce businesses.

**2. Digi-Locker Integration:** Streamlines compliance for exporters.

**3. Duty-Free Incentives:** Export incentives under RoDTEP (Remission of Duties and Taxes on Export Products).

**4. ONDC Platform:** Aims to integrate small businesses with global buyers.

**Recommendations for Strengthening Cross-Border Trade:**

**1. Policy Harmonization:** Streamlined taxation and customs systems.

**2. Infrastructure Development:** Investment in efficient logistics networks and trade hubs.

**3. Digital Security:** Strengthen data protection laws and cyber security protocols.

**4. Public-Private Partnerships (PPP):** Encourage collaborations for innovation and infrastructure.

**5. Capacity Building:** Train MSMEs in digital marketing and cross-border compliance.

**Conclusion:**

Cross-border e-commerce has redefined the landscape of global trade, presenting vast opportunities for economic growth and inclusivity. However, its full potential can only be realized by addressing regulatory, logistical, and cyber security challenges. Governments, businesses, and international organizations must collaborate to harmonize policies, enhance digital and physical infrastructure, and build capacity for SMEs and other stakeholders. By fostering innovation and implementing sustainable practices, cross-border e-commerce can continue to thrive as a cornerstone of global economic integration and development. Cross-border e-commerce is transforming global trade, offering immense opportunities for businesses and consumers alike. However, to maximize its potential, governments, businesses, and international organizations must address challenges related to trade policies, logistics, and regulations. By fostering innovation, enhancing cooperation, and implementing streamlined trade policies, the cross-border e-commerce sector can continue to thrive in an increasingly interconnected world. Cross-border e-commerce represents a transformative opportunity for global trade. By addressing policy gaps and logistical challenges, countries can ensure inclusive growth and economic integration. Collaborative efforts between governments, businesses, and international organizations are essential to maximize the potential of cross-border e-commerce while safeguarding interests across stakeholders.

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## An Analytical Study on Sustainable Development In Commerce

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**DOI - 10.5281/zenodo.15130645**

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### **Abstract:**

*There is close relationship between Sustainable Development and Commerce & Management. Because at every corner of globe, these subjects are playing vital role in running Socio Economic activities. Sustainable Development concept is not new, it has been followed by many cultures over the course of history with an aim of maintaining a balance Between man and nature as well as economy. For sustainable development, factors such as preserving and protecting the environment and natural resources along with maintaining social and economic equality need to be followed. As we are growing economy, facing many socio-economic problems. Would we become able to fulfill all the protocols of sustainable development? In this paper, Researcher elaborated the pillars of sustainability and how the sustainable development offers for the growth of society.*

***Keywords: Commerce, concept and importance of sustainable development, role of sustainable development, opportunities and challenges for sustainable development in commerce.***

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### **Introduction:**

Sustainable development plays vital role in creating a balance between the economic, environmental and social needs. It is a way of organizing and managing the society by which it can exist for a long period without making any compromise on the availability of resources for future generations. We all are living in the era of science and technology, where technology is upgrading in every walk of life and who can survive here or face the competition those who will sustain according to time and situation. Now, we all are well aware about the world, what is happening in the globe, countries are fighting with each other, and it is big question for all of us, how to sustain the resources and nature because ultimately it will become cause of destruction. After all, all the areas are related to management and business and related activities of it. Here, Sustainable development is very

important. What is exactly sustainable development? It's simple the development that meets the requirements of the present without negotiating the ability of future generations to meet their own wants. Sustainability brings three elements into harmony: Economy, Society and Environment. The world is moving around these three factors whether it is commerce or management. Whatever we do, for the sack of society and it definitely affects our economy, society and environment Business concerns need to face the fact that the boundaries of accountability and responsibility are moving fast. The trend towards sustainable management means that organizations are beginning to implement a systems wide approach that links in the various parts of the business with the greater environment at large.

**Review of Literature:**

a. Neeta Ben (2024), he has studied The Role of Commerce in Promoting Sustainable Development b. Choudhuri S (2019), he has studied A Research on Sustainable Development in India. c. Surabhi S and Naseem A (2022), Opportunities and Challenges of Sustainable Marketing Practices in Emerging Markets

**Importance of the Study:**

Sustainable development is very important. It helps businesses for a long time. When businesses use sustainable methods, they work better in the organization and, save money in the organization. Also, sustainable development in the commerce sector can be create new jobs and encourage new ideas.

**Statement of the Problem:**

Despite the growing emphasis on sustainable development, many businesses struggle to implement effective sustainability strategies due to: Lack of awareness, technology and expertise in sustainable business practices and regulatory and compliance challenges in different regions.

**Objectives:**

To study the concept of sustainable

1. To study the concept of sustainable development.
2. To understand the importance of sustainable development in commerce
3. Examine the key opportunities for sustainable development in commerce. and identify the major challenges hindering sustainability adoption in businesses.

**Methodology:**

This research paper aims to give a better understanding about the theme of Sustainable Development in Commerce and Management in current

scenario. The study is descriptive in nature. The literature and data are mainly based on secondary a source, which has been collected from various publications, magazines, journals and internet sources.

**Discussion:**

Sustainable Development Sustainable development refers to the developing and implementing public policies and programs by considering environmental, economic and social objectives.

**1. Definition of Sustainable Development:**

Sustainable development is a way to meet people's needs today without stopping future generations from meeting theirs. Since many of our natural resources can run out, it is our social responsibility to use them wisely. That's why people are now using more sustainable products and technologies. The goal of sustainable development is to use resources in a way that doesn't upset the balance of nature.

**2. Core Elements of Sustainable Development:**

There are numerous factors associated with the sustainable development and it contains various indicators with the goals as well as targets. The goals can be classified into three core elements of sustainable development considered by UNO are economic growth, social inclusion and environmental protection. It is essential to harmonize them. Sustainable economic growth, achieving sustainable livelihood, living in harmony with nature are important for sustainable development.

**1. Environmental Protection:** It prevents nature from being used as an inexhaustible source of resources and ensures its protection and rational use. Aspects such as environmental conservation, investment in renewable energy, saving water, supporting sustainable mobility, and innovation in

sustainable construction and architecture, contribute to achieving environmental sustainability on several fronts.

**2. Social Inclusion:** This is very helpful in fostering gender equality, well fare of people in health and quality education to all across the globe.

**3. Economic Growth:** It focuses on equal economic prosperity that generates wealth for all, without environmental degradation. Fair and equitable distribution of economic resources. · Eradicating poverty in all its forms and dimensions.

### **3. Importance of Sustainable Development for the Commerce:**

A big reason behind the increased importance of sustainable development is because of how our population changes. Sustainable development is crucial for commerce as it allows businesses to operate responsibly by minimizing environmental impact, promoting social equity, and ensuring long-term economic viability by managing resources effectively, which ultimately attracts environmentally conscious consumers, enhances brand reputation, and opens up new market opportunities for growth while mitigating potential risks associated with resource depletion and regulatory changes.

The following reasons highlight the importance of sustainable development for the commerce:

- **Consumer Demand:** Increasing consumer awareness about environmental issues drives demand for sustainable products and services, forcing businesses to adapt to stay competitive.
- **Brand Image and Reputation:** Implementing sustainable practices can significantly improve a company's image and reputation, attracting customers who prioritize ethical sourcing and responsible operations.
- **Cost Savings:** Efficient resource management through sustainable practices can lead to cost reductions by

minimizing waste and energy consumption.

- **Innovation and New Markets:** Sustainability can drive innovation, leading to the development of new products, services, and market segments that cater to environmentally conscious consumers.
- **Risk Mitigation:** Addressing environmental concerns proactively can help businesses avoid potential regulatory hurdles and legal issues related to pollution and resource depletion.
- **Employee Satisfaction and Retention:** Employees often value a company's commitment to sustainability, which can improve morale and employee retention.
- **Investor Appeal:** Investors are increasingly looking for companies with strong sustainability practices, which can enhance access to capital.

### **4. The Role of Businesses in Sustainable Development:**

Businesses play a crucial role in driving sustainable development through:

- **Corporate Social Responsibility (CSR):** Initiatives that support environmental protection and social well-being.
- **Sustainable Supply Chain Management:** Ethical sourcing and waste reduction strategies.
- **Green Innovation:** Investment in renewable energy and eco-friendly technologies.

### **5. Opportunities for Sustainable Commerce:**

- **Government Incentives:** Tax benefits and subsidies for green businesses encourage sustainability adoption.
- **Technological Advancements:** AI, blockchain, and IoT enable efficient resource management.
- **Sustainable Branding:** Companies that prioritize sustainability build stronger customer loyalty.

- **Market Expansion:** New markets are emerging for sustainable products and services, providing opportunities for businesses to reach new customer segments.
- **Cost Savings:** Implementing energy-efficient practices and reducing waste can lead to significant cost reductions over time.
- **Innovation Potential:** Developing innovative sustainable solutions can create competitive advantage and open new business avenues.
- **Stakeholder Engagement:** Aligning with sustainability goals can improve relationships with investors, employees, and communities.
- **Access to Funding:** Some investors prioritize companies with robust sustainability strategies, making it easier to secure funding.

#### 6. Challenges in Implementing Sustainable Practices:

- **Financial Constraints:** Many businesses hesitate to invest in sustainable technologies due to high costs.
- **Regulatory Complexity:** Varying sustainability regulations across regions create compliance challenges.
- **Consumer Behavior:** While consumers demand sustainable products, price sensitivity often affects purchasing decisions.
- **High Initial Costs:** Implementing sustainable practices can involve significant upfront investments in technology, infrastructure, and process changes.
- **Measurement Difficulty:** Accurately measuring and reporting sustainability performance can be complex and challenging.
- **Consumer Perception:** Educating consumers about sustainable practices and ensuring they understand the value proposition can be difficult.

- **Supply Chain Complexity:** Managing sustainability across the entire supply chain can be challenging due to multiple stakeholders and potential for environmental impacts throughout the process.
- **Industry Resistance:** Established industries may be reluctant to change their practices, creating barriers to adoption of new sustainable technologies.
- **Regulatory Uncertainty:** Lack of clear and consistent regulations around sustainability can create confusion and hinder innovation.

#### 7. How Commerce can Approach Sustainable Development:

- **Develop Sustainability Strategy:** Align business goals with sustainable development goals (SDGs) and define clear targets and metrics.
- **Evaluate Supply Chain:** Assess the environmental and social impact of suppliers and work to implement sustainable practices throughout the supply chain.
- **Product Innovation:** Design and develop products with sustainability in mind, considering lifecycle impacts.
- **Transparency and Reporting:** Communicate sustainability efforts clearly to stakeholders through regular reporting and verification.
- **Collaborate with Stakeholders:** Partner with industry peers, NGOs, and government agencies to address sustainability challenges.

#### Conclusion:

Sustainable development in commerce is no longer an option but a necessity. Businesses must integrate sustainability strategies to remain competitive and contribute to environmental and social well-being. As sustainable management institutions adapt, it becomes imperative that they include an image of

sustainable responsibility that is projected for the public to see. This is because business concern is socially based organizations. While challenges exist, technological advancements, regulatory support, and consumer awareness provide opportunities for businesses to embrace sustainability successfully. Future research should focus on measuring the financial impact of sustainability initiatives and developing frameworks for small and medium enterprises (SMEs) to adopt sustainable practices effectively.

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## A Study on the Role of Digital Transformation in Shaping Business Strategy

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**DOI - 10.5281/zenodo.15130654**

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### **Abstract:**

*The impact of digital technologies on the business world has been profound in the 21st century. In the age of digital transformation, businesses face significant challenges in maintaining their competitiveness and relevance. Digital transformation in business strategy refers to the process of integrating digital technologies into all areas of a business to enhance operations, improve customer experiences and create new value propositions. New digital technologies, data analytics, and new applications of artificial intelligence (AI) are rapidly changing the expectations of customers, employees, and other stakeholders. Technology's rapid evolution has fundamentally changed how businesses operate; creating an era of unprecedented change that affects all of society. As a result, even executives who aren't tech experts or digital natives must be able to leverage technology to ensure their company remains competitive and grows. This research paper delves into the intricate relationship between digital transformation and business strategy, exploring the profound effects of technological advancements on organizational structures, processes, and competitive landscapes. The current study includes a qualitative analysis and makes use of secondary data from books, journals, newspapers and the internet. This study aims to provide valuable insights into how businesses can strategically leverage digital transformation to thrive in an ever-changing global environment.*

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**Keywords – Digital Transformation, Technology, Innovation, Business Strategy.**

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### **Introduction:**

Digital transformation is a complex and multifaceted concept. Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. Digital transformation facilitates the emergence of new business models. Digital transformation is crucial for businesses globally to maintain competitiveness and relevance in a world shaped by technology. The convergence of digital technologies and strategic business planning has become a pillar for success. This research explores the symbiotic relationship between digital transformation and business strategy, aiming to unravel the nuances of this integration. The integration of digital transformation into business

strategy requires a strategic and holistic approach, aligning technology initiatives with overarching organizational goals. As organizations grapple with the challenges and opportunities presented by rapid technological changes, understanding how digital transformation shapes and is shaped by strategic decisions becomes imperative. Through case studies, literature review and analysis this study seeks to shed light on the pivotal role digital transformation plays in modern business strategies, offering insights to navigate the ever-evolving landscape of the global marketplace.

### **The Role of Digital Transformation in Shaping Business Strategy:**

Digital transformation is crucial in modern business strategy as it enables

companies to stay competitive, innovate and adapt to changing market conditions. The essential reasons why digital transformation is essential in shaping business strategy include –

### 1. Improved Customer Satisfaction:

One of the clearest advantages of digitalization in business is improved customer satisfaction. Digitalized processes lead directly to increased customer satisfaction.

### 2. Activates new channels of communication:

Digital transformation in business creates new channels of communication. Like Emails, mobile applications, chat bots, and social media are modern digital communication channels activated in transitioning companies.

### 3. Innovation:

Innovation is at the heart of digital transformation. By embracing new technologies and digital tools, businesses can develop innovative products, services, and business models that differentiate them from competitors. This innovation not only attracts new customers but also positions the business as a leader in its industry.

### 4. Competitive Advantage:

Organizations gain a significant competitive advantage through digital transformation. Adopting innovative technologies and strategies often leads to operational improvements in business organizations.

### Review of Literature:

The different aspects of Commerce and Management education have been covered by several scholars. It is widely discussed in various researchers' publications some of them have been reviewed in this section.

1. **K. Schwertner** – In his research article “Digital Transformation of Business” have stated digital business transformation is an objective process that responds to changing business environments. Digital Transformation is

one of the key success factors in the global business environment is for the company to be able to adapt quickly and effectively to changes. He also stated the world economy is transforming into a digital economy with a proliferation of cloud computing, big data and analytics, mobility and broadband connectivity, e-commerce, social media and the use of smart sensors and the internet of things.

2. **Musammata Tahmina Khanom** – In her paper titled “Business Strategies in The age of Digital Transformation” Khanom explores how digital transformation influences business strategies and identifies effective tactics for success in the digital era.
3. **Sangeet Paul Choudary** – In his work, Choudary examines the shift from traditional business models to platform – based strategies in the context of digital transformation.

### Objectives of Research:

This paper emphasizes on the following objectives.

1. To understand the concept of Digital Transformation on business strategy.
2. To understand the key elements of Digital Transformation
3. To identify the key challenges and opportunities that organizations face when developing and implementing digital strategies.
4. To identify the digital technologies are significantly impacting on business strategy.

### Research Methodology:

The present study is descriptive nature. This study is based on the secondary data. The secondary data like research articles, government reports, reference books, websites, Journals are utilized for the present study.

### The key Elements of Digital Transformation:

Digital transformation involves a complex and interconnected set of elements

that drive organizational change and innovation. This includes hardware, software, networks, and communication systems. Successful digital transformation is not merely about adopting new technologies but fundamentally reshaping how an organization operates and delivers value. The following key elements of Digital Transformation of businesses is to effectively use technology to improve performance and gain a competitive edge-

#### **1. Data Analysis and Artificial Intelligence (AI):**

Data is very important for digital transformation. Using advanced analytics and AI, companies can learn a lot from their large amounts of data. Tools like predictive analytics, machine learning, and AI help them make better decisions, improve how they work, and give customers a more personal experience.

#### **2. Innovation and New Revenue Streams:**

Digital transformation fosters innovation, enabling businesses to develop new products and services and explore new revenue streams. Digital platforms, online subscriptions, and mobile apps provide new channels to reach customers and generate income, diversifying revenue and increasing resilience.

#### **3. Digital Platforms and Ecosystems:**

Digital transformation often involves the creation or participation in digital ecosystems and platforms. These ecosystems facilitate collaboration, partnerships, and the integration of diverse technologies. Platforms enable businesses to extend their reach, access new markets, and offer innovative services through APIs and partnerships.

#### **4. Customer Relationship Management (CRM) Systems:**

CRM systems play a vital role in digital transformation by centralizing customer data, enabling personalized interactions, and improving overall customer experiences. Integrated CRM platforms

empower businesses to understand customer behaviours, preferences, and feedback, facilitating targeted marketing and service delivery.

#### **5. Strategic Vision and Leadership:**

The integration begins at the top, with leadership articulating a clear strategic vision for digital transformation. Leaders must champion the change, communicate its strategic importance, and align the entire organization around a shared digital vision. Establishing a culture that embraces innovation and agility is crucial.

#### **6. Alignment with Business Objectives:**

Digital transformation initiatives should be directly tied to specific business objectives. Whether it's improving customer experiences, increasing operational efficiency, or entering new markets, alignment ensures that technology investments directly contribute to strategic goals. Regularly reassessing alignment is crucial as business priorities evolve.

#### **7. Customer-Centric Approach:**

A customer-centric focus is paramount in integrating digital transformation into business strategy. Understanding customer needs, behaviours, and preferences informs the selection of technologies and guides the development of solutions that enhance the overall customer experience. Feedback loops and data analytics play a vital role in refining strategies based on customer insights.

#### **8. Talent Development and Up skilling:**

Integrating digital transformation requires a workforce equipped with the necessary skills. Investing in talent development and upskilling programs ensures that employees can leverage new technologies effectively. This commitment to continuous learning fosters a culture of innovation and adaptability.

#### **9. Technology Architecture and Integration:**

Building flexible and scalable technology architecture is foundational. Organizations need to select and integrate technologies that align with their strategic



goals. Compatibility and interoperability are crucial considerations to ensure seamless integration across different systems and platforms.

#### 10. Change Management:

Acknowledging and addressing resistance to change is a critical aspect of successful integration. A robust change management strategy communicates the benefits of digital transformation, engages employees, and provides support throughout the transition. Effective change management ensures that the organization embraces the necessary cultural and operational shifts.

#### Outcomes of Digital Transformation in various Areas:

##### 1. Education and E-learning:

The COVID-19 pandemic accelerated the use of digital technologies in education. While some criticized the shift to online learning ("Zoom University"), technology has significantly improved education and e-learning by enabling personalized and flexible teaching methods.

##### 2. Market Leadership in Electric Vehicles:

Through digital transformation, Tesla has become a dominant force in the electric vehicle market. Its innovative approach and commitment to sustainability have reshaped consumer views and spurred other automakers to increase their investments in electric mobility.

##### 3. Retail and E-Commerce:

Digital technologies have revolutionized consumer retail through tools like e-coupons and digital loyalty programs. Retailers have also gained from advancements such as automated inventory management.

##### 4. Autonomous Driving Advancements:

Tesla's pursuit of autonomous driving technology, supported by over-the-air updates, has earned it a reputation for groundbreaking innovation. While full autonomy remains a goal, Tesla's progress has significantly influenced the automotive industry's trajectory toward self-driving cars.

#### 5. Financial Services:

Digital trends have significantly transformed financial services. Banking and finance have evolved from cumbersome paper-based systems to readily accessible mobile apps, boosting both revenue and customer experience.

#### Challenges and Risks in Digital Transformation:

Digital transformation can be very helpful for businesses, but it also has problems and dangers that need to be considered. It's important to understand and deal with these problems to make the change to a digital way of working successful.

##### 1. Resistance to Change:

**Challenge:** Resistance to change among employees is a most important challenge in digital transformation. Existing workflows, processes, and organizational cultures may clash with the new digital initiatives, leading to resistance at various levels within the organization.

**Mitigation:** Effective change management strategies, communication plans, and employee engagement initiatives can help alleviate resistance. Providing comprehensive training programs and involving employees in the transformation process can foster a more positive mindset towards change.

##### 2. Data Security and Privacy issues:

**Risk:** Data security and privacy are major concerns in our increasingly digital world. The greater reliance on technology increases the risk of data breaches and privacy violations. Protecting sensitive information from cyber attacks is crucial, particularly given the large amounts of data organizations collect and use.

**Mitigation:** To mitigate these risks, organizations must implement strong cybersecurity measures, including encryption and regular security audits. Adhering to data protection regulations like GDPR or HIPAA is also vital for ensuring legal and ethical data handling.

### 3. Lack of Skill of Employees:

**Challenge:** The rapid pace of technological advancement often outpaces the availability of skilled professionals. Organizations may face challenges in recruiting and retaining talent with the necessary digital skills, hindering the successful execution of digital initiatives.

**Mitigation:** Investing in employee training and development programs, partnering with educational institutions, and fostering a culture of continuous learning can help bridge skill gaps. Collaboration with external experts and leveraging outsourced talent are additional strategies to address resource shortages.

### 4. Budget Constraints:

**Risk:** Digital transformation initiatives can be resource-intensive, leading to cost overruns if not managed effectively. Budget constraints and unforeseen expenses may hinder the implementation of planned projects.

**Mitigation:** Establishing a realistic budget, conducting thorough cost-benefit analyses, and implementing effective project management practices are crucial for controlling costs. Prioritizing initiatives based on their strategic impact and potential return on investment helps optimize resource allocation.

### 5. Lack of Strategic Clarity:

**Challenge:** Digital transformation efforts may face challenges if organizations lack a clear and well-defined digital strategy. Without a strategic roadmap, initiatives may become fragmented, leading to inefficiencies and suboptimal outcomes.

**Mitigation:** Organizations should articulate a clear digital strategy aligned with overarching business objectives. Regular strategic reviews, stakeholder alignment, and continuous monitoring ensure that digital initiatives remain focused and contribute to the organization's long-term goals.

Addressing these challenges and risks requires a proactive and strategic approach. Organizations that navigate these hurdles successfully are better positioned to

leverage digital transformation as a catalyst for innovation, growth, and sustained competitive advantage.

### Conclusion:

The present paper has mapped the thematic evaluation of research on DT in the areas of business and management. A digital transformation strategy is a comprehensive plan for leveraging digital solutions to enhance the physical facets of your business in areas such as engineering, manufacturing, and service. Creating a digital transformation strategy requires teamwork and should include input from all relevant groups. The significance of a thoughtfully designed digital transformation strategy becomes evident in light of changing business dynamics. Recommendations for businesses looking to embark on their digital transformation journey are provided.

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## Profitability Analysis of Hindustan Unilever Limited and Its Influence on The Stock Market

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DOI - 10.5281/zenodo.15130659

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### Abstract:

*This study analyzes the financial performance and profitability of Hindustan Unilever Limited (HUL) from 2018-19 to 2022-23, focusing on key financial indicators such as Contribution, Profit-Volume (PV) Ratio, Break-Even Point, and Margin of Safety. The findings reveal a consistent increase in HUL's revenue and profitability, reflected in the growing contribution and improved PV ratio. The break-even point shows stability, indicating efficient cost management, while the expanding margin of safety highlights reduced financial risk and enhanced business sustainability. These financial trends suggest strong operational efficiency, improved shareholder value, and a positive outlook for the company in the stock market. The study provides valuable insights for investors, financial analysts, and policymakers regarding HUL's profitability and market stability.*

**Keywords:** *Financial Performance, Profitability Analysis, Hindustan Unilever Limited, Break-Even Point, Stock Market Impact, Margin of Safety.*

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### Introduction:

Hindustan Unilever Limited (HUL) is a market leader in the FMCG sector, with a diverse portfolio of brands across various categories such as personal care, home care, and food & beverages. This research paper aims to evaluate HUL's financial performance using various financial metrics over a five-year period, reflecting the company's strengths and areas of improvement.

HUL is India's largest fast-moving consumer goods (FMCG) company, with leadership in Home & Personal Care Products and Foods & Beverages. HUL's brands, spread across 20 distinct consumer categories, touch the lives of two out of three Indians. The company operates at a large scale with a combined volume of about 4 million tonnes and sales of nearly Rs. 13,718 crores. The mission that inspires HUL's over 15,000 employees is to "add

vitality to life." With 35 Power Brands, HUL meets everyday needs for nutrition, hygiene, and personal care with products that enhance the quality of life.

Unilever, the parent company, holds a 51.55% stake in HUL, while the remaining shares are distributed among 360,675 individual shareholders and financial institutions. A Fortune 500 transnational, Unilever sells Foods and Home & Personal Care brands in about 100 countries worldwide.

### Review of Literature:

**1. Gupta, R., & Sharma, P. (2020).** *Financial Performance and Profitability Analysis of FMCG Companies in India.* This study evaluates the financial performance of leading FMCG companies, including Hindustan Unilever Limited (HUL), using profitability ratios such as net profit margin, return on assets (ROA), and return on equity

(ROE). The findings suggest that HUL maintains a strong profitability position compared to its competitors, mainly due to its efficient cost management and strong brand portfolio.

**Mehta, S., & Patel, K. (2021).** *Impact of Financial Performance on Stock Market Returns: A Case Study of Hindustan Unilever Limited.* This research explores the relationship between financial profitability and stock market performance. It highlights that HUL's consistent revenue growth, high dividend payouts, and stable profit margins contribute to positive investor sentiment, leading to an upward trend in share prices. The study also discusses market reactions to quarterly earnings reports and dividend announcements.

**Kumar, A., & Verma, D. (2019).** *Stock Market Performance and Profitability: Evidence from the FMCG Sector in India.* The authors analyze the stock price movements of FMCG companies, with a focus on how profitability indicators influence investor decisions. The study finds that companies like HUL with strong profitability ratios tend to experience lower stock price volatility, making them attractive to long-term investors. Additionally, the study discusses external factors such as inflation and consumer demand affecting HUL's profitability and stock valuation.

Kumar & Bansal (2008) found that in many cases of mergers and acquisitions (M&A), acquiring firms were able to generate long-term synergy, such as higher cash flow, business expansion, diversification, and cost reduction. They employed ratio analysis and correlation in their study. Kumar (2009) examined post-merger productivity, resource turnover, and solvency of acquiring organizations and

found that, in most cases, mergers did not lead to an improvement in financial performance. Ramakrishnan (2010) analyzed 87 firms that underwent mergers between January 1996 and March 2002. By assessing pre-tax operating cash flows three years before and after mergers, he concluded that mergers benefitted Indian corporations in the long run.

### Objectives of the Study:

The primary objectives of this study are:

1. To assess HUL's revenue growth and profitability trends.
2. To evaluate the impact of external factors such as competition, market trends, and regulatory policies.
3. To assess HUL's share market performance and its impact on investor sentiment.

### Research Methodology:

The study adopts a quantitative approach, using secondary data from HUL's annual reports, financial statements, industry reports, and share market performance data. Key financial ratios such as Return on Equity (ROE), Return on Assets (ROA), Current Ratio, and Debt-to-Equity Ratio are calculated. Additionally, stock price trends, market capitalization, and investor sentiment analysis are considered to determine HUL's impact on the share market.

### Data Analysis and Interpretation:

#### Financial Performance Analysis

The financial performance analysis of HUL from 2018 to 2022 is summarized in the following table:

Year	Contribution (₹ crores)	PV Ratio (%)	Break-Even Point (₹ crores)	Margin of Safety (₹ crores)
2018-19	21,325	68.66	22,685.7	8,375.3
2019-20	21,989	68.95	23,121.1	8,768.9
2020-21	23,767	68.84	23,955.55	10,569.45
2021-22	26,866	70.29	25,933.99	12,290.01
2022-23	27,656	71.31	25,320.43	13,464.57

The data shows a steady increase in contribution and an improving PV ratio. The break-even point has slightly declined, indicating better cost management. The rising margin of safety suggests a stronger financial position. Conclusions The financial performance analysis of Hindustan Unilever Limited (HUL) from 2018-19 to 2022-23 reveals the following key insights:

- 1. Consistent Growth in Contribution** – The contribution of HUL has steadily increased from ₹21,325 crores in 2018-19 to ₹27,656 crores in 2022-23, indicating strong revenue generation and operational efficiency.
- 2. Improvement in Profit-Volume (PV) Ratio** – The PV ratio has shown a positive trend, rising from 68.66% in 2018-19 to 71.31% in 2022-23. This signifies better cost control, improved profit margins, and increased profitability.
- 3. Break-Even Point Stability** – The break-even point initially increased from ₹22,685.7 crores in 2018-19 to ₹25,933.99 crores in 2021-22 but declined slightly to ₹25,320.43 crores in 2022-23. This reflects effective cost management and higher efficiency in

operations, leading to sustained profitability.

- 4. Expanding Margin of Safety** – The margin of safety has consistently improved, growing from ₹8,375.3 crores in 2018-19 to ₹13,464.57 crores in 2022-23. This indicates that the company is generating higher revenues beyond its break-even point, reducing financial risk and strengthening overall business stability.

HUL has demonstrated strong financial performance and profitability growth over the years. The rising contribution, increasing PV ratio, and expanding margin of safety indicate effective cost management, stable revenue generation, and improved financial health. These trends also suggest a positive outlook for investors and stakeholders, reinforcing HUL's position as a market leader in the FMCG sector.

#### Share Market Analysis:

HUL's share market performance is analyzed based on stock price trends, market capitalization, and investor sentiment.

The following table presents HUL's stock price data from 2018 to 2022:

Year	Stock Price (₹)	Market Capitalization (₹ crore)	Dividend Yield (%)
2018-19	1,540	3,35,000	1.2
2019-20	1,820	3,80,000	1.3
2020-21	2,050	4,10,000	1.5
2021-22	2,300	4,55,000	1.6
2022-23	2,450	4,80,000	1.7

#### Key Observations:

- 1. Stock Price Growth:** HUL's stock price has consistently increased, from ₹1,540 in 2018 to ₹2,450 in 2022, reflecting strong investor confidence.
- 2. Market Capitalization:** The company's market capitalization has grown steadily, reaching ₹4,80,000 crore in 2022.
- 3. Dividend Yield:** HUL has maintained a stable dividend yield, ensuring consistent returns to shareholders.
- 4. Investor Sentiment:** Positive financial performance, strong brand equity, and efficient cost management have contributed to increased investor confidence and higher stock valuations.

**Problems of the Study:**

The study on the **profitability analysis of Hindustan Unilever Limited (HUL) and its impact on the stock market** faces several key challenges:

1. **Fluctuations in Market Conditions** – The financial performance of HUL is influenced by **external factors such as inflation, economic downturns, and changing consumer demand**, which may impact profitability and stock prices.
2. **Impact of Competition** – The **FMCG sector is highly competitive**, with several domestic and international players. Analyzing HUL's profitability in isolation may not provide a complete picture of its financial health compared to its competitors.
3. **Limitations of Financial Ratios** – While financial indicators like **Contribution, PV Ratio, Break-Even Point, and Margin of Safety** provide insights into profitability, they may not fully capture qualitative factors such as **brand value, innovation, and consumer loyalty** that influence HUL's financial performance.
4. **Regulatory and Policy Changes** – Government regulations, **tax policies, and changing compliance requirements** in the FMCG sector can impact costs and profitability, creating challenges in drawing stable conclusions from financial data.
5. **Stock Market Volatility** – The relationship between profitability and stock market performance is complex, as **share prices are affected by investor sentiment, global economic trends, and speculative trading**, making it difficult to establish a direct correlation.
6. **Data Availability and Accuracy** – The study relies on **published financial statements and secondary data sources**, which may have **limitations in terms of data accuracy, updates, and interpretation**.

7. **Macroeconomic and Global Influences** – External factors such as **currency fluctuations, raw material price changes, and geopolitical events** can impact HUL's profitability, making it challenging to isolate company-specific factors. Despite these challenges, the study aims to provide a **comprehensive analysis of HUL's profitability and its influence on the stock market**, offering valuable insights for investors, financial analysts, and policymakers.

**Findings of the Study:**

1. **Profitability Improvement:** HUL's contribution increased from ₹21,325 crores in 2018 to ₹27,656 crores in 2022, reflecting improved profitability.
2. **Financial Stability:** The rising margin of safety and stable break-even point indicate strong cost management and operational efficiency.
3. **Stock Market Performance:** HUL's stock price and market capitalization have consistently grown, indicating strong investor trust and company performance.

**Suggestions:**

1. **Enhancing Cost Efficiency:** HUL should further optimize costs to reduce the break-even point and enhance profitability.
2. **Expanding Market Reach:** Exploring new markets and innovative product lines could drive higher revenues and improve financial strength.
3. **Investor Engagement:** Continued transparency in financial reporting and dividend policies will help maintain investor confidence.

**Conclusions:**

HUL has demonstrated a strong financial trajectory over the five-year period, with consistent growth in contribution, an improving PV ratio, and an expanding margin of safety. Its stock price and market

capitalization have also seen a positive trend, reflecting investor confidence. The company is well-positioned for continued profitability and market leadership, with opportunities for further optimization and growth. The financial performance analysis of **Hindustan Unilever Limited (HUL) from 2018-19 to 2022-23** indicates consistent growth in profitability, operational efficiency, and financial stability. The company's **contribution has steadily increased** from ₹21,325 crores in 2018-19 to ₹27,656 crores in 2022-23, reflecting strong revenue generation and cost management. The **Profit-Volume (PV) Ratio has improved from 68.66% to 71.31%**, signifying better control over costs and enhanced profitability. The **break-even point showed stability**, with a slight decline in 2022-23, demonstrating the company's ability to optimize its cost structure. Additionally, the **margin of safety has expanded significantly from ₹8,375.3 crores to ₹13,464.57 crores**, indicating a lower financial risk and a strong financial cushion. These positive financial trends suggest **HUL's strong market position, operational resilience, and attractiveness as an investment option**. Furthermore, its consistent financial growth enhances **investor confidence and stock market performance**, reinforcing HUL's leadership in the FMCG sector. Overall, the study concludes that **HUL has successfully maintained steady profitability, financial stability, and market strength, making it a robust and reliable company in the industry**.

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## Profitability Analysis of Hindustan Unilever Limited and Its Influence on The Stock Market

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DOI - 10.5281/zenodo.15130665

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### Abstract:

*The Zero Hunger scheme is a crucial initiative aimed at eradicating hunger and improving food security for marginalized communities. This study analyzes the awareness, accessibility, and socio-economic impact of the scheme among 105 respondents. The findings reveal that while a significant number of beneficiaries have experienced improvements in food security and nutrition, awareness about the scheme remains moderate, with a need for better outreach efforts by government officials. Additionally, the application process poses challenges for some individuals, affecting accessibility. The study highlights the positive impact of the scheme in reducing financial burdens related to food and ensuring long-term food security. However, concerns regarding food quality and quantity indicate areas for improvement. The research suggests enhancing awareness campaigns, simplifying application procedures, and ensuring high-quality food distribution to maximize the scheme's effectiveness. Strengthening these aspects can lead to greater participation and better outcomes for beneficiaries.*

**Keywords:** Zero Hunger Scheme, Food Security, Socio-Economic Impact, Awareness

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### Introduction:

Hunger and malnutrition remain significant global challenges, despite advancements in food production and distribution systems. In India, where a considerable portion of the population lives below the poverty line, food insecurity continues to affect vulnerable groups, particularly marginalized communities. Recognizing this issue, the Indian government has implemented various welfare programs under the Zero Hunger Goal, aligning with the United Nations Sustainable Development Goals (SDGs). These schemes aim to ensure access to adequate and nutritious food for all, thereby addressing the root causes of poverty and malnutrition.

Mahad, located in the western region of Maharashtra, is known for its agricultural economy and socio-cultural diversity.

Despite its economic contributions, certain pockets of the district continue to face issues related to poverty, food insecurity, and malnutrition. Marginalized communities, including scheduled castes, scheduled tribes, landless laborers, and economically disadvantaged households, often struggle to access essential resources, including food and nutrition programs. This research aims to evaluate the socio-economic impact of various Zero Hunger schemes implemented in Mahad. It will assess the level of awareness, accessibility, and effectiveness of these schemes in improving food security, nutrition, and the overall socio-economic conditions of marginalized communities. Additionally, the study will explore the challenges faced by beneficiaries and identify gaps in policy implementation. The findings from this study are expected to provide valuable insights into the role of



government interventions in addressing hunger and poverty. Moreover, the research will offer recommendations for enhancing the effectiveness of food security programs to ensure equitable access and positive outcomes for marginalized groups. This evaluation will contribute to the broader discourse on achieving the Zero Hunger Goal in India and fostering sustainable development in rural and semi-urban areas.

#### **Review of Literature:**

##### **Impact of Food Security Programs on Vulnerable Populations (UNICEF, 2020)**

this review focuses on the effectiveness of food security programs, including Zero Hunger schemes, in improving the well-being of vulnerable groups. It highlights how initiatives like the Public Distribution System (PDS) and Integrated Child Development Services (ICDS) contribute to reducing hunger and malnutrition, while also improving the nutritional status of children and women in marginalized communities.

##### **Government Schemes and Their Effect on Poverty Reduction in Rural India (Economic and Political Weekly, 2021)**

this paper reviews the success and limitations of various government welfare schemes, including Zero Hunger-related programs, in rural India. It emphasizes the socio-economic empowerment of marginalized communities, particularly in the context of rural poverty reduction, education, and income-generating opportunities, while pointing out the existing gaps in infrastructure and accessibility.

##### **Food Security and Nutrition Programs in India: A Critical Review (Journal of Rural Development, 2022)**

this Study evaluates the long-term affects of food security and nutrition programs on the marginalized sections of society. It analyzes the role of government initiatives in improving food access, addressing malnutrition, and contributing to better health outcomes for marginalized

communities in districts like Sangli, with a special focus on women and children. **Challenges in Accessing Government Welfare Schemes in Rural India (International Journal of Social Sciences, 2019)** Focusing on the barriers that marginalized communities face in accessing welfare schemes, this review discusses logistical, social, and administrative challenges that limit the impact of programs designed to achieve Zero Hunger. It specifically examines the role of local governance and the effectiveness of outreach efforts to ensure that the benefits reach the most vulnerable. **Zero Hunger and Its Role in Achieving Sustainable Development Goals (SDGs) in India (Food Policy, 2020)**this study examines the alignment of India's Zero Hunger schemes with the United Nations Sustainable Development Goals (SDGs). It highlights the positive impact of these schemes on reducing hunger and improving socio-economic conditions, but also critiques the disparities in outcomes across different states and communities, especially marginalized groups in rural areas.

**Annadurai (1988)** conducted an assessment of the Public Distribution System (PDS) in Tamil Nadu for the period from 1952 to 1986. He hypothesized that the PDS in Tamil Nadu had generated positive effects for consumers, emphasizing the importance of empirical verification of secondary data in evaluating beneficiary-oriented public intervention programs. The findings indicated that the PDS policy was beneficial to both producers and consumers. However, its impact on poverty alleviation and consumption levels did not fully meet the expectations of policymakers. To improve the effectiveness of the PDS, several models had been employed.

#### **Statement of the Problem:**

Despite the implementation of various government schemes under the Zero

Hunger Goal, marginalized communities in rural and semi-urban areas continue to face significant challenges related to food insecurity, malnutrition, and poverty. In Mahad, where agriculture plays a key role in the economy, several vulnerable groups struggle to access nutritious food and basic resources due to social, economic, and geographical barriers.

While programs such as the PDS, ICDS, and the National Food Security Act (NFSA) are designed to alleviate food insecurity, their impact on marginalized communities in Mahad remains underexplored. Many beneficiaries face difficulties in accessing these programs due to lack of awareness, poor infrastructure, bureaucratic inefficiencies, and logistical challenges. This study seeks to bridge this gap by evaluating the socio-economic impact of Zero Hunger schemes on marginalized communities in Mahad, identifying the challenges faced by beneficiaries, and providing recommendations for improving the implementation and reach of these programs.

#### **Objectives of the Study:**

1. To assess the level of awareness and accessibility of Zero Hunger schemes among marginalized communities in Mahad.
2. To analyze the socio-economic impact of Zero Hunger schemes on the food security and nutrition status of marginalized communities in Mahad.

#### **Hypothesis Of The Study:**

H<sub>1</sub>: There is a significant relationship between the level of awareness of Zero Hunger schemes and the level of access to

these schemes among marginalized communities in Mahad.

#### **Research Methodology:**

The research methodology combines qualitative and quantitative approaches to evaluate the socio-economic impact of Zero Hunger schemes on marginalized communities.

**Research Design:** A descriptive research design has been adopted to systematically assess food security, nutrition, income levels, and education before and after the implementation of these schemes.

**Population and Sampling:** The study will focus on marginalized communities in Mahad, employing a stratified random sampling method. A total of 100 households has been selected (50 rural and 50 semi-urban) to ensure representation across different strata.

**Data Collection: Primary Data:** Structured interviews, focus group discussions, and surveys has been conducted to gather data on food security, nutrition, income, and accessibility of Zero Hunger schemes.

**Secondary Data:** Government reports, policy documents, and existing studies have been analyzed to provide contextual insights.

#### **Data Analysis and Interpretation:**

Quantitative data has been analyzed using descriptive statistics (mean, median, standard deviation) and regression analysis to examine relationships between scheme implementation and socio-economic outcomes. Qualitative data has been analyzed through thematic coding using NVivo software to identify patterns related to awareness, accessibility, and impact.

Table Showing Awareness and Socio economic impact of Zero hunger scheme

Sr. No.	Statement	N	Mean	SD	Rank
<b>Section 1: Awareness and Accessibility of Zero Hunger Schemes</b>					
1.	I am aware of the Zero Hunger schemes provided by the government.	105	3.37	.83781	V
2.	I have received sufficient information about how to apply for Zero Hunger schemes.	105	3.27	.81610	IV
3.	The application process for Zero Hunger schemes is easy and accessible for marginalized communities.	105	3.15	.83359	III
4.	Government officials and local authorities actively promote awareness about Zero Hunger schemes.	105	3.05	.74936	V
5.	I have personally benefited from the Zero Hunger schemes in terms of food security and nutrition.	105	3.55	.84580	I
<b>Section 2: Socio-Economic Impact of Zero Hunger Schemes</b>					
6.	The Zero Hunger schemes have improved my household's access to nutritious food.	105	3.47	.78406	II
7.	Due to the Zero Hunger schemes, my family's overall health and nutrition have improved.	105	3.40	.77790	III
8.	The financial burden of purchasing food has reduced due to the benefits of Zero Hunger schemes.	105	3.27	.77418	V
9.	The quality and quantity of food provided under Zero Hunger schemes meet my family's dietary needs.	105	3.37	.83781	IV
10.	The Zero Hunger schemes have contributed to long-term food security for my family.	105	3.57	.78406	I

Source: Compiled by researcher

The table presents an analysis of awareness, accessibility, and the socio-economic impact of Zero Hunger schemes among 105 respondents. The results are categorized into two sections:

#### **Awareness and Accessibility and Socio-Economic Impact:**

##### *Section 1: Awareness and Accessibility of Zero Hunger Schemes*

The highest-ranked statement in this section (Mean = 3.55, Rank I) suggests that many respondents have personally benefited from the Zero Hunger schemes in terms of food security and nutrition. This indicates that the scheme is effectively reaching its intended beneficiaries.

The awareness level about the scheme is moderate, with a mean score of 3.37 (Rank V), indicating that while some individuals are aware, there is still scope for improvement. Information dissemination regarding application procedures (Mean = 3.27, Rank IV) and accessibility for

marginalized communities (Mean = 3.15, Rank III) also show a need for further simplification and outreach.

The lowest-ranked statement (Mean = 3.05, Rank V) relates to the role of government officials and local authorities in promoting awareness, suggesting that awareness campaigns and community engagement need to be strengthened to enhance participation.

##### *Section 2: Socio-Economic Impact of Zero Hunger Schemes*

This section reveals that the schemes have had a **positive socio-economic impact on** beneficiaries. The highest-ranked statement (Mean = 3.57, Rank I) highlights that the Zero Hunger schemes have contributed to long-term food security.

Household access to nutritious food (Mean = 3.47, Rank II) and improvements in overall health and nutrition (Mean = 3.40, Rank III) further emphasize the significance of these schemes in enhancing well-being.

However, respondents expressed slightly lower satisfaction regarding the **financial burden reduction (Mean = 3.27, Rank V) and food quality and quantity (Mean = 3.37, Rank IV)**, indicating potential areas for improvement in food distribution and quality assurance. **Zero Hunger schemes have made a substantial impact on food security, nutrition, and long-term**

#### Findings of the Study:

- 1. Positive Impact on Food Security and Nutrition:** The Zero Hunger schemes have significantly contributed to food security, with the highest-ranked statement (Mean = 3.57) indicating long-term benefits. Respondents also reported improved access to nutritious food and better overall health due to the scheme's support.
- 2. Need for Greater Awareness and Accessibility:** While many respondents are aware of the scheme, the study highlights gaps in outreach efforts by government officials and local authorities (Mean = 3.05, Rank V). Additionally, challenges in the application process and limited information about eligibility indicate a need for better communication and support.

#### Suggestions of the Study:

- 1. Strengthening Awareness Campaigns:** The government should enhance awareness initiatives through local authorities, social media, and community programs to ensure that marginalized communities receive sufficient information about the Zero Hunger schemes.
- 2. Improving Accessibility and Food Quality:** Simplifying the application process and ensuring the quality and quantity of food provided under the scheme meet nutritional standards can enhance the program's effectiveness.

**sustainability, there is a need for increased awareness, better communication, and further improvements in food quality and accessibility.** Strengthening the role of local authorities in outreach efforts and simplifying the application process can further enhance the effectiveness of these schemes.

Regular feedback mechanisms should be established to address beneficiaries' concerns.

#### Conclusions:

The study highlights the significant role of the Zero Hunger scheme in enhancing food security and improving the socio-economic conditions of beneficiaries. The findings indicate that while the scheme has had a positive impact on food access, nutrition, and financial relief, there are still challenges related to awareness, accessibility, and food quality. Many respondents reported that they have personally benefited from the scheme, with improvements in their household's food security and overall well-being. However, the lack of sufficient awareness campaigns and complexities in the application process hinder the full effectiveness of the initiative. To enhance the impact of the Zero Hunger scheme, stronger outreach programs, simplified application procedures, and improvements in the quality and quantity of food distribution are recommended. Government authorities should work closely with local communities to increase awareness and ensure that all eligible individuals can access the benefits without difficulty. By addressing these challenges, the scheme can become more effective in achieving its goal of eliminating hunger and ensuring long-term food security for marginalized populations.

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## Financial Inclusion in India- An Overview

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**DOI - 10.5281/zenodo.15130677**

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### **Abstract:**

*Financial inclusion contributes to economic growth by stimulating entrepreneurship, increasing savings, and expanding investment opportunities. It boosts consumer spending and business development, leading to job creation and improved productivity. Financial inclusion helps every community in the country to participate in the country's economic development system. The Main objective of the study is to know the conceptual framework of financial inclusion in India. Researcher has collected secondary data from the deferent sources like journal, reports, books, newspaper and websites. Researches has concluded that financial inclusion contributes to economic growth by stimulating entrepreneurship, increasing savings, and expanding investment opportunities. Financial inclusion policy plays an important role in eliminating economic inequality in the country.*

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**Keywords:** *Prime Minister's Employment Generation Programme Ministry ff Micro, Small and Medium Enterprises, Swabhimaan Schemes, Pradhan Mantri Jan Dhan Yojana, Jeevan Jyoti Bima Yojana and Vocational Education and Training Loan Scheme.*

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### **Introduction:**

Financial inclusion contributes to economic growth by stimulating entrepreneurship, increasing savings, and expanding investment opportunities. It boosts consumer spending and business development, leading to job creation and improved productivity. Financial inclusion helps to achieve the sustainable development of the country, by providing financial services to the unreached people with the help of financial institutions. Financial inclusion can be defined as easy access to formal financial services or systems and their usage by all members of the economy. The committee on financial inclusion, of government of India, has defined financial inclusion as the process of ensuring timely access to financial services and adequate credit where needed by vulnerable groups such as the weaker sections and low income

groups at an affordable cost (Rangarajan Committee, 2008) The Global Financial Development Report on Financial Inclusion, 2014, defines Financial Inclusion as “the proportion of individuals and firms that use financial services. It has a multitude of dimensions, reflecting the variety of possible financial services, from payments and savings accounts to credit, insurance, pensions and securities markets. It can be determined differently for individuals and for firms.”

### **Review of Literature:**

The researcher has studied in following different relevant literature reviewed.

1. Shabna Mol TP (2014) carried out a research work to contribute a conceptual understanding of financial inclusion in the Indian context.

2. Shyni.V.K and D.Mavoothu (2014) explored about achieving inclusive growth through financial inclusion in India.
3. Solomon Olajide Fadun (2014) examined financial inclusion as a tool for poverty alleviation in developing countries, with special reference to Nigeria.

### Importance of the Study:

Financial inclusion helps every community in the country to participate in the country's economic development system. Financial inclusion policy plays an important role in eliminating economic inequality in the country. Financial inclusion policy is important in eliminating economic inequality. Since every community in the country is taking advantage of banking facilities, social welfare schemes, loans, savings, it has helped in the inclusive development of the country. Therefore, it is necessary to give priority to financial inclusion.

### Statement of the Problem:

Financial inclusion is important for the overall development of a country, its implementation faces many challenges such as underdeveloped infrastructure, delays in accessing credit, and lack of information about digital services. Hence, the researchers have chosen this topic.

### Objectives:

1. The Main objective of the study is to know the conceptual framework of financial inclusion in India.

### Methodology:

Researcher has collected secondary data from the deferent sources like journal, reports, books, newspaper and websites.

### Discussion:

Financial inclusion refers to the process of ensuring that individuals and businesses, particularly those in underserved or low-income segments, have access to affordable and appropriate financial products and services. These services include savings accounts, credit, insurance, remittances, and payment systems. The ultimate goal of financial inclusion is to promote economic growth, reduce income inequality, and improve overall financial well-being. Key

### Financial Inclusion in India:

1. **Accessibility:** Financial services should be physically and digitally accessible to everyone, even in remote areas.
2. **Affordability:** Services should be affordable to low-income individuals and small businesses.
3. **Availability of Products:** A range of products tailored to the needs of diverse groups, such as small loans, microinsurance, and digital payment systems.
3. **Financial Literacy:** Empowering individuals with the knowledge and skills to make informed financial decisions.
4. **Economic Growth:** Increases access to capital for entrepreneurs and small businesses, driving economic activity.
5. **Poverty Reduction:** Provides tools for saving, credit, and insurance to manage risks and invest in opportunities.
6. **Social Equity:** Reduces inequalities by giving marginalized groups access to essential financial resources.
7. **Resilience:** Enhances individuals' ability to cope with financial shocks and emergencies.
8. **Empowerment:** Particularly for women, financial inclusion fosters greater independence and participation in the economy.

### Components of Financial Inclusion in India:

Financial inclusion is the delivery of financial services and products to the sections of disadvantage and low-income segment of society, at an affordable cost in a fair and transparent manner by regulated institutional players. Components of Financial Inclusion included in Bank Accounts, Savings, Insurance, Payment and Remittance, Affordable credit and Financial Advice.

**Table no.1 Major Milestones in Financial Inclusion in India**

S. No	Year	Particulars
1	1969	Nationalization of Banks
2	1971	Establishment of priority sector lending banks
3	1975	Establishment of Regional Rural Banks
4	1982	Establishment of NABARD
5	1992	Self Help Groups Bank Linkage program
6	1998	NABARD goal setting for one million SHG linkage by 2008
7	2000	Establishment of SIDBI foundation of Micro credit
8	2005	One million SHG target achieved
9	2008	Financial Inclusion report submitted to Union Finance Ministry

*Source: RBI Reports, 2011.*

Apart from this government of India has started following schemes as an initiative for Financial Inclusion:

#### a. Prime Minister's Employment Generation Programme Ministry of Micro, Small and Medium Enterprises:

Launched in August 2008, Prime Minister's Employment Generation Programme (PMEGP) is a credit-linked subsidy scheme, administered by the Ministry of Micro, Small and Medium Enterprises (MSME). PMEGP aims to

generate employment opportunities through the establishment of micro-enterprises in the non-farm sector for rural as well as urban areas.

#### b. Swabhimaan Schemes:

Swabhimaan Scheme is a project designed to provide banking services to people who are living in remote rural areas. It was launched on February 10, 2011. The main aim is this scheme of promoting financial inclusion in these underserved regions. The Swabhimaan Scheme project is jointly operated by the Ministry of Finance and the Indian Banks' Association (IBA) to ensure that the rural population has easy access to banking services. The main goal of the Swabhimaan Scheme is to make banking services more accessible and convenient to the people living in large rural areas who have been lacking these services for far too long. The scheme has helped to promote entrepreneurship in rural areas and led to the development of robust banking infrastructure in rural areas. This scheme has a significant impact on financial inclusion in India. The Swabhimaan scheme has helped to increase financial literacy and awareness among the population. Earlier Financial Inclusion programme for opening of villagers bank account only. The Swabhimaan scheme has been a step towards empowering people and helping them achieve financial independence.

#### c. Pradhan Mantri Jan Dhan Yojana:

It was launched by the Prime Minister Narendra Modi on 15 August 2014. The slogan of the scheme is "*Mera Khaata, Bhagya Vidhata*" The PMJDY has been conceived as a national mission on financial inclusion with the objective of covering all households in the country with banking facilities and having a bank account for each household. Benefits under PMJDY: One basic savings bank account is opened for unbanked person, There is no requirement to maintain any minimum balance in PMJDY accounts, Interest is earned on the deposit in



PMJDY accounts, Rupay Debit card is provided to PMJDY account holder, Accident Insurance Cover of Rs.1 lakh (enhanced to Rs. 2 lakh to new PMJDY accounts opened after 28.8.2018) is available with Ru Pay card issued to the PMJDY account holders.

**d. Jeevan Jyoti Bima Yojana:**

Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) is an insurance scheme offering life insurance cover for death due to any reason. It is a one-year cover, renewable from year to year. The scheme is offered by banks/post offices and administered through life insurance companies. All individuals who are account holders of participating banks/ post office in the age group of 18 to 50 years are entitled to join. PMJJBY offers one- year term life cover of ₹ 2.00 Lakh to all the subscribers in the age group of 18-50 years. It covers death due to any reason. Premium payable is ₹ 436/- per annum per subscriber, to be auto debited from the subscriber's bank/post office account.

**e. Vocational Education and Training Loan Scheme:**

The Vocational Education and Training Loan Scheme provides financial assistance to youth of the target group to enhance their skills & employability.

**Conclusion:**

Financial inclusion contributes to economic growth by stimulating entrepreneurship, increasing savings, and expanding investment opportunities. Financial inclusion policy plays an important role in eliminating economic inequality in the country. The number of financial inclusion schemes like a Prime Minister's Employment Generation Programme Ministry of Micro, Small and Medium Enterprises, Swabhimaan Schemes, Pradhan Mantri Jan Dhan Yojana, Jeevan Jyoti Bima Yojana and Vocational Education and Training Loan Scheme also helps to the employment opportunities

through the different sectors in the rural as well as urban areas. Improving the financial literacy, effective use of technology and providing accessible financial services to rural and underprivileged communities is essential address the challenges for financial inclusion. These issues can be effectively achieving the goal of financial inclusion.

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## Sustainability of Women Employment Generation in Rural Area due to Government Scheme

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**DOI - 10.5281/zenodo.15130689**

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### **Abstract:**

*India's economy is the fastest growing economy in the world. India is known as the land of villages. Even today, 70 per cent of India's population lives in rural areas. The people here are dependent on agriculture and agriculture is dependent on the vagaries of nature.*

*People in rural areas have to deal with a lot of problems. For example, agriculture is dependent on nature, low wages, lack of jobs, malnutrition, poverty, water, electricity, communication, transportation, health, migration, etc.*

*In rural areas, women also play a very important role equally with men. Women are 50% of the society, who work round the clock for the welfare of the human race, who wake up for the family, who give dedication without expecting any compensation. The family institution is based on the sacrifice and labour of women. According to rural tradition, women's place was in the home. Now, however, things have changed. The reason is to empower rural women. It has become a necessity for the society to ensure sustainable development of the country. It has also become necessary for rural women to get an education and make their place in various fields. For this, the government is also implementing several schemes by introducing several bills and policies.*

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### **Introduction:**

Many scholars and social reformers seem to have come up with a plan to bring the women section of the society out of the stereotypes and caste system. But this class is yet to gain independence. Sane Guruji, in his book "Indian Women's Life", has said that society needs women's intelligence, but it is also in the interest of women to be self-sufficient. So it's time for them to insist that they take responsibility for independence.

Indian culture is an agrarian culture and rural women have contributed significantly to the progress of the agricultural sector. About 70% of the Indian economy is related to agriculture and agro-related industries. Of course, rural area have the highest number of women. Also, the invisible work of these women is most

visible. If the value of their invisible nature's work is extracted, it will certainly add to the national income. Most of the country's natural resources are found in rural areas. Therefore, agricultural development in rural areas is the most important and primary source of income.

Therefore, we cannot underestimate the importance of agriculture. That is why the contribution of the agriculture sector to India's GDP growth is remarkable. About 80 per cent of women in rural areas are engaged in agriculture, and we see many small, cottage industries related to agriculture in the rural areas. Women contribute to agriculture through many roles such as farmers, entrepreneurs, and workers. Rural women are building the nation by contributing their work as a responsible

citizen in various ways such as poultry farming, animal husbandry, goat, sheep farming, occupation dairy farming, horticulture, horticulture, plantation, forestry fishing, planting to post-harvest work, mowing, production of papad and pickles, summer work, raw materials required for the production of finished goods, sewing, restaurant, tourism and entertainment.

They are becoming sources of other industries and contributing to others by generating income for themselves.

### Research Objectives:

1. Understand the concept of women empowerment.
2. Review central and state government schemes for women empowerment.
3. To study the welfare approach of the government on the basis of various schemes implemented for women.
4. To understand the role played by the Government Scheme in living standards, generating self-employment and employment opportunities in rural area.

### Research assumptions:

1. Government schemes were implemented effectively.
2. Gender inequality.

### Research Methods:

The second material is supported for the present research paper. It uses published books, magazines, weekly magazines, various newspapers, brochures on various schemes of the government, internet.

### Limitations of Research:

Since the scope of central and state government schemes is very broad, the study of schemes implemented only for women has been limited.

The Constitution gives rights to women. The information doesn't seem to have reached them as much as they should. The Maharashtra government announced the first women's policy in 1994. It was changed

over time to set a second women's policy in 2001 and a third in 2014. All these policies mainly consider violence against women, women's laws, economic status reform, role of media, participation of NGOs, determination of schemes with women at the center, development of self-help groups, Mudra yojana.

Job creation and improving employment capacity are the priorities of the government. Accordingly, the Government of India has taken various steps to create jobs in the country. Various long-term schemes/programmes/policies are included to make the country self-reliant and create employment opportunities as well as self-employment.

### Review of Literature:

1. **Solunkhe, G. J. (2016)** noticed that the PMEGP schemes is helpful to those who are unemployed and wants some financial help to take the existing business opportunity. This scheme is helpful to those peoples who believe in self help and help to others by increasing employment opportunity. This scheme is helps to improve the hidden skill of entrepreneurship in rural peoples and to make self sufficient. Increase in the income level of rural people increase the national income of country too.
2. **Bagul, S.A. (2017)** noted that India is a developing country, which makes it very essential for government to promote entrepreneurship more. Government today was providing lot of useful schemes for women as well, but the benefits are far beyond reach due to rural educational exposure. Country needs to focus on job giving youth rather them job seeking youth. All we need to do today is instill a feeling of entrepreneurship in the youth today.
3. **Motik, S. (2000)** also tried to connecting women entrepreneur and economic growth and found that women

entrepreneurs help in economic development by job creating, increase saving that results energize in working capital, increase business volume.

4. **Priyanaka Sharma (2013)** highlighted the development ways for women entrepreneurship. These are providing better educational facilities, adequate training programs, vocational training, and establishing special target groups for women entrepreneurs etc. This study also highlighted the problems faced by women entrepreneurs. These are male dominating society, inadequate financial assistance, women family obligations etc.
5. **Devi Rama T. (2017)** researched and give recommendations as women constitute one-half of India's population, without their engagement and empowerment, rapid economic progress is not possible, for sustainable development women empowerment is of utmost value. along with government, civil society organizations and allother stake holders must come forward and involve in the women empowerment process it is the need of hour.

#### **Various schemes of the government for Women:**

##### **1) Training and Employment Assistance Program :**

The Government of India launched the Women Training and Employment Assistance Programme Scheme in 1986-87. The objective of this scheme is to develop poor, promising, rural and urban women. Agriculture, animal husbandry, dairying, horticulture, fisheries, handloom, handicrafts, sewing arts, khadi and village industries, silk industry, etc. have been covered in this program. It is being implemented by public sector organisations, state corporations, District Rural Development Authority, cooperative societies, federations and registered NGOs that have been in existence for at least three

years.

The objective is to develop truly poor rural and urban women and provide them with funds through the central government and implementing agencies. The scheme is for labourers, unpaid, daily wage labourers, migrants, women-led families, tribal and disadvantaged groups.

Under this scheme, work is done to improve the skills of needy women so that they can get employment or start their own employment. Through this, women are involved and trained in various fields like agriculture, horticulture, dairy, handloom, sewing and fisheries.

##### **2) Swayamsiddha Yojana:**

On July 12, 2001, the central government changed the name of Indira Gandhi Mahila Yojana to Swayamsiddha Yojana. It is an integrated scheme for the development and empowerment of women. The main objective of this scheme is to ensure the social, economic and all-round development of women. At the same time, the aim is to create awareness about economic issues.

##### **3) Balika Samriddhi Yojana:**

The scheme was launched by the Government of India on October 2, 1997, under the Women and Child Development Policy for the convenience of girls. This important initiative is being implemented to welcome the birth of girls in the society as well as to increase the quality of education. At the same time, the objective of the scheme is to support girls and motivate them to take up various activities that generate income for their own well-being.

Banks and financial institutions are unable to lend to rural women as they do not have enough money and lack education. If women get the right education and inheritance rights, they can definitely progress.

##### **4) Udyogini Scheme :**

This scheme is a very important scheme for women empowerment. This

scheme is for women already started or are going to do an industry. Under this scheme, a loan of Rs 3 lakh is given to women between the ages of 18 years and 45 years to widows, destitute or disabled women belonging to Scheduled Castes and Scheduled Tribes to work in the business, agriculture, retail and small enterprise sectors.

#### **5) Business loans of Bharatiya Mahila Bank:**

Bharatiya Mahila Bank provides business loans to women entrepreneurs who want to start new ventures in retail and SME sectors. Loans up to a maximum of `1 lakh are given to women entrepreneurs. The business loan scheme also offers a discount of `20 crore and 0.25%.

#### **6) Annapurna Yojana:**

This scheme is a special loan scheme of State Bank of India. Under this scheme, loan facility is provided to women. Loans up to `50,000 are given for pot cutlery, gas connection, refrigerator, mixer, grinder, hot case pot stand, tiffin box, working table, water filter etc. For this, the property of the business has to be kept as collateral with the guarantor. Women can repay this loan in 36 monthly installments.

#### **7) Dena Shakti Yojana :**

Dena Bank has launched a special Dena Shakti scheme for women to make women self-reliant and self-reliant. Under this scheme, loans up to `20 lakh are made available at a very low interest rate. This allows women to start their own businesses. Women get an interest subvention of 0.25% on loans received through this scheme and the repayment period is up to 10 years. The facility is also available for agricultural production, retailers and micro enterprises.

#### **8) Cent Kalyan Yojana:**

This is a loan scheme of the Central Bank of India. Loans up to `1 crore are provided through this scheme for micro and small scale industries. Overall, the scheme aims to finance women's business dreams.

#### **9) Women's Initiative Fund Scheme:**

Punjab National Bank launched the Mahila Udyog Nidhi Yojana for women to make women self-reliant and start businesses. Under this scheme, women can start their own business. At the same time, they can acquire new technologies and new skills. Under this scheme, loans up to `10 lakh can be availed for beauty parlours, cable TV networks, catering, hotels, nurseries, care centres, laundry, mobile repairs and have to be repaid over a period of 5 to 10 years.

#### **10) Stree Shakti Package:**

The scheme has been launched to provide financial assistance to poor and destitute women. The scheme provides loans through State Bank of India and other public sector banks. Loans range from `50,000 to `2 lakh for retail trade and business and `50,000 to `25 lakh for msme. Women get a 0.50% discount on interest rates. Under this scheme, no collateral is accepted up to a loan of `5 lakh.

#### **11) Stand Up India Scheme:**

On April 5, 2016, the stand-up India loan scheme was launched by the government to allow Scheduled Castes, Scheduled Tribes, Backward Classes and women to start their own businesses. Through this scheme, loans ranging from `1 lakh to `10 lakh are provided. The scheme can be availed from 18 years to 65 years. Under this scheme, the repayment period is up to 7 years.

#### **12) Mudra Loan Scheme for Women:**

Pradhan Mantri Mudra Loan Yojana is a business loan scheme. Under this scheme, unsecured loans up to `10 lakh are provided in three types.

- A) **Shishu Loan Scheme:** Loans up to 50,000 are provided under this scheme.
- B) **Kishore Loan Scheme:** Under this scheme, loans ranging from `50,000 to `5 lakh are provided to women.
- C) **Youth Loan Scheme:** These women are given loans ranging from `5 lakh to

₹10 lakh.

### **13) Orient Women's Development Scheme:**

The scheme is implemented by Oriental Bank for women. Under the scheme, only women are included and they are given ownership rights of about 51% of the shares. Through this scheme, women get a 2% discount on interest rates. The scheme provides loans ranging from ₹10 lakh to ₹25 lakh for Small Scale Industries. No guarantor is required. Enterprising women can repay the loan over a period of 7 years.

### **14) Training plan for women:**

The objective of the scheme is to provide vocational training to women above 15 years of age. It gives priority to destitute women and widows who have no support from anyone. They get whatever is fixed amount for this on a regular basis.

### **15) Prime Minister's Employment Generation Programme:**

On the eve of Independence Day 1993, the then Prime Minister in his speech said that the government was committed to launch the Pradhan Mantri Rojgar Yojana to provide employment opportunities to the youth. The scheme was formally launched on October 2, 1993, the birth anniversary of the Father of the Nation, Mahatma Gandhi. This scheme is implemented in each district through Directorate of Industries through District Industries Centre. In Mumbai and suburbs, the scheme is implemented through Assistant Director (Industries) Mumbai Metropolitan Area, Worli, Mumbai. Initially the scheme was implemented only in urban areas but from April 1994 it was also implemented in rural areas. This scheme has taken the place of employment scheme for boys and girls.

This scheme is a combination of Pradhan Mantri Rojgar Yojana (PMRY) and Rural Employment Generation Program (REGP). This scheme is implemented for unemployed youth in both rural and urban areas in coordination with Khadi and Village

Industries Commission and Khadi and Village Industries Board. KVIC routes government subsidy through designated banks for eventual disbursement to the beneficiaries / entrepreneurs directly into their bank accounts. The maximum cost of the project/unit admissible in manufacturing sector is ₹25 lakhs and in the business/service sector, it is ₹10 lakhs.

### **16) Seed Money Scheme:**

The Government's Seed Capital Scheme (SMS) for educated unemployed has been implemented since 1976-77 through the Directorate of Industries and the Regional Development Corporation. Meanwhile, since 1983, the central government and banks have been implementing several schemes for financial assistance to entrepreneurs. As per Maharashtra's New Industrial Policy, 1983, the Seed Capital Assistance Scheme was merged with the Central Government's National Equity Fund Scheme as a few lakh people were found to be disadvantaged and the scheme was handed over to the District Industries Center for their implementation. From 1<sup>st</sup> October 1993, the Government of Maharashtra announced this scheme to provide employment to the educated unemployed.

Under this scheme self-employment activities are encouraged. Business/ service industries, with a project limit of ₹25 lakh are recommended for approval and the maximum loan limit is ₹3.75 and the bank gives 75 percent loan.

Under the scheme, local persons in the age group of 18 to 50 years with at least 7<sup>th</sup> Class passed and with the domicile of Maharashtra for at least 15 years are eligible to get the benefit of this scheme.

### **17) District Industry Centre Loan Scheme:**

Micro and Small Enterprises are of great importance in India being an agriculture based nation. Micro and Small Enterprises require little capital and provide

ample employment opportunities. But currently micro and small scale industries are in crisis due to lack of capital, raw materials, effective management, trained manpower, electricity. To overcome all the problems, to increase the national income, and provide ample employment opportunities, the central and state governments have decided to set up various institutions for the development of such industries. District Industries Center Loan Scheme was started from 1978-79 to provide financial assistance to very small industries in semi-urban and rural areas to achieve their development and thereby create more employment opportunities and self-employment. This scheme is a district level scheme and is implemented at the district level through the District Industry Center Office. So that potential entrepreneurs can develop and get the facilities they need at one place.

There is no education or age requirement for this scheme. Also both the large industries and small scale industries should be eligible for registration.

Investment in machinery in the industry should be within 2 lakh. Bank provides 65 to 75 percent loans. The rate of interest is 4% and the seed capital loan can be repaid in 8 years.

#### **Conclusion:**

India is the youngest populous country in the world. More than 50 per cent of the working women of the population still do not have the status of entitlement and entitlement here. They have already been ignored. However, they make up more than 45% of the country's population. They are still not considered human resources in society. If these human resources are really used in the Indian economy and their participation in economic development increases, then surely the picture of the Indian economy will be even different. While the government is implementing

several schemes and policies for women empowerment, there is a need for an encouraging and safe environment for women's empowerment. Giving them the freedom to make decisions in a fear-free environment will reveal their immense potential.

However, today there are thousands of women entrepreneurs in the country whose ideals are before our eyes, which have been an inspiration for us.

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## Impact of Climate Change on Farmers' Financial Growth With Respect to Satara District

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DOI - 10.5281/zenodo.15130701

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### Abstract:

*This study investigates the multifaceted impact of climate change on the financial stability of farmers in Satara district, Maharashtra. Against a backdrop of erratic monsoonal patterns, rising temperatures, and increasing incidences of extreme weather events, the research explores how climate variability undermines agricultural productivity and exacerbates economic vulnerabilities among smallholder farmers. Employing a mixed-methods approach, quantitative analysis of meteorological and economic data is combined with qualitative insights gathered through structured interviews and surveys among 248 respondents using stratified random sampling. The findings reveal that declining crop yields, increased input costs, and heightened debt levels are prevalent issues. The research underscores that while farmers have initiated adaptation measures—such as crop diversification and mixed farming—systematic institutional support and improved resource management remain critical for long-term sustainability. Policy recommendations include the expansion of climate-resilient agricultural practices, enhancement of irrigation infrastructure, and targeted financial support. The study contributes to the broader literature on climate change impacts in agrarian economies, offering insights that are relevant for both local policy formulation and broader global discussions on sustainable agricultural development.*

**Keywords:** Climate Change, Agriculture, Financial Stability, Adaptation Strategies, Farmers, Satara District, Climate Resilience.

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### Introduction:

Climate change is a critical global challenge that severely affects agriculture, particularly in India where nearly half the population depends on farming. In Satara district, known for its agrarian economy, farmers traditionally relied on predictable monsoons for stable crop production. However, increasing climate variability—marked by erratic rainfall and extreme weather—has led to reduced yields and financial distress. This is especially true for smallholder farmers, who, lacking robust financial reserves and adaptive resources, face heightened vulnerability, leading to

debt accumulation and threatening both their immediate livelihoods and the long-term sustainability of the agricultural sector.

### Objectives:

1. To Study the impact of climate change on agricultural yield and productivity of Farmers in Satara district.
2. To evaluate the impact of climate variability on the financial health of farmers.
3. To identify coping mechanisms and adaptation strategies adopted by farmers in response to climate change.



**Review of Literature:**

1. **Dr. S.S. Rathore**  
Key focus: Impact of Climate Change on Agriculture in Maharashtra  
Dr. Rathore (2013) shows that climate change severely affects Maharashtra's agriculture. In Satara, especially in Phaltan, Khandala, and Khatav, altered rainfall and droughts reduce yields and soil fertility.
2. **Kumar et al. (2019)**  
Key Focus: Financial Implications for Farmers  
Kumar et al. (2019) find that smallholder farmers suffer from lower yields, resulting in reduced income, higher debt, and overall financial instability. Adaptation costs further strain their finances.
3. **Adger et al. (2003) & Binswanger-Mkhize (2012)**  
Key focus: Adaptation Strategies  
These studies categorize farmers' adaptations into technological, institutional, and behavioral measures. Strategies like drought-resistant crops and intercropping are common, but financial and informational barriers limit their use.
4. **Dr. P. K. Mishra**  
Key focus: Economic Impacts of Climate Change on Farmers  
Mishra (2014) reports that climate variability in Satara leads to lower crop yields and income loss, worsening rural poverty. While crop diversification may help, limited resources hinder its adoption.
5. **Dr. Bhende & Chatterjee**  
Key focus: Case Studies from Satara  
Bhende and Chatterjee (2020) note that the PoCRA project, which promotes water conservation and improved irrigation, has had mixed success in Satara, highlighting ongoing challenges in achieving climate resilience.

**Research Gap:**

While various studies discuss climate change's impact on agriculture, limited research focuses on its direct financial implications for farmers in Satara. Existing literature lacks detailed analysis of adaptation measures and their effectiveness in ensuring financial sustainability. So, this study aims to bridge this gap by providing a comprehensive evaluation of climate change's financial repercussions and proposing strategic interventions.

**Research Problem:**

The key issue addressed in agricultural sector in Satara district is heavily influenced by climatic conditions. With rising instances of erratic rainfall, droughts, unseasonal weather events, and pest outbreaks attributed to climate change, farmers are experiencing significant economic stress. The critical issue is the persistent financial instability caused by climate-induced agricultural disruptions and the inadequacy of adaptive strategies to ensure sustainable growth.

**Significance of the Study:**

This research provides valuable insights into the financial consequences of climate change on farmers in Satara. It aims to assist policymakers, agricultural organizations, and financial institutions in designing effective strategies to enhance farmers' resilience. The findings will contribute to sustainable agricultural development and financial security in the region.

**Research Methodology:**

This study uses a mixed-method approach, integrating both quantitative and qualitative techniques undertaken with an objective of,

1. To Study the impact of climate change on agricultural yield and productivity of Farmers in Satara

district.

2. To evaluate the impact of climate variability on the financial health of farmers.
3. To identify coping mechanisms and adaptation strategies adopted by farmers in response to climate change.

Data on temperature, rainfall, extreme weather, crop yields, income levels, and farmers' perceptions are gathered from both primary sources (surveys, interviews, and focus groups) and secondary sources (government meteorological records, agricultural reports, and policy documents). A total of 248 farmers, were collected with stratified sampling method, identified based on having experienced climate-related challenges, were selected to capture diverse

farming practices and financial vulnerabilities within the region.

#### Data Analysis:

Data analysis is structured around both secondary and primary data sources:

1. **Climate and Agricultural Data:**
2. Analysis of historical rainfall and temperature data indicates increasing variability and frequency of extreme weather events in Satara.
3. Crop yield statistics reveal a downward trend in productivity, particularly for water-intensive crops like sugarcane and rice.
4. Comparative analysis shows that farmers relying predominantly on rain-fed agriculture experience more significant income fluctuations than those with access to irrigation.

Table 1: Impact of Climate change on agriculture.

Crop	Impact of climate change	Estimated productivity decline
Sugarcane	Irregular rainfall and water scarcity due to reduced monsoons. Increased water stress.	10-15% decline in yield due to water availability issues and inconsistent rainfall.
Rice	Increased temperatures affecting flowering stages Erratic monsoon patterns leading to water stress.	10-15% reduction in yield due to heat stress and rainfall availability.
Groundnut	Rising temperatures and reduced rainfalls Decreased soil moisture leading to poor crop growth.	5-10% decline in yields due to temperature rise and water stress.
Water resources	Reduced water availability for irrigation due to changing rainfall and evaporation patterns. Increased competition for water.	In years of drought, sugarcane cultivation reduced by 20-30% to conserve water.

Source: Satara district Agricultural office.

#### Survey Findings:

- **Demographics:** Majority (49.2%) aged 41-60, with 63.3% owning less than 2 hectares of land.
- **Perceived Climate Impact:** 69% report noticing climate pattern changes, affecting crop yields and income levels.
- **Economic Impact:** 47.2% report declining incomes due to climate variability.
- **Adaptation Strategies:** 65.3% employ soil conservation, crop diversification, rainwater harvesting, and improved irrigation.
- **Key Needs:** Better access to weather forecasts, improved irrigation, input subsidies, and financial support.

**Table 2: Current Scenario of Farmers' Financial Position in Satara District**

Aspect	Details	Source
Landholding Patterns	93% of farmers are small and marginal, owning less than 2 hectares of land.	NABARD Report
Income Sources	Diversification into activities like sericulture; 317.25 hectares dedicated to mulberry farming.	KVK Satara
Weather-Related Challenges	Adverse impacts from hailstorms, cyclones, and unseasonal rains during 2020-21 and 2021-22.	Economic Survey of Maharashtra
Livestock Contributions	Livestock sector contributes 4.11% to GDP; goats contribute 17.93% of GDP from livestock.	Pharma Journal
District Economic Indicators	Satara's GDP in 2020-21: ₹61,241 crore (current prices), ₹42,378 crore (constant prices).	IndiaStat Districts
Sustainability Challenges	Growing inequality, droughts, limited irrigation, and improper resource management identified.	ResearchGate

**Interpretation:** The synthesis of quantitative data and qualitative insights confirms that climate variability is a major determinant of reduced agricultural productivity and financial instability. The data further suggest that while some adaptation strategies are being employed, these measures remain insufficient to counterbalance the adverse impacts.

**Table 3: Changes in crop yields and financial positions**

Category	Significantly Decreased	Decreased	No Change	Increased
Agricultural Yield	High	High	Low	Low
Financial Position	Low	High	High	Low
Income Levels	Low	High	Low	Low

**Findings:**

1. Out of 248 farmers, 122 (49.2%) belong to the 41–60 age group. Additionally, 156 (62.9%) are male, while 92 (37.1%) are female.
2. Regarding education, 107 (43.1%) have completed primary school, and only 26 (10.5%) possess postgraduate qualifications.
3. Land holdings show that 157 out of 249 (63.3%) own less than 2 hectares, with the remaining 91 (36.7%) owning more.
4. Rain-fed farming is most common (131, 52.8%), compared to 41 (16.5%) in irrigated and 76 (30.6%) in mixed farming, while sugarcane is the principal crop grown by 122 farmers (58.7%).
5. A majority, 171 (69.0%), have noticed changes in weather patterns, with unseasonal rainfall being the most reported challenge (116, 46.8%), alongside shorter monsoons, higher temperatures, and increased pests.
6. Similarly, 171 (69.0%) have observed changes in crop yields, with most reporting decreases in yield, financial position, and income; 117 (47.2%) noted a decrease in income, while various groups reported significant decreases, increases, or no change.
7. Adaptation practices have been adopted by 162 (65.3%) farmers, with soil conservation (111, 44.8%) and crop diversification (109, 44.0%) being the

most common strategies, followed by improved irrigation, rainwater harvesting, and climate-resilient seeds.

- The most needed support, as indicated by 113 (45.6%) farmers, is better access to weather forecasts and early warnings, with additional needs for improved irrigation facilities, modern training, input subsidies, and enhanced financial assistance.

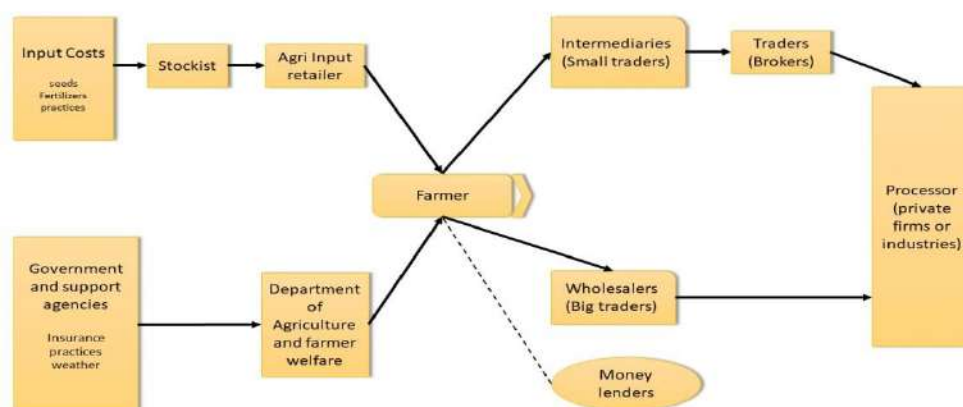
### Suggestions:

- Agri-Tech Collaborative Model:** Integrates modern technology, government initiatives, and private support into one digital platform. This model connects farmers with real-time weather data, crop advisory services, financial tools, and market linkages, fostering stakeholder collaboration to boost productivity and financial resilience.
- Digital Support:** Web portals provide essential tools like weather updates, crop management techniques, financial planning assistance, and market price data. User-friendly, multilingual interfaces empower farmers to make informed decisions and adapt to climate challenges.
- Early Warning Signals:** Early warning systems use satellite imagery, weather forecasts, and local data to issue timely alerts for extreme

weather events, pest outbreaks, and other risks. These signals help farmers take preventive measures to reduce crop losses and financial setbacks.

- Foster Community-Based Solutions:** Community-based initiatives, such as shared irrigation, cooperative storage, and group purchasing of inputs, reduce individual costs and build collective resilience. These efforts promote solidarity and enable large-scale climate adaptation strategies.
- Adopt Climate-Resilient Farming Practices:** Encourages sustainable methods like crop rotation, agroforestry, conservation tillage, and the use of drought-resistant seeds. Training programs and subsidies for technologies like drip irrigation and solar-powered equipment lead to long-term environmental and financial benefits.
- Financial Support and Insurance:** Tailored financial products, such as low-interest loans and flexible repayment options, help farmers invest in adaptive practices. Weather-linked insurance schemes provide compensation for climate-related losses, offering a financial safety net and reducing overall risk.

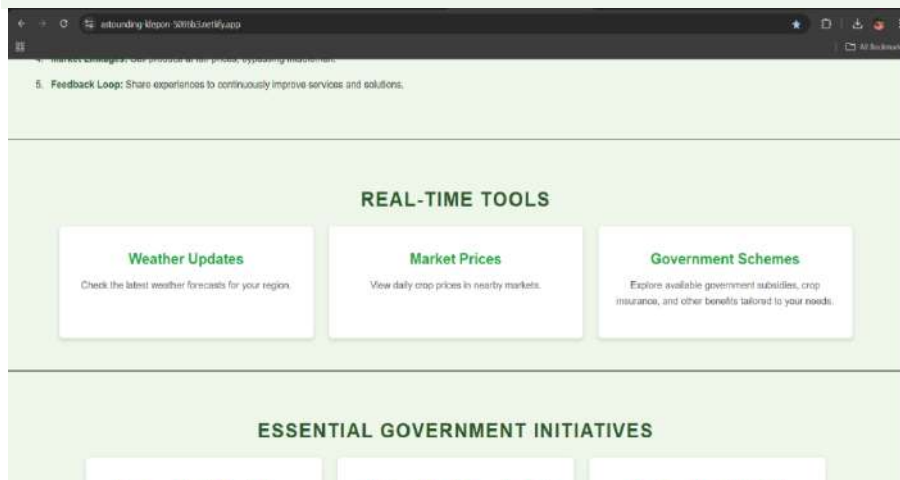
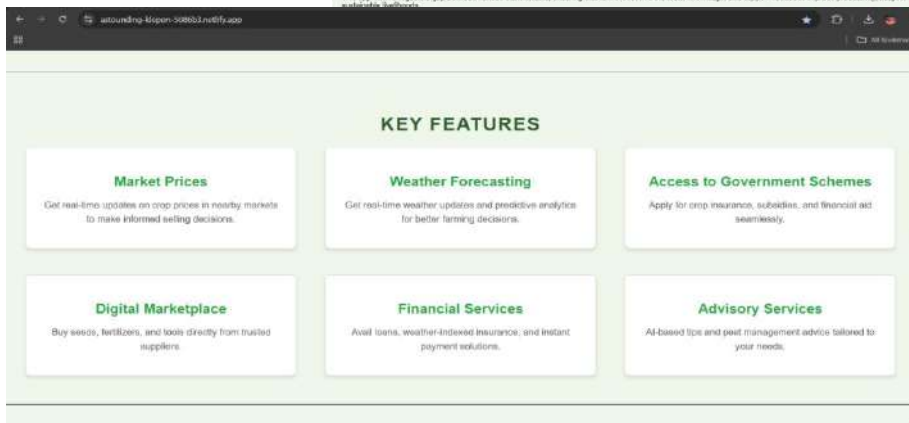
A flowchart or diagram can be created to visually represent the components and workflow of the model.



Model Website link:

<https://astounding-klepon-5086b3.netlify.app/>

Website Interface:



**Conclusion:**

This research emphasizes the critical impact of climate change on the financial stability of farmers in the Satara district. The study reveals that weather events, unpredictable rainfall patterns, and rising temperatures have significantly disrupted agricultural productivity, increased costs, and heightened financial vulnerabilities for farmers. These challenges are compounded by limited access to financial resources, technology, and market opportunities. The proposed **Integrated Agri-Tech Collaboration Model** stands out as a comprehensive approach to empowering farmers by combining technological innovation, government support, financial management strategies, and direct market linkages. The suggestions provided, including Weather-Linked Insurance Plans, Subsidized Loans, and Diversified Income Sources, offer practical solutions to address these issues. This model not only addresses immediate financial concerns but also ensures long-term sustainability by fostering resilience to climate change.

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3. Global climate datasets - World Bank, NASA, IPCC climate projections.
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## Recent Trends and Challenges in Commerce

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DOI - 10.5281/zenodo.15130713

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### Abstract:

*Environmental awareness has a strong influence on how people choose and use products that are better for the environment. This study examines how social factors, knowledge, and attitudes influence green consumer behavior in the Satara region, where sustainability is gaining popularity. Fifty people from both urban and rural locations participated in a survey to learn more about their purchasing patterns, awareness levels, and obstacles to implementing green practices. The findings indicate that consumers are more likely to purchase eco-friendly goods, such as those with energy-efficient features and sustainable packaging, if they are more knowledgeable about environmental issues. However, factors like high prices, limited availability, and doubts about product claims make it tough for everyone to move to green consumption. Businesses and policy makers play a key role in making green products more affordable and accessible through clear marketing, better pricing, and awareness campaigns. This study emphasizes the necessity of governmental regulations that promote environmentally friendly decisions and push businesses to take greater responsibility. This study contributes to the discussion on sustainable consumption by providing practical recommendations that assist companies and regulators in enhancing environmentally friendly consumer behavior in the region.*

**Keywords:** *Environmental Awareness, Green Consumer Behavior, Sustainability, Eco-friendly Products*

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### Introduction:

In recent years, environmental concerns have become an important issue globally. Climate change, pollution, deforestation, and excessive resource consumption have led to serious issues for our planet. To address these challenges, many people are shifting toward more sustainable lifestyles, making environmentally friendly choices in their everyday consumption habits. Green consumer behavior refers to purchasing and using products that have minimal negative impact on the environment. This includes purchasing products with green packaging, choosing energy-efficient equipment's, and minimizing waste through recycling and reusing materials.

One of the most essential factor influencing consumer behavior is environmental awareness. Green decisions are more likely to be made by those who are knowledgeable about environmental issues. Price, the availability of eco-friendly products, and the credibility of sustainability claims are only a few of the numerous variables that affect customer behavior. Promoting sustainability in developing areas like the Satara district requires an understanding of green consumer behavior. This study examines the obstacles customers have when adopting green products and focuses on how environmental consciousness influences consumer decisions in this area.

The purpose of the study is to examine consumer attitudes, knowledge, and

societal effects around sustainable consumption. This research offers insights for companies, policymakers, and educators to promote greener choices by identifying important drivers and barriers. The results will aid in the creation of plans to encourage environmentally friendly consumption and aid in Satara district's environmental preservation initiatives.

### **Literature Review:**

The concept of green consumer behavior is rooted in environmental psychology and sustainable development. Prior studies have identified factors such as environmental knowledge, personal values, and social norms as key determinants of eco-friendly purchasing habits. Researchers argue that increased awareness results in more sustainable choices. However, barriers such as higher costs, limited availability, and lack of trust in green products often hinder widespread adoption.

According to Peattie (2010), green consumerism is influenced by a combination of knowledge, motivation, and external factors such as policy frameworks and corporate practices. Ottman (2011) highlights that effective green marketing strategies significantly impact consumer choices. A study by Thøgersen and Ölander (2003) found that individuals with higher environmental awareness exhibit stronger pro-environmental purchasing behaviors. These studies provide a theoretical foundation for understanding green consumerism and guide the research methodology.

### **Objectives of the study:**

The objectives of this study are as follows:

1. To assess the level of environmental awareness among consumers in the Satara district.
2. To examine the impact of environmental awareness on green consumer behavior.
3. To identify barriers preventing consumers from adopting green products and practices.

### **Limitations of the Study:**

The study has certain limitations. First, it is limited to the Satara district, which may not fully represent consumer behavior in other regions. Second, self-reported data may be influenced by social desirability bias, leading respondents to overstate their green behavior.

### **Research Methodology:**

Primary data served as the basis for writing this research. A systematic questionnaire was used to gather primary data from residents of the Satara district. In order to ensure a representative sample, a random sampling technique was used. There were two sections to the questionnaire: Part A gathered demographic data such as gender, age, education, occupation, and family income, while Part B included 13 questions assessing environmental awareness, sustainability attitudes, and buying habits. A total of 50 respondents from both urban and rural areas participated in the survey.



**Findings and Observations:****Demographic Profile:**

Sr. No.	Personal Information of The Respondents	Percentage (%)
1.	<b>Gender:</b>	
	- Male	55.6
	- Female	44.4
2.	<b>Age (Years):</b>	
	- 18–24	20.0
	- 25–34	42.2
	- 35–44	24.4
	- 45 and above	13.4
3.	<b>Educational Qualification:</b>	
	- High School or below	2.2
	- Graduate	11.1
	- Postgraduate	68.9
	- Doctorate	17.8
4.	<b>Occupation:</b>	
	- Student	15.6
	- Private Sector Employee	20.00
	- Government Sector Employee	33.3
	- Own Business	2.2
	- Professional	24.4
	- Others	4.5
5.	<b>Monthly Income:</b>	
	- Below ₹20,000	37.8
	- ₹20,000 to ₹40,000	33.3
	- ₹40,000 to ₹60,000	2.2
	- ₹60,000 to ₹80,000	4.4
	- Above ₹80,000	22.2

From the above table, it is clear that, there were almost equal numbers of male and female who responded to the survey—55.6% were male and 44.4% were female.

Most responders (42.2%) are between the ages of 25 - 34, with those between the ages of 35 - 44 coming in second (24.4%). Just 13.4% of consumers are 45 years of age or older, compared to 20% who are younger (18–24 years).

A significant proportion (68.9%) of respondents hold postgraduate degrees, while 17.8% have a doctorate. Only 2.2% of respondents have a high school education or below.

The respondents come from diverse professional backgrounds, with the highest percentage (33.3%) working in the

government sector, followed by professionals (24.4%) and private-sector employees (20%). A smaller proportion includes students (15.6%) and business owners (2.2%).

**Key Findings:**

- Respondents with higher educational qualifications indicate a high potential for environmental awareness, which can influence green consumer behavior.
- The dominant age group (25–34 years) indicates that sustainability efforts should focus on young and middle-aged consumers, as they are more likely to adopt eco-friendly habits.
- The significant presence of government employees and professionals suggests that policy-driven sustainability

initiatives and corporate responsibility programs could effectively influence consumer behavior.

- Since the majority of respondents fall into the lower or moderate-income range, affordability is still an issue that may affect their willingness to spend more for environmentally friendly goods.
- A remarkable 97.8% of respondents believe that environmental problems significantly touch their lives and communities, demonstrating strong awareness and concern for sustainability.
- The majority of respondents (62.2%) frequently buy eco-friendly products, but 33.3% purchase them only sometimes, indicating strong awareness but inconsistent green buying behavior due to factors like cost and availability.
- Most respondents follow sustainable practices, with 60% using reusable bags and avoiding plastic, while only 42.2% practice waste segregation.
- Health benefits (71.1%) and social responsibility (64.4%) are the top motivators for purchasing eco-friendly products.
- Limited availability (46.7%) and higher prices (33.3%) are the main barriers to purchasing green products.
- While 35.6% are willing to pay a premium for eco-friendly products, 62.2% may do so only if the price difference is minimum, highlighting cost sensitivity as a crucial element in green shopping decisions.
- A strong majority (93.3%) support government policies promoting sustainable consumer behavior, indicating a high level of public approval for eco-friendly regulations.

#### **Recommendations and Suggestions:**

- Workshops, seminars, and community programs are essential for raising awareness of green consumer behavior.

- Social media and digital platforms should be used to spread knowledge, share success stories, and provide practical tips on sustainable living to reach a wider audience.
- The government should introduce policies that encourage green consumption, such as subsidies, incentives, and restrictions on non-eco-friendly products, making sustainable choices more accessible.
- Businesses should actively promote green products by ensuring clear labeling, offering discounts, and engaging in transparent marketing to build consumer trust and confidence.
- Community engagement initiatives like clean-up drives, sustainability fairs, and eco-friendly product exhibitions can help create awareness and encourage people to adopt greener lifestyles.
- Partnering with environmental influencers, non-governmental organizations, and educational institutions can further amplify awareness efforts and make sustainable choices more mainstream.
- Enhancing the availability and affordability of eco-friendly products is essential to ensure that more consumers can make green purchasing decisions without financial constraints.

#### **Conclusion:**

This study finds that environmental awareness has a strong impact on green consumer behavior in the Satara district. People who understand environmental issues prefer eco-friendly products, but high prices, limited availability, and doubts about product claims make it hard for everyone to choose green options. To promote sustainable consumption, businesses should improve marketing, make green products more affordable, and ensure they are easily available. Policymakers need to launch

awareness campaigns and offer incentives to encourage eco-friendly choices.

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## Impact of Education on the Awareness of Financial Planning among Villagers of Satara District

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**DOI - 10.5281/zenodo.15130725**

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### **Abstract:**

*Financial Planning is a methodical way for achieving life goals. A financial plan serves as a roadmap for navigating life's challenges. The process of financial planning allows an individual to maximize their resources in order to achieve their objectives. It helps people save more money, improves their quality of life, and prepares them for future emergencies. Thirty-three villages in the Satara district were the sites of this investigation. 384 respondents who were chosen by random selection provided the data needed for the study. Numerous statistical tools like frequency, percentage and cross tabulation have been used to evaluate the data that was gathered with the aid of a schedule. The results reveals that respondents who are graduates & post graduates as compared to respondents who are less educated or illiterate have a higher awareness level about financial planning.*

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**Keywords:** *Financial Planning, Financial Literacy, Education.*

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### **Introduction:**

The process of turning cash into a financial asset is referred to as investment. Purchasing financial instruments with the hopes of earning a profit in the future is referred to as investing. The contemporary Indian financial market offers a wide range of financial products such as bank deposits, gold and silver, real estate, life insurance, postal savings, shares, debentures, mutual funds, derivatives, etc. Investors spend their excess funds in a variety of ways, depending on their awareness, knowledge, goals, risk tolerance, etc.

Every investor has varied goals for their investments including safety, liquidity, tax advantages, maximizing wealth, buying a home, getting married, and raising children. A person prefers to consult with specific individuals such as friends, family, tax consultants, chartered accountants and relatives, for financial advice.

Every person needs to understand financial planning in order to deal with the

various financial products and services available on the market. We must integrate financial literacy into our daily lives. The process of financial planning allows an individual to maximize their resources in order to achieve their objectives. It gives people a higher standard of living, helps them save more money, etc. A person who is sufficiently knowledgeable about financial planning is better able to make wise investment choices.

### **Review of Literature:**

**Suchitra A. (March 2016)** investigated financial knowledge and investing practices of individuals of Kerala. A systematic questionnaire was used to gather the necessary study data from 150 people in the city and 150 people in the villages. The data were gathered using a stratified random sampling approach. Statistics techniques including frequency, percentage, mean, standard deviation, ANOVA test, and t test were used to examine the collected

information. According to the research, respondents' awareness levels were somewhat above average. The survey revealed that newspapers and television were the primary information sources for investors. The majority of urban investors, however, depend on financial experts. According to the study's findings, investors' levels of knowledge fluctuate significantly depending on their age, gender, educational background, and home area.

**Prabhat Poorna (November 2016)** studied the impact of risk on the investment decisions and relationship between various factors with the risk taking ability of the investors. 100 investors from the Vijayawada region completed a questionnaire to provide the primary data for the study. With the use of statistical methods like frequency and percentage, the information collected was examined. The association between various parameters and investors' capacity for risk-taking was investigated using the Chi square test. The study discovered that important determinants on investing decisions were age, gender, income, educational background and occupation. The capacity of the investors to take risks was independent to their gender or age. It was discovered that an investor's capacity for taking risks was correlated with their employment, income, and level of education.

**Chaurasia Pratibha (July 2017)** undertook a research to determine the investment preferences of investors in the Indore district and to examine the effects of various demographic factors on those choices. The samples were chosen using the judgement sampling approach. 229 investors' responses to a questionnaire were used to collect data, which was then examined using statistical methods including frequency, percentage, and chi square test. The study revealed that investors favored fixed deposits over capital markets as their preferred investment instrument. It was discovered that the

demographic characteristics of investors, such as their age, gender, and educational background, significantly influenced their investing preferences. It was proposed to run financial planning workshops and awareness campaigns.

#### **Importance of the Study:**

Every individual wishes to invest money in order to generate a profit and put money to good use. The primary occupation of the villagers of Satara district is farming and related activities. Their investing options are limited due to low and uncertain income, a lack of education and skills, and so on. Different investment alternatives appeal to people of various ages, education levels, genders, income levels, and family structures. The villagers' investment decisions vary depending on demographic parameters as well as their awareness of financial planning. This study has been carried out in the villages of the Satara district of Maharashtra. This study makes it possible to learn about the level of awareness of financial planning among village investors based on their educational qualification.

#### **Statement of Research Problem:**

As a growing country, India faces the daunting task of obtaining sufficient funds for its development projects. Many scholars, economists, and decision-makers have observed that demographic factors impact the investment choices of individual investors.

To make informed investment decisions, a person must be aware of every potential opportunity available to them. The aim of the current study is to undertake a thorough analysis of the awareness of the village investors about the financial planning based on their educational qualification. The study is intended to provide detailed answers to the following two questions:

1. What is the concept of financial planning?
2. What is the impact of Education on the awareness about financial planning?

### Objectives of the Study:

The present study intends to achieve the following objectives:

- 1) To overview the concept of financial planning.
- 2) To examine the impact of education on the awareness about financial planning.

### Scope of the Study:

The geographical scope of this research is limited to the villages in the Satara district. Satara district consists of 11 talukas. The survey included three villages from each taluka, chosen at random. Thus, this study is limited to 33 villages in Satara district.

The conceptual scope is confined to determining awareness of financial planning. The analytical scope is confined to examining obtained data using statistical tools such as frequency, percentage, and cross tabulation.

### Research Methodology:

**Type of Research:** It is a descriptive research.

**Data Sources:** Primary data has been collected from villager investors using a standardized schedule. The secondary information has been acquired from secondary sources such as books, journals, and reports.

**Instrument:** The schedule is divided into two parts: Investor Demographic Profile and Awareness of Financial Planning. The data for the inquiry has been collected using a five-point Likert scale. The awareness of financial planning has been tested using 20 statements.

### Data Analysis and Interpretation:

Awareness of individuals about financial planning depends upon their educational qualification. Following frequency distribution Table No. 1 shows the distribution of respondents on the basis of educational qualification.

**Table No. 1 Classification of Respondents as per Qualification**

Sr. No.	Qualification	Frequency	Percentage
1	Illiterate	89	23.18
2	Less than SSC	93	24.22
3	SSC	26	6.77
4	HSC	53	13.80
5	Diploma	18	4.69
6	Graduation	77	20.05
7	Post-Graduation	28	7.29
	<b>Total</b>	384	100

(Source: Primary Data Compiled by Researcher)

The above Table No. 1 shows that, the respondents possess different types of educational qualifications. Out of total respondents, 93 respondents i.e. 24.22 % respondents have education less than SSC, followed by 89 respondents i.e. 23.18 % respondents are illiterate, followed by 77 respondents i.e. 20.05 % respondents are graduates. Out of total respondents, only

4.69 % respondents are diploma holders, 6.77 % respondents are SSC pass out and 7.29 % respondents are post graduates. The percentage clearly indicates that, more than 60 % of total respondents have educational qualification up to HSC only. It indicates that, majority of the village people of Satara district are less educated.

### Awareness of Respondents on the basis of Education Qualification:

Five variables namely Money Management, Investment Planning, Estate Planning, Insurance Planning, and Retirement Planning have been identified as being relevant for gauging the financial planning awareness of village investors in the Satara district. The five-point Likert scale was used to collect the data needed for the investigation. Each variable has 4 statements. It means the maximum total

score of 1 variable is 20. It means the maximum total score of all 5 variables is 100. The total scores of respondents have been classified into 3 categories namely; Low Awareness, Average Awareness and High Awareness. Following frequency distribution Table No. 2 shows the classification of respondents into Low Awareness, Average Awareness and High Awareness on the basis of educational qualification.

**Table No. 2 Awareness of Respondents on the basis of Education Qualification**

Educational Qualification * TotalAwareness1 Cross tabulation						
			TotalAwareness1			Total
			Low Awareness	Avg. Awareness	High Awareness	
Edu. Qua.	Illiterate	Count	73	16	0	89
		% within Edu. Qua.	82.0%	18.0%	0.0%	100.0%
	Less than SSC	Count	53	39	1	93
		% within Edu. Qua.	57.0%	41.9%	1.1%	100.0%
	SSC	Count	4	16	6	26
		% within Edu. Qua.	15.4%	61.5%	23.1%	100.0%
	HSC	Count	4	27	22	53
		% within Edu. Qua.	7.5%	50.9%	41.5%	100.0%
	Diploma	Count	0	7	11	18
		% within Edu. Qua.	0.0%	38.9%	61.1%	100.0%
	Graduation	Count	2	15	60	77
		% within Edu. Qua.	2.6%	19.5%	77.9%	100.0%
	Post Graduation	Count	0	1	27	28
		% within Edu. Qua.	0.0%	3.6%	96.4%	100.0%
Total		Count	136	121	127	384
		% within Edu. Qua.	35.4%	31.5%	33.1%	100.0%

#### (Source: Compiled by Researcher)

According to the above table, 89 out of the 384 respondents are illiterate. Out of this, majority i.e. 82 % respondents has low awareness and remaining 18 % respondents has average awareness about financial planning.

Out of total 384 respondents, 93 respondents have education less than SSC. Out of this, majority i.e. 57 % respondents has low awareness, followed by 41.9 % respondents with average awareness and remaining 1.1 % respondents has high awareness about financial planning.

26 respondents out of the 384 total respondents hold an SSC qualification. Out of this, majority i.e. 61.5 % respondents has average awareness, followed by 23.1 % respondents with high awareness and remaining 15.4 % respondents has low awareness about financial planning.

Out of total 384 respondents, 53 respondents have education of HSC. Out of this, majority i.e. 50.9 % respondents has average awareness, followed by 41.5 % respondents with high awareness and

remaining 7.5 % respondents has low awareness about financial planning.

Out of total 384 respondents, 18 respondents Diploma holders. Out of this, majority i.e. 61.1 % respondents has high awareness and remaining 38.9 % respondents has average awareness about financial planning.

Out of total 384 respondents, 77 respondents are graduates. Out of this, majority i.e. 77.9 % respondents has high awareness, followed by 19.5 % respondents with average awareness and remaining 2.6

### Findings:

1. Maximum i.e. 24.22 % respondents have education less than SSC, followed by 23.18 % illiterates and 20.05 % graduates. Out of total respondents, only 4.69 % respondents are diploma holders, 6.77 % respondents are SSC pass out and 7.29 % respondents are post graduates. It indicates that most of the respondents of the study area possess limited educational qualifications. (Table No. 1)
2. Based on the educational background, those with post-graduate, graduate and diploma degrees have a high level of awareness of financial planning, while those with no education or education below the SSC have a low level of awareness. (Table No. 2)
3. Out of 28 post graduate respondents majority i.e. 96.4 % respondents has high awareness and out of 77 graduate respondents, majority i.e. 77.9 % respondents has high awareness about financial planning. (Table No. 2)
4. Out of 89 illiterate respondents majority i.e. 82 % respondents has low awareness and out of 93 respondents having education less than SSC majority i.e. 57 % respondents has low awareness about financial planning. It indicates that, the awareness level of individual investor's increases with increase in educational qualification. (Table No. 2)

% respondents has low awareness about financial planning.

Out of total 384 respondents, 28 respondents are post graduates. Out of this, majority i.e. 96.4 % respondents has high awareness and remaining 3.6 % respondents has low awareness about financial planning.

The table makes it clearly evident that the respondents' level of education has an impact on their awareness of financial planning. In comparison to individuals with lower educational qualifications, those with higher qualifications are more aware of financial planning.

### Suggestions:

1. The "New India Literacy Programme" (NILP), a program authorized by the Central Government of India in 2022, should be implemented by the state government in order to increase literacy among the illiterate people in every village who are at least 15 years old.
2. A number of articles about financial planning, investment options, and financial literacy should be published by the newspaper agencies. To raise people's level of awareness & knowledge, the articles should be released on a regular basis on a designated day.
3. To teach parents and village residents about financial literacy, financial planning, investment options, etc., the schools and colleges in the villages should host special talks. These kinds of initiatives need to be planned during social events like annual functions and parent meetings.
4. In order to teach the village residents about financial literacy, financial planning, investment options, etc., the colleges and universities should organize events such as guest lectures, street plays, dramas, skits, etc. during the NSS camps and make sure that the majority of the village residents attend.



**Conclusion:**

This study has been conducted to measure the awareness level of village investors about financial planning based on their educational qualification. The cross-tabulation results reveals that respondents who are graduates & post graduates as compared to respondents who are less educated or illiterate have a higher awareness level about financial planning.

The study concludes that, there is a need to increase the financial literacy of the village peoples. It can be achieved through conducting financial literacy camps, organizing special lectures on financial literacy, publishing series of articles in the local newspapers etc.

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## Non-Performing Assets in Maharashtra's Cooperative Banking Sector - A Case Study of Satara and Sangli DCCBs

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**DOI - 10.5281/zenodo.15130735**

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### **Abstract:**

*Non-performing assets (NPAs) are a significant challenge in the banking sector, particularly for District Central Cooperative Banks (DCCBs) in Maharashtra, which play a crucial role in rural credit and agricultural financing. This study aims to conduct a comparative analysis of NPA management in Satara DCCB and Sangli DCCB, two prominent cooperative banks in the state. The research examines the trends, causes, and impact of NPAs in these banks over the past decade. It also evaluates the effectiveness of recovery mechanisms, including legal actions, restructuring, and government policies. Data for the study is collected from annual reports, RBI and NABARD publications, and interviews with bank officials and borrowers. The findings indicate that both banks face high NPAs due to inadequate credit appraisal, loan waivers, political interference, and weak recovery mechanisms.*

**Keywords:** *Non-Performing Assets (NPAs), District Central Cooperative Banks (DCCBs), NPA Management, Satara DCCB, Sangli DCCB, Maharashtra, Rural Banking, Financial Sustainability*

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### **Introduction:**

Non-performing assets (NPAs) are a significant challenge in the banking sector, particularly for District Central Cooperative Banks (DCCBs) in Maharashtra, which play a crucial role in rural credit and agricultural financing. This study aims to conduct a comparative analysis of NPA management in Satara DCCB and Sangli DCCB, two prominent cooperative banks in the state. The research examines the trends, causes, and impact of NPAs in these banks over the past decade. It also evaluates the effectiveness of recovery mechanisms, including legal actions, restructuring, and government policies. Data for the study is collected from annual reports, RBI and NABARD publications, and interviews with bank officials and borrowers. The findings indicate that both banks face high NPAs due to inadequate credit appraisal, loan waivers,

political interference, and weak recovery mechanisms.

### **Objectives of the Study:**

1. To analyse the trends and causes of NPAs in Satara and Sangli DCCBs.
2. To compare the financial performance and NPA levels of both banks.
3. To evaluate the NPA recovery mechanisms employed by the two banks.

### **Hypotheses of the Study:**

Null Hypotheses ( $H_0$ ) and Alternative Hypotheses ( $H_1$ ):

$H_0$  There is no significant difference in the NPA levels of Satara DCCB and Sangli DCCB.  $H_1$ : There is a significant difference in the NPA levels of Satara DCCB and Sangli DCCB.

H<sub>0</sub>: There is no significant difference in the NPA recovery performance of Satara DCCB and Sangli DCCB.

H<sub>1</sub>: The NPA recovery performance of Satara DCCB and Sangli DCCB differs significantly due to variations in recovery mechanisms and management strategies.

#### Limitation of the Study:

The study covers the NPA management practices of Satara DCCB and Sangli DCCB over the past 10 years. It involves an analysis of financial reports, RBI and NABARD guidelines, and interviews with bank officials, and case studies of loan recovery processes.

#### NPA Analysis Of Satara DCC Bank And Sangli DCC Bank:

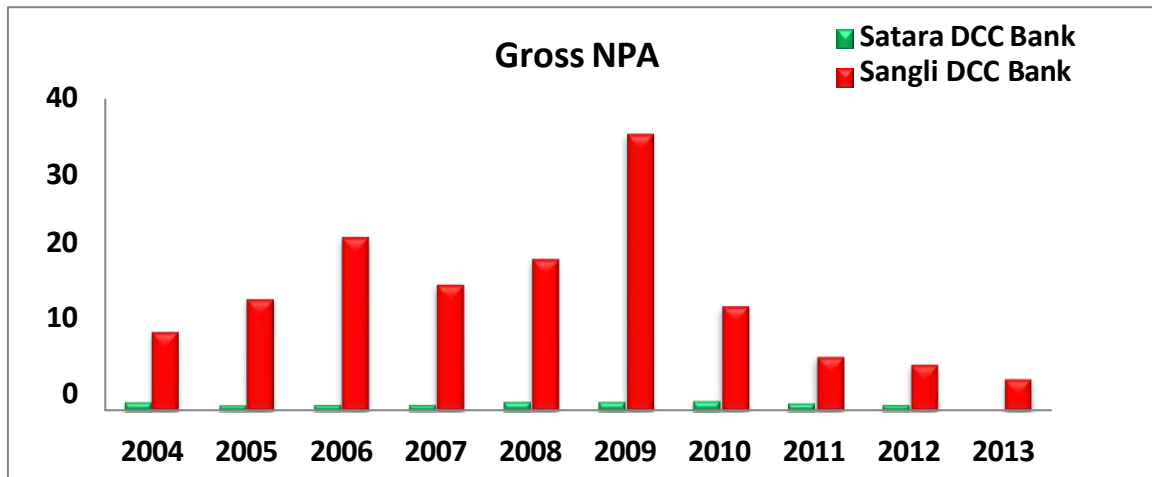
##### Introduction:

The success of banking business depends upon the financial soundness of its banking system. One of the parameters that is used to judge the Banking sector. Financial health is the level of Non

Performing loans or assets. Non Performing loans is an important criterion, because it reflects the asset quality, credit risk and efficiency in allocation of resources to production sector. The high level of NPAs in Banks and financial institution has been a matter of grave concern in financial management to the public as bank credit. These banks are commercial organization and the main business of banking is to collect the deposits from the public and lend it to the individuals, business concerns, institution etc. Sub-standard assets: a sub standard asset is one which has been classified as NPA for a period not exceeding 12 months. Doubtful Assets: a doubtful asset is one which has remained NPA for a period exceeding 12 months. Loss assets: All those assets which are considered as non-performing for period of more than 12 months are called as Doubtful Assets. All those assets which cannot be recovered are called as Loss Assets. The following analyses have been made for NPA of both banks.

**Table 1.1: Comparative Analysis of Gross NPA of Satara DCC bank and Sangli DCC bank**

Years	Satara DCC bank			Sangli DCC bank		
	Gross NPA amount	Gross Advances	Gross NPA %	Gross NPA amount	Gross Advances	Gross NPA %
2004	698.88	64391.85	1.09	10963.88	1,07,817.17	10.17
2005	415.03	55769.38	0.74	13718.8	95,409.27	14.38
2006	800.08	107324.54	0.75	23345.33	1,04,423.51	22.36
2007	769.07	97819.54	0.79	18197.65	1,11,996.42	16.25
2008	1132.05	97819.54	1.16	21032.85	1,07,798.26	19.51
2009	1130.89	97658.93	1.16	33487.11	94,142.72	35.57
2010	1344.35	109333.32	1.23	14254.25	1,05,852.88	13.47
2011	1536.67	157231.86	0.98	11178.16	1,60,596.78	6.96
2012	1535.12	193530.22	0.79	10637.09	1,77,981.79	5.98
2013	1490.78	264909.65	0.56	8650.26	2,10,123.59	4.12
Average	0.92			14.88		
S. D.	0.23			9.37		
C. V. %	24.53			62.97		

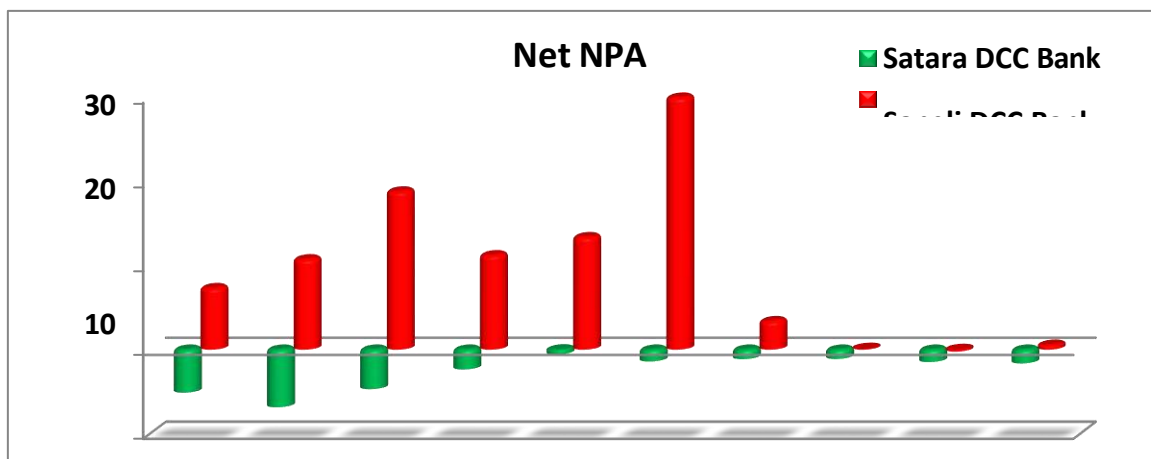


Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13

It is clear from the above table 1.1 that the Gross NPA of Satara DCC bank is less than the Sangli DCC bank. The gross NPA ratio of Satara DCC bank shows the fluctuating trend from 2004 to 2013. The Sangli DCC bank also shows the fluctuating trend in the study period. The gross NPA ratios of Sangli DCC bank reached to 4.12% up to 2014. The average of gross NPA of

Satara DCC bank and Sangli DCC bank is 0.92 and 14.88 respectively. The standard deviation of gross NPA of Satara DCC bank and Sangli DCC bank is 0.23 and 9.37 respectively and the coefficient of variation is 24.53 % and 62.97% respectively. The Sangli DCC bank shows the high Gross NPA ratio which shows the low quality of credit portfolio.

Figure 1.2



**Table 1.2: Comparative Analysis of Net NPA of Satara DCC bank and Sangli DCC bank**

Years	Satara DCC bank				Sangli DCC bank		
	Net NPA amount	Net Advances	Net NPA %	Net NPA %	Net NPA Amount	Net Advances	Net NPA %
2004	-3105.64	60587.33	-5.13	0.00	6968.89	94912.65	7.34
2005	-3556.96	51797.39	-6.87	0.00	8694.53	80749.02	10.77
2006	-3572.38	75897.33	-4.71	0.00	16647.59	88388.43	18.83
2007	-2452.18	104103.29	-2.36	0.00	10826.77	96265.51	11.25
2008	-541.78	96145.71	-0.56	0.00	12216.62	91139.79	13.40
2009	-1340.13	95187.91	-1.41	0.00	22621.33	75456.69	29.98
2010	-1202.18	106783.8	-1.13	0.00	3001.26	88381.13	3.40
2011	-1709.46	153985.73	-1.11	0.00	108.13	143397.85	0.08
2012	-2805.65	189189.45	-1.48	0.00	-377.61	161697.63	-0.23
2013	-4260.76	259158.11	-1.64	0.00	1091.91	198572.28	0.55
Average	-2.64				9.54		
S. D.	2.14				9.61		
C. V. %	-81.07				100.82		

(Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13)

The above table reveals that the Net NPA ratio of Satara DCC bank and Sangli DCC bank. The Net NPA ratio of Satara DCC bank has minus hence it clears from the minus ratio, the Net NPA of the bank is zero. It is good sign for the bank because the bank has fulfilled the degree of the riskiness in the credit portfolio during the study period. But in respect of the Sangli DCC bank it is clear from the above ratio is high (29.98 %) in the year 2009. But the Net

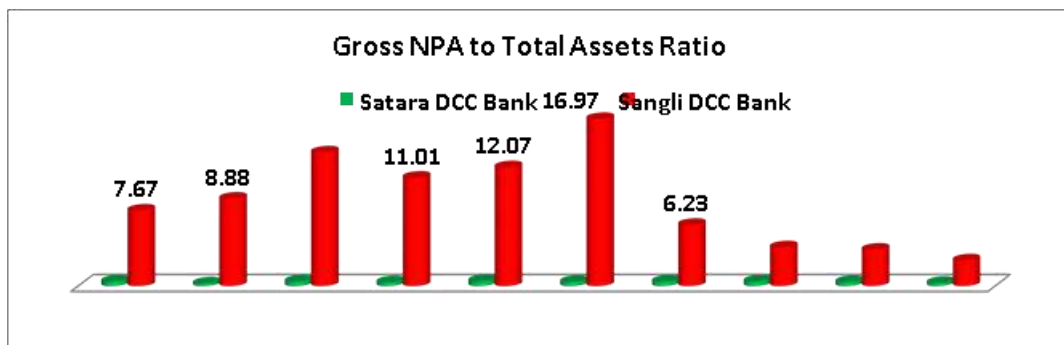
NPA ratio from 2010 it is decreased 3.40 % to -0.23%. The average of Net NPA ratio of Satara DCC bank has shown the negative i. e. -2.64%, but the average of Sangli DCC bank has shows 9.54%. The standard deviation of both the banks shows the 2.14 and 9.61 respectively. The coefficient of variation of the Satara DCC bank and Sangli DCC bank is -81.07% and 100.82% respectively.

**Table 1.3: Gross NPA to Total Assets of Satara DCC bank and Sangli DCC bank**

Years	Satara DCC bank			Sangli DCC bank		
	Gross NPA amount	Total Assets	Ratio %	Gross NPA amount	Total Assets	Ratio %
2004	698.88	144110.67	0.48	10963.88	1,43,020.91	7.67
2005	415.03	148032.11	0.28	13718.8	1,54,539.02	8.88
2006	800.08	162587.93	0.49	23345.33	1,72,040.22	13.57
2007	769.07	193109.84	0.40	18197.65	1,65,300.35	11.01
2008	1132.05	215619.63	0.53	21032.85	1,74,257.96	12.07
2009	1130.89	254690.1	0.44	33487.11	1,97,351.02	16.97
2010	1344.35	282463.33	0.48	14254.25	2,28,669.90	6.23
2011	1536.67	316437.28	0.49	11178.16	2,82,780.42	3.95
2012	1535.12	360934.43	0.43	10637.09	2,86,810.85	3.71
2013	1490.78	432575.33	0.34	8650.26	3,29,588.97	2.62
Average	0.44			8.67		
S. D.	0.08			4.72		
C. V. %	17.40			54.43		

(Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13)

Figure 1.3



The above table 1.3 shows that the gross NPA to Total assets of Satara DCC bank, the ratio has the fluctuating trends during the study period. The maximum ratio was 0.53% in the year 2008 and the at least ratio was 0.28% in the year 2005, during all the study period ratio is less than one percent. The Sangli DCC bank shows the ratio has very fluctuating trends during the study period. In the year 2009 it is found that highest ratio 16.97% as compared to nearest study year, and minimum ratio was 2.62% in the year

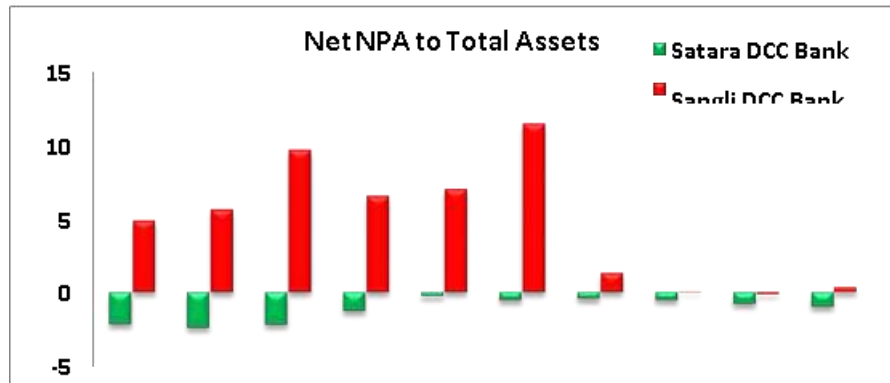
2013. In the year 2006 to 2009 the increasing trend and after the year decreasing trends. It is clear that Satara DCC bank maintained minimum ratio of gross NPA to total assets as compared to Sangli DCC bank. It is concluded that the Satara DCC bank has very low ratio, they indicates very sound liquidity position of the NPA as compared to Sangli DCC bank, the Sangli DCC bank paid adequate attention to reduction of NPA and control the ratio.

Table 1.4 : Net NPA to Total Assets of Satara DCC bank and Sangli DCC bank

Years	Satara DCC bank			Sangli DCC bank		
	Net NPA amount	Total Assets	Ratio %	Net NPA amount	Total Assets	Ratio %
2004	-3105.64	144110.67	-2.16	6968.89	1,43,020.91	4.87
2005	-3556.96	148032.11	-2.40	8694.53	1,54,539.02	5.63
2006	-3572.38	162587.93	-2.20	16647.59	1,72,040.22	9.68
2007	-2452.18	193109.84	-1.27	10826.77	1,65,300.35	6.55
2008	-541.78	215619.63	-0.25	12216.62	1,74,257.96	7.01
2009	-1340.13	254690.1	-0.53	22621.33	1,97,351.02	11.46
2010	-1202.18	282463.33	-0.43	3001.26	2,28,669.90	1.31
2011	-1709.46	316437.28	-0.54	108.13	2,82,780.42	0.04
2012	-2805.65	360934.43	-0.78	-377.61	2,86,810.85	-0.13
2013	-4260.76	432575.33	-0.98	1091.91	3,29,588.97	0.33
Average	-1.15			4.67		
S. D.	0.81			4.16		
C. V. %	-70.52			88.99		

(Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13).

Figure 1.4



The above table 1.4 shows the Net NPA to total assets ratio of both the DCCB's. The Satara DCC bank has increasing trends during the study period. The ratio in the initial year after 2005 was found -2.40% higher and -0.25% has lower in the year 2008. After the next study period the ratio has increased in the last year 2013 the ratio was -0.98%. It is good sign than fulfil the riskiness assets and all provisions of satisfactory made. The Sangli DCC bank's ratio has fluctuating trends in the

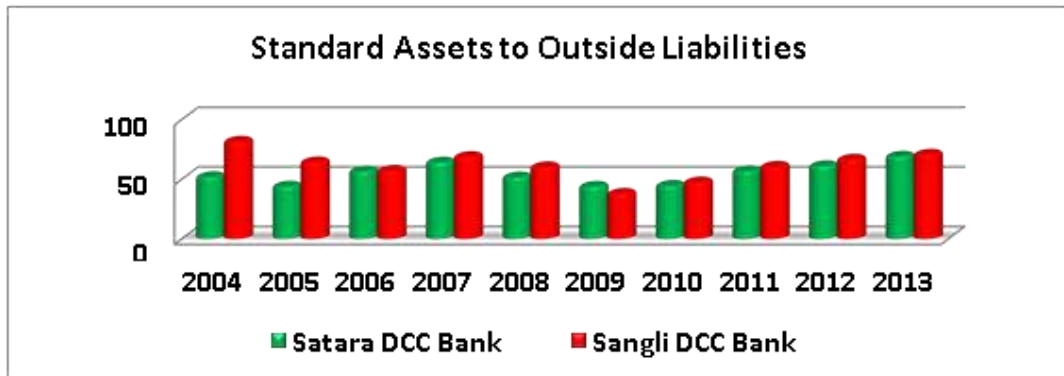
year 2009, it is found 11.46% higher the ratio and -0.13 has the lower ratio in the year 2012 in the last year 2013 the ratio was 0.33% , which was decreased. It clear that the Sangli DCC bank did not fulfil the riskiness assets, not provision made satisfactory during the study period. It is expressed that average ratio of Satara DCC bank (-1.15%) is lower than the Sangli DCC bank (4.67%), the Satara DCCB's standard deviation 0.81 and C.V. -70.52 has less than the Sangli DCCB (4.16) and (88.99) respectively.

**Table 1.5: Standard Assets to Outside Liabilities of Satara DCC bank and Sangli DCC bank**

Years	Satara DCC bank			Sangli DCC bank		
	Total Standard Assets	Total Outside Liabilities	Ratio	Total Standard Assets	Total Outside Liabilities	Ratio
2004	63693	1,22,210.48	52.12	96853.3	1,18,393.32	81.81
2005	55354.4	1,25,440.74	44.13	81690.5	1,26,658.09	64.50
2006	77869.6	1,37,081.69	56.81	81078.2	1,41,142.10	57.44
2007	106555	1,65,797.75	64.27	93798.9	1,36,051.45	68.94
2008	96687.5	1,86,478.93	51.85	86765.4	1,43,601.49	60.42
2009	96528	2,19,499.95	43.98	60655.6	1,59,234.35	38.09
2010	107989	2,40,959.09	44.82	91598.6	1,92,127.11	47.68
2011	155695	2,73,274.68	56.97	149419	2,45,790.92	60.79
2012	191995	3,13,524.31	61.24	163885	2,45,655.98	66.71
2013	263419	3,80,388.11	69.25	201473	2,84,173.90	70.90
Average	54.54			61.73		
S. D.	8.79			12.24		
C. V. %	16.11			19.83		

(Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13)

Figure 1.5



The above table 1.5 shows the ratio of standard asset to outstanding liabilities of Satara DCC bank, this ratio shows fluctuating trends. It should highest in the year 2013 the ratio has 69.25% and lowest ratio 44.13 % in the year 2005. the average ratio of 54.54% during the study period because the ratio in the initial year 2004 to 2011, the ratio was 52.12% to 56.97% having fluctuating trends, during this period.

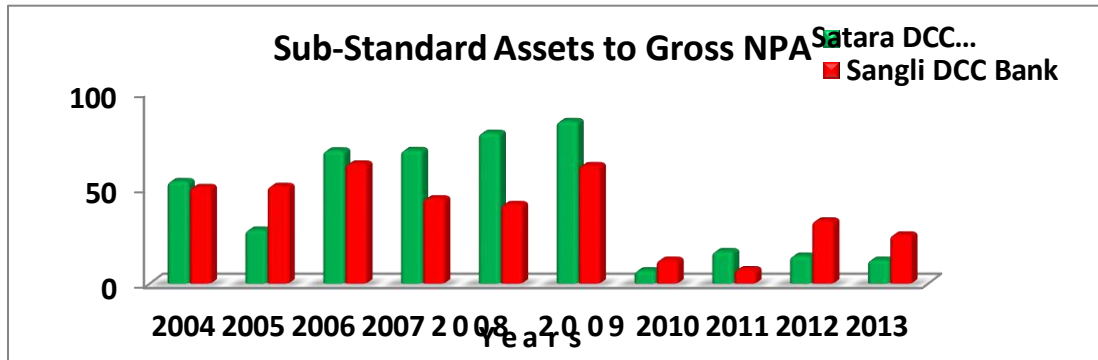
The standard deviation was 8.79 and coefficient variance 16.11 during the study period. This ratio indicates the deposits safety but above picture of Satara DCC bank does not constant safety satisfied the depositors. The Sangli DCC bank shows the very fluctuating trend of the ratio of standard asset to outstanding liabilities. Sangli DCCB's was 12.24 percent and 19.63 percent. The above observation shows that Satara DCCB has not safety depositor as compared to Sangli DCCB and Sangli DCCB has greater safety Deposits.

Years	Satara DCC bank			Sangli DCC bank		
	Total Sub-Standard Assets	Gross NPA amount	Ratio	Total Sub-Standard Assets	Gross NPA amount	Ratio
2004	374.61	698.88	53.60	5536.85	10963.88	50.50
2005	116.93	415.03	28.17	7008.86	13718.8	51.09
2006	557.01	800.08	69.62	14649.6	23345.33	62.75
2007	537.18	769.07	69.85	8114.2	18197.65	44.59
2008	891.89	1132.05	78.79	8748.22	21032.85	41.59
2009	960.12	1130.89	84.90	20733.9	33487.11	61.92
2010	91.83	1344.35	6.83	1763.43	14254.25	12.37
2011	259.81	1536.67	16.91	829.17	11178.16	7.42
2012	222.91	1535.12	14.52	3506.94	10637.09	32.97
2013	184.92	1490.78	12.40	2215.92	8650.26	25.62
Average	43.56			39.08		
S. D.	30.79			19.23		
C. V. %	70.68			49.20		

(Source: Data Compiled from the annual reports of both banks from 2003-04 to 2013)



Figure 1.5



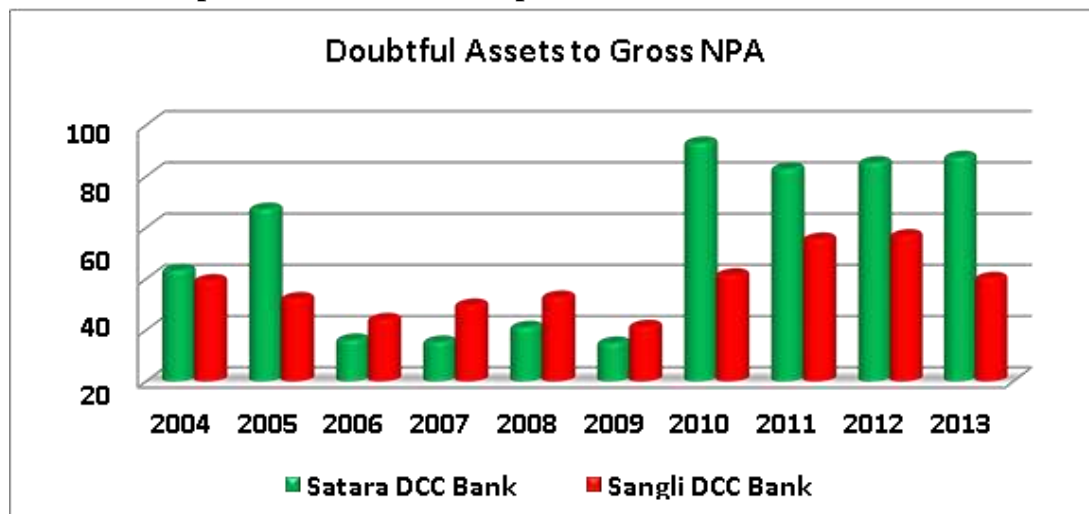
The above table 1.5 reveals the Ratio of Sub- Standard Asset to Total Gross NPA. The Satara DCC bank's the amount of Sub – standard asset and Total gross NPA amount has fluctuating trends during the study period. It was the maximum ratio of 84.90% in 2008 and minimum ratio of 6.83% in year

2010. The Substandard asset to total gross NPA ratio of the Sangli DCCB found fluctuating during the study period because of the variation in the substandard asset caused by the higher percentage of the Doubtful Asset over substandard assets.

Table 1.6: Doubtful Assets to Gross Assets of Satara DCC bank and Sangli DCC bank

Years	Satara DCC bank			Sangli DCC bank		
	Total Doubtful Assets	Gross NPA amount	Ratio	Total Doubtful Assets	Gross NPA amount	Ratio
2004	303.99	698.88	43.50	4326.81	10963.88	39.46
2005	279.68	415.03	67.39	4454.72	13718.8	32.47
2006	130.45	800.08	16.30	5675.76	23345.33	24.31
2007	119.32	769.07	15.51	5442.34	18197.65	29.91
2008	240.16	1132.05	21.21	6951.76	21032.85	33.05
2009	170.77	1130.89	15.10	7240.2	33487.11	21.62
2010	1252.52	1344.35	93.17	5953.73	14254.25	41.77
2011	1276.86	1536.67	83.09	6227.83	11178.16	55.71
2012	1312.21	1535.12	85.48	6063.5	10637.09	57.00
2013	1305.86	1490.78	87.60	3490.08	8650.26	40.35

Source: Data Compiled from the annual reports of both banks from 2003-04 to 2012-13)



The table 1.6 explains that Doubtful Asset Ratio to Gross Asset. The Satara DCCB has fluctuating trends during the study period. The ratio which was lower in the year 2009 15.10% and 93.17% in the year 2010. It is found higher after 2006 however the Bank showed very control over doubtful asset in 2007 as its ratio found decreased by 0.79% compared to the ratio of 16.30% in year 2006. Sangli DCCB Doubtful Ratio found slight fluctuating trend during the initial year ratio 39.40% in 2004 after two years decreasing trend 2006. The ratio was 24.31 % and later the year fluctuating ratio of the year 2010. The maximum ratio was 57.00 % in year 2012 and minimum ratio 21.62 % in year 2009.

**Table 1.7: Loss Assets to Gross Assets of Satara DCC bank and Sangli DCC bank**

Years	Satara DCC bank			Sangli DCC bank			
	Total Loss Assets	Gross NPA amount	Ratio	Total Loss Assets	Gross NPA amount	Ratio	Ratio
2004	0	698.88	0.00	6.34	10963.88	0.06	
2005	0	415.03	0.00	11	13718.8	0.08	
2006	0	800.08	0.00	10.18	23345.33	0.04	
2007	0	769.07	0.00	16.26	18197.65	0.09	
2008	0	1132.05	0.00	16.26	21032.85	0.08	
2009	0	1130.89	0.00	16.26	33487.11	0.05	
2010	0	1344.35	0.00	11.13	14254.25	0.08	
2011	0	1536.67	0.00	1638.5	11178.16	14.66	
2012	0	1535.12	0.00	1584.75	10637.09	14.90	
2013	0	1490.78	0.00	1545.17	8650.26	17.86	
Average	0			4.79			
S. D.	0			7.65			
C. V. %	0			159.70			

(Source: Data Figure 1.7 Compiled from the annual reports of both banks from 2003-04 to 2012-13)

It is clear that the average ratio of the loss asset of Satara DCCB was zero percent compared to the S. D. and C.V., which was zero percent compared to Sangli DCCB. They efficiently decreased the Loss Asset and Sangli DCCB average ratio 4.79 percent during the study period. S.D. 7.65 and C.V. 159.70 indicate increasing the loss asset and increasing the percentage of NPA. They control as compared to Satara DCC bank.

#### **Findings Regarding to the NPA Management of Sangli DCC bank:**

1. The Sangli DCC bank has its own Bank Recovery Management. It consists of Bank Manager, Deputy Manager (Agree & Non-Agree), Senior Officers etc.

2. The special Bank Recovery Management is in working at the all tehsil of the Sangli District. They draw a report about the recovery. Bank provides a four wheeler vehicle to Bank Recovery Management.
3. Sangli DCC bank prepares a list of the debtors who are unable to pay the debts in time. If they are not ready to pay the loan then the bank should take the legal action under the section 101 of Maharashtra Cooperative Act 1960.

### Findings Regarding the NPA Management of Satara DCC Bank:

1. The loan recovery squad of Satara DCC Bank always makes the enquiry about the repayment of loan within specific period by visiting to debtors.
2. It is found that in respect of Satara DCC Bank if the loan holders are unable to repay the loans then, the action will be taken as the Cooperative act 1960 section 100, beside this, the loan holders have the chance to give the clarifications about it and then it will take the proper action.
3. If the members of primary society has unable to repay the loan, then the action

### Conclusion Suggestion:

- The Satara DCC Bank and Sangli DCC Bank should advances provided by banks need to be done pre-sanctioning evaluation and post disbursement control so that NPA can reduce.
- The Satara DCC Bank have separate cell for the recovery of loans and advances like that the Sangli DCC Bank should establish recovery cell for speedy recovery loans and advances.
- Sangli DCC bank should considered NPA problem and makes a provision for NPA, it should be set up the strategies for the purpose of loan and advances and reduce the NPA percentage.
- Satara DCC bank's have got success to reduce the NPA at low NPA, but the researcher has suggested that the

will be taken on him therefore, the other members can get notice to repay the loan amount in time.

4. Recovery of bank loan should be made under the Cooperative Act 1960 and as per the rules of NABARD. It has no any kind or political intervention especially from directors, the president or any other public representative etc.
5. Bank should provide loan by considering the credit of loan holders. If the loan required for the agriculture project, then it can be considered that it has capacity to repay the loan or not.

Satara DCC bank should adopt the preventive detective and corrective the techniques to reduce NPA.

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## The Role of Mobile Wallets in developing Countries

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DOI - 10.5281/zenodo.15130743

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### Abstract:

*Mobile wallets (m-wallets) have emerged as a transformative financial tool in developing countries, driving financial inclusion and economic empowerment. By leveraging mobile technology, m-wallets provide secure, convenient, and cost-effective digital payment solutions, particularly benefiting unbanked and under banked populations. They facilitate seamless transactions, enable access to financial services, and support small businesses, contributing to economic growth. Additionally, m-wallets enhance financial security by reducing cash dependency and associated risks. However, challenges such as digital literacy gaps, cyber security threats, and regulatory constraints remain. Addressing these barriers through policy support, technological innovation, and awareness campaigns can further enhance the impact of m-wallets in fostering inclusive and sustainable economic development.*

**Keywords:** *Cyber security, wallets, inclusion*

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### Introduction:

The rapid development of mobile technology in recent years has significantly transformed consumer behavior & business practices. The outcome of this evolution is the emergence of mobile wallet, which has converted traditional physical wallets into mobile wallets through the convergence of mobile technologies & payment method. Mobile wallets or m-wallets provide users with the convince of conducting financial transactions using their smart devices both online & offline providing advantages beyond physical wallets. These benefits include cashless transactions, faster payment reduced fraud & time of savings.

M-wallets help not just consumers, but businesses have also realized the potential of m- wallets in increasing sales, attracting new customers & retaining existing ones. It is part of payment app on mobile device to pay for a wide range of services & digital or hard goods. The concept of using non- coin based currency systems has long history; it is only in this 21<sup>st</sup> century that the technology to support

systems has become widely available. M-Wallet began adoption in japan in the 2000's & later all over the world in different ways. The first patent exclusively defined "Mobile Payment System" filled in 11<sup>th</sup> December 2000 & Later 23<sup>rd</sup> march 2019. The demand for m- wallets has risen dramatically, notable during the COVID-19 outbreak.

Developing countries like China, Mexico, Vietnam, are abandoning cards in favor of m-wallets to avoid the poor financial infrastructure & the nemours benefits that m-wallets provide, m-wallets include-Google Pay, Apple Pay, Samsung Pay, Ali Pay, Easy Paisa, Gcash, WeChat, Gojek, PromptPay, and Paytm.. Mobile payment solutions can be deployed as a means of extending services of financial institutions to community known as unbanked. Which estimate to be as much more 50% of the world's adult. According to financial Report 2009, The use of mobile payments in developing countries have attracted to public & private funding by organization as Bill & Melinda Gates foundations the united states Agency for

international development in order to achieve various growth opportunities.

### Review of relevant Literature:

- a) Mishra S(2021)studied an empirical study on mobile wallets and mobile money 2.
- b) Rahman S (2022) Promoting fintech: driving developing country consumers' mobile wallet use through gamification and trust.

### Statement of the Problem:

M-wallets are changing the traditional ways of making &receiving payments, doing shopping, pay bills people belonging to F- generation which wants fast food, fast fuel & facebook. This generation has grown up with the world with technology connected with social media networks using their smart phones &tablets. Lots of research work has been done on the same with different age group as the respondent's. This research study is an attempt in this direction to know the preference of users in Angeles city towards m-wallets.

### Objectives of the Study:

1. To Identify different mobile wallet used by youth & senior citizen for payments & collections.
2. To compare initial & recent usage of m-wallets.

### Data Analysis& Interpretation:

Table No.1 Demographic profile of m-wallets users

	Categories	Count	Percentage
Age	21-30 Years	45	75.0
	33-40 Years	9	15.0
	41 to 50 Years	3	10.0
	51 & above	3	10.0
Gender	Male	32	53.3
	Female	28	46.7
	Intermediate	10	16.6
Education Level	Graduate	17	28.4
	Post Graduate	33	55.0
Annual Income	Rs.100000 to Rs.200000	29	48.3
	Rs.200001 to Rs.300000	17	28.3
	Rs.300001 to Rs.400000	8	13.4
	Above Rs.400001	6	10.0
Profession	Service	30	50.0
	Business	10	16.6
	Professional	15	25.0
	Any other	5	8.34

3. To study pros & cons of m-wallets.
4. To suggest measures for safe & effective usage of m-wallets

### Importance of Study:

1. This study helps us to understand why people adopt mobile wallet's, what factors influence their choices.
2. This studies can analyze how mobile wallets affect spending habits , impulse purchase & overall financial behavior
3. This study helps to explore the potential of new technologies like biometrics, block chain & AI to enhance.
4. It contributes to development of appropriate regulatory frameworks that balance innovation with consumer protection & security.
5. It analyzes the competitive landscape of the mobile wallet market, identifying key players, their strengths & weakness & emerging trends.

### Research Methodology:

The study is based on secondary data. This data is collected through E-books, magazines, Newspaper, research articles, research journals registered agents of mobile wallets situated in developing countries.

- From the analysis it is found that 53.3% of users of mobile wallets are male & below 16.6% beneficiaries have been used by intermidate.
- The majority of individuals 75% fall within the 21-30 years age group, indicating that the sample is predominantly young& minority of individuals 10% fall within the 41 to 50 years age group.
- 55% of m-wallets users are post graduate degree holders& 28.4% are graduate holders.

### Initial Usage of M-Wallets:

#### 1. Early Adoption (Pre-2015):

- Initially, M-wallets were used mainly for mobile recharges, bill payments, and online shopping.
- Services like Paytm, Google Wallet, and M-Pesa gained popularity in certain regions.
- Adoption was limited due to concerns about security and lack of awareness.

#### 2. Growth Phase (2015-2020):

- Demonetization in India (2016) and the rise of digital banking accelerated M-wallet adoption.
- More people started using them for peer-to-peer (P2P) transactions, travel bookings, and e-commerce.
- Governments and financial institutions promoted digital payments through cashback offers and incentives.

### Recent Usage Trends (2021-Present):

#### 1. Mainstream Financial Tool:

- M-wallets are now widely used for QR payments, contactless transactions, and salary disbursements.
- Integration with UPI (Unified Payments Interface) in India has significantly boosted M-wallet transactions.
- Countries like China (WeChat Pay, Alipay) and the US (Apple Pay, Google Pay) have seen high adoption rates.

#### 2. Expanded Features & Services:

- The highest proportion 48.3% m-wallet users who are earning between Rs. 100000 to Rs. 200000 annually&10% of users who are earning between above Rs 4,00,0001.
  - The Service professionals form the largest group 50%, indicating that most individuals work in jobs such as government or private-sector employment. 8.34% indicates smallest group of individuals from other services..
  - Cryptocurrency trading, investment options, and BNPL (Buy Now Pay Later) services are now available on some wallets.
  - Enhanced security with biometric authentication, AI fraud detection, and regulatory compliance.
  - Merchant acceptance has expanded, with small businesses and street vendors adopting M-wallets.
- #### 3. Shift Towards Super Apps:
- M-wallets are evolving into "super apps", offering not just payments but also banking, insurance, and e-commerce within a single platform.
  - Examples include Paytm, PhonePe, and Google Pay, which now offer loans, insurance, and mutual fund investments.

### Mobile Wallets: Pros and Cons:

Mobile wallets have a lot of benefits, but they also have some problems. When considering whether a mobile wallet suits your financial needs and tastes, it's critical to weight these advantages & disadvantages.

#### Pros:

##### 1. Convenience and accessibility are positives.

- By allowing customers to leave their actual wallets
- By allowing customers to leave their actual wallets
- By allowing customers to leave their actual wallets at home and conduct

all financial transactions through their smartphones instead, mobile wallets streamline the payment process.

- Access to a variety of financial services in one handy
- Access to a variety of financial services in one handy app, including payments, money transfers, and bill payments.
- Tools for budget management and real-time
- Tools for budget management and real-time transaction tracking improve financial awareness and control.

## 2. Security Issues:

- Encryption and biometric authentication are two strong security techniques that provide high levels of protection against fraud and illegal access.
- Reduced reliance on actual cards reduce the possibility of theft or loss of cards.
- Reduced reliance on actual cards reduces the

## 3. Buyer Acceptance:

- A rise in the use of mobile wallets, which eliminate the need to carry actual cards or cash, at both brick and mortar businesses and online retailers.
- Users can smoothly accrue rewards and discounts with loyalty card integration.
- A rise in the use of mobile wallets, which eliminate

## 4. Compatibility:

- Accessibility to a large user base is made possible by mobile wallets' compatibility with a variety of handsets and operating systems.
- Transactions funding is made flexible by integration with a variety of payment mechanisms, such as

Bank accounts, Credits cards and debit cards.

## Cons:

### 1. Security Issues:

- Mobile wallets are generally safe, but they are not impenetrable to internet risks. Users must exercise caution & follow security best practices in order to protect their digital wallets from potential attackers.

### 2. Buyer Acceptance:

- Mobile wallet technologies may not be widely used, especially in areas with poor technology infrastructure.

### 3. Compatibility:

- M-wallet can be inaccessible to users of older or unsupported devices since access to them requires a suitable smartphone or device.
- Some m-wallets services don't exist in all nations or regions, which make them less accessible to users from other countries.
- It is important to understand that, while m-wallets excel at offering simple & secure digital payments solutions, mobile money services offer a more diverse range of payment options.

## Suggestions:

- Enable **biometric authentication** (fingerprint/Face ID) or **two-factor authentication (2FA)** for additional security.
- Set a **strong PIN/password** for your M-wallet.
- Hackers can intercept data on public Wi-Fi; always use **mobile data or a secure network** for transactions.
- Turn on **SMS/email notifications** to track every transaction in real time.
- Do not **share OTPs, PINs, or card details** with anyone.
- Avoid clicking on **unknown links** or responding to suspicious messages

pretending to be from M-wallet providers.

- Keep your M-wallet app updated to get the latest security patches and bug fixes.
- Use **official apps** (Google Pay, Paytm, PhonePe, Apple Pay, etc.) to link your bank account.
- Verify all settings before enabling **auto-debit or linking multiple accounts**.
- Always have an alternative payment method (credit/debit card or cash) in case of **technical failures**.
- If you lose your phone, immediately **log in from another device** and block your wallet.
- Contact customer support to **disable unauthorized access**.
- Download M-wallet apps **only from official stores (Google Play, Apple App Store)** to avoid malware risks

#### Conclusion:

M-wallets have revolutionized financial transactions in developing countries by providing accessible, secure, and efficient digital payment solutions. They have played a crucial role in promoting financial inclusion, especially among unbanked and under banked populations, empowering individuals and businesses with seamless transactions. The adoption of mobile wallets has contributed to economic growth by enabling small businesses, streamlining government payments, and facilitating remittances. Furthermore, they enhance financial security, reducing reliance on cash and mitigating risks associated with theft and fraud.

However, challenges such as digital literacy, cyber security risks, and regulatory hurdles must be addressed to maximize their impact. Governments, financial institutions, and technology providers must collaborate to create supportive policies, strengthen digital infrastructure, and build trust in

mobile financial services. With continuous advancements in mobile technology and increasing smartphone penetration, m-wallets are poised to further transform economies in developing nations, bridging financial gaps and fostering inclusive economic development.

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## Burning Issues of the Municipal Corporation in Mahad City of Raigad District

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DOI - 10.5281/zenodo.15130753

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### Abstract:

*The Municipal Corporation of Mahad, located in the Raigad district, faces numerous challenges that affect its efficiency and the overall quality of life for residents. Rapid urbanization, coupled with limited resources, has led to critical issues such as inadequate infrastructure, poor waste management, irregular water supply, environmental degradation, and administrative inefficiencies. The lacks of proper drainage systems, deteriorating road conditions, and ineffective waste disposal mechanisms have further contributed to urban distress. Additionally, financial constraints and bureaucratic delays have hindered the timely implementation of development projects. This study aims to analyze these pressing issues in detail, assess their impact on the local population, and identify potential strategies for improving municipal governance. The findings of the study will provide valuable insights into the existing problems and propose practical solutions to enhance service delivery, infrastructure planning, and administrative efficiency. The study emphasizes the need for sustainable urban management practices and strategic planning to ensure the long-term development of Mahad City, thereby improving the living conditions of its residents.*

**Keywords:** Municipal Corporation, Infrastructure, Waste Management, Water Supply, Urban Governance

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### Introduction:

Mahad, a historically and industrially significant town in Maharashtra, is governed by the Municipal Corporation, which is responsible for providing essential services to its residents. Rapid urbanization and increasing population pressure have intensified various civic issues, making it imperative to evaluate and address them systematically. Municipal corporations play a vital role in the governance and administration of urban areas. Mahad, a historic town in Maharashtra, has been facing several urban governance challenges. The municipal corporation is responsible for providing essential public services such as water supply, sanitation, waste management, infrastructure development, and public health facilities. However, rapid urbanization, inadequate infrastructure, financial constraints, and administrative

inefficiencies have led to significant issues affecting the overall quality of life of residents. This research aims to identify and analyze the burning issues faced by the Mahad Municipal Corporation, including waste management, drainage systems, road infrastructure, water supply problems, and financial constraints. The study will provide insights into the causes and impact of these challenges while suggesting possible solutions for efficient urban governance.

### Issues Faced By the Municipal Corporation:

**Infrastructure Deficiencies:** Mahad suffers from poor road conditions, inadequate drainage systems, and insufficient public amenities. Many areas face congestion, lack of street lighting, and unplanned urban growth, leading to deteriorating living standards.

**Waste Management Crisis:** The improper disposal of solid waste is a major concern. The absence of an efficient garbage collection and disposal system has resulted in pollution and health hazards. Illegal dumping and lack of waste segregation further worsen the problem.

**Water Supply and Sanitation:** Intermittent water supply, low water pressure, and contamination issues plague Mahad's residents. The absence of a comprehensive sewage system results in poor sanitation, leading to waterborne diseases.

**Environmental Challenges:** Mahad, being an industrial hub, suffers from air and water pollution due to the release of untreated industrial effluents into local water bodies. Deforestation and encroachments have also led to ecological imbalances, causing frequent flooding during monsoons.

**Administrative and Financial Constraints:** Inefficiencies in governance, corruption, and a lack of transparency have hindered developmental projects. Insufficient funding and poor revenue collection further aggravate the Corporation's inability to provide quality civic services.

#### Review of Literature:

**Kundu, A. (2019).** "Urban Governance and Infrastructure Challenges in India." *Urban Studies Journal*, 56(4), 789-805. This study explores the governance challenges faced by municipal corporations in India, highlighting issues such as inadequate infrastructure, inefficient service delivery, and financial mismanagement. The author emphasizes the need for decentralization and participatory governance to improve urban management. **Patil, S. & Deshpande, R. (2020).** "Municipal Finance and the Challenges of Urban Local Bodies in Maharashtra." This paper examines the financial constraints of municipal corporations in Maharashtra, including Mahad. It highlights issues such as

insufficient revenue generation, delays in fund allocations, and the impact of financial instability on urban development projects. **Sharma, P. (2018).** "Waste Management and Environmental Sustainability in Indian Municipalities." *Environmental Research & Development*, 12(3), 112-129. This research focuses on solid waste management challenges in municipal areas, analyzing the inefficiencies in waste collection, disposal, and recycling. The study suggests policy interventions such as public-private partnerships (PPPs) and community participation to enhance waste management efficiency. **Jadhav, M. & Bhosale, T. (2021).** "Water Supply and Sanitation Issues in Municipal Corporations of Maharashtra: A Case Study Approach." *Journal of Urban and Regional Studies*, 9(1), 56-73. This study investigates the problems related to water supply and sanitation in municipal corporations of Maharashtra. The findings reveal that poor infrastructure maintenance, water leakage, and contamination are major concerns affecting urban residents. The study recommends better planning and investment in water infrastructure. **Singh, R. & Mehta, P. (2017).** "Role of Public Participation in Improving Municipal Governance." *International Journal of Urban Affairs*, 14(2), 205-220. This paper discusses the importance of public participation in municipal governance.

#### Objectives of the Study:

1. To examine the key challenges faced by the Mahad Municipal Corporation in providing essential services.
2. To evaluate the financial and administrative constraints affecting the efficiency of municipal governance.

#### Research Methodology:

The study adopted a descriptive and analytical research design to explore the various issues faced by the Mahad

Municipal Corporation. Data collection involved both primary and secondary sources. Primary data were gathered through surveys and structured questionnaires with residents, municipal officials, and stakeholders, along with interviews with municipal officers, urban planners, and local representatives. Field observations were also conducted to assess infrastructure and service delivery. Secondary data included government reports, municipal budgets, policy documents, research papers, and media reports related to municipal governance. A purposive sampling technique was used to select respondents, ensuring the inclusion of residents, municipal officials, and experts in urban governance. Data analysis employed both qualitative and quantitative methods, with descriptive statistics used to analyze survey data and content analysis applied to government policies and municipal reports. This study aimed to provide valuable insights and policy recommendations to enhance the efficiency of the Mahad Municipal Corporation and improve urban living conditions.

For the present study, the research adopted a **convenience sampling** method to select respondents from Mahad city. A total of **50 members** were chosen based on their availability and willingness to participate in the study. The sample included **residents, municipal officials, urban planners, and other stakeholders** who were directly or indirectly affected by municipal governance issues. This sampling approach enabled the collection of relevant data while ensuring diverse perspectives on the challenges faced by the Mahad Municipal Corporation.

#### **Data Analysis and Interpretations:**

The table presents an analysis of the challenges in providing essential services by the Mahad Municipal Corporation. It includes key services such as water supply, waste management, road infrastructure, drainage and sanitation, and municipal health services. The data, based on responses from 50 participants, highlights the mean scores, standard deviations, and variances for each service, offering insights into public satisfaction and areas needing improvement.

**Table: Challenges in Providing Essential Services**

<b>Sr. No.</b>	<b>Statements</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Varr.</b>
1	The Mahad Municipal Corporation provides adequate water supply to residents.	50	3.93	1.19	1.42
2	The waste management system in Mahad is efficient and properly managed.	50	3.02	0.98	0.97
3	The road infrastructure in Mahad is well-maintained and meets public needs.	50	3.26	0.91	0.66
4	The drainage and sanitation facilities in Mahad are sufficient and effective.	50	3.19	1.40	1.98
5	The municipal health services are accessible and of good quality.	50	3.15	1.61	0.83

The analysis of essential service provision by the Mahad Municipal Corporation reveals varying levels of satisfaction among residents. The highest-rated service is water supply (Mean = 3.93, SD = 1.19), indicating general satisfaction,

though some variability exists. Waste management (Mean = 3.02, SD = 0.98) and road infrastructure (Mean = 3.26, SD = 0.91) show moderate satisfaction, suggesting room for improvement. Drainage and sanitation facilities (Mean = 3.19, SD = 1.40) exhibit

higher variability, reflecting inconsistencies in service effectiveness. Municipal health services (Mean = 3.15, SD = 1.61) have the highest standard deviation, implying significant differences in public perception. Overall, while the water supply is relatively well-regarded, other essential services require enhancements for better public satisfaction. The study indicates that while the Mahad Municipal Corporation provides

essential services, there are significant gaps in efficiency and effectiveness. The water supply system is relatively satisfactory, but waste management, road maintenance, drainage, and health services require improvements to ensure consistency and accessibility. Addressing these challenges will enhance public satisfaction and contribute to better urban living conditions.

**Table: Financial and Administrative Constraints**

Sr. No.	Statements	N	Mean	SD	Rank
1.	The municipal corporation faces significant financial difficulties that impact service delivery.	50	3.18	1.68	V
2.	There is a lack of transparency in the financial management of the municipal corporation.	50	3.27	1.86	III
3.	The Mahad Municipal Corporation has sufficient staff and resources to manage urban governance effectively.	50	3.24	1.83	IV
4.	Bureaucratic delays and inefficiencies hinder the timely implementation of municipal projects.	50	3.38	0.94	II
5.	Public participation and feedback are considered in municipal decision-making processes.	50	3.47	1.10	I

Source: Compiled by researcher

The analysis of financial and administrative constraints in the Mahad Municipal Corporation reveals key challenges affecting urban governance. Public participation and feedback in decision-making received the highest mean score (3.47), suggesting a relatively positive perception of citizen involvement. However, bureaucratic delays and inefficiencies (Mean = 3.38) rank second, indicating concerns about slow project implementation. The lack of transparency in financial management (Mean = 3.27) and insufficient staff and resources (Mean = 3.24) highlight administrative weaknesses. Financial difficulties impacting service delivery (Mean = 3.18) rank the lowest, yet still indicate moderate concern. Overall, while public participation appears somewhat satisfactory, addressing bureaucratic inefficiencies,

financial transparency, and resource management is crucial for improving municipal governance. The study highlights key financial and administrative constraints affecting the Mahad Municipal Corporation. While public participation in decision-making appears relatively satisfactory, bureaucratic delays and inefficiencies significantly hinder the timely execution of municipal projects. Financial transparency remains a concern, indicating a need for better accountability in fund management. Additionally, insufficient staff and resources limit the corporation's ability to manage urban governance effectively. Financial difficulties, though ranked lowest, still impact service delivery. To enhance municipal efficiency, it is crucial to streamline administrative processes, improve

financial transparency, and allocate adequate

### Findings of the Study:

1. **Public Participation:** The highest-ranked factor (Mean = 3.47) indicates that public participation and feedback are considered in municipal decision-making, reflecting some level of citizen involvement.
2. **Bureaucratic Inefficiencies:** Bureaucratic delays and inefficiencies (Mean = 3.38) significantly hinder the timely implementation of municipal projects, impacting overall governance effectiveness.
3. **Financial Transparency Issues:** A lack of transparency in financial management (Mean = 3.27) suggests concerns about accountability and the need for improved financial oversight within the municipal corporation.
4. **Resource and Staff Constraints:** The availability of sufficient staff and resources (Mean = 3.24) is perceived as inadequate, highlighting administrative limitations in managing urban governance efficiently.

### SUGGESTIONS:

1. **Improving Infrastructure** Investing in better road networks, public amenities, and sustainable urban planning can enhance the overall quality of life.
2. **Effective Waste Management** Implementing a robust waste segregation system, promoting recycling, and establishing scientific disposal facilities can help mitigate the garbage crisis.
3. **Enhancing Water Supply and Sanitation** Developing a better water distribution network, rainwater

resources for better urban management.

- harvesting systems, and improved sewage treatment plants can address water and sanitation challenges.
4. **Environmental Conservation Measures** Strict industrial pollution control policies, afforestation programs, and flood control measures are necessary to protect Mahad's ecosystem.
5. **Strengthening Governance and Finances** Ensuring transparency, improving revenue collection, and involving citizen participation in decision-making can lead to better municipal administration.

### Conclusions:

The study reveals that while public participation in municipal decision-making is relatively satisfactory, bureaucratic inefficiencies remain a significant challenge, delaying the implementation of essential projects. Financial transparency issues highlight concerns about accountability, necessitating improved oversight in municipal fund management. Additionally, the shortage of staff and resources affects the effective administration of urban governance. Addressing these financial and administrative constraints is crucial for enhancing the efficiency, transparency, and overall effectiveness of the Mahad Municipal Corporation.

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## The Impact of Artificial Intelligence and Automation on Business & Commerce

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DOI - 10.5281/zenodo.15130758

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### Abstract:

*The rapid advancements in Artificial Intelligence (AI) and Automation technologies are significantly reshaping the global landscape of business and commerce. From improving operational efficiency to enabling better decision-making and personalized customer experiences, AI and automation are transforming industries across the board. This paper explores the current and future impact of these technologies on business operations, labor markets, customer engagement, and overall economic growth. By examining key trends, challenges, and opportunities, this research aims to provide a comprehensive overview of how AI and automation are revolutionizing commerce and business practices globally.*

**Keywords:** *Artificial Intelligence, Automation, Business Transformation, E-commerce, Customer Experience, Labor Market, Digital Economy.*

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### Introduction:

The integration of Artificial Intelligence (AI) and automation into business operations has triggered a paradigm shift across industries. These technologies are not only optimizing traditional workflows but also creating new business models, redefining value chains, and enhancing customer experiences. The convergence of AI and automation is enabling businesses to achieve operational efficiencies, reduce costs, increase productivity, and foster innovation.

This paper delves into the multifaceted impacts of AI and automation on businesses and commerce, focusing on their influence on business strategies, economic implications, workforce dynamics, and global trade.

### Objectives of the Study:

1. To analyse the role of AI and automation in improving business efficiency, decision-making, and scalability.

2. To examine the impact of AI on customer engagement, including personalization and automated

### Research Methodology:

The research adopts a qualitative and quantitative approach, incorporating a literature review of academic studies and industry reports, secondary data analysis from market reports and government publications, and, if applicable, primary data collection through surveys or interviews with business professionals and AI experts. A comparative analysis of AI adoption across industries is conducted to assess business performance, workforce transitions, and economic shifts. Additionally, trend analysis and ethical considerations are examined to understand the broader implications of AI and automation on commerce.

### Defining Artificial Intelligence and Automation:

Artificial Intelligence (AI) refers to the simulation of human intelligence in

machines that are programmed to think and learn from data. AI technologies include machine learning, natural language processing, computer vision, and neural networks, enabling machines to perform tasks that traditionally required human cognition, such as decision-making, problem-solving, and language translation.

Automation, on the other hand, involves the use of technology to perform tasks with minimal human intervention. This can range from robotic process automation (RPA) for repetitive tasks to autonomous systems for more complex operations. Automation is driven by technologies such as robotics, AI, and data analytics, allowing businesses to streamline operations and reduce human error.

### **Impact on Business Operations:**

#### **1. Operational Efficiency:**

AI and automation are driving major efficiencies in business operations. For instance, AI-powered software can automate repetitive tasks, such as data entry and inventory management, while advanced algorithms analyze vast amounts of data to optimize supply chain processes. Automation in manufacturing and warehousing, through robotics and AI-driven machines, has drastically reduced production time and improved precision.

#### **2. Decision-Making:**

AI enables businesses to make more informed, data-driven decisions. Machine learning algorithms analyze customer data, market trends, and internal performance metrics to provide insights that guide strategic planning. Predictive analytics, powered by AI, allows businesses to forecast demand, optimize pricing, and identify emerging market opportunities. These data-driven insights are essential for staying competitive in the fast-evolving global market.

### **3. Cost Reduction and Scalability:**

Automation allows businesses to scale operations more efficiently by reducing reliance on manual labor. AI-driven chatbots, for example, can handle a high volume of customer service inquiries at a fraction of the cost of human agents. This reduction in labor costs allows companies to reallocate resources to other strategic initiatives, such as product development and market expansion.

### **Impact on Customer Experience and Engagement:**

#### **1. Personalization:**

AI is enabling a more personalized customer experience by analyzing consumer behavior, preferences, and browsing patterns. AI-powered recommendation engines, like those used by Amazon and Netflix, suggest products and services tailored to individual needs, leading to higher conversion rates and customer satisfaction.

#### **2. 24/7 Customer Support:**

Automation through chatbots and AI-driven virtual assistants has revolutionized customer service. These systems provide instant support and respond to inquiries around the clock, enhancing the customer experience. With natural language processing (NLP), AI can understand and resolve complex queries, improving response times and customer satisfaction.

#### **3. Predictive and Proactive Engagement:**

AI can predict customer needs based on historical data and trends. Businesses are leveraging AI to engage with customers proactively, offering personalized recommendations, reminders, and special offers before customers even ask. This predictive approach improves customer retention and loyalty.



**Impact on the Labor Market:****1. Job Displacement and Creation:**

AI and automation have raised concerns about job displacement, particularly in industries reliant on manual labor and repetitive tasks. While machines take over low-skill, repetitive roles (e.g., in manufacturing and administrative jobs), they also create new job opportunities in AI development, data science, and machine learning. Upskilling and reskilling the workforce are critical for preparing workers for the new job landscape.

**2. Labor Market Transformation:**

Automation is transforming the nature of work, with more tasks becoming specialized, technological, and service-oriented. This shift demands a workforce that is skilled in technology, data analysis, and problem-solving. Businesses must adapt to the changing skill requirements by investing in training programs to ensure workers remain competitive in the job market.

**3. Remote Work and Flexibility:**

The adoption of AI and automation technologies has also facilitated the rise of remote work. Businesses now have the tools to manage remote teams, automate routine tasks, and monitor performance through cloud-based systems and AI. As a result, the labor market is becoming more flexible, with workers increasingly able to collaborate across borders and work from anywhere.

**Economic Implications:****1. Productivity Growth:**

AI and automation contribute significantly to productivity growth. By automating mundane tasks and augmenting human capabilities, businesses can achieve higher output with fewer resources. This productivity boost has the potential to drive economic growth, increase GDP, and improve standards of living.

**2. Global Trade and Commerce:**

AI and automation are enhancing international commerce by streamlining logistics, optimizing inventory management, and improving customs processing. Companies are better equipped to navigate global supply chains, reduce operational delays, and respond to market demands in real-time. Furthermore, automation allows for more efficient production and distribution of goods, driving global trade.

**3. Wealth Inequality:**

While AI and automation present opportunities for growth, there are concerns about wealth inequality. Companies that successfully integrate AI and automation may experience significant cost savings and profit growth, but workers displaced by automation may face economic hardships. Governments and organizations must address these disparities by ensuring equitable access to education, training, and employment opportunities.

**Challenges and Ethical Considerations:****1. Data Privacy and Security:**

As AI systems rely heavily on data, businesses must prioritize data privacy and security to maintain consumer trust. Ensuring the ethical use of customer data, preventing data breaches, and adhering to global data protection regulations (e.g., GDPR) are crucial for businesses adopting AI and automation technologies.

**2. Algorithmic Bias:**

AI systems are only as unbiased as the data they are trained on. Companies must be vigilant in ensuring that their AI algorithms are free from biases that could negatively affect decision-making processes, especially in areas like hiring, credit scoring, and customer service.

**3. Ethical Automation:**

The ethical implications of replacing human workers with automation must be considered. Companies must adopt strategies that minimize harm to workers, such as

providing retraining opportunities and ensuring fair labor practices.

#### **Future Trends and Opportunities:**

As AI and automation continue to evolve, businesses will have access to increasingly sophisticated tools to optimize operations, enhance customer experiences, and drive innovation. The future will likely see further advancements in AI, including more intelligent machines capable of autonomous decision-making and collaboration with human workers.

In the coming years, businesses will also increasingly adopt AI-driven sustainability practices, leveraging data analytics and automation to reduce their environmental footprint and achieve sustainability goals.

#### **Conclusion:**

The integration of AI and automation into business operations and commerce is transforming industries at an unprecedented pace. These technologies are driving efficiencies, enhancing customer experiences, and creating new opportunities for businesses. However, as AI and automation continue to evolve, businesses must consider the implications on the workforce, economy and society. The future of AI and automation in commerce presents both challenges and opportunities, requiring a balanced approach to ensure that the benefits are widely shared.

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## A Study on Export of India's Manufactured Goods

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**DOI - 10.5281/zenodo.15130770**

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### **Abstract:**

*Manufactured goods export is one of the significant parts of the Indian economy. India is known as agriculture country but recent years in the composition basket increasing the share of manufactured goods in export due to modernization and diversification of the economy. The main objectives of this paper are to examine the total export of manufactured goods share in total export and analyze the total export of manufactured goods in pre and post reforms periods, to fulfill this objective researcher have used secondary data pre and post reform era. In this paper used different statistical techniques such mean, CAGR and independent t test for outcomes of the result. In pre reforms period Chemicals & related products and Handicrafts very inconsistency growth but in post reforms engineering goods and other Manu. Goods shows inconsistency growth its repressing in tables. The overall research paper has concluded that the manufactured goods export is important to contributing in the total export of India as well as there is significant growth in the post reform era as compare to the pre reform era. Manufactured goods export had been implementing the place of pride in the export basket of India and helpful to push up the Indian economy.*

**Keywords:** *Composition, Manufactured Goods, Export, Foreign Trade, Reform Era*

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### **Introduction:**

Over the reform period observed that number of shifts have been taken place in the various aspects of India's foreign trade particularly in the terms of composition of commodities basket. The exports cover a wide range of traditional and non-traditional products while imports mainly consist of capital goods, petroleum products, raw materials, intermediates and chemicals to meet the ever-increasing industrial demands. (Bhat,2011,p-2) The diversification of the economy due to the reform process of industrialization and modernization has induced a number of changes in the composition of commodities baskets. The exports cover a wide range of traditional and non-traditional products while imports mainly consist of capital goods, petroleum products, raw materials, intermediates and

chemicals to meet the ever-increasing industrial demands. The composition India's foreign trade has undergone substantial changes. Composition of exports means goods that we are selling to other countries. At the time of Independence; our exports consisted mainly of agricultural products like Tea, Spices, tobacco and other raw materials etc. We were also exporting cotton textiles and jute products in large quantities. With the industrialization of the economy, composition of exports has under gone a change, Thereby the proportion of raw materials in our exports has declined while that of manufactured goods has increased. we are now exporting large quantities of items such as machinery and transport equipment, chemicals allied products, marine products, handicrafts, fish however export of items such as cotton fabric tea Jute

manufactures, spices etc also continues. Our major exports now include manufacturing goods such as Engineering goods, chemicals and related products, Textiles Electronic Goods, Gems & Jewelry, etc. which constitutes over 80 percent of our export basket

#### **Review of Literature:**

**Mane Vinod H. (2011)** has studied the India's direction and composition of foreign trade in the last sixty years. India accepted globalization and liberalization in the year 1991. He shown that India's major exports include manufacturing and engineering goods. Economic development required setting up of new industries, modernization of agriculture and industry. For this, capital goods like machinery, transport equipment's, and raw materials, chemicals and fertilizers, petroleum products etc. are imported. Due to increasing home production of food grains there has been a rapid decline in their imports and now we are self-sufficient in food grains. Our major imports now comprise of capital goods, metals and minerals, chemicals and fertilizers, petroleum, oil and lubricants (POL) etc., which are required to meet the developmental needs of our economy. Today the manufactured goods and services dominate the export basket. The composition of exports shows a perceptible shift in this decade i.e. 2000s from light manufactures to heavy manufactures and petroleum crude and products. **Sathe Dhanmanjiri (1990)** in her thesis has given an analysis of the linkages of foreign trade for the Indian economy (1951 to 1979) to evaluate the performance of exports and imports on the basis of linkages and found that performance of export from period 1951-52, the share of exports in total output has been near about stagnant and the share of exports in the total output was 5.6% in 1951-52, which declined to around 3% in 1968-69. Since then, it has picked up and it became 4.5% in 1978-79. Thus, the changes in exports have not been

in a favorable direction and performances of imports shows that, the imports as a share of total output were 7.4% in 1951-52, and rose in 1978-79 to 5.7%. There has been a remarkable fall in the imports of agricultural goods on the one hand there has been a rise in the importance of manufactured goods. **Bagher Hesamiazizi (2006)** in there thesis he has made an attempt to examine the role of foreign trade in economic growth and development of Indian and Iranian economies. The study conducted for a period of 1960 to 2004 and the data analysis is done using both traditional methodologies, such as common size statements, trend analysis and ratio analysis, correlation regression etc. Based on these results, the study reveals that in pre liberalization period increasing of imports is more than increasing of exports, and increasing of imports led to problems in economic growth. It shows that imports in relation to exports are performing better and post liberalization period export earnings are growing less than imports expenditures i.e. export in relation to import is performing bad so economic growth is less. **Subramanian Srividya (2009)** in there thesis has studied the evaluation of trade policy reforms since 1991 (with emphasis on export promotion instruments). This thesis concluded that the trade policy reforms over nearly two decades enabled perceptible changes in the pattern of trade with manufactured exports attaining dominant share in the export basket viz. engineering goods, petroleum and chemical related products being major exports drivers. The direction of exports shifted to developing countries in the Asian. **Pillania Rajesh K. (2008)** has undertaken exploratory study of India's foreign trade. According to there study, India's foreign trade has progressed a lot over the last sixty years since Independence. The period can be divided into three sub-periods of 1950-1970, 1971-1991 and post 1991. The trade has stagnated and India has lost its market share to other

countries in 1950s and 1960s. The situation improved in 1970s. In terms of composition, now it is dominated by manufactured goods and services. Services exports contribution has grown rapidly in recent past .India's services exports share in global exports is more than that double of Indian manufacturing exports. In terms of direction, it is now more distributed around the world and the share of East Asian countries is on rise in overall trade.

#### Statement of Problems:

The foregoing review of research literature reveals that definitely some research studies relating to the overall composition of India's foreign and the Performance of exports and Imports have been carried out. All studies focused only on India's external Sector Performance especially export performance during post Reform period. and agricultural exports This paper is provides the picture of exports of india's manufactured goods in pre and post reforms periods.so it's benefited to understanding present export India manufactured goods in details study for

researchers and equips us about commodity wise exports manufactured goods of India.

#### Objectives of the Study:

1. To examine the total exports of Manufactured goods share in pre and post reforms period
2. To analyze the total exports of Manufactured goods in pre and post reforms period.

#### Research Methodology:

The study is based on the secondary data obtained from 1980-81 to 1990-91 and 1991-92 to 2013-14. The data has collected from Annual Reports of Ministry of Finance, Government of India, Economic Survey Reports from 1980-81 to 2013-14 and Handbook of Statistics on Indian Economy 2006-07 & 2013-2014 by Reserve bank of India. For the analysis of composition of Exports and Imports appropriate statistical tools like percentage share, and average values are used. For the analysis of composition of India's foreign trade entire study period is divided into two halves i.e., pre-reform period (1980-81 to 1990-91) and post-reform period (1991-92 to 2013 -14).

**Table 1.1: Total Export of Manufactured goods share in pre reform period (Value in Rs)**

Year	Total export of Manufactured goods	Total Export of India	Percentage Share
1980-81	4136.27	6710.7	61.64
1981-82	4674.18	7805.88	59.88
1982-83	4671.82	8803.34	53.07
1983-84	5138.73	9770.7	52.59
1984-85	6275.76	11743.7	53.44
1985-86	6449.88	10894.61	59.20
1986-87	8026.67	12451.96	64.46
1987-88	10625.56	15673.66	67.79
1988-89	14641.44	20231.5	72.37
1989-90	19931.67	27658.42	72.06
1990-91	23319.1	32557.63	71.62
Mean	9808.28	14936.55	62.56
SD	6653.59	8464.32	
CV	67.84	56.67	
CAGR	19.48	16.14	

**Source:** Calculated on the basis of data given in various issues of Economic survey Report, GOI, 1981-1982 to 1986-1987 and Handbook of Statistics on the Indian Economy, RBI, 2000-2001 to 2005-06.

Table 1. 1 represents the data of total export of manufactured goods share in total exports of India in pre reform period. It is seen that proportion of manufactured goods in pre reforms period is 62.56 percent means more than 50 percent manufactured goods

contributed in total export due to modernization. The compound growth rate of export of manufactured goods 19.48 percent annually is greater than that of total export due to the economic reforms during this period.

**Table 1.2: Total Export of Manufactured goods share in post reform period  
(Values in Rs. Crore)**

Year	Total export of Manufactured goods	Total Export of India	Percentage Share
1991-92	32413.41	44041.81	73.60
1992-93	40659.81	53688.26	75.73
1993-94	52244.58	69751.39	74.90
1994-95	64067.06	82674.11	77.49
1995-96	79433.34	106353.34	74.69
1996-97	87377.38	118817.08	73.54
1997-98	33635.82	130100.64	25.85
1998-99	108506.18	139753.14	77.64
1999-00	128760.68	159561.39	80.70
2000-01	156858.42	203571.01	77.05
2001-02	159146.4	209017.97	76.14
2002-03	194764.52	255137.28	76.34
2003-04	222828.84	293366.75	75.96
2004-05	272872.33	375339.53	72.70
2005-06	317953	454799.97	69.91
2006-07	384261	571779	67.20
2007-08	414599	655864	63.21
2008-09	566402	840755	67.37
2009-10	546456	845534	64.63
2010-11	719863	1142922	62.98
2011-12	888599	1465959	60.62
2012-13	999612	1635261	61.13
2013-14	1162383	1894182	61.37
2014-15	1210086	1897026	63.79
<b>Mean</b>	368490.95	568552.32	64.81
<b>SD</b>	371169.00	605222.00	
<b>CV</b>	100.73	106.45	
<b>CAGR</b>	17.32	18.00	

**Source:** Calculated on the basis of data given in various issues of Handbook of Statistics on the

Indian Economy, RBI, 2000-2001 to 2014-15. Table 2 gives the data of total manufactured goods export share in India's total export in percentage. The total contribution of manufactured goods export in post reform era is 64.81 percent. From the year 1990-91 to 2014-15 the contributions of manufactured goods export has indicated a continuous decreasing i.e.73.60 percent to

63.79 percent but compound annual growth rate was decrease as compare to pre reform era i.e.17.32 percent due to liberal the trade. The total export growth rate has 18.00 percent. Manufactured goods and total export has more variability in the export values because after reforms period due to the changing pattern of production and structure of economy.

**Table 1.3: Total Export of Manufactured Goods in Pre-reform period**  
(Values in Rs. Crore)

Year	II. Manufactured goods							Total of Export of Manufactured Goods
	A. Leather and manufactures	B. Chemicals & related products	C. Engineering goods	D. Textile and textile products	E. Gems & jewelry	F. Handicrafts	G. Other Manu. goods	
1980-81	337.13 (8.15) *[-30.57]	226.97 (5.49) *[13.67]	796.86 (19.27) *[2.84]	1406.8 (34.01) *[11.47]	601.92 (14.55) *[15.99]	164.24 (3.97) *[23.10]	602.35 (14.56) *[9.99]	4136.27 (100) *[5.46]
1981-82	369.35 (7.90) *[9.56]	365.54 (7.82) *[61.05]	930.58 (19.91) *[16.78]	1319.52 (28.23) *[-6.20]	761.07 (16.28) *[26.44]	152.18 (3.26) *[-7.34]	775.94 (16.60) *[28.82]	4674.18 (100) *[13.00]
1982-83	360.05 (7.71) *[-2.52]	337.81 (7.23) *[-7.59]	857.88 (18.36) *[-7.81]	1258.2 (26.93) *[-4.65]	949.99 (20.33) *[24.82]	0 (0.00) *[-100.00]	907.89 (19.43) *[17.01]	4671.82 (100) *[-0.05]
1983-84	428.86 (8.35) *[19.11]	316.63 (6.16) *[-6.27]	807.14 (15.71) *[-5.91]	1447.71 (28.17) *[15.06]	1207.36 (23.50) *[27.09]	0 (0.00) *[- ]	931.03 (18.12) *[2.55]	5138.73 (100) *[9.99]
1984-85	627.07 (9.99) *[46.22]	459.8 (7.33) *[45.22]	955.99 (15.23) *[18.44]	1920.16 (30.60) *[32.63]	1153.27 (18.38) *[-4.48]	0 (0.00) *[- ]	1159.47 (18.48) *[24.54]	6275.76 (100) *[22.13]
1985-86	646.63 (10.03) *[3.12]	359.46 (5.57) *[-21.82]	954.12 (14.79) *[-0.20]	1926.5 (29.87) *[0.33]	1411.62 (21.89) *[22.40]	0 (0.00) *[- ]	1151.55 (17.85) *[-0.68]	6449.88 (100) *[2.77]
1986-87	731.21 (9.11) *[13.08]	452.35 (5.64) *[25.84]	1081.34 (13.47) *[13.33]	2448.41 (30.50) *[27.09]	1994.84 (24.85) *[41.32]	0 (0.00) *[- ]	1318.52 (16.43) *[14.50]	8026.67 (100) *[24.45]
1987-88	1250.48 (11.77) *[71.02]	1026.35 (9.66) *[126.89]	1494.11 (14.06) *[38.17]	3907.6 (36.78) *[59.60]	2612.73 (24.59) *[30.97]	226.04 (2.13) *[- ]	108.25 (1.02) *[-91.79]	10625.56 (100) *[32.38]
1988-89	1522.03 (10.40) *[21.71]	1579.19 (10.79) *[53.86]	2318.89 (15.84) *[55.20]	4399.14 (30.05) *[12.58]	4391.95 (30.00) *[68.10]	298.19 (2.04) *[31.92]	132.05 (0.90) *[21.99]	14641.44 (100) *[37.79]
1989-90	1950.44 (9.79) *[28.15]	2586.99 (12.98) *[63.82]	3325.99 (16.69) *[43.43]	6237.55 (31.29) *[41.79]	5295.53 (26.57) *[20.57]	371.11 (1.86) *[24.45]	164.07 (0.82) *[24.25]	19931.67 (100) *[36.13]
1990-91	2600.25 (11.15) *[33.32]	3100.45 (13.30) *[19.85]	4037.78 (17.32) *[21.40]	7791.82 (33.41) *[24.92]	5246.71 (22.50) *[-0.92]	401.7 (1.72) *[8.24]	140.39 (0.60) *[-14.43]	23319.1 (100) *[17.00]
<b>Mean</b>	983.95 (9.49)	982.87 (8.36)	1596.43 (16.42)	3096.67 (30.89)	2329.73 (22.13)	146.68 (1.36)	671.96 (11.35)	9808.28 (100)
<b>SD</b>	755.35	1008.51	1132.39	2225.99	1805.16	158.92	466.26	6653.59
<b>CV</b>	76.77	102.61	70.93	71.88	77.48	108.35	69.39	67.84
<b>CAGR</b>	23.81	28.83	17.29	20.77	25.83	-	-19.20	19.48

**Source:** Calculated on the basis of data given in various issues of Economic survey Report, GOI, 1981-1982 to 1986-1987 and Handbook of Statistics on the Indian Economy, RBI, 2000-2001 to 2005-06.

**Note:** 1. Figure given in Bracket ( ) only indicates percentage share of commodity. 2. \* and bracket \*[- ] Values are related to Annual Growth Rate of commodity.

Table 1.3 represents the composition of Total export of manufactured goods in pre-reform period. It shows the textile & textile product (31) percent and gems and jewelry (22) percent have major contributor as compare to other manufactured goods.. The growth of export of leather and manufacturer is inconsistent (76.77) percent with compound growth rate is 23.81 percent. Chemical & related products has shared 8.36 per cent share of the total manufactured goods. The growth of export of chemical & related products is inconsistent as compound growth rate is 28.83 per cent and coefficient of variation is 102.61 percent. India exported chemical & related products of an average amount Rs.982.87corer in pre-reform period. The commodity engineering goods shared 16.42 per cent share of the manufactured

#### Conclusion:

Total Export of manufactured goods is growing with compound growth rate of 17.32 percent is less as compare to the pre reforms period was 19.48 percent due to the increasing the export of engineering goods, Gems and jewelry in pre reforms period. The average export of manufactured goods is seen Rs 368490.95 corer in post reforms period with very inconsistence growth while in pre reforms the mean was Rs.9808.28 corer with coefficient of variation 67.84 percent. In pre reforms period Chemicals & related products and Handicrafts very inconsistence growth but in post reforms engineering goods and other Manu. Goods shows inconsistence growth its repressing in tables. The overall research paper has concluded that the manufactured goods export is important to contributing in the total export of India as well as there is significant growth in the post reform era as compare to the pre reform era. Manufactured goods export had been implementing the place of pride in the export basket of India and helpful to push up the Indian economy.

goods. Compound growth rate in export of engineering goods is 17.29 percent per year. Its observed Export of Handicrafts has the least share in the manufactured goods. From the year 1982-83 to 1986-87 the handicraft fails to contribute the total export as well as its very inconsistence growth (108.35) percent during the pre reforms period due to ups and downs in demand. Mean values of total export of other manufactured goods are Rs. 671.96 corer. They shared 11.35 percent of total manufactured goods. Compound growth rate of export of other manufactured goods is -19.20 percent there is very less growth during pre reform period. The average export of manufactured goods is seen Rs 9808.28 corer.

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## Management Strategies and Challenges in the Maharashtra State Road Transport Corporation (MSRTC)

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DOI - 10.5281/zenodo.15130785

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### Abstract:

*The Maharashtra State Road Transport Corporation (MSRTC) is one of the largest state-owned public transport organizations in India, providing vital bus services across Maharashtra. Despite its importance, MSRTC faces numerous challenges, including financial instability, operational inefficiencies, and stiff competition from private operators. This research paper provides an in-depth analysis of these challenges and explores their implications for the corporation's sustainability.*

*The study begins with an overview of MSRTC, highlighting its history, structure, and current operations. A review of literature follows, examining existing studies on public transport management, particularly in the Indian context, and identifying gaps that this paper seeks to address. The core of the paper focuses on the various challenges faced by MSRTC, including financial constraints, an aging fleet, labor disputes, and the impact of regulatory and policy frameworks.*

*Through detailed analysis and discussion, the paper identifies key areas where MSRTC needs to improve, such as diversifying revenue streams, modernizing its fleet, adopting advanced technologies, and enhancing workforce management. The recommendations section provides actionable strategies for MSRTC to overcome its challenges, improve service quality, and achieve long-term financial sustainability. In conclusion, while MSRTC's challenges are significant, they can be addressed through strategic management, innovation, and stakeholder engagement. By implementing the proposed recommendations, MSRTC can enhance its operational efficiency, maintain its competitive edge, and continue to serve the people of Maharashtra effectively.)*

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**Keywords:** - Maharashtra State Road Transport Corporation, Collaboration, Innovation, Technological Integration

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### Introduction:

The Maharashtra State Road Transport Corporation (MSRTC) is one of India's oldest and most extensive public transport systems, serving the state of Maharashtra since its establishment in 1948. Formed under the provisions of the Road Transport Corporation Act, 1950, MSRTC was set up to provide efficient, affordable, and reliable bus services to the people of Maharashtra. With a fleet of over 18,000 buses and a network that spans urban, rural, and remote areas, MSRTC plays a vital role

in ensuring mobility and connectivity across the state. Over the decades, MSRTC has evolved from a basic road transport service to a multifaceted organization that not only focuses on passenger transport but also contributes to the socio-economic development of the region. The corporation's services cater to diverse needs, including regular passenger transport, inter-city and intra-city services, and special buses for long-distance travel, tourist destinations, and educational institutions. MSRTC's commitment to accessibility ensures that

even the most remote villages are connected to larger towns and cities, thus playing a crucial role in the state's development.

### Objectives of the Study:

This research aims to explore the management strategies and challenges faced by MSRTC in its operations. The primary objectives of the study are:

1. To analyse the current management strategies employed by MSRTC to maintain and improve its services.
2. To assess the operational and financial challenges that MSRTC encounters in delivering public transport services.
3. To provide recommendations for improving the efficiency, sustainability, and overall performance of MSRTC.
4. Enhancing the image of the corporation.
5. Giving goodwill to the corporation.
6. Mission of the Corporation - To communicate the policies to the public.
7. To create harmony and cordial relations with all types of people related to the Corporation.
8. Making awareness about ST service.

### Literature Review on MSRTC:

The literature review examines previous studies, reports, and scholarly articles related to the management, operations, and challenges of the Maharashtra State Road Transport Corporation (MSRTC). It provides a comprehensive understanding of the existing body of knowledge, identifies gaps in the research, and lays the groundwork for the current study.

#### 1. Sinha & Sharma, 2021.

Public transportation systems, particularly those operated by state governments, play a crucial role in ensuring mobility for millions of people. Effective management of such systems is essential for maintaining service quality, financial sustainability, and public satisfaction. Several studies have highlighted the importance of strategic management,

financial planning, and technological integration in the public transportation sector. In their study, the author discusses the role of state-run transportation systems in providing essential services to both urban and rural populations. The study emphasizes the need for effective resource management, regular fleet maintenance, and customer-focused service improvements. The author suggests that government intervention and subsidies are often necessary to maintain the viability of these services, especially in less profitable routes.

#### 2. Verma, 2021.

Another study by the author discusses the challenges of managing large public transport corporations in developing countries. It identifies common issues such as aging infrastructure, inefficient route planning, and the impact of political interference on operational decisions. The study recommends adopting modern management practices and leveraging technology to enhance service efficiency and customer experience. The author suggests that MSRTC could explore new service models, such as demand-responsive transport and eco-friendly buses, to meet the changing needs of passengers and reduce environmental impact.

#### 3. Kumar, 2022.

The evolution of MSRTC has been well-documented in several studies, focusing on its growth, challenges, and contributions to Maharashtra's transportation network. MSRTC has played a pivotal role in providing affordable and accessible transportation across Maharashtra. The study traces the corporation's history from its inception in 1948, highlighting key milestones such as fleet expansion, the introduction of new services, and efforts to modernize operations.

The study argues that MSRTC's extensive network has been instrumental in connecting remote villages to urban centres, thereby facilitating economic growth, access to education, and healthcare services. The author notes that despite financial

challenges, MSRTC has continued to fulfill its mandate of providing essential public transport services. Financial management is a critical aspect of MSRTC's operations, given the corporation's reliance on government subsidies and the challenges posed by rising operational costs.

#### **4. Prof. M. Kulkarni 2022.**

A study by delves into the financial health of MSRTC, analysing its revenue sources, expenditure patterns, and subsidy dependency. The author finds that while MSRTC generates significant revenue from ticket sales, it struggles with high operating costs, particularly in maintaining an aging fleet. The study recommends financial restructuring, including fare revisions and exploring alternative revenue streams such as advertising and public-private partnerships. The study highlights the role of state funding in sustaining the corporation's operations, particularly in uneconomical routes. It suggests that while subsidies are necessary, there is a need for more efficient financial management practices to reduce dependency on government support.

#### **5. Mishra, 2022.**

The examines the operational challenges faced by MSRTC, focusing on issues such as vehicle maintenance, fuel efficiency, and service punctuality. The study notes that an aging fleet and inadequate maintenance facilities often lead to frequent breakdowns and service disruptions. The author recommends fleet modernization and adopting preventive maintenance practices to enhance operational efficiency. The study argues that effective leadership and a positive organizational culture are essential for motivating employees and ensuring high service standards. The author recommends that MSRTC management should invest in leadership development and foster a culture of collaboration and innovation.

#### **6. Gupta 2024.**

In a comparative analysis, [Author] (Year) contrasts MSRTC's operational

strategies with those of other state transport corporations. The study finds that MSRTC has made commendable efforts in route optimization and scheduling but still lags in areas such as real-time tracking and customer service. The author suggests that MSRTC could benefit from adopting best practices from more successful state-run transport entities, such as the use of digital technologies for route planning and customer interaction. The study points out that labor unrest, often resulting from disputes over wages and working conditions, has a significant impact on service continuity. The author suggests enhancing employee engagement and implementing regular training programs to improve service delivery and reduce attrition rates.

#### **7. Patel & Deshmukh, 2020.**

According to the adoption of digital technologies such as GPS tracking, electronic ticketing, and automated scheduling systems has the potential to transform MSRTC's operations. The study highlights the benefits of real-time tracking for improving service punctuality and customer satisfaction. However, it also notes the challenges in implementing such technologies, particularly in rural areas with limited infrastructure.

#### **MSRTC Overview:**

The Maharashtra State Road Transport Corporation (MSRTC) is a state-run public transportation service provider in Maharashtra, India. Established in 1948, MSRTC plays a critical role in connecting urban, semi-urban, and rural areas across the state. With a mission to provide affordable, reliable, and efficient bus services, MSRTC has grown into one of the largest state transport undertakings in India.

#### **Organizational Structure:**

MSRTC operates under the authority of the Maharashtra State Government, with oversight from the Ministry of Transport. The corporation is governed by a board of

directors, including senior officials from the state government, transport experts, and representatives from various stakeholders.

- **Board of Directors:** The board is responsible for setting policies, approving budgets, and overseeing the corporation's overall strategic direction. It is composed of the Managing Director, Transport Commissioner, and other key officials.
- **Management Team:** The day-to-day operations are managed by a team of senior executives, including the General Manager, Chief Operating Officer, Chief Financial Officer, and department heads for operations, finance, human resources, and engineering.
- **Regional Offices:** MSRTC has a decentralized structure with multiple regional offices across Maharashtra. Each region is managed by a Regional Manager who oversees operations, maintenance, and customer service within their jurisdiction.
- **Depots and Divisions:** The corporation operates through a network of bus depots and divisions. Each depot manages a specific number of buses, handles maintenance, and coordinates daily operations. Divisional offices provide administrative support to the depots.

#### **Operations:**

- **MSRTC's operations** are extensive, covering both urban and rural areas of Maharashtra. The corporation's services are designed to cater to the diverse needs of the population, from daily commuters to long-distance travellers.
- **Fleet Size and Composition:** MSRTC operates a fleet of approximately 18,000 buses, including standard buses, luxury coaches, semi-luxury buses, and special services such as air-conditioned and sleeper coaches.
- The fleet is regularly updated to meet safety and emission standards, though a significant portion of the buses are aging and require frequent maintenance.

- **Service Categories: City and Suburban Services:** These buses serve metropolitan areas and their suburbs, providing affordable transport options for daily commuters.
- **Rural Services:** MSRTC operates extensive rural services, connecting remote villages to nearby towns and cities. These services are vital for the socio-economic development of rural areas.
- **Intercity and Interstate Services:** MSRTC offers long-distance services between major cities within Maharashtra and to neighboring states, ensuring connectivity for both passengers and goods.
- **Special Services:** The corporation also runs special buses for pilgrimage sites, tourist destinations, and educational institutions. These services cater to specific demands during peak seasons and festivals.
- **Ticketing Systems:** MSRTC has implemented both traditional and digital ticketing options. Passengers can purchase tickets at bus stations, through mobile apps, or via the MSRTC website. The corporation has introduced e-ticketing and smart cards to improve convenience and reduce transaction times.
- **Route Network:** MSRTC's route network is one of the most extensive in India, covering over 250,000 kilometres. The network is designed to maximize coverage and ensure that even the most remote areas have access to bus services. Routes are regularly reviewed and optimized based on demand and operational feasibility.
- **Scheduling and Punctuality:** MSRTC strives to maintain a strict schedule to ensure reliability. However, challenges such as traffic congestion, road conditions, and vehicle maintenance can affect punctuality. The corporation has been working on improving its

scheduling systems and introducing real-time tracking to enhance service reliability.

#### **Financial Overview:**

- MSRTC operates in a challenging financial environment, balancing the need to provide affordable services with the constraints of operating costs and revenue generation.
- Revenue Sources: Passenger Fares: The primary source of revenue for MSRTC is passenger fares. The corporation follows a government-approved fare structure, which is designed to be affordable while covering basic operational costs.
- Government Subsidies: MSRTC receives subsidies from the Maharashtra government to cover losses incurred on uneconomical routes, particularly in rural areas. These subsidies are essential for the corporation's sustainability.
- Other Income: MSRTC also generates revenue through advertisements on buses and bus stations, leasing of commercial spaces, and logistics services.
- Expenditure: The corporation's major expenses include fuel costs, employee salaries, vehicle maintenance, and infrastructure development. Rising fuel prices and the need for fleet modernization have put pressure on MSRTC's finances.
- Financial Challenges: Despite its revenue streams, MSRTC faces significant financial challenges, including operational losses, subsidy dependency, and high maintenance costs. The corporation has been exploring various strategies to improve its financial health, including fare adjustments, cost-cutting measures, and exploring new revenue opportunities.

#### **Human Resource Management:**

- With a workforce of over 1,00,000 employees, MSRTC is one of the largest employers in Maharashtra. Managing

such a large workforce presents both opportunities and challenges.

- Workforce Composition: MSRTC's workforce includes drivers, conductors, mechanics, administrative staff, and management personnel. The corporation places a strong emphasis on training and skill development to ensure high service standards.
- Labor Relations: MSRTC has a history of labor disputes, particularly related to wages, working conditions, and job security. The corporation works closely with employee unions to address grievances and maintain industrial harmony.
- Training and Development: MSRTC offers regular training programs for its employees, focusing on driving skills, customer service, and safety protocols. These programs are aimed at enhancing the efficiency and effectiveness of the workforce.
- Employee Welfare: The corporation provides various welfare benefits to its employees, including health insurance, retirement benefits, and housing facilities. These benefits are designed to improve employee morale and retain talent.

#### **Challenges Faced by MSRTC:**

The Maharashtra State Road Transport Corporation (MSRTC) plays a crucial role in providing public transportation services across Maharashtra. However, the corporation faces several significant challenges that impact its operations, financial health, and ability to meet the needs of its passengers. These challenges can be broadly categorized into financial, operational, and human resource-related issues.

#### **Financial Challenges:**

**1. Revenue Shortfalls:** MSRTC's primary source of revenue comes from passenger fares. However, the fare structure is regulated by the government and kept

relatively low to ensure affordability, especially for rural and low-income passengers. This limits the corporation's ability to generate sufficient revenue to cover its operating costs. Additionally, competition from private transport operators and alternative modes of transport, such as app-based ride-sharing services, has led to a decline in passenger numbers on some routes, further reducing revenue.

**2. Rising Operational Costs:** MSRTC faces high operational costs, primarily due to fuel expenses, maintenance of an aging fleet, and employee salaries. Fuel prices have been volatile, and as a major cost component, fluctuations in fuel prices directly impact the corporation's finances. Maintenance costs are also significant, given the age and condition of many of the buses in MSRTC's fleet, which require frequent repairs and replacements.

**3. Subsidy Dependency:** To sustain operations, particularly on uneconomical rural routes, MSRTC relies heavily on subsidies from the Maharashtra government. While these subsidies are crucial for the corporation's survival, they are not always timely or sufficient to cover the deficits. This dependency on government funding makes MSRTC vulnerable to policy changes and budgetary constraints.

**4. Debt and Financial Liabilities:** Over the years, MSRTC has accumulated significant debt due to operating losses and capital expenditures. Servicing this debt, along with meeting other financial liabilities such as employee pensions and gratuities, places an additional strain on the corporation's finances. This has led to cash flow issues, affecting the ability to maintain and expand services.

### Operational Challenges

**1. Aging Fleet:** A significant portion of MSRTC's fleet is outdated and in poor condition, leading to frequent breakdowns and service disruptions. The aging fleet also results in higher maintenance costs and lower fuel efficiency. Although the

corporation has initiated fleet modernization programs, the scale and pace of these efforts have been insufficient to address the problem comprehensively.

**2. Maintenance Issues:** MSRTC's maintenance facilities are often inadequate, leading to delays in repairs and a backlog of buses waiting for service. The lack of modern tools, equipment, and skilled personnel further exacerbates maintenance challenges. As a result, many buses are not operational, reducing the availability of services and impacting reliability.

**3. Service Punctuality and Reliability:** Traffic congestion, road conditions, and the aging fleet contribute to delays and service cancellations, affecting MSRTC's ability to maintain a reliable schedule. Inconsistent service punctuality leads to passenger dissatisfaction and loss of trust in the corporation's services, driving commuters to seek alternative transportation options.

**4. Competition from Private Operators:** MSRTC faces intense competition from private bus operators, particularly on lucrative intercity routes. Private operators often offer better-maintained buses, more flexible schedules, and additional amenities, making them more attractive to passengers. This competition reduces MSRTC's market share and revenue.

**5. Logistical Challenges:** Operating an extensive network across urban, semi-urban, and rural areas presents logistical challenges in terms of route planning, scheduling, and resource allocation. Ensuring that services are both efficient and accessible requires sophisticated planning tools and data analysis, areas where MSRTC has room for improvement.

### Human Resource Challenges:

**1. Labor Disputes and Industrial Relations:** MSRTC has a history of labor disputes, often related to wages, working conditions, and job security. These disputes have led to strikes and service disruptions, affecting the corporation's reputation and financial stability. Managing relations with

multiple employee unions and addressing grievances in a timely manner remains a significant challenge for MSRTC's management.

**2. Employee Morale and Motivation:** The demanding nature of the work, coupled with financial instability and uncertain job security, has led to low employee morale in some cases. This affects the quality of service provided to passengers and can lead to higher absenteeism and turnover rates. Additionally, the lack of adequate training and development opportunities for employees impacts their performance and job satisfaction.

**3. Workforce Management:** MSRTC employs a large and diverse workforce, including drivers, conductors, mechanics, and administrative staff. Coordinating such a large workforce, ensuring their efficiency, and maintaining discipline are complex tasks. The corporation faces challenges in optimizing workforce deployment and ensuring that the right personnel are available where and when needed.

**4. Training and Skill Development:** With the introduction of new technologies and modernized fleet components, there is a growing need for ongoing training and skill development for MSRTC's employees. However, the corporation has limited resources to invest in comprehensive training programs, which can lead to skill gaps and inefficiencies in operations.

### **Strategic and External Challenges:**

**1. Government Policy and Regulatory Environment:** MSRTC operates within a complex regulatory framework, where policies related to fares, subsidies, and labor relations are determined by the state government. Changes in government policies, such as reductions in subsidies or changes in fare structures, can have significant impacts on MSRTC's operations and financial health.

**2. Environmental and Sustainability Concerns:** As concerns about environmental sustainability grow, there is increasing pressure on public transport operators to reduce their carbon footprint. MSRTC faces challenges in transitioning to greener technologies, such as electric buses, due to high initial costs and the need for supporting infrastructure.

**3. Technological Adoption:** While technology can significantly enhance operational efficiency and customer service, MSRTC has been slow in adopting modern technological solutions. The implementation of GPS tracking, automated scheduling, and digital ticketing systems has been limited, particularly in rural areas, due to budgetary constraints and infrastructure challenges.

**4. Customer Expectations and Satisfaction:** As passengers' expectations evolve, MSRTC must adapt its services to meet higher standards of comfort, convenience, and punctuality. However, financial and operational constraints make it challenging for the corporation to consistently deliver a high-quality customer experience, leading to passenger dissatisfaction and declining ridership.

**5. Analysis and Discussion:-**The analysis and discussion section delves into the key challenges faced by the Maharashtra State Road Transport Corporation (MSRTC) and evaluates its management strategies in addressing these issues. This section also discusses the implications of these challenges for the corporation's sustainability and future growth.

### **Financial Analysis:**

**1. Revenue Generation vs. Operational Costs:** MSRTC's financial sustainability is heavily influenced by its ability to balance revenue generation with operational costs. The analysis reveals that the corporation struggles with a low fare structure that, while essential for maintaining affordability, limits its revenue potential. This issue is exacerbated by the rising costs of fuel,

vehicle maintenance, and labor. Although subsidies from the state government provide critical support, they are not sufficient to cover all expenses, leading to recurring financial deficits.

**2. Debt and Financial Liabilities:** MSRTC's debt burden and financial liabilities, including employee pensions and gratuities, add to its financial challenges. The analysis indicates that servicing this debt consumes a significant portion of the corporation's revenue, leaving limited funds for operational improvements and expansion.

### Operational Analysis

#### 1. Fleet Management and Maintenance:

The analysis shows that MSRTC's aging fleet is a major operational challenge. The outdated buses lead to frequent breakdowns, higher maintenance costs, and reduced service reliability. The corporation's maintenance facilities are also found to be inadequate, leading to delays in repairs and compounding the problem.

#### 2. Service Punctuality and Reliability:

Traffic congestion, poor road conditions, and logistical challenges contribute to service delays and cancellations. The analysis indicates that while MSRTC has made efforts to optimize routes and schedules, these challenges continue to affect service punctuality and reliability.

#### 3. Competition from Private Operators:

MSRTC faces stiff competition from private bus operators, especially on profitable intercity routes. The analysis shows that private operators often provide better-maintained vehicles, flexible schedules, and additional amenities, making them more attractive to passengers.

### Human Resource Analysis:

#### 1. Labor Relations and Employee Morale:

The analysis highlights ongoing labor disputes and low employee morale as significant challenges for MSRTC. Frequent strikes and industrial actions disrupt services

and contribute to negative public perception. Additionally, the lack of adequate training and career development opportunities affects employee performance and job satisfaction.

**2. Workforce Management:** Managing a large and diverse workforce presents logistical challenges for MSRTC. The analysis indicates that inefficiencies in workforce deployment and a lack of modern management practices contribute to operational challenges.

### Strategic and External Factors:

#### 1. Government Policy and Regulatory Environment:

MSRTC operates within a complex regulatory framework, where policies related to fares, subsidies, and labor relations are determined by the state government. The analysis shows that changes in government policies can have significant impacts on the corporation's operations and financial health.

#### 2. Technological Adoption and Innovation:

The analysis reveals that MSRTC has been slow to adopt modern technological solutions that could improve operational efficiency and customer service. Limited investment in digital ticketing, GPS tracking, and automated scheduling systems hinders the corporation's ability to compete with more technologically advanced operators.

#### 3. Environmental and Sustainability Challenges:

As environmental concerns grow, there is increasing pressure on public transport operators to reduce their carbon footprint. The analysis shows that while MSRTC has taken some steps towards sustainability, such as exploring the use of CNG buses, the transition to greener technologies is slow.

### Suggestions & Recommendations for MSRTC:

**1. Improving Financial Management:** To address its financial challenges, MSRTC should explore alternative revenue streams, such as advertising, public-private



partnerships, and value-added services. Implementing cost-cutting measures, such as fuel-efficient driving practices and preventive maintenance, can also help reduce operational expenses. Additionally, the corporation should engage with the state government to secure more predictable and sustainable funding.

**2. Fleet Modernization and Maintenance:**

Investing in fleet modernization is crucial for improving service quality and reliability. MSRTC should prioritize the procurement of new buses and explore leasing options to reduce the financial burden. Enhancing maintenance practices through better facilities, training, and preventive maintenance programs will help reduce breakdowns and extend the lifespan of the fleet.

**3. Enhancing Customer Experience:** To compete with private operators, MSRTC should focus on enhancing the overall customer experience. This includes improving service punctuality, offering additional amenities such as Wi-Fi and air conditioning, and expanding digital ticketing options. Engaging with passengers through feedback mechanisms and social media can also help identify areas for improvement and build customer loyalty.

**4. Strengthening Labor Relations:**

Improving labor relations is essential for maintaining a motivated and productive workforce. MSRTC should engage in regular dialogue with employee unions, address grievances promptly, and offer fair wages and benefits. Investing in employee training and development programs will also help improve performance and job satisfaction.

**5. Leveraging Technology and Innovation:**

MSRTC should accelerate its adoption of modern technologies to enhance operational efficiency and customer service. This includes implementing GPS tracking, automated scheduling, and online ticketing systems. The corporation should also explore innovative service models, such as

demand-responsive transport and green technologies, to meet evolving passenger needs and reduce environmental impact.

**6. Adapting to Policy and Regulatory Changes:**

MSRTC must remain agile in adapting to changes in government policies and regulations. Building stronger relationships with policymakers and advocating for policies that support the sustainability of public transport services will be critical. Additionally, the corporation should seek greater operational autonomy to make decisions that are in the best interest of its financial health and service quality.

**Financial Management:**

**1. Advertising:** Expand advertising opportunities on buses, bus stations, and other MSRTC properties to generate additional income. Collaborate with brands and local businesses to create mutually beneficial advertising partnerships.

**2. Public-Private Partnerships (PPPs):**

Explore PPP models to fund infrastructure projects, fleet modernization, and service expansions. Private investments can help MSRTC enhance its services without over-relying on government subsidies.

**3. Value-Added Services:** Introduce premium services, such as luxury or express buses, with higher fare rates for passengers willing to pay for additional comfort and convenience.

**4. Fuel Efficiency Programs:** Implement training programs for drivers focused on fuel-efficient driving techniques to reduce fuel consumption. Consider investing in fuel-efficient vehicles as part of fleet modernization.

**5. Preventive Maintenance:** Shift from reactive to preventive maintenance to reduce the frequency and cost of repairs. Regularly scheduled maintenance can extend the lifespan of buses and prevent costly breakdowns.

**6. Energy Savings:** Reduce operational costs by adopting energy-saving measures, such as optimizing lighting, HVAC systems,

and other energy-consuming facilities at depots and bus stations.

**7. Debt Management:** Develop a clear debt reduction plan, including refinancing existing debt at lower interest rates and prioritizing the repayment of high-interest loans. This will improve cash flow and reduce financial pressure.

**8. Government Engagement:** Advocate for more predictable and timely subsidies from the state government. MSRTC should work closely with policymakers to secure funding that reflects the actual costs of providing public transport services, particularly in rural and underserved areas.

### **Operational Efficiency:**

**1. Procurement of New Buses:** Prioritize the acquisition of new, energy-efficient buses to replace the aging fleet. Explore leasing options or bulk purchasing agreements to reduce costs.

**2. Introduction of Electric Buses:** Gradually transition to electric buses, starting with urban routes where charging infrastructure is easier to implement. This will reduce fuel costs, emissions, and maintenance requirements.

**3. Upgrade Maintenance Facilities:** Invest in modernizing maintenance facilities and tools to ensure quicker and more efficient repairs. This will reduce the downtime of buses and improve service reliability.

**4. Training for Maintenance Staff:** Provide ongoing training for mechanics and technicians to keep them updated on the latest maintenance techniques and technologies, especially for newer bus models.

**5. Real-Time Tracking and Monitoring:** Implement GPS tracking across the entire fleet to monitor bus locations in real-time. This data can be used to improve scheduling, reduce delays, and provide passengers with accurate arrival times.

**6. Optimized Route Planning:** Regularly review and optimize routes based on passenger demand, traffic patterns, and

operational feasibility. Introduce express services on high-demand routes to reduce travel times and improve efficiency.

**7. Enhanced Customer Experience:** Introduce amenities such as Wi-Fi, better seating, and air conditioning on select services to attract and retain passengers. Improve the cleanliness and comfort of buses to enhance the overall travel experience.

**8. Digital Services:** Expand digital ticketing options and develop a user-friendly mobile app for booking tickets, tracking buses, and providing feedback. Digital services will make it easier for passengers to plan their journeys and stay informed.

### **Human Resource Management:**

**1. Regular Communication with Unions:** Establish a continuous dialogue with employee unions to address grievances proactively and prevent strikes or service disruptions. Consider involving unions in decision-making processes to foster cooperation and mutual understanding.

**2. Fair Compensation and Benefits:** Review and adjust compensation packages to ensure they are competitive and fair. Providing benefits such as health insurance, retirement plans, and performance bonuses can boost employee morale and reduce turnover.

**3. Comprehensive Training Programs:** Invest in regular training programs for drivers, conductors, mechanics, and administrative staff to improve their skills and efficiency. Training on customer service, safety protocols, and new technologies should be prioritized.

**4. Career Development Opportunities:** Create clear career progression pathways within MSRTC to motivate employees and reduce attrition. Offering opportunities for promotions and professional growth can enhance job satisfaction and loyalty.

**5. Efficient Deployment:** Use workforce management tools to optimize the deployment of staff across different routes

and depots. This ensures that resources are used efficiently and that there is no overstaffing or understaffing in critical areas.

**6. Performance Incentives:** Introduce performance-based incentives to encourage higher productivity and better service quality. Rewarding employees for meeting or exceeding performance targets can drive overall improvement.

#### **Technological Advancement:**

##### **1. Digital Transformation:**

**2. Integrated Ticketing Systems:** Develop an integrated ticketing system that allows passengers to book tickets online, through mobile apps, and at physical locations. Consider implementing a smart card system that can be used across all public transport modes in Maharashtra.

**3. Automated Scheduling and Route Optimization:** Utilize data analytics and AI-driven tools to optimize bus schedules and routes based on real-time traffic conditions, passenger demand, and historical data.

**4. Green Technologies:** Explore the use of alternative fuels, such as CNG or biofuels, in addition to electric buses. Invest in solar power for depots and bus stations to reduce energy costs and the environmental impact.

**5. Waste Management:** Implement effective waste management practices at all MSRTC facilities, including recycling programs and the proper disposal of hazardous materials.

#### **Strategic Planning and Governance:**

**1. Vision and Mission Alignment:** Ensure that MSRTC's long-term strategic plan aligns with its mission to provide affordable, reliable, and sustainable public transport. The plan should include clear goals, timelines, and performance metrics to track progress.

**2. Stakeholder Engagement:** Engage with key stakeholders, including passengers, employees, government agencies, and

private partners, to gather input and build support for strategic initiatives.

#### **Governance and Accountability:**

**3. Strengthen Governance Structures:** Improve the governance of MSRTC by establishing clear roles, responsibilities, and accountability mechanisms at all levels of the organization. Regular audits and performance reviews can help identify areas for improvement.

**4. Transparency and Reporting:** Increase transparency by regularly publishing reports on financial performance, operational efficiency, and customer satisfaction. This can help build trust with stakeholders and ensure that the corporation remains accountable to the public.

**5. Advocate for Supportive Policies:** Work closely with the Maharashtra state government to advocate for policies that support public transport, such as favorable tax rates for fuel, subsidies for green technologies, and investments in transport infrastructure.

**6. Operational Autonomy:** Seek greater operational autonomy from the state government to make faster and more effective decisions. This could involve reducing bureaucratic delays in procurement, staffing, and financial management.

#### **Conclusion:**

The Maharashtra State Road Transport Corporation (MSRTC) is a vital lifeline for millions of people across Maharashtra, providing essential public transport services that connect urban, semi-urban, and rural areas. Despite its critical role, MSRTC faces significant challenges, including financial constraints, operational inefficiencies, competition from private operators, and human resource issues. These challenges have hindered the corporation's ability to meet the evolving needs of its passengers and maintain financial sustainability. This paper has examined the various aspects of MSRTC's operations,

identifying key challenges and analyzing their impact on the corporation's overall performance. The discussion has highlighted the importance of strategic management, technological innovation, workforce development, and financial planning in overcoming these challenges. The recommendations provided in this paper focus on diversifying revenue streams, modernizing the fleet, improving service reliability, enhancing customer experience, and strengthening labor relations. Additionally, embracing digital transformation and sustainability initiatives are crucial for MSRTC to remain competitive and environmentally responsible in the long term.

In conclusion, while MSRTC's current challenges are significant, they are not insurmountable. With the right strategies and a commitment to continuous improvement, MSRTC can revitalize its operations, regain public trust, and secure a sustainable future. The corporation's ability to adapt to changing circumstances, innovate, and effectively manage its resources will be key to its success in the coming years. By addressing these challenges head-on and implementing the proposed recommendations, MSRTC can continue to fulfill its mission of providing affordable, reliable, and accessible public transportation to the people of Maharashtra.

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## A Critical Analysis of Earnings Management Strategies: Insights from an IFRS Framework

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**DOI - 10.5281/zenodo.15130798**

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### **Abstract:**

*Earnings management continues to be a widely debated topic in financial reporting and corporate governance. With the adoption of International Financial Reporting Standards (IFRS) globally, the scope and techniques of earnings management have changed. This review explores various earnings management practices, their motivations, detection methods, and implications within the context of IFRS adoption. The article highlights the need for transparency and strong regulatory frameworks to moderate opportunistic behavior in financial reporting.*

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**Keywords:** *Earnings Management, IFRS, Financial Reporting, Accounting Standards, Corporate Governance*

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### **Introduction:**

Earnings management refers to the deliberate manipulation of financial statements to achieve desired financial outcomes. While some forms of earnings management may comply with accounting standards, others may involve fraudulent practices. The adoption of IFRS, with its principle-based approach, has significantly influenced how companies manage earnings.

### **Background:**

IFRS aims to improve the comparability, reliability, and transparency of financial statements globally. Despite these objectives, the flexibility inherent in principle-based accounting creates opportunities for earnings management.

### **Objectives:**

1. Identify common earnings management techniques used under IFRS.
2. Examine the motivations behind such practices.

3. Explore detection and prevention strategies.

### **Earnings Management Techniques:**

Earnings management can be broadly classified into real earnings management and accrual-based earnings management.

#### **1. Accrual-Based Earnings Management:**

Accrual-based techniques involve manipulating accounting entries without altering actual cash flows. Common methods include:

1. **Revenue Recognition:** Manipulating the timing or criteria for recognizing revenue.
2. **Expense Recognition:** Shifting expenses between periods to smooth earnings.
3. **Provisioning:** Adjusting provisions for bad debts.

#### **2. Real Earnings Management:**

Real earnings management alters actual operational decisions to influence reported earnings, including:

1. **Overproduction:** Reducing per-unit fixed costs to improve profit margins.
2. **Sales Manipulation:** Offering deep discounts or flexible credit terms to boost sales.
3. **Discretionary Spending:** Delaying or accelerating expenditures such as advertising and R&D.

#### **Motivations for Earnings Management:**

Organizations engage in earnings management for various reasons, including:

1. **Market Pressure:** Meeting or exceeding analyst forecasts.
2. **Contractual Obligations:** Influencing debt contracts or executive compensation tied to financial metrics.
3. **Regulatory Compliance:** Managing earnings to avoid violations of regulatory requirements.

#### **Detection and Prevention:**

Detecting earnings management is challenging due to the sophistication of techniques employed. Effective detection methods include:

##### **1. Analytical Procedures:**

1. Ratio Analysis: Identifying unusual trends in financial ratios.
2. Benford's Law Analysis: Detecting irregularities in reported figures.

##### **2. Auditing Techniques:**

1. Extended Audit Procedures: Deep dives into high-risk areas such as revenue recognition.
2. Independent Reviews: Ensuring objectivity in financial reporting.

##### **3. Regulatory Oversight:**

Regulators play a critical role in curbing earnings management through:

1. Enforcing Compliance: Regular inspections and penalties for non-compliance.
2. Enhancing Transparency: Requiring detailed disclosures in financial statements.

#### **Implications of IFRS Adoption:**

The adoption of IFRS has led to both challenges and improvements in financial reporting practices:

##### **1. Benefits:**

- Enhanced comparability and consistency of financial reports.
- Improved investor confidence due to greater transparency.

##### **2. Challenges:**

- Increased complexity in financial reporting.
- Greater judgment required in applying accounting principles, which can be exploited for earnings management.

#### **Conclusion and Recommendations:**

Earnings management undermines the credibility of financial reporting and investor confidence. To mitigate this issue, the following recommendations are made:

- Strengthening internal controls and corporate governance.
- Enhancing auditor independence and rigor.
- Promoting ethical financial reporting practices through training and education.

Future research should focus on the long-term impacts of IFRS on earnings management practices and the effectiveness of regulatory interventions.

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## Women In Information Technology (IT): Barriers And Challenges

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DOI - 10.5281/zenodo.15130810

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### Abstract:

*The representation of women in information technology (IT) has evolved significantly over the past few decades. Despite progress, women remain underrepresented in key technical roles and leadership positions in this sector. This abstract explores the historical context, current status, and future prospects for women in IT. It discusses challenges faced by women such as gender discrimination, lack of mentorship and limited access to networking opportunities. However, it also highlights the growing number of initiatives, policies and organizations dedicated to promoting gender equality in the technology sector. By addressing issues such as educational disparity, workplace discrimination, and societal stereotypes, the abstract concludes that fostering an inclusive environment for women in IT is not only a matter of equity but is also essential for driving innovation and diverse perspectives in technology development.*

**Keywords:** *STEM education, Gender Gap, Social cultural factors, cultural progression barriers.*

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### Introduction:

Information technology (IT) sector has emerged as an important part of economic growth and social transformation globally and India has played a significant role in this revolution. In 21st century, India is growing developing country where whole world see opportunities as a global market or IT Hub. Infosys, TCS, Wipro, IBM, HCL technologies, Sonata software, Oracle, Tech Mahindra etc. provide IT services to America and other countries of the world. India and IT sector were facing male dominance. However role of female in IT sector is not negligible. Hence this is an attempt to focus on the barriers and challenges faced by women in the IT sector. IT sector is represented by Aziz Premji, Ajit Balakrishnan, Narayan Murthy, Nandan Nilekani but it's now need of time to give equal opportunity to women also so that women can prove themselves like Falguni Nayar, Roshni Nadar, Geeta Kannan, Sudha Murthy etc. Recently Prime Minister

Pratibha Patil, Finance Minister Nirmala Sitharaman, Sudha Murthy proved their calibre not only in the Indian economy but also in the world.

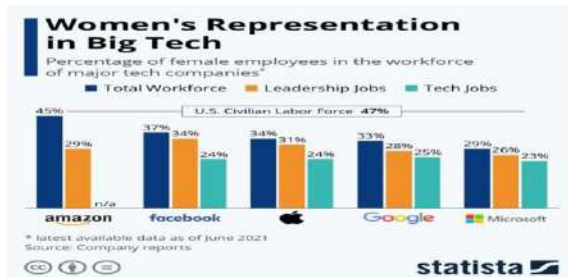
The information Technology (IT) sector has revolutionary industries like AI, BPO, Block-chain and societies worldwide, yet women remain underrepresented in this rapidly growing field. Despite their increasing participation in STEM education, women continue to face significant barriers and challenges in entering, sustaining and advancing in IT careers. Gender biases, workplace discrimination, lack of mentorship and work life balance struggles contribute to their underrepresentation in leadership roles. Additionally societal stereotypes and cultural expectations often discourage women from pursuing careers in technology. Then only equality and efficiency of work will increase



**Review of relevant Literature:**

a. Manju Ahuja, ( Feb 2015) Women in the information technology profession: a literature review, synthesis and research agenda

b. Ladonna Morris(July, 2002)Women in Information Technology Literature Review: Recruitment, Retention and Persistence Factors

**Statement of Problems:**

Women in the IT sector in India juggle both professional and personal responsibilities, often facing challenges due to societal expectations, workplace demands and work life balance issues.

Women managers face problem in balancing teamwork, leadership and personal career aspiration. Women have many responsibilities on social, morale & on family grounds and professional places. Therefore the subject matter - Women in Information Technology (IT): Barriers and Challenges has selected by researcher.

**Objectives of the Study:**

1. To know the current status of women in IT.
2. To study barriers and challenges of women work in IT.
3. To suggest remedies to overcome challenges.
4. To highlight successful initiatives that has effectively address barriers for women.

**Importance of Study:**

- Societal norms often steer girls away from STEM fields from a young age,

perpetuating the stereotypes that technology is a “male domain.”

- Women in IT often face biases in hiring processes, promotion decisions, and performance evaluations.
- Offering leadership training and development programs specifically designed for women in IT.

**Research Methodology:**

The study is based on secondary data. This data is collected through E-books, magazines, newspapers, e-journals.

**Data Analysis and Interpretation:****• Current Status of Women in IT:**

Above graph indicates that percentage of female employees in the workforce of major tech companies like Amazon 45% of total workforce and 29% in leadership jobs. In Facebook 37% of total workforce, 34% leadership jobs & 24% tech jobs. In apple 34% of total workforce, 31% leadership jobs and 24% tech jobs. In Google 33% of total workforce, 28% leadership jobs and 25% tech jobs. In Microsoft 29% total workforce, 26% leadership jobs & 23% tech jobs.

**• Barriers and challenges of women work in IT:****1. Gender Stereotypes and bias:**

Studies indicate that 60% of women in IT have experienced gender bias at work (women in tech survey, 2023). IT sector dominated by men. Women in IT sector often struggle with stereotypes. In workplaces implicit bias can lead to unequal opportunities for promotion & leadership roles.

**Interpretation:**

The above survey shows that 57% of women are non tech and 43% women in tech field. As per survey women professionals have encountered bias at the workplace 6 in 10(60% only). 10% women say that maternity breaks impact their career growth.

8% women faced gender based ostracism at the workplace.

### **2. Work life balance & family responsibility:**

A study involving 100 women in the tech industry found that 72% believe that their Careers suffer due to Childcare and family obligations (womentech.net). The demanding nature of IT jobs long hours and the expectation of being constantly available create challenges for women managing family responsibilities. Maternity leave policies & flexible work options are often inadequate making it difficult for women in to maintain career growth.

### **3. Lack of mentorship and networking opportunities:**

A study by (Anita B.org 2022) found that only 20% of women in IT have female mentors.

Many women report that the culture in IT environments can be unwelcoming or even hostile. This discourages them from seeking out mentorship or participating in networking activities, limiting their growth and exposure to opportunities.

### **4. Workplace discrimination and wages gap:**

Women need safe work atmosphere, friendly culture and transportation facilities in case of night shifts. Day care centre should be made available in vicinity of workplace. Women in IT earn 18%, less than men (Pay Scale, 2023) Studies indicate that women in IT earn less than men. Discrimination on hiring promotions, card salary, and gender pay gap. A woman often faces more Challenges in gaining recognition for their contributions in male dominated environments.

### **Interpretation:**

The above image shows that women earn 15% less in increments than men. Rs. 1.91 crore average compensation paid to women executives stood against 2.24 crore Rs. Earned by their male counter parts. Only 7% women represent in senior management

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of organisations whereas 5% women represent at the top level management. Only 10.5% organization gives chance to women in their top management. 76% companies don't have a single woman in top management.

### **5. Lack of confidence and imposter syndrome:**

Many women in IT experience imposter syndrome psychological pattern where they doubt their abilities and feel like they aren't as capable for work. Women often report low level of confidence as compared to men which can impact their likelihood to apply for negotiations of promotion.

### **6. Underrepresentation:**

Women are significantly under represented in IT related field. According to various studies women make up about 25 – 30 % of workforce in STEM and lower in leadership position. In many countries women are less likely to pursue degree in computer science and engineering leading to fewer female candidates entering to IT work force.

### **Remedies to overcome challenges:**

- 1) To promote awareness campaigns, mentor ship programme, culture of equality in work place. Companies should also implement unbiased hiring practise and ensure that women have equal opportunities for advancement.
- 2) To create a supportive environment for women in balancing family and workplace responsibility. IT organizations should offer Flexible work hours & remote work options.
- 3) To encourage successful women in leadership and mentorship roles for inspiring newcomers in IT. To form groups for developing skills required for jobs.
- 4) To promote transparent pay scales & create policies that ensures equal pay for equal work. Educational program on

financial literacy can empower women to close the wages gap.

### Successful initiatives that have effectively address barrier for women:

- 1) **Falguni Nayar:** Falguni Nayar is an Indian businesswoman and the founder of **Nykaa**, a leading beauty and fashion e-commerce company in India. She launched Nykaa in 2012 after leaving her job as an investment banker at Kotak Mahindra Bank. Under her leadership, Nykaa became a billion-dollar company and went public in 2021, making her one of India's richest self-made women.
- 2) **Roshni Nadar:** Roshni Nadar Malhotra is an Indian businesswoman and the chairperson of HCL Technologies. She is the daughter of Shiv Nadar, the founder of HCL, and became the first woman to lead a listed Indian IT company. Before taking over as chairperson in 2020, she was the CEO and Executive Director of HCL Corporation, the holding company of HCL Technologies.  
 Apart from business, she is actively involved in philanthropy through the Shiv Nadar Foundation, which focuses on education and social development. She is also a trained classical musician.
- 3) **Geeta Kannan:** She is a well-known leader in the technology and Agile coaching space in India. She has been associated with the Agile India Conference, one of the largest Agile and Lean conferences in Asia, and has played a key role in promoting Agile methodologies in organizations.  
 With decades of experience in the IT industry, she has worked with companies like Infosys and has been a strong advocate for women in technology. Her expertise includes Agile transformation, leadership coaching, and organizational change management.
- 4) **Sudha Murthy:** Sudha Murthy is an Indian author, philanthropist, and the

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former chairperson of Infosys Foundation. She is known for her contributions to literature, social work, and education. She has written numerous books in English and Kannada, including novels, short stories, children's books, and travelogues.

Through the Infosys Foundation, she has worked extensively in healthcare, education, public hygiene, and rural development. Some of her famous books include *Wise and Otherwise*, *The Day I Stopped Drinking Milk*, and *Grandma's Bag of Stories*. She was the first female engineer to be hired by TATA Engineering and Locomotive Company (TELCO).

- 5) **Aruna Jayanthi** - Aruna Jayanthi is a prominent Indian business leader known for her contributions to the IT and consulting industry. She has held key leadership positions at Capgemini, a global consulting and IT services firm.

She led Capgemini India from 2011 to 2015, overseeing a massive workforce and driving growth. She later became the Managing Director of Asia-Pacific and Latin America for Capgemini and later headed Business Services globally. She has been consistently listed among the most powerful women in business in India. She holds an MBA from Narsee Monjee Institute of Management Studies (NMIMS), Mumbai.

### Conclusion:

Women in Information Technology (IT) face significant barriers and challenges despite progress in gender diversity. Major barriers include workplace bias, lack of mentorship, unequal opportunities, and social stereotypes that discourage women from pursuing careers in technology. Additionally, issues such as the gender pay gap, limited leadership representation and work-life balance hinder their progress.

Addressing these challenges requires a multi-pronged approach. Organizations should implement inclusive policies, provide mentoring and sponsorship opportunities, and create a conducive work environment. Educational institutions should encourage girls to explore STEM fields from an early age. Furthermore, addressing systemic barriers requires industry-wide efforts, including policy reform and cultural change.

By fostering a more equitable and inclusive IT sector, we can unlock the full potential of women in technology, leading to greater innovation, diverse thinking and overall industry growth.

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## A Research on Future of Digital Marketing in the Era of 5G

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DOI - 10.5281/zenodo.15130818

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### **Abstract:**

*The Paper has been written to research on future of Digital Marketing through 5G Network. This paper explores the future growth of 5G and the opportunities that it can create for Digital Marketers around the world. The paper also includes an in-depth analysis of how 5G will impact various digital marketing channels. It discusses how 5G can enhance social media marketing, content marketing and other online platforms. Digital marketing, as a newer form of advertising, is slowly being acknowledged and embraced by individuals. With the advancement of 5G technology, it is set to redefine the landscape of digital marketing. The effects are substantial, as it enhances customer experiences and fosters innovation. Marketers are exploring fresh approaches to connect with and engage their audiences. In upcoming years, 5G technology will be a fast game-changer in almost every aspect of the Internet of Things (IoT) including digital marketing industry. This study helps you predict and understand the possible benefits of 5G networks in Digital Marketing Industry and find out how online stores might develop in the future as a result.*

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**Keywords:** 5G, 5G Networks, Digital Marketing, Internet of Things (IoT)

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### **Introduction:**

The future of digital marketing will be shaped by the introduction of 5G networks. With 5G, we can anticipate significant changes in how individuals engage with their devices and the internet. This technology will create numerous opportunities for digital marketers, enabling them to connect with a broader audience and provide more tailored experiences. 5G networks will make digital marketing increasingly personalized and immersive. The advent of 5G networks will transform the landscape of digital marketing entirely. Digital marketers constantly seek out the newest trends and technologies that can enhance their marketing efforts. 5G is the next generation of mobile networks that promises to achieve speeds that can be up to 10 times quicker than 4G. This leap in technology will not only enhance the speed of data transfer but also reduce latency, allowing for real-time interactions and smoother experiences. For digital marketers, this means a vast array

of new opportunities. With the ability to transmit large amounts of data quickly, marketers can leverage high-quality video content, augmented reality (AR), and virtual reality (VR) experiences to engage consumers in immersive ways. Furthermore, 5G will enable more sophisticated data analytics, allowing marketers to gather insights more efficiently and tailor their strategies to meet the specific needs of their audiences. This will open up a completely new range of opportunities for digital marketers. 5G is not just about faster speeds; it's a fundamental change in how information is transmitted and received.

In recent years, research in the field of 5G technology has experienced significant growth, particularly in its application to digital marketing. This trend reflects a transformation in how companies interact with their consumers and optimize their market strategies through faster, more reliable, and data-intensive communication

channels enabled by 5G. The shift towards 5G-driven infrastructure has been propelled by the demand for seamless connectivity and the development of advanced analytics capabilities that can process large volumes of data in real time.

#### **Statement of the research Problem:**

This research aims to conducting an in-depth investigation of how 5G technology can impact and reshape Digital Marketing Industry. This is an important and relevant issue for both marketing practitioners and researchers. Marketers need guidance on how to fully harness 5G's capabilities for customer engagement. Academically, the research will contribute to the theoretical underpinning of how next-generation networks transform digital marketing.

#### **Objectives of the Study:**

1. To analyze the features and architecture of 5G networks
2. To study how 5G influences core components of Digital Marketing
3. To explore the future scope of the digital marketing with 5G networks.

#### **Research Methodology:**

The research was chosen due to the need to address an emerging and relevant topic such as the future of digital marketing in the 5G Era. This methodology allows for a comprehensive and structured evaluation of the existing research, facilitating the identification of trends, challenges, and research gaps. The research is especially useful in areas of rapid technological development, where consolidating knowledge is essential to understand and anticipate changes in the digital marketing paradigm. The data used in the research are secondary and collected from various books, journals and web portals.

#### **Introduction to 5G and its role in digital marketing:**

5G is the fifth generation of mobile networks. It is quicker, has reduced latency,

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and is more dependable than earlier networks. This technology has the potential to revolutionize how we engage with and consume online content. This faster, more reliable technology is greatly affecting digital marketing. It affects everything from customer engagement to data security. 5G is bringing unmatched internet speeds. Faster internet speeds result in seamless streaming, rapid downloads, and an overall enhanced experience in online gaming. Strategies and tactics that use digital channels to promote products or services, including SEO, social media marketing, and online advertising. Digital marketing is being transformed by the adoption of technologies like 5G, enabling more dynamic and personalized campaigns. 5G isn't just about speed; it's about unlocking new possibilities for immersive experiences.

#### **Digital Marketing in the 5G Era: Key influences and Changes:**

With the 5G era, digital marketers must adapt their strategies to fully leverage this ground-breaking technology. One of the most significant effects of 5G on digital marketing will be its capacity to improve customer experience. Brands will be able to offer high-quality content, including videos, virtual reality experiences, and augmented reality campaigns, effortlessly and instantly. This will lead to a more immersive and captivating experience for consumers, helping brands to connect and foster relationships with their target audience more easily. Here's how you can implement advanced digital marketing tactics across various services to stay ahead of the curve.

##### **1. Search Engine Optimization:**

The speed and connectivity of 5G is transform SEO by emphasizing the importance of mobile optimization and immediate search capabilities. Businesses must ensure their websites and content are optimized for the lightning-fast speeds and enhanced user experiences that 5G enables.

**Social media:** 5G is enhancing social media interactions by enabling high-quality, live content sharing and engagement. Marketers

**2. Video Marketing:** 5G's ultra-high speeds and minimal latency are transform video marketing. Marketers may create more immersive and engaging video content, resulting in enhanced engagement and conversion rates.

**3. Content Marketing:** With 5G, content marketing is become more dynamic and interactive. The ability to deliver rich media content quickly and reliably is enhancing user engagement and satisfaction. Marketers can leverage augmented and virtual reality to create more immersive content experiences.

**4. Paid Advertising:** 5G Network enhancing the effectiveness of paid advertising by enabling data analysis and more precise targeting. Marketers can optimize their ad spend and improve campaign performance.

**5. Performance Marketing:** 5G's data and analytics capabilities are greatly benefit performance marketing. Marketers are optimizing campaigns more effectively and measure their impact with greater accuracy.

#### Findings:

1. The low latency of 5G enables real-time data processing, allowing brands to respond instantly to consumer behaviors and trends. This leads to more effective marketing strategies and timely promotions.
2. 5G facilitates the integration of various technologies, such as artificial intelligence, machine learning, and big data analytics.
3. With 5G, marketers are creating more interactive and immersive experiences, such as augmented reality (AR) and virtual reality (VR) campaigns.
4. The capabilities of 5G leading the evolution of social media platforms, enabling new features like live streaming in high definition and augmented reality filters.
5. 5G will facilitate the growth of the Internet of Things (IoT), connecting more devices and enabling brands to gather more data on

can leverage this to create more interactive and engaging social media campaigns.

consumer habits. This can lead to smarter marketing strategies based on comprehensive insights.

6. Overall, the research indicates that 5G will revolutionize digital marketing by enabling brands to create more engaging, personalized, and timely marketing strategies that resonate with consumers.

#### Conclusion:

We know the concept of 5G is and how the technology will influence the digital marketing industry. 5G's high-speed, high-capacity connection, low latency, and multiple simultaneous connections are expected for more types of ad placements and wider range of creative expressions. The technology will also make use of more diverse data than ever before to deliver personalized ads. Media companies and advertisers need to keep abreast of the latest 5G-related technologies and seek ways to use 5G technology in their businesses'

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## Comparative study between SBI (State Bank of India) Home Loan and HDFC (Housing Development Finance Corporation) Home Loan

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DOI - 10.5281/zenodo.15130846

### Introduction:

A comparative study between SBI (State Bank of India) Home Loan and HDFC (Housing Development Finance Corporation) Home Loan from 2019 to 2024, we can compare key aspects like interest rates, loan eligibility, processing fees, customer service, and loan features over this period. The exact numbers can vary depending on various factors, but here is an outline of how these two lenders typically compare.

### Objectives:

1. To compare Interest Rate, Eligibility, Process, Repayment Tenure of SBI & HDFC
2. To Study Customer Services provided by both banks

### Methodology:

Secondary Method use for data collection

#### 1. Interest Rates (2019-2024)

Interest rates are one of the most important factors when comparing home loans. Over the years, both SBI and HDFC have followed the trend of reducing rates, particularly in response to the Reserve Bank of India (RBI) monetary policy.

##### SBI Home Loan:

- **2019-2020:** Rates were in the range of **8.50% - 8.60%** (floating rate).

- **2021-2022:** SBI launched the "**Shaurya Home Loan**" for defense personnel and also provided lower rates in the range of **6.70% - 7.10%** for regular home loans.

- **2023-2024:** The rates typically ranged between **8.05% - 8.60%**, with the introduction of **repo-rate linked lending rates (RLLR)**, aligning their rates to the RBI's repo rate.

##### • HDFC Home Loan:

- **2019-2020:** The interest rate on home loans ranged between **8.75% - 9.00%** (floating).

- **2021-2022:** HDFC reduced its home loan rates to about **6.70% - 7.30%**, similar to SBI.

- **2023-2024:** Rates typically hovered between **8.05% - 8.55%**, but with some flexibility based on customer profiles and whether the loan was linked to the repo rate.

#### 2. Loan Eligibility and Processing:

Both SBI and HDFC have a detailed eligibility process that includes factors such as income, credit score, age, and property value.

##### • SBI Home Loan Eligibility:

- Minimum age: **18 years** (for salaried individuals) and **21 years** (for self-employed).

- Maximum age: **70 years** at loan maturity.



○ Loan amount: Up to **₹15 crores** depending on income, property, and repayment capacity.

○ Processing Fees: Typically **₹10,000 to ₹15,000** for loans under ₹75 lakh, and higher for bigger loans.

• **HDFC Home Loan Eligibility:**

○ Minimum age: **21 years** (for salaried individuals) and **23 years** (for self-employed).

○ Maximum age: **60-65 years** at loan maturity (could be extended in some cases).

○ Loan amount: Up to **₹10 crores** depending on customer eligibility.

○ Processing Fees: Typically ranges from **₹3,000 to ₹15,000** (depending on loan amount).

**Conclusion:** Both banks offer generous loan amounts. However, SBI has slightly higher loan eligibility and its processing fee is typically higher than HDFC.

### 3. Repayment Tenure:

Both lenders offer long repayment tenures, allowing flexibility to borrowers.

• **SBI:**

○ **Tenure:** Up to **30 years**.

• **HDFC:**

○ **Tenure:** Up to **30 years**, with similar flexibility.

Both banks provide the same maximum loan tenure of 30 years.

### 4. Special Loan Schemes and Features:

Both institutions offer various schemes and features targeting different segments of the population.

• **SBI Home Loan Schemes:**

○ **SBI MaxGain:** This allows borrowers to reduce their EMI burden by maintaining a higher balance in the loan account.

○ **SBI FlexiPay:** Targeted at younger professionals, it allows them to pay interest-only EMIs in the initial years.

○ **Shaurya Home Loan:** Specially designed for defense personnel.

• **HDFC Home Loan Schemes:**

○ **HDFC Home Loan:** Offers regular home loans with competitive rates.

○ **HDFC Truflux:** A flexible repayment option with the possibility of switching between fixed and floating rates.

○ **HDFC Home Loan for Women:** Provides concessional rates for women borrowers.

Both banks offer innovative and specialized loan schemes, with HDFC providing more flexibility with schemes like **Truflux** and **Home Loan for Women**, while SBI focuses on products like **MaxGain** and loans for specific sectors like defense personnel.

### 5. Customer Service:

Customer service is an essential aspect of the home loan experience. Both SBI and HDFC have a reputation for offering reliable customer service.

• **SBI:**

○ Being a government-owned entity, SBI has a vast branch network across India, and customer support is generally considered reliable, though sometimes can be slow due to the size of the institution.

○ **Digital Platform:** SBI has made improvements to its online loan application process and has an efficient online portal for managing loans.

• **HDFC:**

○ HDFC is generally known for its more personalized service and faster processing times.

○ **Digital Platform:** HDFC has invested in its digital infrastructure, and its loan management system is considered more user-friendly than SBI's in some cases.

HDFC generally provides a more streamlined, personalized experience, while SBI offers broad accessibility due to its extensive branch network.

**6. Prepayment Charges & Foreclosure:**

Prepayment and foreclosure charges vary based on whether the loan is fixed or floating.

- **SBI:**
  - **Floating rate loans:** No prepayment charges.
  - **Fixed rate loans:** Prepayment charges apply if the loan is paid off within the first 3 years.
- **HDFC:**
  - **Floating rate loans:** No prepayment charges.
  - **Fixed rate loans:** Charges apply for foreclosure within the first 3 years.

Both SBI and HDFC offer favorable terms regarding prepayment, with charges only applicable in the case of fixed-rate loans.

**Conclusion:**

Both **SBI** and **HDFC** offer competitive and flexible home loan options, but here are some quick insights:

- **Interest rates:** Both have generally similar rates, especially in recent years.
- **Eligibility & Processing Fees:** SBI has a higher loan eligibility, while HDFC may have lower processing fees.
- **Loan Features:** SBI has more specialized schemes like **MaxGain**, while HDFC offers greater flexibility in repayment with **Trufix**.
- **Customer Service:** HDFC is known for its more streamlined and customer-centric service, while SBI benefits from its extensive branch network.

In choosing between the two, you should consider personal factors like interest rates, loan eligibility, customer service quality, and the specific loan features you need.

**Comparative Summary (2019-2024)**

Feature	SBI Home Loan	HDFC Home Loan
<b>Interest Rates</b>	<b>6.70% - 8.60%</b> (repo-rate linked, varying with market changes)	<b>6.70% - 8.55%</b> (repo-rate linked, competitive)
<b>Loan Amount</b>	Up to <b>₹15 crores</b>	Up to <b>₹10 crores</b>
<b>Processing Fees</b>	₹10,000 to ₹15,000 (varies with loan amount)	₹3,000 to ₹15,000 (varies with loan amount)
<b>Eligibility</b>	Minimum age: <b>18 years</b> (salaried), <b>21 years</b> (self-employed)	Minimum age: <b>21 years</b> (salaried), <b>23 years</b> (self-employed)
<b>Loan Tenure</b>	Up to <b>30 years</b>	Up to <b>30 years</b>
<b>Special Schemes</b>	<b>MaxGain, Flexipay, Shaurya Home Loan</b>	<b>Trufix, Home Loan for Women</b>
<b>Prepayment Charges</b>	No charges on floating rate loans; Fixed rate loans have charges within the first 3 years	No charges on floating rate loans; Fixed rate loans have charges within the first 3 years
<b>Customer Service</b>	Extensive branch network; good digital services	Known for personalized service; excellent online interface
<b>Special Interest Rates</b>	<b>SBI Shaurya Home Loan</b> for defense personnel	Special rates for women borrowers; <b>HDFC Trufix</b> option

**Summary of Key Differences:**

1. **Interest Rates:** Both banks offer competitive rates, but HDFC's rates are often slightly higher compared to SBI.

However, HDFC provides more flexibility through **Trufix**.

2. **Loan Amounts:** SBI offers higher loan limits (up to ₹15 crores) compared to HDFC's ₹10 crores.
3. **Special Products:**
  - **SBI** focuses on **MaxGain**, which allows for a higher degree of flexibility with prepayments.
  - **HDFC** focuses more on **Trufix** and offers preferential rates for women.
4. **Processing Fees:** SBI's processing fees tend to be higher than HDFC's, especially for smaller loans.
5. **Customer Service:** HDFC is known for better customer service with faster processing and a more user-friendly digital experience.

### Conclusion:

Both banks offered competitive interest rates, with the rates becoming more competitive after the introduction of repo-rate linked loans. The gap between SBI and HDFC's rates narrowed significantly. Both **SBI** and **HDFC** offer reliable and competitive home loan options with slight differences in terms of interest rates, loan amounts, and features. If you prioritize flexibility in managing your loan, **SBI MaxGain** could be a good choice, whereas **HDFC** provides an edge in terms of service and the option to switch between fixed and floating rates.



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## Role Of Digital Marketing In Business Growth

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DOI - 10.5281/zenodo.15130860

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### Abstract:

*In modern days of information explosion, digital marketing has become highly influencing factor which has revolutionized the business and its marketing strategy as well. The digital marketing has become an essential ingredient of the business growth in India. The role of digital marketing and of content marketing specifically is a huge help to leverage some free advertising and helps in business growth. Digital marketing makes it simple to target your exact customers. Focusing on your specific target customers increases both customer satisfaction and revenue.*

**Keywords:** *Digital Marketing, Marketing Strategy, Content Marketing, Customer Satisfaction, Online Marketing.*

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### Introduction:

Digital marketing is the component of marketing that uses the internet and online based digital technologies such as desktop computers, mobile, phones and other digital media and platforms to promote products and services. It has significantly transformed the way brands and businesses utilize technology for marketing since the 1990s and 2000s. As digital platforms became increasingly incorporated into marketing plans and everyday life, and as people increasingly used digital devices instead of visiting physical shops, digital marketing campaigns have become prevalent, employing combinations of methods. Some of these methods include, Search Engine Optimization (SEO), Search Engine Method (SEM), content automation, campaign marketing, Data-driven marketing, ecommerce marketing, social media marketing, social media optimization, e-mail direct marketing, display advertising, e-books, and optical disks and games. Digital Marketing extends to non-internet channels that provides digital media, such a television, Mobile

Phones SMS and MMS, Callbacks, and on-hold mobile ringtons. The extension to non-internet channels differentiates digital marketing from online marketing,

### Purpose:

This Paper seeks to importance of various aspects of Digital Marketing Like  
Brand Awareness  
Content Marketing  
Create a budget  
Increases Sale

### Benefits Of Digital Marketing:

1. Brand Awareness:  
Digital Marketing helps businesses reach a wider audience and increase brand recognition.
2. Customer Engagement:  
Digital Marketing helps businesses engage with customers and get real-time feedback.
3. Cost-Effectiveness:  
Digital Marketing can be more cost-effective than traditional marketing.
4. Return on Investment:

Digital Marketing can help businesses increase their return on investments.

### Types of Digital Marketing:

- Search Engine Optimization: SEO Helps Businesses rank higher in search engine results
- Search Engine Marketing:- SEM Helps Businesses market through search engine.
- Social Media Marketing:- Helps Businesses engage with cutomers on social media.
- Pay-Per-Click Advertising:- Helps Businesses reach a targeted audience by paying per click on their advertising.
- Content Marketing:- Helps businesses create content to engage with customers
- Email Marketing:- Helps businesses send targeted messages to customers via email.

### Design /Methodology:

1. Collection of Data on Google form survey through questionnaire.
2. To take few samples of whole collective data.
3. Analysis of samples through basic statistical terminology like Mean, median, mode.
4. To find out the conclusion of analysis in terms of rate percent through study of their pie-charts and graphs accordingly.

### Google Form Questionnaire Information Graph/Piachart:

#### Tabular Format (Statistical Terminology):

Factors	Proportion
Mean	5.4
Median	5
Mode	10

Factors	Proportion
Mean	5.7142
Median	5
Mode	9

In above Situation approximately as per our data collection Facebook and Youtube platform use for collecting information and showing awareness among the digital platform.

#### Tabular Format (Statistical Terminology):

In above situation approximately as per our data collecting Influencer marketing platform use for collectiong information and make creative efforts among the digital platform.

#### Tabular Format (Statistical Terminology):

Factors	Proportion
Mean	5.5
Median	5
Mode	9

In above situation as per our data collecting video and blog opticals use for marketing strategy and create influencer environment enhance among the business.

#### Google Form link:

<https://docs.google.com/forms/d/e/1FAIpQLScyHI3DdrDFdRp8uK5k9LbVbhV3ice0MFs7eGsRmHLCyp9EyA/viewform?usp=header>

#### Approach / Objective:

1. To determine the basic proportion of Role of Digital Marketing in business growth through their sample of collective data.
2. To identify the quantitative aspects like mean, median, mode of collective data through their samples.

3. To analyze their spending money on Digital Marketing on daily, weekly, monthly, yearly basis.

**Originality / Values:**

To estimate the importance of various factors regarding our Digital Marketing form use of our business.

**Result / Conclusion:**

According to our statistical survey, almost 100% business man use of Instagram from Digital Marketing. Among the 50% choose business man purchased a product/service based on an online advertisement. Also 90% business man use of mobile marketing because there is most effective digital marketing channel. Almost 30% business man engage multiple times a day with our brand from social media and same of the 30% rarerly and never engage with our brand from social media. The business man is 90% video content prfer to consume on digital marketing platform.

**Reference:**

1. <https://www.springboard.com/blog/business-and-marketing/digital-marketing-importance/>
2. <https://www.sigmasolve.com/blog/digital-marketing-for-business/>



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## Recent Trends in the Dairy Business in India

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DOI - 10.5281/zenodo.15130877

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### Abstract:

Agriculture is the primary occupation in India. However, since most families have limited agricultural land, there arose a need for supplementary occupations. Dairy farming is one of the most important supplementary occupations in the country. In July 1970, India launched 'Operation Flood' (White Revolution), and within just forty years, it became the largest milk-producing country in the world. Today, India contributes 24% of global milk production. In 2014-15, milk production in India was 146.3 million tonnes, and the per capita daily availability of milk was 322 grams. Over time, this increased, and by 2023-24, the country's milk production had risen to 239.3 million tonnes, with per capita daily milk availability increasing to 471 grams. The total milk production in the country during this period was 1930.6 million tonnes, and the per capita daily milk availability was 39.60 grams. The average milk production during the same period was 193.1 million tonnes, while the average per capita daily milk availability was 396 grams. Recent trends in the Indian dairy industry include a growing demand for value-added dairy products like cheese, yogurt, and flavoured milk, a focus on organic and A2 milk options, increasing adoption of technology like automated milking systems and IoT for farm management, a shift towards online milk delivery services, and a growing emphasis on sustainable and ethical dairy farming practices with concerns for animal welfare and environmental impact.

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### Introduction:

Agriculture is the primary occupation in India, and even today, entire rural families depend on it. After the Green Revolution, various experiments were conducted in agriculture, increasing its productivity. Farmers also started shifting towards horticulture and fruit cultivation. However, since most families have limited agricultural land, the need for supplementary occupations arose. Today, India contributes 24% to global milk production. The country's dairy cooperative sector has become an exemplary industry for the poor worldwide. The dairy industry in India has grown significantly through cooperative efforts, making India the world's number one milk producer. India plays a crucial role in ensuring the availability of milk and dairy products to its growing population. Milk is

essential for good health. The country has a large population of milch animals, but several issues affect milk production. These include poor animal health, inadequate veterinary facilities, unscientific approaches to livestock management, and the lack of proper care for high-quality milch animals. Due to these reasons, the per capita milk availability in the country remains below the minimum required level (Khatakale, 1995). To improve this situation, there is a need for crossbreeding of cows and buffaloes, modern cattle shed management, scientific milking practices, balanced nutrition, proper guidance on animal husbandry, and stability in government-determined milk prices. These measures will help farmers in rural areas increase milk production and maximize their profits.

**Definition of Milk:**

"Milk is a white secretion obtained from the mammary glands of mammals. In short, milk is the secretion obtained from the healthy udder of a common mammal approximately 4 days after giving birth and up to 15 to 30 days before the next birth."

A whitish liquid containing proteins, fats, lactose, and various vitamins and minerals that is produced by the mammary glands of all mature female mammals after they have given birth and serves as nourishment for their young.

**Significance of the Study:**

Even today, most people in India live in rural areas. Small and marginal land holders in rural areas as well as some agricultural labourers are engaged in dairy business. This business is also seen as a supplementary sideline to agriculture, due to the seasonal income from agriculture. The standard of living of the majority of the people is inferior but the milk business helps people to become self-employed and improve their economic income.

**Objectives of the Study:**

1. To review milk production in India.
2. To study the recent trends in the dairy business in India.

**Research Methodology:**

The present paper entitled “Recent Trends in the Dairy Business in India” is

mainly depend upon secondary data. The secondary data mainly collected from the annual reports of National Dairy Development Report (NDDDB). The necessary secondary data of the study will be collected from reference books, reputed journals, magazines and website.

**Milk Production in India:**

Before independence, the dairy business in India was not systematically organized. Traditional methods were used for milking and preparing dairy products such as curd, buttermilk, butter, ghee, and shrikhand. In 1904, the first cooperative law in India led to the establishment of agricultural credit supply institutions. Later, under the second cooperative law of 1912, various other cooperative institutions were founded alongside cooperative credit supply institutions. This laid the foundation for the dairy industry in the cooperative sector.

After independence, various programs were implemented under the Five-Year Plans for the development of the dairy sector. To meet the milk demand of large cities like Mumbai, the first dairy project in India was established at Aarey in 1947. Under the guidance of Dr. Verghese Kurien, ‘Operation Flood’ (White Revolution) was launched in July 1970. Within just forty years, India became the largest milk producer in the world. In 2023-24, India’s total milk production increased to 239.3 million tons.

**Table No. 1: Milk production and per capita availability of milk in India**

Sr. No	Year	Production (Million Tonnes)	Per Capita Availability (gms/day)
1	2014-15	146.3	322
2	2015-16	155.5	337
3	2016-17	165.4	355
4	2017-18	176.3	375
5	2018-19	187.7	364
6	2019-20	198.4	406
7	2020-21	210.0	427
8	2021-22	221.1	444
9	2022-23	230.6	459



10	2023-24	239.3	471
<b>Total</b>		1930.6	3960
<b>Average</b>		193.1	396
<b>Standard Deviation</b>		32.18	52.77
<b>coefficient</b>		16.37	13.33
<b>Compound Annual Growth Rate (CAGR)</b>		0.06	0.04
<b>Maximum</b>		239.3	471
<b>Minimum</b>		146.3	322

**Source:** Basic Animal Husbandry Statistics MoFAHD, DAHD, GOI

The above Table No. 1 presents the milk production in India from the year 2014-15 to 2023-24. In 2014-15, milk production in India was 146.3 million tonnes, and the per capita daily availability of milk was 322 grams. Over time, this increased, and by 2023-24, the country's milk production had risen to 239.3 million tonnes, with per capita daily milk availability increasing to 471 grams. The total milk production in the country during this period was 1930.6 million tonnes, and the per capita daily milk availability was 39.60 grams. The average milk production during the same period was 193.1 million tonnes, while the average per capita daily milk availability was 396 grams. During this period, the standard deviation of milk production was 32.18, while the standard deviation of per capita daily milk

availability was 52.77. The compound annual growth rate (CAGR) of milk production in the country during this period was 0.06%, and the CAGR of per capita daily milk availability was 0.04%. The coefficient of variation for milk production in the country during this period was 16.37%, while the coefficient of variation for per capita daily milk availability was 13.33%. During this period, the maximum milk production recorded was 239.3 million tonnes, while the minimum milk production was 146.3 thousand tonnes. Similarly, the maximum per capita daily milk availability was 471 grams, while the minimum was 322 grams. From this data, it can be concluded that there has been a consistent and significant increase in milk production in India over the years.

#### **Recent trends in the dairy business in India:**

Recent trends in the Indian dairy industry include a growing demand for value-added dairy products like cheese, yogurt, and flavoured milk, a focus on organic and A2 milk options, increasing adoption of technology like automated milking systems and IoT for farm management, a shift towards online milk delivery services, and a growing emphasis on sustainable and ethical dairy farming practices with concerns for animal welfare and environmental impact.

#### **Key points about these trends:**

- **Consumer preference shift:** Consumers are increasingly opting for healthier and premium dairy products, driving demand for value-added items like probiotic yogurt, fortified milk, and specialty cheeses.
- **Organic and A2 milk popularity:** Growing awareness about health benefits is leading to a rise in demand for organic and A2 milk, which is perceived as having better nutritional qualities.
- **Technological advancements:** Dairy farms are adopting advanced technology like automated milking

systems, sensors for cattle health monitoring, and AI-based optimization of dairy operations.

- **E-commerce penetration:**  
Online milk delivery services are gaining traction, particularly in urban areas, allowing for convenient access to dairy products.
- **Sustainability focus:**  
Dairy companies are increasingly focusing on sustainable packaging and ethical sourcing practices to address environmental concerns.
- **Plant-based alternatives:**  
While not as dominant as traditional dairy, there is a growing interest in plant-based milk options like almond, soy, and oat milk, catering to vegan consumers.
- **Rise of Dairy Startups:**  
Growth of innovative dairy brands offering value-added products like flavoured milk, probiotic drinks, and lactose-free dairy.
- **Government Support & Policies:**  
Initiatives like the National Dairy Plan and subsidies for dairy farmers.
- **Sustainability & Eco-friendly Practices:**  
Adoption of biodegradable packaging, waste management, and sustainable dairy farming techniques.
- **Export Opportunities:**  
India is expanding its dairy exports, particularly in markets like the Middle East and Southeast Asia.

### Conclusion:

Today, India is the number one country in the world in the dairy business. Recent trends in the Indian dairy industry include a growing demand for value-added dairy products like cheese, yogurt, and flavoured milk, the production of organic and A2 milk, increasing adoption of automated milking systems and IoT technology, the rise of online milk delivery

services, and a growing emphasis on sustainable and ethical dairy farming practices that focus on animal welfare and environmental impact. However, despite these advancements, several challenges still hinder the full development of the dairy sector in rural areas. These include traditional milking methods, milk adulteration, poor animal health, inadequate veterinary facilities, a lack of hybrid cattle, unstable milk prices, and insufficient government support. These factors continue to limit the overall growth of the dairy industry in India.

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## To Study The Growth And Development Of Selected Private General Insurance Companies In India

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**DOI - 10.5281/zenodo.15130885**

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### **Abstract:**

*The growth of insurance assiduity is associated with the general growth of assiduity, trade and commerce. The origin of insurance services may be traced back to 14th Century in Italy when vessels carrying goods were covered under different threats. The methodical and orderly morning of the insurance assiduity took place in UK at Lloyds coffee house in Tower Street in London. In developing countries, insurance sector has assumed special significance as it has the implicit to speed up the rate of growth of the frugality. Insurance Industry assists the development process of an frugality in several ways. Primarily, it acts as mobilizer of savings, fiscal conciliator protagonist of investment exertion, stabilizer of fiscal request, threat director and an agent to allocate capital coffers efficiently. Although the insurance assiduity has grown fleetly in the industrialized countries. Its growth in developing countries has neither been satisfactory nor in tandem with the growth of other sectors of the frugality. The 12 most industrialized countries in the world still regard for 88 of global decoration volume. The proportion of emerging nations is incredibly low.. The slow growth insurance services in developing countries calls for an in- depth analysis of the nature and pattern of the elaboration of these services programs pursued to develop the insurance assiduity and constraints thereof also need close examination.*

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### **Introduction**

Previously, Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC), together with its four subsidiary companies, were the only two state-owned insurers in the Indian insurance market. Beginning in December 2000, these the following insurance businesses—Oriental Insurance Company Limited, New India Assurance Company Limited, National Insurance Company Limited, and United India Assurance Company Limited—have become separate insurance companies after being detached from the parent company. The first

sets of licenses, divided into categories like as life and non-life insurers, were granted in 2001 by the Insurance Regulatory and Development Authority (IRDA). For the analysis, all private sector general insurance businesses that operated in India from 2012–13 to 2021–22 are included. The top six private sector general insurers and General Insurance Corporation, the only private sector general insurer, are studied in order to determine the characteristics of Indian general insurance businesses. As of March 31, 2022, the following companies offered general insurance in the Indian market:

Table: 1.1

## Profile of Indian General Insurance Companies Selected for the Study

Sr. No.	Reg. No.	Date of Reg.	Name of the Company
1.	106	04/12/2000	Indian Farmers Fertiliser Co-Operative TOKIO General Insurance Company Limited.
2.	113	02/05/2001	Bajaj Allianz General Insurance Company Limited.
3.	115	03/08/2001	ICICI Lombard General Insurance Company Limited.
4.	102	23/10/2000	Royal Sundaram Alliance General Insurance Company Limited.
5.	103	17/08/2000	Reliance General Insurance Company Limited.
6.	108	24/08/2000	Tata AIG General Insurance Company Limited.

**Source: Source: Compiled from Annual Reports of IRDA.**

### Review Literature:

**JawaharBabu (2010):** In their paper surveyed the general factors impacting the automobile insurance claims settlements, particularly those offered by third-party agents, are the main subject of this study. The majority of disputes are resolved by courts, which results in an unusually long settlement delay. The rise in auto accidents is partially to blame for this. This study was specifically focused on the process of settling claims.

**SarojiHiremath (2013):** In their study the researcher's focus in this study was on the new trends and difficulties that general insurance businesses in India are facing, especially from global insurers, as well as on how their services are becoming more varied and customized. Despite this, there are more companies in the general insurance industry in India due to the country's large market and ample opportunity for growth.

**Geeta Bhardwaj et al. (2015):** In her paper the problems and scams in health insurance were the main topics of this study. The researcher acknowledged the process for effectively overcoming fraud. The company should implement a top-down approach to

determine the true impact of the risk on their operations. After looking at the amount of fraud cases in India, it was found that 15% of all claims were made by opportunistic, repeat, and organized fraudsters. Fraud from both the insurer's and the insured's perspective is frequently evaluated.

**Chakravorty (2016) :** Evaluated the financial performance of four Indian public-sector general insurance companies. Out of the four public-sector general insurance companies in India, the author discovered that United India General Insurance Company performs the best.

**Shrinivas (2008), Subhash and Bhat (2007) :** In their study based on the experiences of the key marketing personnel for LIC of India, such as branch managers, development officials, and insurance agents, examines the reasons behind LIC's insurance policy defaults following privatization. Draw attention to how innovation is essential to the insurance sector's expansion. They believe that satisfying consumers' growing expectations will be the primary factor in the insurance industry's success. To grow the insurance industry in the upcoming years, LIC and other private players must also make a concerted effort to reach the

rural market. The potential for maximizing the wealth of private institutional investors, affluent people, and private families is enormous.

**Ramana (2008)** :The quick development of the Indian insurance sector is covered. In addition to posing significant obstacles to insurance companies looking to expand internationally, Raman (2004) underlined regulatory dissonance, which further emphasizes the impossibility of exporting complete business models from one nation to another. In the article, the regulatory dissonance between the non-life insurance markets in India and the United States was discussed. Regulatory dissonance in the areas of business line definition, accounting treatment of acquisition expenses, treatment of unearned premiums, catastrophe reserve creation, reinsurance cession, investment regulation, duties to the rural and social sector, rate and form regulation, and solvency margin computation are all attempted to be highlighted

#### **Need for the Study:**

The insurance business has seen new opportunities as a result of the winds of liberalization, globalization, and privatization, which have created an extremely competitive environment. Following the banking sector's successful privatization efforts, the insurance sector has emerged as a shining example of the advantages of competition and permitting the entry of foreign and private businesses. A multitude of issues pertaining to the system's overall quality of portfolio, productivity, image, and operational efficiency have been brought about by the insurance industry's explosive growth after nationalization. They have been getting complaints all the time about the customer service being worse. These insurance companies have been forced to reassess their operating philosophy and methodology since the start of the reforms in order to be

competitive with businesses in the public sector. It is obvious that the current public insurers must act quickly to maintain their competitiveness by executing tasks more efficiently and effectively while also maintaining cost effectiveness. These private sector businesses have launched numerous efforts in an effort to compete with public sector businesses. However, even after changing their strategy and mindset during the post-reform era, private sector businesses still need to evaluate their current situation.

#### **Objectives of the Study:**

1. To study the growth and development of selected private general insurance companies in India.
2. To study the role of selected private general insurance companies in India.
3. To make suggestions based on the study to improve the financial position for better practice in future for the selected units.

#### **Research Methodology:**

The study is entirely based on secondary data. The methods such the data will be collected from the relevant annual reports of general insurance companies, the annual reports of IRDA and other related literature available both as hand copy and on the net have been consulted for collection of data apart from these various magazines, books, manuals of the insurance and websites of the IRDA. A number of other websites relating to insurance business, such as [www.iffcotokio.co.in](http://www.iffcotokio.co.in), [www.bajajallianz.com](http://www.bajajallianz.com), [www.icicilombard.com](http://www.icicilombard.com), [www.royalsundaram.in](http://www.royalsundaram.in), [www.reliancegeneral.co.in](http://www.reliancegeneral.co.in), [www.tataaig.com](http://www.tataaig.com), [www.irdaindia.org](http://www.irdaindia.org) etc. will be also visited for the purpose of data collection.

**Result & Discussion:****Trends in Gross Direct Premium:****Gross Direct premium of Private Sector General Insurance Companies (Rs. In Crore)**

Years Insurers	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
IFFCO TOKIO General Insurance Company	2565.03	2930.92	3329.96	3691.33	5563.70	5631.89	7001.84	7961.04	8410.88	8452.91
Bajaj Allianz General Insurance Company	4001.4	4516.44	5229.84	5832.15	7633.28	9445.22	11059.41	12779.77	12569.53	13688.59
ICICI Lombard General	6133.99	6856.16	6677.79	8090.71	10725.20	12356.85	14488.23	13312.84	14003.09	17976.87
Royal Sundaram Alliance Insurance Company	1560	1437.04	1569.2	1694.12	2188.78	2623.44	3172.57	3666.96	2822.28	2866.59
Reliance General Insurance Company	2010.01	2388.82	2715.83	2791.56	3935.35	5069.08	6191.03	7465.04	8310.28	9408.96
TATA AIG General Insurance Company	2135.08	2362.71	2714.13	2958.56	4167.97	5435.92	7742.66	7384.53	8042.06	10024.97
<b>Total</b>	<b>18405.51</b>	<b>20492.09</b>	<b>22236.75</b>	<b>25058.43</b>	<b>34214.28</b>	<b>40562.4</b>	<b>49655.74</b>	<b>52570.18</b>	<b>54158.12</b>	<b>62418.89</b>

**Source: Annual Reports of Private Sector General Insurance Companies from 2012-13 to 2021-22.**

The gross direct premium trend over the study period is displayed in the table above. Prior to liberalization, the gross direct premium income of private sector general insurance businesses was trending higher all of it. Throughout the whole pre-reform era, ICICI Lombard General Insurance Company was the biggest private sector general insurance provider, followed by IFFCO TOKIO General Insurance Company, Bajaj Allianz General Insurance Company, Royal Sundaram Alliance Insurance Company, Reliance General Insurance Company, TATA AIG General Insurance Company. For every private sector general insurance company, the growth rate of gross

direct premium over the prior year has been computed to assess the examining the growth of private sector general insurance businesses before and after privatization to determine the effect of privatization on that growth. The growth rate of private sector general insurance is seen in Tables 1.2. Businesses in the pre-reform era outnumber those in the post-reform era. It is evident that the growth rate of general insurance companies in the private sector has been adversely impacted by privatization. The state-owned insurance companies have been rocked by the private sector and are now compelled to take fast action to maintain the insurance sector's greater growth rate

### Gross Direct Premium Income of Private Sector General Insurance Companies:

The primary source of income for general insurance businesses is the premiums they collect. The regular premium

is the amount that the insurers get as payment for taking on the risk. The annual premium income for several years is shown in table provided below.

**Table1.3: Gross Direct Premium Income of Private Sector General Insurance Companies (Rs. In Crores)**

Insurers Years	IFFCO General Insurance Company		Bajaj Allianz General Insurance Company		ICICI Lombard General Insurance Company		Royal Sundaram Alliance Insurance Company		Reliance General Insurance Company		TATA AIG General Insurance Company		Total
	Insurance Company	% Age Share	Insurance Company	% Age Share	Insurance Company	% Age Share	Insurance Company	% Age Share	Insurance Company	% Age Share	Insurance Company	% Age Share	
2012-13	2565.03	4.07	4001.40	6.35	6133.99	9.74	1560.00	2.48	2010.01	3.19	2135.08	3.39	18585.51
2013-14	293092	3.78	451645	5.82	685616	8.84	143704	1.85	238882	3.08	236271	3.05	2049210
2014-15	332997	3.93	522985	6.18	667780	7.89	156920	1.85	271584	3.21	271414	3.21	2223680
2015-16	3691.33	3.83	5832.15	6.05	8090.71	8.39	1694.12	1.76	2791.56	2.90	2958.56	3.07	25058.43
2016-17	5563.70	4.34	7633.28	5.96	10725.20	8.37	2188.78	1.71	3935.35	3.07	4167.97	3.25	34214.28
2017-18	5631.89	3.74	9445.22	6.27	12356.85	8.20	5623.44	1.74	5069.08	3.36	5435.92	3.61	35126.48
2018-19	7001.84	8.61	11059.41	13.61	14488.22	17.82	3172.57	3.90	6191.03	7.62	7742.66	9.53	49655.73
2019-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C.A.G.R . (%)	15.43	-	15.63	-	13.06	-	10.67	-	17.43	-	20.21	-	15.07

Source: Compiled from Annual Reports of IRDA.

Data for the year 2019-20 to 2021-22 is not available.

The preceding table shows that the income from regular premiums increased at a growth rate of 20.21 percent, from 2135.08 crores to 7742.66 crores of TATA AIG General Insurance Company. The private sectors general insurance companies now receive regular premium income of 7001.84 crores, 11059.41 crores, 14488.22 crores, 3172.57 crores, 6191.03 crores and 7742.66 crores, in that order, throughout 2021–22. The average annual growth rate for private sectors is 15.43 percent, 15.63 percent, 13.06 percent, 10.67 percent, 17.43 percent and 20.21 percent indicating that the growth in regular premium. Even with an equal growth rate, the percentage of private sector share decreased until 2013–2014. It dropped from 4.07 percent, 6.35 percent, 9.74

percent, 2.48 percent, 3.19 percent and 3.39 percent in 2012-13 to 3.78 percent, 5.82 percent, 8.84 percent, 1.85 percent, 3.08 percent, and 3.05 percent in 2013-14. It began to rise once more in 2015-16, reached to 3.83 percent, 6.05 percent, 1.76 percent, 2.90 percent and 3.07 percent in 2015-16.

#### **Commission Expenses Regular Premium:**

In order to ensure that general insurance costs stay below the set limit, expense management is essential. Furthermore, paying commissions, which make up to 80% of the overall cost of operating a general insurance policy, is a significant expense running costs. Table 1.6 shows the commission payment versus normal premium.

**Table 1.4: Commission Expenses Regular Premium (Rs. In Crore)**

<b>Insurers Years</b>	<b>Private Sector</b>	<b>LIC</b>	<b>Total</b>
2012-13	3412.85	7707.36	11120.21
2013-14	3040.13	8458.94	11499.07
2014-15	3003.16	6293.44	9296.6
2015-16	3311.17	6473.19	9784.36
2016-17	3840.52	7096.55	10937.07
2017-18	5100.55	8235.52	13336.07
2018-19	5813.95	8799.61	14613.56
2019-20	6339.51	9711.17	16050.68
2020-21	6845.72	8969.83	15815.55
2021-22	8088.8	9730.97	17819.77
C.A.G.R. (%)	9.01	2.36	4.83

**Source: Compiled from Annual Reports of IRDA.**

The general insurance industry's commission costs increased by 4.83 percent to 17819.77 crores in 2021–22 from 11120.21 crores in 2012–13. Growth of general insurance businesses in the private sector in terms of commission for regular LIC (2.36 percent) and premium (9.01 percent) are higher.

#### **Commission Expenses Ratio:-**

It is the proportion of commission costs to the premium that general insurers

The private sector's commission costs grew from 3412.85 crores in 2012–13 to 8088.0 crores in 2021–2022. LIC pays its agents a higher commission in contrast to the ordinary premium, which has declined over time. It is as a result of it receiving greater premiums.

under write. The commission to normal premium ratio is displayed as follows in table 1.7.



Table1.5: Commission Expenses Ratio of General Insurance

(In Percent)

Insurers Years	Private Sector	LIC	Total
2012-13	15.63	25.43	41.06
2013-14	14.63	26.51	41.14
2014-15	12.56	27.23	39.79
2015-16	12.20	27.16	39.36
2016-17	11.62	26.98	38.60
2017-18	13.57	29.26	42.83
2018-19	13.88	28.09	41.97
2019-20	14.30	16.76	31.06
2020-21	14.60	26.44	41.04
2021-22	10.94	26.55	37.49

Source: Compiled from Annual Reports of IRDA.

Given that LIC's ratio is larger than the private sector in various years, the above table shows that LIC has had to pay more commission in order to receive regular premium payments. It grew from 25.43 percent in 2012–13 to 26.55 percent currently, whereas the private sector ratio has similarly demonstrated a declining tendency

. From 15.63 percent in 2012–13 to 10.94 percent in 2021–22, it has decreased. This indicates that the insurers will soon have to pay significant fees because the industry-wide ratio increased over the course of several years

### Conclusion:

This study destined to evaluate the performance of selected private general insurance companies. It is observed that private sector general insurance companies have to adopt new and innovative policies to give momentum to the growth so that they can compete with private players. The development in general insurance business in India, so far, is only the good start still it has to reach 90% of the population in India. It is an evergreen and emerging market for insurance companies if they focus. As people are also getting aware of insurance products and services, the regulatory body i.e. Insurance regulatory Development Authority (IRDA) must focus on standard policies to be followed by both public and private sector general insurance companies.

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## E- Commerce in Banking Sector

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**DOI - 10.5281/zenodo.15143737**

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### **Abstract:**

*Electronically-based payment systems have been in operation since the 1960s and have been expanding rapidly as well as growing in complexity. However, in most of the major industrialized countries, an inverse relationship exists between the volume and the number of transactions handled electronically. The Internet is experiencing rapid growth which is being largely driven by new commercial users of the network. Other commercial on-line services provided by companies such as CompuServe, America On-line and Prodigy is also expanding rapidly.*

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### **Introduction:**

With the rapid expansion of the Internet, there are a number of initiatives underway for the creation of a secure cost-effective payment system which will be able to support growing commercial activities on the network. Although electronic payment systems for large payments have been in operation for some time, rapidly expanding volumes of foreign exchange and securities trading are increasingly at variance with the requirements for a cost-effective and efficient electronic payment system for making low value payments. Current progress in establishing such payment systems on the Internet is examined.

**E-Commerce:** It is a way of doing business transactions via the internet. E-commerce or e-business is based on the electronic processing and transmission of data, including text, sound, and video. E-commerce as it is commonly known is the use of technology to conduct financial transactions online. Commerce on the Internet is already a reality. The communication facilities which are on offer are rapidly become integrated as core business tools (Cronin, 1994). The emphasis to date has been on use of the Internet for

communications with customers and other companies operating on collaborative ventures. However, an increasing number are concentrating on transactions between businesses and on-line sales.

**E-Banking:** It allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtualbank, credit union or building society. To access a financial institution's online banking facility, a customer having personal Internet access must register with the institution for the service, and set up some password (under various names) for customer verification. The password for online banking is normally not the same as for telephone banking. Financial institutions now routinely allocate customer numbers (also under various names), whether or not customers intend to access their online banking facility.

### **Objectives of the Study:**

1. To study of payment systems through E-Banking and their role in respect to global trade and investment.
2. To review the various existing payments systems and concludes that a cost

effective and efficient electronic means for small value payments has yet to be established on a universal global basis.

3. To understand current developments in the expansion of the Internet as well as other broadly uses in E- commerce & Banking sector.

### **Methodology of the Study:**

This paper is prepared on the basis of secondary sources of data, such as books, study material of professional courses, government, websites and some extent primary observations of the researchers.

### **Payment Systems through E-Banking:**

Money and monetary systems have also been strongly linked to the role of the state. In the medieval period, money largely meant gold or silver coins whose weight and fitness were guaranteed by the ruler under whose authority they were issued. For a long period of history, official mints were established which would convert bullion into an equivalent weight of coins, minus a fee. In the 20th century, issuance of currency has been jealously guarded by the nation state and economic policy increasingly has been exercised indirectly through the monetary system using interest rates.

**1. National systems of exchange:** The development of money has been inextricably associated with the growth of trade and commerce. Monetary exchange and banking systems then developed rapidly as foreign and domestic trade expanded exponentially following the onset of the industrial revolution. Although commodity-based money dates back to antiquity, money in its present primarily token form (i.e., money that does not exist in any physical form but takes the form of financial claims on banks and other financial institutions) has only assumed predominance during the past 100 years. However, over the past 40 years, growth in international trade, which has exceeded the expansion of GDP at the

national level, has resulted in a global economy which increasingly has no place for economic and monetary policies which are pursued purely at the national level.

### **2. International systems of exchange:**

International trade has grown significantly due to LPG policy and with it the associated monetary flows. More recently, the globalization have led to a spectacular growth in the value of non-trade-related financial transactions. Every transaction whether trade- or non-trade-related gives rise to obligations that need to be settled through a transfer of money between the parties involved. Settlement of non-trade-related and large value trade transactions is increasingly based on the electronic large value payment systems which have been developed since the 1960s. Together this has led to a major expansion in payment and settlement systems. These now handle payment volumes on a daily basis which collectively dwarf economic output in the main industrial countries.

**3. Banking and Securities markets:** Non-trade related international and domestic financial transactions have grown substantially both in absolute terms and relative to the growth in trade. Elaborate settlement systems are being developed to contain the burgeoning risks which are involved. The overall rate of increase has been substantial in the past 15 years. The past 25 years has seen a progressive globalization of world securities markets. While the speculative flow of funds into the world's emerging equity markets has declined from their peak in 1994, commentators identify them as a key source of future growth in the late 1990s. Standard Chartered Bank estimates that the size of emerging markets in terms of market capitalization is set to double to 4 trillion US dollars within the next five years, whereas others estimate that if present growth rates continue, these new markets could account for around half the world's equity market

capitalization by 2015 (*Financial Times*, 1994b). When messages are on free format (unrecognized universally) recipients have to interpret and to rekey them, involving higher levels of cost, more time and making the systems much more prone to the introduction of errors. At the same time there is a countervailing pressure to settle transactions, particularly those relating to securities, more quickly.

**4. Payment & Settlement Systems:** A mixture of different payment systems has evolved to service the growing requirements of both trade- and non-trade-related commerce. In the majority of cases, these systems operate as closed proprietary networks, creating incompatibilities between different systems. There is a particularly sharp division between the payment and settlements systems which are used for large value transfers and those which are available to settle smaller payments, particularly on a cross-border basis. This has led to an inverse relationship between the volume and the number of transactions. It has also further accentuated the division between large multi-national corporations and smaller enterprises wishing to utilize electronic systems for making payments. These large corporations seek to minimize the costs of transfers within their operations while preserving the legal integrity and tax status of the companies concerned. Smaller companies which do not have access to these networks are forced to rely on a paper-based system of documentary credits. These are generally very time-consuming as well as costly to buyer and seller alike.

**5. National Payment Systems:** Electronic payment systems are not new and have been around in some form for several decades. The volumes passing through wholesale systems are huge and it is useful to provide some indications of the scale of monetary flows which are involved. According to the Bank for International Settlements (BIS), it takes less than three business days for

Japan's interbank funds transfer systems to generate turnover equivalent to the country's annual economic output and around four days in Germany. However, both the volume and scale of these financial flows are increasingly removed from the day-to-day reality of making payments within and across borders for goods and services. International large value payments are increasingly intertwined. In Switzerland the proportion of large value payments which are one end of a foreign exchange transaction is already 90%. Expectations are that as finance becomes even more global in scope, then similar proportions will exist in some of the other major financial centers. This creates a push for real time settlement, ultimately on a global scale linking all the national large payment systems together (*Economist*, 1993).

**6. Correspondent Banking:** In contrast to the inter-bank settlement systems which have been developed for large value payments; other cross-border transactions are based on older payment architecture. The correspondent banking system remains widely in use throughout the world. It is also used where banking systems are fragmented, for example the United States, where it is used to facilitate payments between local regional banks by using large money center or payment banks. The correspondent banking system, although now ingrained after centuries of established practice, has become increasingly outdated. Its principal disadvantage lies in the requirement to involve three and sometimes even more parties to carry out the transfer of a single payment.

**7. Payment Messaging Systems:**

The demands for international settlement of currency and securities transactions have increased, electronic payment systems for large payments have developed. SWIFT, which stands for the Society for Worldwide Interbank Financial Telecommunication, currently dominates the field of interbank

messaging but is increasingly facing competition from other networks. Although the SWIFT system enjoys world-wide acceptance it is dependent on the same heritage of correspondent banks which form the basis for all low value cross-border transfers. SWIFT has more recently has been examining other opportunities to provide 'value-added' services including messaging associated with the global securities markets. It is generally accepted that a point will soon be reached where more traditional means of settlement using telex and facsimile will no longer be able to cope (*Financial Times*, 1994h). SWIFT is therefore focusing its attention on the requirements for global settlement of large value payments. Its existing proprietary network and charging structure is simply not cost effective when making lower value payments. In recent years, other competing cross-border electronic payment systems have been established.

**7. Checks and Bank Transfers:** Despite the development of electronic payment systems, business-to-business payments are still predominantly made using non-electronic funds transfer (checks or telegraphic transfer). In the US, despite the development of an array of automated systems, most businesses continue to bill their customers with paper invoices and to make payments to suppliers using paper checks. The same inverse relationship between payment volume (in terms of transaction volume) and aggregate payment value is mirrored in all the other industrialized countries where the percentage of business-to-business payments made electronically is frequently even lower than the 12.5% in the US. Paper-based payment systems are an increasingly costly anachronism in an age which permits cost effective global electronic communications systems. Individual businesses have also been reluctant to move to electronic methods, preferring instead to focus on automating internal administrative processes

and in some cases capitalizing on the float benefits which accrue as a result of payments in transit.

**8. Credit Card Payment Systems:** Credit and debit cards are rapidly growing in significance as the preferred method of settling small value payments associated with the purchase of specific goods and services. Separate electronic clearing and settlement systems have been established by the major credit card companies. Both MasterCard and Visa have established their own networks which are used for verifying transactions world-wide. Electronic point of sale terminals permit card details to be verified in less than 15 seconds with networks linking the merchant, the credit card processor and the card issuer world-wide. These networks are growing rapidly as the trend for consumers to make payments by credit card in place of writing a cheque continues to grow. The growth in credit card usage confirms the basic demand which exists for more efficient electronically based payment systems.

**9. Cash and Automatic Teller Machines (ATMs):** Despite the development of electronic payment systems, modern industrial economies still function to a large extent on cash payments. In the United Kingdom, around 85% of payments by volume are still made in this way (Association for Payment Clearing Services, 1994). Although cash payments represent the direct converse of electronic forms of payment, cash delivery is itself increasingly based on the huge base of Automatic Teller Machines (ATMs) which are being increasingly networked together to permit customers to collect cash from different banks as well as in other countries. ATM and credit card networks are linked in that VISA and MasterCard holders have long enjoyed the facility to draw cash from ATMs. A number of companies, including NatWest in the UK, are developing smart card technologies, which may ultimately

bridge the gap between ATM networks for delivering cash and the requirement to make electronic payments. NatWest are leading a consortium to develop smart card technology to develop an 'electronic purse' which with suitable equipment could also be used to transact payments on the Internet.

### **Development of Internet Payments System:**

#### **1. Development of Payment systems:**

Markets of any sort involve transactions, right through to the point when the seller has been paid by the buyer. Until that point, the whole transaction remains uncertain. The more primitive the system, then the longer the delay is between undertaking to pay and actual payment, and the greater is the uncertainty. The Internet offers the prospect of a highly cost effective payment system for low value transactions. The technologies involved are able offer nearly to instantaneous settlement of transactions.

At present Internet customers have a limited set of options for making payments? The simplest option is to provide details of a credit card number and transmit this information to the merchant vendor usually using an alternative to electronic mail, either the telephone or fax. A number of enterprises currently trading on the Internet have opted for this payment method.

**2. Digitized 'e-cash' Systems:** A number of companies are developing payment systems which permit direct payments to be made anonymously. Payment takes the form of encoded messages representing the encrypted equivalent of digitized money. The aim is to be able to effect payment directly without requiring the use of intermediaries. A number of trials are presently under way to test the concepts which are involved. One of the leading firms which is developing an 'e-cash' system is Digi Cash, which has previously been involved in developing smart card technologies. Payments consist of uniquely

coded digital tokens which are established in such a way as to prevent duplication or fraud. Under the DigiCash scheme, customers would use local currency to buy an equivalent amount of digital cash from a bank. One of its key attractions is that it avoid the time and expense associated with becoming an approved credit card accepting merchant. Anyone will be able to set up a business and receive e-cash once the system is operating fully.

**3. Payment Clearing Systems:** A number of companies are attempting to overcome the security issues involved in handling payments on the Internet by establishing electronic clearing systems. Essentially the service on offer involves a system of secure messages which permit buyer and seller to communicate with each other, while also permitting instructions to make payment to be sent via the message/payment clearer, frequently using existing proprietary networks. First Virtual checks with the buyer that a particular transaction is to go ahead before arranging the appropriate account debit. First Virtue's initial aim is to permit businesses to receive income for services (such as publications) over the Internet where traditional payment methods would be uneconomic. In addition to facilitating debit or credit card payments, CyberCash will also provide independent electronic payment services. Accounts are established directly with CyberCash and maintained on the basis of an account holder's CyberCash key and not on direct user identity.

**4. Credit Card-Based Systems:** The major credit companies have been the only established financial institutions actively investing in future payment systems on the Internet. Credit card based payment systems have some limitations already identified earlier in the paper. Nevertheless, telephone-based credit card payments currently account for the majority of Internet commercial transactions. A secure and

efficient method to transmit credit card details will clearly be welcomed as a major step forward. A number of initiatives are underway. Both of the major credit card companies have linked up with software houses to develop the encryption software systems which will be required. Visa and Microsoft announced that they were jointly developing software based on a security architecture which will enable customers to make purchases using coded credit card, debit card and charge card numbers on-line.

#### **5. Smart Card Based Systems:**

Some observers believe that the only way in which payments over the Internet can be made secure is to physically separate authentication from the process which provides the communication links between buyer and seller. A number of companies are therefore examining the use of smart card readers linked to a personal computer. A smart card used to store money in the same way as a phone card would make it possible to separate authentication from the payment process. Smart cards technology would permit them to be charged up with cash at an ATM or separately using a proprietary bank network. The value in the smart card could then be transferred securely and anonymously over the Internet.

#### **Limitations:**

1. It requires the buyer to incur the additional expense and inconvenience of conveying credit card details and requires that the seller is accredited by a merchant acquirer/credit card processor.
2. It is also relatively costly since credit card merchant acquirers generally charge premiums for handling telephone-based sales. There is a general unwillingness to make personal credit card details available in this form, since both buyer and seller are exposed to fraud.
3. Difficulties which have been identified with the present system include the fact that banks run up large and unmonitored overdrafts during the day, exposing

members of the system to the risk that one might fail before payments had been completed with a dependence on 'unwinding' payments as the remedy for failure.

4. There is increasing pressure to use messaging as a result of falling settlement times. These have meant that it is increasingly difficult to trade confirmations in paper form.
5. The fundamental difficulty with establishing electronic payment systems on the Internet is that system was specifically designed to facilitate the free exchange of information.
6. Credit card payment systems have proved to be highly vulnerable to fraud. Credit cards can be stolen from their owners and then misused, and merchants accepting credit card payments can fraudulently fail to deliver goods.

#### **Conclusion:**

There are signs of increasing divergence between the existing electronic large value payment systems and the requirement for a globally-based electronic payment system which can process low value payments cost effectively. The former systems are based on proprietary closed systems architectures whose underlying technology is often mainframe-based and where communications are restricted to leased circuits. In addition, large value payment systems are increasingly becoming devoted to the processing of large foreign exchange and securities transactions which are largely divorced from the real trade in goods and services. This aggravates the inverse relationship which already exists between large volumes of transactions which are being processed in paper form compared to a much smaller number of very large payments which are processed electronically. New trading opportunities are being established as a result of the growth of the Internet and other on-line networks.

Many bankers remain skeptical that Internet-based payment can and will emerge. They believe that they will prove to be largely peripheral to established unchanged patterns of retailing and commerce along with their associated payment systems. However, the evidence is pointing to an alternative consensus. The result is likely to be the creation of a new global commercial market place which permits goods to be ordered and paid for electronically irrespective of location.

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## The Next Frontier: Future Business Management in the Age of AI and Machine Learning

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**DOI - 10.5281/zenodo.15143767**

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### **Abstract:**

Artificial Intelligence (AI) and Machine Learning (ML) have revolutionized business management by optimizing operations, improving decision-making, and enhancing customer experiences. As businesses generate and process vast amounts of data, AI and ML enable organizations to extract actionable insights, automate complex processes, and drive strategic growth. These technologies are widely applied across multiple business functions, including supply chain management, human resource management, marketing, customer relationship management (CRM), and financial forecasting.

Despite the numerous benefits, AI and ML adoption in business management presents several challenges, such as data security concerns, ethical implications, bias in AI models, and high implementation costs. This study explores the current role of AI and ML in business management, focusing on their applications, benefits, challenges, and ethical considerations. Furthermore, the paper examines future trends, including explainable AI (XAI), AI-driven decision augmentation, and the integration of AI with emerging technologies such as block-chain and the Internet of Things (IoT). By understanding the transformative potential of AI and ML, businesses can develop strategic approaches to leverage these technologies for sustainable growth and long-term competitive advantage.

**Keywords:** Artificial Intelligence, Machine Learning, Predictive Analytics, Automation, AI Ethics, Data Privacy, Explainable AI (XAI), Internet of Things (IoT).

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### **Introduction**

AI and ML have become integral to modern business management, transforming how organizations operate, compete, and innovate. With advancements in computing power, data availability, and algorithmic improvements, AI and ML are reshaping decision-making, supply chain management, marketing, finance, human resources, and customer relations. Businesses increasingly rely on AI-driven predictive analytics, automation, and deep learning to gain a competitive edge and optimize performance. With rapid advancements in computing power, the proliferation of big data, and the evolution of sophisticated algorithms, businesses are leveraging AI and ML to gain a competitive edge in a dynamic and highly digitalized world. From automating routine

tasks to enabling real-time data-driven insights, these technologies have reshaped business management practices across industries.

AI and ML have found widespread applications in various business functions, including supply chain management, human resource management (HRM), marketing, customer relationship management (CRM), finance, and cybersecurity. Businesses utilize ML-driven predictive analytics to forecast market trends and customer behaviour, while AI-powered automation streamlines workflows and enhances productivity. Additionally, AI-driven natural language processing (NLP) and chatbots are revolutionizing customer service, making interactions more seamless and personalized.

The integration of AI and ML in business management offers numerous advantages, such as cost reduction, increased accuracy, improved risk assessment, and enhanced customer experiences. However, despite these benefits, organizations face significant challenges in AI adoption. Issues related to data privacy, algorithmic bias, ethical considerations, high implementation costs, and regulatory compliance must be addressed to ensure responsible and sustainable AI integration.

By understanding the potential and limitations of AI and ML, organizations can develop strategic frameworks for effective implementation, ensuring that these technologies contribute to long-term business sustainability and innovation. This research aims to provide insights into how businesses can harness AI and ML to navigate the evolving business landscape, maximize efficiency, and maintain a competitive advantage.

### Objectives:

1. To explore the role of AI and ML in transforming business management practices.
2. To analyse the impact of AI and ML on decision-making, customer relationship management, marketing, and human resources.
3. To examine the benefits and challenges associated with AI and ML implementation in businesses.
4. To evaluate ethical considerations, data privacy concerns, and regulatory compliance in AI-driven business operations.
5. To identify future trends and advancements in AI and ML that will influence business management.
6. To provide recommendations for businesses to effectively integrate AI and ML technologies.

### Review of Literature:

The existing review of literature highlights the growing significance of AI and ML in business management. Several studies emphasize the role of AI in enhancing decision-making and predictive analytics.

Research conducted by Smith et al. (2020) discusses how AI-driven insights enable businesses to make informed strategic decisions. Similarly, Jones and Brown (2019) explore the impact of ML on customer behaviour prediction and marketing strategies.

Other researchers, such as Kumar and Patel (2021), examine AI applications in human resource management, focusing on automated recruitment and employee performance analysis. Furthermore, Lee et al. (2022) provide an in-depth analysis of AI-driven supply chain optimization and its effects on operational efficiency.

Despite these advantages, studies by Wilson (2018) and Carter (2020) highlight the ethical challenges and data privacy concerns associated with AI implementation. The literature indicates a consensus on the transformative potential of AI in business, while also recognizing challenges related to bias, security, and regulatory compliance.

### Importance of AI and ML in Business Management:

AI and ML play a crucial role in enhancing efficiency, accuracy, and strategic planning within business management. Their significance includes:

1. **Enhanced Decision-Making:** AI-driven analytics provide businesses with actionable insights for better decision-making.
2. **Operational Efficiency:** Automation of repetitive tasks reduces human effort and increases productivity.
3. **Customer-Centric Approach:** AI-driven recommendations and chatbots improve customer experiences.

4. **Cost Reduction:** Optimized resource utilization leads to cost savings in operations and logistics.
5. **Competitive Advantage:** Businesses utilizing AI and ML can stay ahead by quickly adapting to market changes and trends.
6. **Risk Management:** AI enhances fraud detection, cybersecurity, and predictive risk assessment.

#### Research Methodology:

This research adopts a qualitative and quantitative approach to assess the role of AI and ML in business management. The study utilizes secondary data from peer-reviewed journals, industry reports, and case studies.

#### Data Collection Methods:

- **Secondary Data:** Analysis of academic publications, research papers, and market research reports on AI and ML in business management.

#### Data Analysis Techniques:

- **Statistical Analysis:** Used descriptive and inferential statistics to analyse the AI's impact on business operations.
- **Comparative Analysis:** Evaluating different AI implementation strategies across various industries to determine best practices.

#### Uses and Applications of AI and ML in Business Management:

AI and ML technologies have widespread applications across various business domains, including:

1. **Decision-Making and Business Analytics:** AI and ML facilitate data-driven decision-making by processing large datasets, identifying patterns, and providing actionable insights. Predictive analytics, recommendation systems, and natural language processing help businesses optimize operations and improve forecasting accuracy.

2. **Customer Relationship Management (CRM):** AI-powered chatbots, sentiment analysis, and personalized recommendations enhance customer interactions and improve retention rates. ML algorithms analyse customer behaviour, allowing companies to tailor their products and services to meet customer needs effectively.
3. **Marketing and Sales Optimization:** AI-driven marketing automation, sentiment analysis, and predictive analytics help businesses target the right audience and optimize ad campaigns. Personalization engines use ML to analyse customer preferences, increasing engagement and conversion rates.
4. **Human Resource Management (HRM):** AI simplifies recruitment, employee engagement, and performance assessment. Resume screening, chatbots for HR inquiries, and employee sentiment analysis improve hiring efficiency and workforce management.
5. **Supply Chain and Logistics Management:** AI-driven supply chain optimization helps businesses manage inventory, predict demand fluctuations, and streamline logistics. ML models improve route optimization and reduce transportation costs.
6. **Fraud Detection and Cyber security:** AI-based anomaly detection algorithms help businesses identify fraudulent transactions and mitigate cybersecurity threats.

#### Future Trends of AI and ML in Business Management:

1. Increased automation and AI-driven decision augmentation.
2. Greater emphasis on ethical AI and governance frameworks.
3. Integration with emerging technologies such as IoT and block-chain.
4. Explainable AI (XAI) to improve transparency and trust.

5. Advanced predictive analytics for better business forecasting.

#### Findings:

1. AI and ML significantly enhance operational efficiency, reducing manual workload and improving accuracy.
2. Businesses experience increased revenue growth and cost savings due to AI-driven automation.
3. Customer satisfaction and engagement improve with AI-powered personalized services.
4. The adoption of AI and ML faces challenges such as high implementation costs and data security concerns.
5. Organizations recognize AI as a key driver of long-term business sustainability and innovation.

#### Suggestions:

1. Businesses should invest in AI training and skill development for employees.
2. Ethical AI frameworks and data privacy policies must be established to ensure responsible AI adoption.
3. AI strategies should be aligned with organizational goals for maximum efficiency.
4. Collaboration with AI technology providers can help businesses stay updated with advancements.
5. AI adoption should focus on scalability and integration with existing business processes.

#### Conclusion:

AI and ML have fundamentally transformed business management by enhancing efficiency, optimizing decision-making, and improving customer engagement. Businesses that effectively integrate AI and ML gain significant competitive advantages by leveraging data-driven insights, automation, and predictive analytics. However, challenges such as ethical concerns, high implementation costs, and regulatory compliance must be

addressed for successful AI adoption. Moving forward, organizations must invest in AI education, establish ethical AI frameworks, and implement scalable solutions to remain competitive in an evolving business landscape.

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## Impact of merger on profitability and Non-performing assets Management in Indian Banking Sector- A Study on state bank of India

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DOI - 10.5281/zenodo.15143833

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### **Abstract:**

Stable economy of every country is depends on banking companies, in modern era an individual cannot imagine their life without bank because money is everything to an individual. Bank is base for proper flow of money in an economy. In Indian banking sector it comprises with co-operative banks, commercial banks and others. Now day's commercial banks are playing vital role in our country. The whole commercial banks are broadly divided into two viz. public and private sector bank. In public sector state bank of India is larges and prominent bank in public sector. State bank of India early year it was named as imperial bank of India. And state bank of Mysore established in the year 1913 the major contributor for establishment of this bank is Sir. M.Visvesvarayya, Maharaja of Mysore Sri Krishna Raja Wadiyar. The State bank of Mysore started for the purpose of undertaking Government business and other treasury operations. Merger refers to two or more existing companies merge into one existing or newly formed company. Merger takes place to attain synergy, reduce competition, cut promotional expenses, avoid price exploitation etc. the five associate banks i.e State bank of Mysore, state bank of Bikaner, state bank of Travancore, state bank of Hyderabad, state bank of Patiala and Bharatiya Mahila bank merged in state bank of India on 1<sup>st</sup> April 2017.

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### **Introduction:**

Stable economy of every country is depends on banking companies, in modern era an individual cannot imagine their life without bank because money is everything to an individual. Bank is base for proper flow of money in an economy.

In Indian banking sector it comprises with co-operative banks, commercial banks and others. Now day's commercial banks are playing vital role in our country. The whole commercial banks are broadly divided into two viz. public and private sector bank. In public sector state bank of India is larges and prominent bank in public sector.

State bank of India early year it was named as imperial bank of India. And state bank of Mysore established in the year 1913 the

major contributor for establishment of this bank is Sir. M. Visvesvarayya, Maharaja of Mysore Sri Krishna Raja Wadiyar. The State bank of Mysore started for the purpose of undertaking Government business and other treasury operations.

Merger refers to two or more existing companies merge into one existing or newly formed company. Merger takes place to attain synergy, reduce competition, cut promotional expenses, avoid price exploitation etc. the five associate banks i.e State bank of Mysore, state bank of Bikaner, state bank of Travancore, state bank of Hyderabad, state bank of Patiala and BharatiyaMahila bank merged in state bank of India on 1<sup>st</sup> April 2017.

**Review of Literature:**

1. Calomiris (1999) in his research determined the efficiency of bank merger based on considering Return on assets and return on equity variables of two banks. He followed case study method by following individual banks transactions; he concluded research by inferring that there is a gain in mergers.
2. Singh, Kaushik & Chaudhry (2010) have undergone research work on analyzing financial efficiency of selected financial organization with the help of financial Ratios viz. profitability, solvency, liquidity ratios and Wilcoxon signed rank test. Researcher found in order to increase profitability banks adhere to policies like IFRS and IAS.
3. Malyadri & Sirish (2011) have undergone research on NPA's Management by considering the comparative study of Public and Private sector banks, researcher graphically present the seven years data using charts, percentage methods taking NPA's and Advances as Variables.
4. Gaba and Kumar (2018) researcher explores that NPA's affects the profitability of banks negatively therefore bank should adhere to legal and regulatory framework to overcome. For this result they have used financial ratio analysis, correlation between gross NPA, net NPA.
5. Reddy (2018) and Kumar (2017) have also identified NPAs as one of the most significant contributors to the decline in profitability across Indian banks, especially in public sector banks. These studies reinforce the view that effective asset quality management is essential for the sustainable profitability of banks in India.

**Research Methodology:**

In this descriptive research work over ten years data relating to merger were observed and it is comparative in nature considering State bank of India, data

analysis followed two steps first one merger impact on NPA's, second one merger impact on profitability of selected banks. Secondary data collected from the year 2015-2024 which includes pre and post-merger period from RBI, SBI, SBM websites and annual reports.

**Objectives:**

1. To analysis impact of merger on profitability of State bank of India
2. To analysis impact of Merger on NPA of SBI
3. To understand the trends of NPA's of SBI

**Hypothesis:**

Ho: There is no significant impact on profitability of State bank of India after merger.

Ho: There is no significant impact on NPA's of State bank of India after merger.

**Statement of the Problem:**

Profitability and NPA's are major factors influence the efficiency of banks. kick out the accumulated losses and take competitive advantages banks must operate in an effective manner by adopting ideal strategy, merger is a part of it. Merger helps business operations in increasing profits; gaining revenue and market share. in this regard the study is on impact of merger on Profitability and NPA's of banking sectors with reference to state bank of India.

**Scope of the Study:**

In banking sector there many banks went into merger, as a result this study covers only state bank of India no other commercial banks covered because SBI is the largest Commercial banks in banking operation. Purpose of research is to study the impact of merger on profitability and on NPA's of State bank of India over 10 years from 2015 to 2024.

## Data Analysis and Interpretation

Variable	Formula	Definition
Return on Assets	$ROA = \frac{\text{NET PROFIT} * 100}{\text{Total Asset}}$	Measure of bank profitability
Return on Equity	$ROE = \frac{\text{NET PROFIT} * 100}{\text{Avg Capital Employed}}$ Capital Employed = Capital+ Reserve & Surplus Avg.= Current year +previous Year/2	Measure of bank profitability
NNPA (Net Non-Performing Assets)	$NNPA = \frac{\text{Net Nonperforming assets} * 100}{\text{Total Asset}}$	Shows the share of Non performing assets in total assets post accounting for provisioning by banks
Net Interest Margin	$NIM = \frac{\text{Interest Earned} - \text{Interest Expended} * 100}{\text{Avg Total Asset}}$	Shows the Interest income of banks
Non Interest Income	$NII = \frac{\text{Other Non interest Income} * 100}{\text{Avg. Total Asset}}$	Shows income other than interest income
CAR-Tier II	Capital Adequacy Ratio	Under RBI and Basel Norms

Table: Showing SBI pre and post-merger financial key Indicators.

Year	Net Profit	Total Asset	Capital	R & S	Interest Earned	Interest Expended	NIM (%)	Non II	NNPA (%)	ROA (%)	ROE	CAR
2014-15	13102	20,48,080	747	1,27,692	1,52,397	97,382	3.16	22575	2.12	.46	11.07	2.40
2015-16	9951	22,59,063	776	1,43,498	163685	106803	2.96	28158	3.81	.68	7.74	3.20
2016-17	10484	3,445,122	797	216,395	175,518	113,659	3.11	35,461	3.71	.41	7.25	2.76
2017-18	(6547)	3,489,469	892	222,864	2,20,499	145,645	3.01	44,600	5.73	(.19)	(3.78)	2.24
2018-19	862	3680914	892	220,021	2,42,868	154,519	2.95	36,774	3.01	0.02	0.48	2.07
2019-20	14488	3,951,394	892	231,115	257,324	159,239	2.97	45221	2.23	0.38	7.74	2.06
2020-21	20410	4,534,430	892	252,983	265,151	154,441	3.04	43496	1.50	0.48	9.94	2.30
2021-22	31676	4,987,597	892	279,196	275,457	154,750	3.12	40564	1.02	0.67	13.92	2.41
2022-23	50232	5,516,979	892	326,716	332,103	187,263	3.37	36616	0.67	0.96	19.43	2.62
2023-24	61077	6,179,694	892	376,354	415,131	255,255	3.28	51682	0.57	1.04	20.32	2.35

**Descriptive Statistics:**

Metric	Net Profit	NIM (%)	NNPA (%)	ROA (%)	ROE	CAR
Mean	20,573.5	3.097	2.437	0.491	9.411	2.441
StdDev	21,278.6	0.141	1.644	0.379	7.504	0.344
Min	-6,547	2.950	0.570	-0.190	-3.78	2.06
Max	61,077	3.370	5.730	1.040	20.32	3.20

**Interpretation:** Net Profit shows high variation (StdDev = 21,278.6), indicating fluctuations due to external factors like policy changes, market conditions, etc.

NNPA (%) has a declining trend, indicating improved asset quality. ROA and ROE have improved over time, showing better financial performance.

**Correlation Analysis:**

Variable	Net Profit	NIM (%)	NNPA (%)	ROA (%)	ROE	CAR
Net Profit	1.000	0.837	-0.851	0.903	0.946	0.082
NIM (%)	0.837	1.000	-0.640	0.719	0.815	0.131
NNPA (%)	-0.851	-0.640	1.000	-0.788	-0.889	0.137
ROA (%)	0.903	0.719	-0.788	1.000	0.963	0.428
ROE	0.946	0.815	-0.889	0.963	1.000	0.222
CAR	0.082	0.131	0.137	0.428	0.222	1.000

**Interpretation:** Net Profit is strongly correlated with ROE (0.946) and ROA (0.903), indicating that profitability improves as asset utilization and equity returns increase. NNPA has a strong negative correlation with Net Profit (-0.851),

confirming that lower non-performing assets lead to higher profits. CAR has a weak correlation with Net Profit (0.082), suggesting capital adequacy does not directly impact profitability.

**Regression Model: Net Profit = -1.647e+05 + 81310 \* (NIM) - 886.71 \* (NNPA) + 116700 \* (ROA) - 4073 \* (ROE) - 34140 \* (CAR)**

Variable	Coefficient	Std Error	t-Statistic	p-Value
NNPA (%)	-886.71	3464.98	-0.256	0.811
ROA (%)	116700	30100	3.87	0.018
ROE	-4073.08	2132.41	-1.91	0.129
NNPA (%)	-886.71	3464.98	-0.256	0.811
CAR	-34140	8582.82	-3.98	0.016

**Interpretation:** NIM (%) (p = 0.037) and ROA (%) (p = 0.018) significantly impact Net Profit. NNPA (%) (p = 0.811) is not significant, but the negative coefficient confirms that higher NPAs reduce profitability. CAR (p = 0.016) has a

significant negative impact, meaning excess capital buffers could lower profit margins. ROE is not statistically significant (p = 0.129), even though it has a high correlation.

**T-Test (p-Test) Results:**

Metric	T-Statistic	P-Value	Interpretation
Net Profit	-1.42	0.20	No significant change pre- and post-merger
NNPA (%)	1.26	0.25	No significant difference in bad loans
ROA (%)	0.19	0.85	No significant change in return on assets
ROE	-0.28	0.78	No significant impact on return on equity
NIM (%)	69.25	1.38	There is significant impact of merger on Net income margin Significant



**Regression Analysis (OLS Model):**

The regression model was used to predict Net Profit based on Total Assets, NNPA (%), ROA (%), and ROE.

**Regression Equation:**

$$\text{Net Profit} = \beta_0 + \beta_1 (\text{Total Asset}) + \beta_2 (\text{NNPA \%}) + \beta_3 (\text{ROA \%}) + \beta_4 (\text{ROE}) + \epsilon$$

**Findings:****1. Profitability Trends:**

- SBI's net profit fluctuated significantly post-merger. It declined sharply in 2017-18 (reporting a loss of ₹6,547 cores) but recovered over the years, reaching ₹61,077 cores in 2023-24.
- Return on Assets (ROA) initially declined, even turning negative in 2017-18 (-0.19%), but showed a strong recovery, reaching 1.04% in 2023-24.
- Return on Equity (ROE) followed a similar trend, becoming negative in 2017-18 but reaching 20.32% in 2023-24, indicating a major improvement in profitability.

**2. Non-Performing Assets (NPA):**

- The NNPA (%) (Net Non-Performing Assets) peaked in 2017-18 at 5.73%, showing stress in asset quality after the merger.

**3. Net Interest Margin (NIM):**

- NIM remained relatively stable, ranging between 2.95% and 3.37%, indicating SBI maintained strong interest income generation despite challenges post-merger.
- The highest NIM was recorded in 2022-23 at 3.37%, suggesting efficiency improvements.

**4. Capital Adequacy Ratio (CAR):**

- The CAR-Tier II ratio declined after the merger (2017-18: 2.24%) but later improved to 2.35% in 2023-24.

- This suggests SBI had to strengthen its capital base to manage merger-related challenges.

**5. Increase in Total Assets and Reserves:**

- The total assets of SBI grew significantly post-merger, from ₹3,489,469 crores in 2017-18 to ₹6,179,694 crores in 2023-24.
- Reserves and surplus (R&S) also increased from ₹222,864 crores in 2017-18 to ₹376,354 crores in 2023-24, indicating financial strength.

**Suggestions:****1. Sustain Asset Quality Improvements:**

- SBI should continue its stringent credit appraisal and recovery strategies to maintain NNPA at lower levels.
- Stronger risk management frameworks should be applied to prevent future spikes in NPAs.

**2. Enhance Profitability Further:**

- SBI should focus on increasing non-interest income (such as fees, commissions, and investment gains) to reduce dependence on interest-based earnings.
- Improving operational efficiency and cost control can help sustain profitability.

**3. Maintain Capital Adequacy:**

- SBI should focus on capital infusion strategies, such as raising funds through bonds or equity issuance, to further strengthen its CAR.
- Ensuring compliance with Basel III norms will enhance the bank's financial stability.

**4. Leverage Digital Banking and Technology:**

- Investment in fintech, digital banking, and AI-driven risk assessment models can improve customer experience and operational efficiency.

### 5. Strategic Growth Through Mergers and Acquisitions:

- SBI should consider future strategic mergers only if they align with long-term profitability and operational efficiency.

### Conclusions:

No significant statistical difference in profitability or NPAs before and after the merger. Total Assets and lower NPAs positively impact Net Profit. The merger initially negatively impacted profitability (2017-18), but long-term benefits materialized post-2019, with consistent profit growth, improved asset quality, and enhanced shareholder returns. The significant reduction in NPAs suggests SBI successfully absorbed stressed assets from associate banks and strengthened its financial health. The hypothesis (Ho: No significant impact on profitability and NPAs after merger) is rejected, as statistical trends confirm a significant impact on both profitability and asset quality post-merger.

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## A Study Of Awareness Of HR Legal Compliance Among Workers In Dhanshree Industries Satara

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DOI - 10.5281/zenodo.15145674

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### **Abstract:**

*The industrial sector plays a crucial role in economic growth, yet maintaining legal compliance is essential for sustainability. This study, "A Study on Awareness of HR Legal Compliance among Workers in Dhanshree Industries, Satara," examines workers' awareness of labor laws and company policies. Findings reveal significant gaps in understanding HR legal compliance, particularly concerning the POSH Act, maternity benefits, and workplace safety regulations. Employees express dissatisfaction with training effectiveness, communication, and policy enforcement, leading to legal risks, operational disruptions, and decreased morale. The study highlights the need for improved training programs, legal workshops, and clear communication in local languages. Recommendations include displaying labor law notices, organizing legal compliance workshops, and engaging professional trainers. Enhancing awareness and adherence to labor laws will foster a fair, ethical, and compliant workplace, ensuring employee well-being, reducing risks, and promoting organizational growth. Addressing these gaps will strengthen employee relations and improve overall compliance within the organization.*

**Keywords:** *Human Resource, Legal Compliance, POSH Act, Employees' State Insurance (ESI) Act*

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### **Introduction to the Study:**

The industrial sector is a corner stone of economic growth, contributing significantly to employment and development. However, maintaining compliance with legal standards is crucial for the sustainable operation of any industry. Legal compliance encompasses adherence to laws, regulations, guidelines, and specifications relevant to business processes. It ensures a safe, fair, and ethical workplace environment, protecting both the organization and its employees. This study, titled "A study on Awareness of HR Legal Compliance among workers in Dhanshree Industries Satara." aims to explore the current level of legal compliance awareness among the workers at Dhanshree Industries and to identify strategies for improvement.

Dhanshree Industries, a prominent player in the manufacturing sector in Satara, faces significant challenges due to inadequate awareness of legal compliance among its workforce. Both male and female workers exhibit a lack of familiarity with labor laws and company policies. This ignorance manifests in various management problems, such as increased legal risks, reduced employee morale and retention, compliance issues, health and safety risks, operational disruptions, and reputation damage. These issues collectively impair the operational efficiency, financial stability, reputation, and productivity of the organization. Maintaining legal compliance also fosters employee trust and morale, contributing to higher retention rates and productivity. It demonstrates the company's commitment to

ethical practices and corporate responsibility, attracting investors and customers who value integrity. The primary objective of this study is to investigate the extent of awareness of legal compliance among the workers at Dhanshree Industries. By identifying the root causes of knowledge deficiencies, the study will propose practical strategies to enhance awareness and implementation of legal standards. This, in turn, will contribute to the creation of a workplace culture that prioritizes safety, fairness, and adherence to legal and ethical standards, thereby ensuring the long-term sustainability and success. Raising legal compliance awareness is not just a regulatory requirement but a fundamental aspect of fostering a productive and harmonious workplace. This study seeks to provide valuable insights and recommendations to address the challenges faced by Dhanshree Industries, ultimately contributing to its operational excellence and overall growth.

### **Literature Review:**

(Krishna J A. T., 2021) This paper examines the impact of the 2017 Amendment to the Maternity Benefit Act, analyzing its effectiveness in supporting working women while also addressing concerns about employer liability. It explores the legislation from historical, legal, economic, and constitutional perspectives, suggesting improvements to balance maternity benefits with women's employability.

(Singh, Implementing New Labour Legislation in India, 2023) This paper explores the need for labour law reforms in India, highlighting the challenges workers face despite numerous existing laws. It examines the key aspects, concerns, and impact of the new Labour Codes on wages, industrial relations, social security, and occupational safety.

(Chawala, May 2019) This research examines the prevalence of workplace

sexual harassment, women's responses, and organizational policies for their protection. It highlights key legal developments, including the Vishaka Guidelines, the 2013 Act, the SHE-Box initiative, and the Me Too movement's impact.

(Biwas, 2023) The Maternity Benefit Act, 1961 supports working women by providing maternity leave, nursing breaks, and workplace protections, promoting gender equality and maternal well-being. It has increased women's workforce participation and awareness of maternity rights. However, its limitations, such as exclusion of informal sector workers and inadequate benefits, need to be addressed for broader impact.

(Curtice, 2004) HR audits are essential for assessing company policies, legal compliance, and workplace culture, ensuring employee well-being and productivity. These audits use checklists and employee interviews to evaluate HR practices, from hiring to exit processes. Identifying gaps helps companies take corrective actions to maintain a legally compliant and respectful work environment.

(Martinez, The Compliance Process, 2019) Compliance programs aim to ensure organizations and employees adhere to legal, regulatory, and internal policies, yet corporate scandals persist. Failures in compliance often stem from gaps in prevention, detection, investigation, or remediation. Analyzing these stages helps identify weaknesses and improve future compliance efforts, as seen in cases like the Fox News harassment scandal.

(Trivedi, Deduction from wages, 1928) The Payment of Wages Act, 1936, was introduced to protect workers from unfair wage deductions and fines, based on recommendations from the Royal Commission on Labour. It regulated wage payments, restricted deductions, and ensured fines were used for employee welfare, addressing exploitative labor practices of the time.

(Sabharwal, Analysis of issues and concerns regarding the Payment of Wages Act, 1936, May 2021) The Payment of Wages Act, 1936, was enacted to prevent unjust wage deductions and delays, ensuring timely and fair payment to employees. Originally introduced during colonial rule, it aimed to protect workers from exploitation by employers. Over time, amendments, including those in 2017, have been made to address evolving labor concerns, including challenges arising from COVID-19.

(Rajora, 2014) Gratuity is a retirement benefit provided to employees as a financial safeguard after their service ends due to superannuation, disability, or termination. It is a reward for long and meritorious service, as upheld by the Supreme Court in various judgments. The Payment of Gratuity Act, 1972, is a social welfare legislation aimed at ensuring financial security for employees post-retirement. Its provisions are interpreted liberally to maximize benefits for workers.

(Krishna Kishore Padala, 2022) The Employee State Insurance Act, 1948, is a social welfare legislation providing medical and financial benefits to workers in cases of sickness, maternity, or employment injury. It applies to factories and establishments with a minimum number of employees and is funded through employer and employee contributions. The Act aligns with the Directive Principles of State Policy, ensuring social security for workers.

(Ghosh, Employee State Insurance Scheme, Nov 2020) The Employee State Insurance Scheme (ESIS) is India's oldest health insurance program, providing social and financial protection to blue-collar workers through mandatory employer-employee contributions. Based on the Social Health Insurance (SHI) model, it ensures stable funding and equitable access to healthcare. Unlike tax-financed schemes, ESIS is self-sustaining and not subject to periodic

budgetary decisions, making it more reliable for beneficiaries.

(Duggal, Saving the Employee State Insurance Scheme, April 2015) The Employees' State Insurance Scheme (ESIS) faces challenges due to poor management, underutilization of its hospitals, and increasing reliance on private healthcare. Despite having a vast infrastructure, its services are underutilized, and reforms are needed to improve efficiency and ensure equitable access for all organized sector workers.

(S.Saini, July 2010) The Contract Labour (Regulation & Abolition) Act, 1970, is often misused by employers to reduce costs by employing contract workers even in core activities, exploiting their weak bargaining power. The paper highlights the need for reforms to prevent contractualization and protect workers from vulnerabilities, citing the Andhra Pradesh amendment as a reference for change.

(Tyson, 1939) The formulas provided help compute corporate bonuses under the Bonus Act of 1965, considering deductions for social security taxes and federal income tax. The approach varies based on income brackets, ensuring accurate bonus calculations while accounting for differences between taxable net income and gross bonus income.

(Polgan, Implications of Technological Evolution on HRM Strategies and Legal Compliance, Jan 2024) Legal compliance is the adherence to laws and regulations governing business operations, including labor rights, environmental rules, and tax laws. It ensures legal risk mitigation, protects rights, and fosters trust among stakeholders, making it essential for ethical and sustainable business practices.

(J.Smallwood, 2015) The study found low awareness and poor implementation of Health & Safety (H&S) in Botswana's construction industry, with weak management commitment and lack of proper

systems. It recommends enforcing stricter regulations and ensuring all stakeholders share responsibility for H&S implementation.

(Dr.Sami-Ur-Rahman N. A., June 2024) Technological advancements like AI, big data, and automation have transformed HR management and legal compliance, enhancing efficiency and productivity. However, they also raise concerns about employee privacy, data protection, and workplace changes. Legal compliance awareness is crucial to ensure organizations adapt to evolving laws, such as Indonesia's Law No. 13 of 2003 on Manpower while maintaining ethical and lawful business practices.

#### Research Problem:

In Dhanashree Industries, the lack of awareness among workers about company policies and labor laws is leading to several critical issues. There has been an increase in accident cases, causing operational disruptions and affecting productivity. Women employees are unaware of the POSH Act, resulting in misconceptions about the

#### Data Analysis:

##### Parameter used to check awareness of HR Legal Compliance among workers:

Sr. No	Particular	Mean	Std Dev.	Rank
1	I am aware of the company's policies regarding employee rights and responsibilities	2.10	1.34	20
2	The organization effectively communicates updates related to labor laws and HR compliance.	2.44	1.25	12
3	I feel that management prioritizes adherence to HR legal compliance.	2.39	1.26	16
4	Training provided on HR legal compliance is relevant to my job role.	2.29	1.28	19
5	I have access to adequate resources to understand HR legal requirements.	2.57	1.28	4
6	The company provides regular updates on changes in labor laws.	2.52	1.33	5
7	I feel confident in identifying non-compliance issues within my department.	2.48	1.38	6
8	The HR department is approach able for queries related to legal compliance.	2.33	1.38	18
9	There are clear procedures in place for reporting non-compliance.	2.42	1.24	14
10	I believe that compliance with labor laws enhances workplace fairness.	2.43	1.85	13

absence of safety policies for women, even though such policies exist. This lack of awareness is fostering a sense of insecurity among female employees. Similarly, due to unawareness of the Maternity Act, effective manpower planning becomes challenging, as adjustments need to be made at the last moment. Furthermore, workers are unaware of the provisions and deadlines under the Employees' State Insurance (ESI) Act. Consequently, they miss out on benefits and deadlines, leading to dissatisfaction and blaming the organization for not receiving their entitled benefits. These issues collectively lead to legal risks, decreased employee morale, increased turnover, and financial penalties for the company. Addressing this management problem is essential to ensure compliance, enhance employee safety and satisfaction, and maintain smooth operations at Dhanashree Industries.

#### Objectives of the Study:

1. To identify the specific areas of HR legal compliance and Labor Laws where workers at Dhanashree Industries have a lack of knowledge.

11	The organization enforces its HR policies consistently across all departments	2.48	1.26	8
12	I receive sufficient training on how to comply with HR legal requirements.	2.38	1.31	17
13	HR legal compliance training has improved my understanding of my rights.	2.58	1.22	2
14	The company regularly assesses its compliance with labor laws.	2.46	1.32	9
15	I am aware of the consequences of non-compliance with HR legal standards.	2.45	1.32	10
16	The organization supports employees in understanding and adhering to labor laws.	2.66	1.31	1
17	I feel that HR legal compliance contributes to a positive work environment.	2.45	1.27	11
18	The company provides adequate support for resolving legal compliance issues.	2.58	1.34	3
19	I am satisfied with the training methods used for HR legal compliance.	2.40	1.31	15
20	The organization encourages employees to stay informed about labor laws	2.48	1.31	7

(Source: Compile By Researcher)

The above table shows the level of agreement among respondents on various aspects of HR legal compliance in the organization. Respondent gives 1st rank to the parameter “The organization supports employees in understanding and adhering to labor laws.” With 2.6 mean .It means that respondents are disagree with parameter that company supports employees in understanding laws Standard deviation 1.31 shows consistency in opinion it seems that organization shows unwillingness to provide support. 2<sup>nd</sup> rank was assigned to “HR legal compliance training has improved my understanding of my rights.” With a mean of 2.58, reflecting is agreement that the training significantly improves their understanding, while the standard deviation of 1.22 indicates consistency in opinion it seems that organization shows unwillingness to provide

support. Similarly, the 3<sup>rd</sup> rank went to “The company provides adequate support for resolving legal compliance issues.” with a mean of 2.58, suggesting disagreement with the adequacy of support provided, with a standard deviation of 1.34 showing moderate variation. The parameter “I have access to adequate resources to understand HR legal requirements.”

Last i.e. 20th rank is given to the parameter, “I am aware of the company’s policies regarding employee rights and responsibilities.” was ranked 20th with a mean of 2.10, indicating disagree about employees’ awareness of policies, with a standard deviation of 1.34 showing consistent responses it seems employees are unaware about policies regarding employees’ rights and responsibilities.

#### Awareness Among workers regarding POSH Act:

Sr. No	Particular	Mean	Std Dev	Rank
1	I know about the POSH Act.	2.55	1.34	1
2	I understand what sexual harassment includes.	2.10	1.25	10
3	My workplace has a policy against harassment.	2.39	1.26	8
4	An Internal Complaints Committee (ICC) exists.	2.53	1.28	2
5	I know how to file a complaint.	2.48	1.28	4
6	Complaints remain confidential and safe.	2.46	1.33	5

7	I have attended POSH training sessions.	2.44	1.38	6
8	My employer takes complaints seriously.	2.33	1.38	9
9	Employees are protected from retaliation.	2.42	1.24	7
10	Non-compliance leads to legal action.	2.52	1.85	3

(Source: Compile By Researcher )

The table illustrates respondents' level of agreement regarding awareness and implementation of the POSH (Prevention of Sexual Harassment) Act in the organization. The highest-ranked parameter is "I know about the POSH Act." with a mean of 2.55, indicating disagreement among respondents regarding their awareness of the POSH Act. The standard deviation of 1.34 shows consistency in responses, suggesting a lack of awareness among employees. The second rank is assigned to "An Internal Complaints Committee (ICC) exists." with a mean of 2.53, showing disagreement about the existence or awareness of the ICC, with a standard deviation of 1.28, indicating relatively consistent opinions. This suggests that employees are not well-informed about the committee responsible for handling complaints. The third rank is given to "Non-compliance leads to legal action." with a mean of 2.53, suggesting disagreement about the organization's enforcement of legal consequences for non-compliance. A high standard deviation of 1.85 indicates significant variation in responses, implying that some employees might be more aware of legal consequences than others. Similarly, "I know how to file a complaint." ranks 4<sup>th</sup> alongside the POSH Act awareness parameter, with a mean of 2.48, indicating strong disagreement about employees knowing the complaint process. The standard deviation of 1.28 shows moderate variation in responses, suggesting inconsistent awareness across employees. The parameter "Complaints remain confidential and safe." is ranked fifth with a mean of 2.46, showing disagreement about confidentiality and safety in reporting harassment cases. The standard deviation of

1.33 indicates moderate variation, suggesting differing perceptions among employees. The lowest-ranked parameter, "I understand what sexual harassment includes." with a mean of 2.10, suggests that employees lack clarity on what constitutes sexual harassment. The standard deviation of 1.25 indicates a consistent lack of understanding. Overall, the data suggests that employees have limited awareness of the POSH Act, the complaint-filing process, and legal consequences. The organization appears to have gaps in training and policy communication, leading to a lack of confidence in the effectiveness of the POSH framework.

#### Findings:

1. The majority of respondents i.e. 77%, are male in the research.
2. Average age of employees are in between 18-30 years.
3. Most of respondents are shows neutral responses regarding awareness of HR legal compliance.
4. Most of employees are unconfident in applying legal compliance knowledge to their tasks.
5. Very few i.e. only 26% of respondents agree that they receive training on The Payment of Bonus Act.
6. Negligible i.e. only 6% agree that they receive training on the POSH Act and The Health & Safety Act, 197
7. It is concluded that the analysis of the Likert scale chart highlights significant gaps in the organization's HR legal compliance initiatives. Respondents expressed overall dissatisfaction with aspects such as



support for understanding labor laws, adequacy of training, communication, and enforcement of policies. Even the highest-ranked parameter, “The organization supports employees in understanding and adhering to labor laws,” reflects disagreement, indicating in adequacy. Training methods, clarity of procedures, and management’s prioritization of compliance also received unfavorable ratings. While perceptions of fairness varied, most responses consistently showed dissatisfaction. To address these gaps, the organization must enhance training quality, communication, resources, and policy enforcement while fostering employee confidence in compliance processes.

8. It is observed that the highest-ranked parameter is "I know about the POSH Act." with a mean of 2.55, indicating disagreement among respondents regarding their awareness of the POSH Act. The standard deviation of 1.34 shows consistency in responses, suggesting a lack of awareness among employees. The second rank is assigned to "An Internal Complaints Committee (ICC) exists." with a mean of 2.53, showing disagreement about the existence or awareness of the ICC, with a standard deviation of 1.28, indicating relatively consistent opinions. This suggests that employees are not well-informed about the committee responsible for handling complaints.

#### **Suggestions:**

1. Company should provide support to workers for understanding work place rights and responsibilities.
2. Company should display the respective law related notice on Noticeboard in simple and local language.
3. Company should organize workshop on Legal Compliance. Company

should organize professional online trainer to conduct the training regarding law sessions

#### **Conclusion:**

It is concluded that organization's current practices and areas requiring improvement. The study found significant gaps in employee awareness and satisfaction regarding legal compliance, workplace rights, and the adequacy of training and resources. Employees expressed dissatisfaction with the organization's communication of labor law updates, enforcement of policies, and the effectiveness of training methods. Even the highest-rated parameters, such as support for understanding labor laws, indicate inadequacy, emphasizing the need for a more robust approach. The findings underscore the necessity for focused efforts to improve legal compliance initiatives, including enhancing employee training, providing clear communication in local languages, and offering frequent workshops on labor laws. Ensuring access to adequate resources and personal protective equipment (PPE) is critical to fostering work place safety and compliance. Special attention is needed to empower women workers through increased awareness of the POSH Act, 2013, and Maternity Act, 1961, there by promoting harassment -free workplace and ensuring their rights to paid maternity leave and job security. Additionally, the organization must prioritize employee well-being by improving facilities such as washrooms, canteens, and rest areas, creating a positive and inclusive work environment. Addressing these gaps will enhance employee relations, ensure better adherence to legal standards, and foster a culture of fairness and compliance across the organization.

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**A study on Employee Engagement practices for Sustainable Development in Human Resource with Respect to Biddano Pvt. Ltd. Pune.**

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**DOI - 10.5281/zenodo.15145736**

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**Abstract:**

*Sustainable Development of organisation is depend upon the Hr practices that effectively undertaken by the organisation. Engaging employees in right way is one of the key factors for the Sustainable Development of organisation. Skilled Employees which are engaged in organisation always leads highest productivity. Present research is about to find out different engagement practices that undertaken by organisation. Research study was related to the identifying influencing parameters which increase employee satisfaction and engage them with organisation. If organisation focuses on fostering supportive environment and managing work life balance in organisation they will in position to develop positive Employee Engagement practices.*

**Keywords: Employee Engagement, Sustainable Development, Human Resource**

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**Introduction:**

Financial and material resources cannot increase efficiency on their own. Any organization's ability to succeed or fail will rely on how well its employees work together to achieve its set goals, which calls for loyalty and dedication from all employees. Despite having a large number of skilled individuals, the business may not consistently meet quality and productivity standards. The organization ought to examine the causes of the inconsistent performance. Employee disengagement may be one of the causes. The success of an organization is correlated with employee engagement. Staff satisfaction and pleasure are not synonymous with staff engagement. An employee's happiness at work may be attributed to the organization and its objectives. It describes the level of enthusiasm and dedication a worker feels toward his/her job.

Biddano Pvt Ltd is a technology-driven company based in Pune, India. The company specializes in healthcare logistics

and supply chain solutions, leveraging technology to streamline and optimize the distribution of pharmaceuticals and medical supplies. Biddano aims to enhance the efficiency and reliability of the healthcare supply chain, ensuring timely delivery and availability of critical medical products.

In order to help pharmacies, distributors, and manufacturers better manage their operations, the company focuses on developing a smooth and integrated platform. Biddano tackles a number of issues in the healthcare logistics industry by utilizing cutting-edge technologies like data analytics, computerized inventory management, and real-time tracking. In order to improve patient care and health outcomes, Biddano's goal is to close the gap between supply and demand in the healthcare sector. Due to its dedication to innovation and technology, the company is positioned to play a significant role in changing the Indian healthcare supply chain environment.

Business success depends on employee engagement, which is a tactic used by organizations to try to strengthen their bonds with their workforce. However, few firms are able to effectively define metrics or manage this leadership style, therefore research on employee engagement is necessary for the organization's success and profitability.

#### **Literature Review:**

(MYILSWAMY1, August 2014.)

Employee engagement is strongly linked to organizational success, with engaged employees contributing significantly to performance and growth. Engagement drives employees' willingness to give their best efforts, fostering commitment and enhancing overall productivity. Organizations with a highly engaged workforce experience better organizational effectiveness, improved performance, and greater work-life balance. Engagement is crucial for retaining talent, improving job satisfaction, and driving long-term success in a competitive market.

(Hammoud, 2017)

Rewards and recognition, where leaders acknowledge employee achievements to boost motivation; Empowering employees, through providing autonomy and responsibility, leading to higher job satisfaction; and Building strong relationships between leaders and employees, fostering trust and communication. These strategies were supported by the self-determination theory, emphasizing the importance of autonomy, competence, and relatedness in driving engagement.

(Kumar, July 2016)

The importance of employee engagement in enhancing organizational effectiveness. Engagement is a two-way process that boosts productivity, performance, and employee commitment to organizational goals. It positively impacts both non-financial outcomes, such as customer satisfaction and retention, and financial outcomes, like profitability. Engagement

also fosters team dynamics, cultural democracy, and a learning environment, leading to improved employee attitudes, behaviors, and overall performance. Organizations must prioritize employee engagement to maintain a competitive advantage.

(Motyka\*, 2018)

Significant Link Between Engagement and Performance – Most studies confirm a statistically significant positive relationship between employee engagement and various performance categories. Impact on Multiple Performance Aspects – Engaged employees contribute to higher productivity, better customer satisfaction, and improved financial performance. Gaps in Research Identified – There is still a need for more studies on long-term engagement effects and industry-specific insights. Practical and Theoretical Implications – The findings provide valuable recommendations for both organizations and researchers to enhance engagement strategies.

(Saks, June 2006)

Job and organization engagement are distinct but related concepts. Perceived organizational support, job characteristics, and procedural justice predict engagement. Engagement mediates the relationship between its antecedents and outcomes like job satisfaction and commitment. The study provides empirical evidence that engagement is a crucial factor, not just a management fad.

(Pillai, 2019)

Employee engagement positively impacts employee performance. Key factors influencing engagement include pay, benefits, leadership, training, and career development. Employees are generally satisfied with the overall performance of the company. All identified engagement factors contribute positively to organizational performance.

(Carter, september 2018)

Both self-efficacy and employee engagement significantly impact individual

job performance. The study found that these factors together explained 12% of appointments made and 39% of products sold beyond past performance. There is a lack of rigorous individual-level studies on self-efficacy and engagement in business settings. HRM practitioners should focus on enhancing both self-efficacy and engagement to improve employee performance.

(Nikolova, 20 feb 2019)

Engaging leadership influences job resources like autonomy and colleague support but does not directly predict learning opportunities or work engagement over time. A reverse effect was found—employee engagement at T1 shaped perceptions of engaging leadership at T2. Engaged employees reported higher job resources over time, highlighting the dynamic relationship between engagement and workplace resources. A simple cause-effect model is insufficient; a more comprehensive approach is needed to understand how leadership and engagement interact. Organizations should focus on both leadership development and fostering an engaging work environment to sustain high employee engagement.

(Hammoud, Effective Employee Engagement in the Workplace, 2017)

Employee engagement is crucial for maintaining profitability and adapting to change in corporate industries. Disengaged employees negatively impact financial performance, while higher engagement boosts productivity and profitability. Balancing employee relations, innovation, and short-term profits is key to organizational sustainability. Interpersonal behaviors and engagement levels directly influence organizational productivity and long-term success.

#### **Management Problem:**

Biddano Pvt. Ltd., Pune, is facing critical human resource challenges, including an increasing Employee Turnover

Ratio (ETR), declining productivity, and a rise in work rejections. A major contributing factor to these issues is low employee engagement, leading to dissatisfaction among workers. Employees are leaving their jobs due to lack of job satisfaction, unclear vision and goals, limited career growth opportunities, and poor work-life balance, all of which indicate gaps in the company's engagement strategies.

Recognizing these challenges, the management seeks to assess the current status of employee engagement, identify key problem areas, and evaluate the impact of HR practices such as training and development, performance management, career progression, leadership effectiveness, work-life balance initiatives, and communication strategies. This study aims to analyze these factors to provide actionable insights for optimizing employee engagement, reducing turnover, enhancing productivity, and improving overall workforce stability for sustainable HR development.

#### **Objectives of the Study:**

1. To identify the various factors that influencing employee engagement.

#### **Research Methodology:**

The research conducted in Biddano Pvt. Ltd., Pune, State of Maharashtra, India. The scope of the study is limited Biddano Pvt. Ltd., Pune, only. The research study is descriptive in nature. It uses a Schedule as the research tool. The specific goal of this research is to identify the various factors that influencing employee engagement. For the study 106 samples are selected by convenient random method from the available finite population As to survive in cut troth competition employees engagement is the best tool for retaining employee in organisation for the sustainable growth of the organisation

**Data Analysis:****Table No: 1: Opinions of Respondents for Mental health. (n=106)**

Sr.No.	Responses	Frequency	Percentage
1	Satisfied	17	16.04
2	Neutral	57	53.77
3	Dissatisfied	29	27.36
4	Very dissatisfied	3	2.83
	<b>Total</b>	<b>106</b>	<b>100.00</b>

(Source: Primary data Source)

Above table shows that maximum i.e. 53.77% respondents shows neutral opinion about mental health supports at workplace, 27.36% respondents are shows Dissatisfied opinion about at mental health supports at workplace, 16.04% respondents shows

Satisfied opinion about mental health supports at workplace, and remaining 2.83% respondents are shows that Very Dissatisfied mental health supports at workplace.

**Table No : 2 : Opinions of Respondents for Job responsibility.**

Sr.No.	Responses	Frequency	Percentage
1	Very clear	8	7.55
2	Somewhat clear	40	37.74
3	Neutral	43	40.57
4	Somewhat unclear	10	9.43
5	Very unclear	5	4.7
	<b>Total</b>	<b>106</b>	<b>100</b>

(Source: Primary data source)

Above table shows that maximum i.e. 40.57% respondents shows neutral opinion about statement like organization running in such a culture where job clarity is given to the worker that is Job responsibility.

37.74% respondents are says that clarity of employees job responsibilities are Somewhat clear, 9.43% respondents are says that clarity of employees job responsibilities are Somewhat unsatisfied, and remaining 7.55% respondents are says that clarity of employees job responsibilities are very clear.

**Table No : 3 Opinion of Respondents for Growth opportunities. (n=106)**

Sr.No.	Responses	Frequency	Percentage
1	Regularly	21	19.81
2	Occasionally	59	55.66
3	Rarely	23	21.70
4	Never	3	2.83
	<b>Total</b>	<b>106</b>	<b>100.00</b>

(Sources: Primary data sources)

Above table shows that maximum i.e. 55.66% respondents says that Occasionally they receive opportunities for growth and development, 21.70%

respondents are saying that Rarely they receive opportunities for growth and development, 19.81% respondents are saying that Regularly they receive

opportunities for growth and development, and remaining 2.83% respondents are saying

that they Never receive opportunities for growth and development.

**Table No 4: Opinion about factors influencing employee engagement.**

Sr	Particulars	Average	Std.Dev.
1.	My job provides growth opportunities and advancements.	4.04	0.85
2.	Our organization has a collaborative culture that promotes teamwork.	3.82	0.86
3.	My supervisor supports and empowers me in my decision.	3.60	1.04
4.	I have autonomy in my job	3.54	1.02
5.	Regular feedback and recognition improve my engagement.	3.59	0.90
6.	Our organization promotes open and transparent communication	3.59	0.93
7.	My work has purpose and meaning, fostering a sense of belonging.	3.45	0.97
8.	I am satisfied with the company's healthy insurance and retirement plan.	3.79	0.97
9.	I receive adequate paid time off (vacation, sick leave, etc.)	3.60	0.94
10.	The company offers wellness programs and employee assistance for personal issues.	3.58	0.94
11.	The company provides opportunities for professional development and training.	3.63	1.02
12.	My work schedule allows for adequate personal time and balance between work and family.	3.58	0.94
13.	The company respects my personal boundaries.	3.53	1.05
14.	The company's reward system is fair and motivating.	3.50	0.94
15.	Overall, I feel engaged valued, and satisfied with my job.	3.44	1.06

(Source: Primary data source)

Above table shows that agreement of among respondent on the various factors influencing employee engagement. The most influencing factor is, "My job provides growth opportunities and advancement" is rated 4.04 Mean score shows that samples are agreed with the job provides growth opportunities and advancement is the most influencing factor. Standard deviation is 0.85 shows consistency in opinions. Next factors influencing "Our organization has a collaborative culture that promotes teamwork." with 3.82 Mean score shows that samples are agreed with the Our organization has a collaborative culture that promote steam work. Standard Deviation is 0.86 shows consistency in opines. Next factor influencing is, "I am

satisfied with the company's health insurance and retirement plan". With 3.79 Mean score shows that samples are agreed to the I am satisfied with the company's health insurance and retirement plan. Standard Deviation is 0.97 shows consistency in opines. Least factor influencing, "Overall, I feel engaged valued, and satisfied with my job", with 3.44 Mean score shows that samples are agreed to the fact that overall, employees feel engaged valued, and satisfied with their job. Standard Deviation is 1.06 shows consistency in opinions.

**Factor Analysis:****Factors Influencing Employee Engagement:**

Following is the analysis of parameters that shows influencing factors which considered to be most important in organization for

engaging employees in the right way. The table shows KMO and Bartlett's Test for Factors Influencing Employee Engagement. Factor analysis has used to find out factors out of these fifteen statements.

**Table No 5: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
	Approx. Chi-Square	1184.136
Bartlett's Test of Sphericity	df	105
	Sig.	.000

(Source: Compiled by researcher)

The **Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy** value is 0.912, indicating that the data is highly suitable for factor analysis. A KMO value above 0.9 reflects an excellent level of sampling adequacy.

The results of **Bartlett's Test of Sphericity** show a Chi-Square value of 1184.136 with 105 degrees of freedom, and the significance level is 0.000. This indicates that the correlation matrix is not an identity matrix and confirms the suitability of the data for factor analysis.

**Table No 6**

<b>Communalities</b>		
	Initial	Extraction
F1	1.000	.653
F2	1.000	.634
F3	1.000	.703
F4	1.000	.671
F5	1.000	.505
F6	1.000	.684
F7	1.000	.706
F8	1.000	.617
F9	1.000	.539
F10	1.000	.592
F11	1.000	.739
F12	1.000	.710
F13	1.000	.753
F14	1.000	.676
F15	1.000	.690
Extraction Method: Principal Component Analysis.		

(Source: Compiled by researcher)

This table presents the communalities for each variable before and after extraction using Principal Component Analysis (PCA). The "Initial" values are set to 1.000, indicating that each variable initially possesses its total variance. The "Extraction" values represent the portion of variance retained in the extracted components. Higher values indicate that a greater proportion of variance is explained by the selected components, suggesting strong representation in the factor structure.

Notably, F13, F11, F12 exhibit the highest extracted communalities, indicating a substantial proportion of their variance is explained. Conversely, F5 and F9 have the lowest communalities, implying that a smaller proportion of their variance is captured by the extracted components



**Table No 7: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.723	58.153	58.153	8.723	58.153	58.153	5.466	36.443	36.443
2	1.150	7.666	65.819	1.150	7.666	65.819	4.406	29.376	65.819
3	.973	6.489	72.308						
4	.746	4.971	77.279						
5	.541	3.607	80.886						
6	.502	3.349	84.235						
7	.409	2.726	86.961						
8	.363	2.423	89.384						
9	.317	2.112	91.496						
10	.279	1.858	93.354						
11	.265	1.764	95.119						
12	.234	1.563	96.682						
13	.204	1.357	98.039						
14	.189	1.260	99.299						
15	.105	.701	100.000						

Extraction Method: Principal Component Analysis.

(Source: Compiled by researcher)

Above table shows that the data explains is 65.81% of variance with two factors. The rotated component matrix has been utilized to get final factor scores.

**Table No 8: Rotated Component Matrix<sup>a</sup>**

Sr. No	Parameters	Component	
		1	2
1.	My job provides growth opportunities and advancements.	.744	.316
2.	Our organization has a collaborative culture that promotes teamwork.	.757	.245
3.	My supervisor supports and empowers me in my decision.	.774	.323
4.	I have autonomy in my job	.629	.525
5.	Regular feedback and recognition improve my engagement.	.651	.287
6.	Our organization promotes open and transparent communication	.761	.324
7.	My work has purpose and meaning, fostering a sense of belonging.	.771	.334
8.	I am satisfied with the company's healthy insurance and retirement plan.	.689	.377
9.	I receive adequate paid time off (vacation, sick leave, etc.)	.658	.325
10.	The company offers wellness programs and employee assistance for personal issues.	.486	.597
11.	The company provides opportunities for professional development and training.	.477	.715
12.	My work schedule allows for adequate personal time and balance between work and family.	.341	.771
13.	The company respects my personal boundaries.	.335	.801
14.	The company's reward system is fair and motivating.	.249	.783
15.	Overall, I feel engaged valued, and satisfied with my job.	.292	.778

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

(Source: Compiled by researcher)

Above Table shows the reasonable factor loading to every statement. The factors with respect to statements are labelled by researcher as follows.

**Table No 9: Factor: Supportive Work Environment**

Sr. No.	Factors	Factor Loading
1.	My job provides growth opportunities and advancements.	.744
2.	Our organization has a collaborative culture that promotes teamwork.	.757
3.	My supervisor supports and empowers me in my decision.	.774
4.	I have autonomy in my job	.629
5.	Regular feedback and recognition improve my engagement.	.651
6.	Our	.761
7.	My work has purpose and meaning, fostering a sense of belonging.	.771
8.	I am satisfied with the company's healthy insurance and retirement plan.	.689
9.	I receive adequate paid time off (vacation, sick leave, etc.)	.658

(Source: Compiled by researcher)

The Factor Supportive work environment highlights the parameters that influence employees be engaged in the organization. Theses factor has extracted owing to nine statements shows employee engagement practices undertaken in organization. The factor loadings suggest the relative importance of each parameter.

**Table No 10: Factor: Work Life Balance:**

Sr. No.	Parameters	Factor Loading
1	The company offers wellness programs and employee assistance for personal issues.	.597
2	The company provides opportunities for professional development and training.	.715
3	My work schedule allows for adequate personal time and balance between work and family.	.771
4	The company respects my	.801
5	The company' reward system is fair and motivating.	.783
6	Overall, I feel engaged valued, and satisfied with my job.	.778

(Source: Compiled by researcher)

Highest loaded factor, "My supervisor supports and empowers me in my decision." with 0.774 loading factor shows supervisors support leads the workers towards empowerment. Reaming statements which comes in this category suggest same employee engagement practices undertaken in organization.

The Factor Work Life Balance highlights the parameters that influence employees be engaged in the organization through balancing the work and life simultaneously. Theses factor has extracted owing to Six statements shows employee engagement practices undertaken in organization.

The factor loadings suggest the relative importance of each parameter. Highest loaded factor, "The company respects my personal boundaries." with 0.801 loading factor shows how oragisation can balance employees work and life simultaneously. Reaming statements which comes in this category suggest same employee engagement practices undertaken in organization.

#### Findings:

1. It is concluded that maximum i.e. 52.83% respondents are male in the research.
2. It is concluded that maximum i.e. 41.51% respondents are from age between 26 to

- 30 years and minimum i.e.2.83% respondents are from age between 40 and above years in the research.
3. It is concluded that maximum i.e.53.77% respondents shows neutral opinion about mental health supports at workplace.
  4. It is concluded that maximum i.e. 55.66% respondents says that occasionally receive opportunities for growth and development, and minimum i.e. 2.83% respondents are saying that Never receive opportunities for growth and development Never.
  5. Opinions about factors influencing employee engagement it is concluded that Most factors influencing is, “My job provides growth opportunities and advancements”. With 4.04 Mean score shows that samples are agreed with the fact that job provides growth opportunities and advancements. Standard deviation is 0.85 shows consistency in opines and Least factor influencing is “The company offers wellness programs and employee assistance for personal issues” with 3.58 Means cores hows that samples are agreed to the fact The company offers wellness programs and employee assistance for personal issues. Standard Deviation is 0.94 shows consistency in opines.
  6. The **Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy** value is 0.912, indicating that the data is highly suitable for factor analysis. A KMO value above 0.9 reflects an excellent level of sampling adequacy.
  7. The Factor Supportive work environment highlights the parameters that influence employees be engaged in the organization. Theses factor has extracted owing to nine statements shows employee engagement practices undertaken in organization. The factor loadings suggest the relative importance of each parameter. Highest loaded factor, “My supervisor supports and empowers me in my decision.” with 0.774 loading factor shows supervisors support

leads the workers towards empowerment.

8. The Factor Work Life Balance highlights the parameters that influence employees be engaged in the organization through balancing the work and life simultaneously. Theses factor has extracted owing to five statements shows employee engagement practices undertaken in organization. The factor loadings suggest the relative importance of each parameter. Highest loaded factor, “The company respects my personal boundaries.” with 0.801 loading factor shows how oragisation can balance employees work and life simultaneously.

#### **Suggestions:**

- Company should implement regular feedback and recognition programs to boost employee morale.
- Company should introduce flexible work arrangements and wellness initiatives to enhance work-life balance.

#### **Conclusion:**

The comprehensive study on employee engagement in Bidaano Pvt Ltd, Pune, yielded valuable insights in to the complex dynamics influencing employee motivation and job satisfaction. The findings underscored the significance of effective communication, recognition, work-life balance, and growth opportunities in fostering a culture of engagement. Notably, inadequate feedback, limited career advancement prospects, and burnout emerged as key challenges undermining employee engagement. To address these issues, the study recommends implementing regular feedback mechanisms, recognition programs, flexible work arrangements, wellness initiatives, and employee development opportunities. By integrating these strategies, Bidaano Pvt Ltd can enhance employee engagement, retention, and productivity, ultimately driving business growth and establishing itself as a preferred

employer.

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*International Journal of Management and Economics*, : 227–244.



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## Cyber Security Awareness: Social Media Usage and Cyber Security Behavior of College Students

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DOI - 10.5281/zenodo.15145781

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### Abstract:

The study aims to analyze the usage of social media and awareness of cybersecurity as well as cyber security behavior among college students. In recent years, social media has highly impacted on student's lives. Social media platforms are easily available to students but they all were not aware about the security and safety measures i.e., Cyber Security. Students using social media accounts for entertainment and majorly sharing their live status. Cybercrime has become a bigger challenge. The national security is at the risk and so is the public safety and personal privacy. In order to eliminate the treats of cybercrime we need to educate the students, since the students are the larger group of people who uses social media these days. This paper studied the level of cyber security awareness among rural undergraduate and postgraduate students in Satara. Data was collected from 280 students. A structured questionnaire used for doing online surveys to analyze how the students uses the social media platforms and are they aware about the cybersecurity. This survey was conducted in Satara city by focusing on Social media security threats, Cyber security behavior and usage of social media platforms. This survey examines the college students active on social media platforms and awareness about cybersecurity. The students' cyber security behavior was general, not secure and safe. In rural areas, students were finding opportunities with the help of social media platforms and they were not much aware about cyber security. They have just heard about cyber security, viruses, money theft, etc. but do not have knowledge about securing personal information, data. For this purpose, the colleges, Cyber security systems should take initiatives to aware the students and secure their lives.

**Keywords:** Social Media Platforms, Social Media Security Threats, Awareness Of Cyber Security, Cyber Security Behavior

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### Introduction:

Cybersecurity is a strategy that prevents organizations assets like computers, Information systems, network, information and data from unauthorized access. The three main objectives of cybersecurity refer to Confidentiality that seeks to keep the information confidential, Integrity of the organization's system, network and data. This CIA Triad model where C stands for Confidentiality, I stand for Integrity and A stands for Availability is being designed to direct the policies for information security in an organization as well as applicable for personal data security.

Cybersecurity is now a major worry for governments, corporations, and individuals alike in today's increasingly digital world. Students are defenseless to anextensive range of cyberdangers, from malware and phishing to know theft and data breaks, as a result of the quick growth of online activities and digital technologies. According to studies, many students are not sufficiently aware of the threats and safety precautions related to online security, even if cybercrimes are becoming more common. Students who lack cybersecurity awareness are not only at risk, but it may also have

wider repercussions when they grow up to be professionals in charge of protecting digital infrastructures and handling sensitive data.

Students must be aware of cybersecurity in order to be able to properly traverse the digital world, safeguard their personal data, and comprehend the wider effects of cyberthreats on society. While some students may understand the fundamentals of internet safety, surveys and research have revealed that many students are still ignorant of more complex risks and the best ways to protect their online presence. A false sense of invulnerability, misunderstandings about internet security, and a lack of formal education on the topic are some of the causes of this ignorance.

This research aims to evaluate students' awareness of cybersecurity, pinpoint frequent misunderstandings, and investigate the elements that influence their comprehension—or lack thereof—of digital security procedures. This study intends to emphasize the significance of incorporating cybersecurity awareness programs into academic curriculum and encouraging improved practices in cyber security

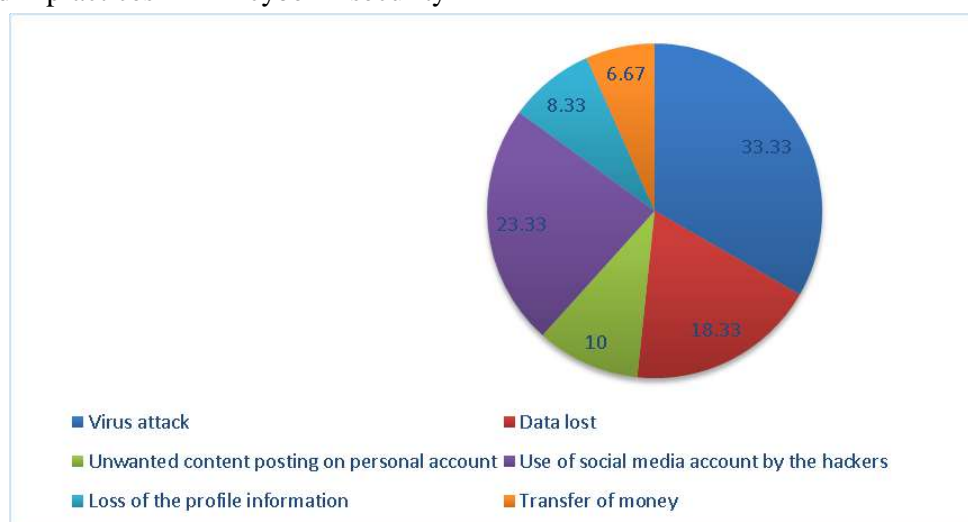
behavior, social media security threats by analyzing the existing level of cybersecurity education and student knowledge.

### Objectives:

1. To study the popular social media platform and their usage among the college students
2. To know about the awareness of cyber security among the college students
3. To study the cyber security behavior of college students

### Research Methodology:

The research was conducted in Undergraduate and Post graduate college students. The present scope of this study is limited to Satara. The research study is descriptive in nature. It uses a Schedule as the research tool. The specific aim of this research is to comprehend the awareness of cyber security, cyber security behavior and use of various social media means among the young students. To analyze the gap between current status of cyber security awareness and the social media threats.



In this 33.33% students encountered with Virus attack. 23.33% students encountered with hack the social media account, 18.33 students with data lost, 10%

with unwanted content post on personal account and 6.67% students encountered with Transfer of money.

**Awareness of Cyber security:**

Sr. No.	Parameters	Mean	SD	Rank
1	I am aware about the Cyber Crime	4.13	0.85	3
2	I am aware about different virus attacks	3.98	0.92	6
3	The antivirus installation and update of it is important to prevent cyber attack	4.10	0.89	4
4	I am aware about security threats like e-mail, virus, fake advertisements, phishing, adware's, spywares attack	4.10	0.70	5
5	Downloading files, images, videos from any website or any E-Mail attachments can cause the security threat	4.15	0.83	2
6	Having enough information of Cyber security	3.82	0.87	7
7	Reading all the term and conditions while downloading any software or application from internet	4.32	0.92	1

From the above table observed that, Students give 1<sup>st</sup> Rank to “Reading all the term and conditions while downloading any software or application from internet” with 4.32 mean score. Majority of the students Agree with that the terms and conditions are essential to read first and then go for downloading any applications. The standard deviation 0.92 shows consistency in opinion. 2<sup>nd</sup> Rank give to the parameter “Downloading files, images, videos from any website or any E-Mail attachments can cause the security threat” with 4.15 mean score. The standard deviation 0.83 shows

consistency in opinion. Students are agreed with downloading files, images from unknown emails may cause security threat. Students give 7<sup>th</sup> Rank to “Having enough information of Cyber security” with mean score 3.82. Students are neutral with they don't have sufficient knowledge or information about cyber security.

It concludes that, Students give 1<sup>st</sup> rank to “Important to read all the term and conditions while downloading any application or software from internet” which is most important part to secure the data and secure the system from virus attacks.

**Cyber security behavior while creating and using password**

Sr. No.	Parameters	Mean	SD	Rank
1	Creating small and easy passwords like name, date of birth, contact number, etc.	2.97	1.34	4
2	Password is known to family members, friends or with any other	2.70	1.28	6
3	Save passwords in web browser, mobile phone notes.	2.93	1.14	5
4	Use same password for multiple accounts	2.57	1.30	7
5	Using two factor authentication (OTP sent on Mobile number or E-mail)	3.92	1.05	2
6	Logging out the account after use is helpful	4.17	0.93	1
7	Never give “Hint” option to recover forget passwords	3.27	1.01	3

From the above table observed that, Students give 1<sup>st</sup> Rank to “Logging out the account after use is helpful” with 4.17 mean score. Majority of the students Agree with after using social media account or email carefully log out first. The standard

deviation 0.93 shows consistency in opinion. 2<sup>nd</sup> Rank give to the parameter “Using two factor authentication (OTP sent on Mobile number or E-mail)” with 3.92 mean score. The standard deviation 1.05 it varies opinion. Students are agreed with Two

factor authentication must be used. Students give 7<sup>th</sup> Rank to “Use same password for multiple accounts” with mean score 2.57. Students are neutral means some students opines that same password used for multiple accounts because it is easy to remember. The standard deviation 1.30 it varies opinion.

It concludes that, Students give 1<sup>st</sup> rank to “Logging out the account after use is helpful” which is most important part to secure the data and secure the system from unauthorized access.

#### Cyber security behavior while accessing and sharing the information

Sr. No.	Parameters	Mean	SD	Rank
1	Use online storage platforms for keeping personal data or information	3.10	1.18	1
2	Storing data and information without any password of authentication	2.58	1.37	2
3	Without any clear security information entering payment information or personal information	2.38	1.31	4
4	Sharing photos, personal information, payment details with unknown contact number or E-mail Id	2.25	1.39	5
5	Open files with unsupported file extension or unknown type	2.47	1.28	3

From the above table observed that, Students give 1<sup>st</sup> Rank to “Use online storage platforms for keeping personal data or information” with 3.10 mean score. Majority of the student’s neutral with online storage platforms used for keeping personal data or information. The standard deviation 1.18 shows less deviation in opinion. 2<sup>nd</sup> Rank give to the parameter “Storing data and information without any password of authentication” with 2.58 mean score. The standard deviation 1.37 it varies opinion. Students are neutral with storing data without any password of authentications

make insecure. Students give 5<sup>th</sup> Rank to “Sharing photos, personal information, payment details with unknown contact number or E-mail Id” with mean score 2.25. Students are disagreeing with unsafe to share photos, payment details with unknown contact number or email. The standard deviation 1.39 it varies opinion.

It concludes that, Students give 1<sup>st</sup> rank to “Use online storage platforms for keeping personal data or information” which use online storage platforms or open source storage platforms for keeping personal data or information.

#### Cyber security behavior while using internet and network

Sr. No.	Parameters	Mean	SD	Rank
1	Use free public network, Wi-Fi	2.82	1.12	1
2	Download or install free Anti-virus from unknown source, websites	2.65	1.31	2
3	Downloading images, audios, videos form unsafe websites	2.40	1.44	4
4	Clicking on links from share by unknown contact numbers, E-mails	2.27	1.40	5
5	Without reading notifications click on Ok or allow buttons	2.15	1.35	7
6	Searching with unsafe/ unsecure websites	2.25	1.34	6
7	Permitting access of the device while downloading	2.63	1.41	3



From the above table observed that, Students give 1<sup>st</sup> Rank to “Use free public network, Wi-Fi” with 2.82 mean score. Majority of the student’s neutral with connect free public Wi-Fi. The standard deviation 1.12 shows less deviation in opinion. 2<sup>nd</sup> Rank give to the parameter “Download or install free Anti-virus from unknown source, websites” with 2.65 mean score. The standard deviation 1.31 it varies opinion. Students are neutral with not to download free anti-virus from unknown sources. Students give 7<sup>th</sup> Without reading notifications click on Ok or allow buttons” with mean score 2.15. Students are disagreeing with without reading any notification not to click on Ok, allow, Submit buttons. The standard deviation 1.35 it varies opinion.

It concludes that, Students give 1<sup>st</sup> rank to “Use free public network, Wi-Fi” is not right cyber security behavior while using internet and network.

#### Findings:

1. It has been found that 33% students prefer WhatsApp as a social media platform.
2. It has been found that 53.33% students spent 1 to 2 Hrs. on social media account
3. It has been found that 75% students were aware about cyber security but not in depth.
4. It has been found that 33.33% students encountered with virus attack.
5. Students give 1<sup>st</sup> Rank to “Reading all the term and conditions while downloading any software or application from internet” with 4.32 mean score. Majority of the students Agree with that the terms and conditions are essential to read first and then go for downloading any applications.
6. Students give 1<sup>st</sup> Rank to “Logging out the account after use is helpful”

with 4.17 mean score. Majority of the students Agree with after using social media account or email carefully log out first.

7. Students give 1<sup>st</sup> Rank to “Use online storage platforms for keeping personal data or information” with 3.10 mean score. Majority of the student’s neutral with online storage platforms used for keeping personal data or information.
8. Students give 1<sup>st</sup> Rank to “Use free public network, Wi-Fi” with 2.82 mean score. Majority of the student’s neutral with connect free public Wi-Fi.

#### Suggestions:

1. Every institution should conduct Cyber security workshops, Expert lectures, seminars, competition regularly for improving the cyber security behavior regarding password creation, access internet or any network, sharing personal information, money transaction details.
2. Encourage students to go for certifications, add-on courses, forums, competitions in cyber security.
3. Run cyber security campaigns and involved techno-savvy students for awareness. In this campaign aware the students regarding security threats, data breach, social media security threats, cyber security behavior and cyber-attacks.
4. Tie-up with the Cyber security organizations who will gives theoretical knowledge as well as technical knowledge about cyber security.
5. Every institute should develop cyber security policies for student’s while using campus Wi-Fi, personal or institutes devices. Gives the guidelines regarding how to secure network, devices, personal data.

**Conclusion:**

Awareness of cybersecurity among students is really very important in the world of digitalization, when technological advancements and its use is deeply integrated into everyday life. Students, who are frequent internet users, available on social media platforms and accessing various online platforms, are vulnerable to many cyber activities, including phishing, identity theft, and cyberbullying. Students' training on the importance of protecting personal information, recognition of general threats and the adoption of good practice of cyber behavior. Institutions, teachers, and parents play an important role in promoting culture of consciousness and responsibility for cyber-sensitized. Eventually, as students become more informed and attentive, they can help reduce the risks associated with cybrism by providing a safer digital environment for themselves and others.

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## A Study on Management of Current Assets and Liabilities in Stenless Steel Company & Construction

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DOI - 10.5281/zenodo.15145815

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### Abstract:

*One of the most important areas in day to day management of the firm is the management of current assets and liabilities. Current assets and liabilities management is the functional area of finance that covers all the current accounts of the firm.*

*Current assets and liabilities management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of Current assets and liabilities management is to ensure that a firm can continue its operation and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses.*

*The main objective of current assets and liabilities management is to maintain an optimal balance between each of the working capital components. Business success heavily on the ability of financial executives to effectively manage receivables inventory and payable. Firms can reduce their financial costs and increase the amount of investment tied up in short-term assets. Most of the financial manager's time and effort is allocated to optimizing the level of current assets and liabilities back toward optimal levels. To obtain more knowledge about management of current assets and liabilities researcher has selected Stenless Steel Company for research.*

*Stenless Steel Company is established in the year of 2001. It is engaged in the promotional activities of the mechanized manufacturing of AAC Block of Baltic Building Elements Ltd. India Stenless Steel Company is an established company engaged in the promotional activities of the mechanized manufacturing of AAC Blocks of Biltec Building Elements Ltd. in India. They are a team of professional with impeccable educational qualifications and professional credentials. It offers an entire product service of Aerated Autoclave Cellular Blocks. One of the most important areas in the day-to-day management of the Stenless Steel Company is the management of current assets and liabilities*

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### Introduction:

One of the most important areas in day to day management of the firm is the management of current assets and liabilities. Current assets and liabilities management is the functional area of finance that covers all the current accounts of the firm.

Current assets and liabilities management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of Current assets and liabilities management is to ensure that a firm can continue its operation

and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses.

The main objective of current assets and liabilities management is to maintain an optimal balance between each of the working capital components. Business success heavily on the ability of financial executives to effectively manage receivables inventory and payable. Firms can reduce their financial costs and increase the amount of investment tied up in short-term assets. Most of the financial manager's time and

effort is allocated to optimizing the level of current assets and liabilities back toward optimal levels. To obtain more knowledge about management of current assets and liabilities researcher has selected Stenless Steel Company for research.

Stenless Steel Company is established in the year of 2001. It is engaged in the promotional activities of the mechanized manufacturing of AAC Block of Baltic Building Elements Ltd. India Stenless Steel Company is an established company engaged in the promotional activities of the mechanized manufacturing of AAC Blocks of Biltec Building Elements Ltd. in India. They are a team of professional with impeccable educational qualifications and professional credentials. It offers an entire product service of Aerated Autoclave Cellular Blocks. One of the most important areas in the day-to-day management of the Stenless Steel Company is the management of current assets and liabilities.

#### **Significance of the Study:**

In general, the current assets are considered as one of the important components of the total assets of a firm. A firm may be able to reduce the investment of total assets by renting or leasing plants and machinery. Whereas the same policy cannot be followed for the components of net capital. The high level of current assets the risk of liquidity associated with the opportunity cost of funds that may have been invested in long-term assets. The impact of net capital management policies on profitability is highly important, however, little empirical research has been carried out to examine this relationship.

The efficient management of net capital is an important prerequisite for the successful working of a business concern it reduces the chances of business failure generates a feeling of security and confidence in the minds of personnel in the organization it assures the solvency of steady of organization.

In the general form the Viewpoint of the chief financial officer (CFO) management of net capital is simple and a simple concept of ensuring the ability of the organization to finance the difference between the current assets and current liabilities.

In reality management of current assets and liabilities has become one of the most important issues in the organization where many financial executives are trying to identify migrants of net capital and the basic deter optimal level of current assets and liabilities. Consequently, companies can minimize risk and improve the overall performance by understanding the role and determinants of current assets and liabilities.

#### **The objective of the Study:**

1. To study the concept, sources and uses of the current assets and liabilities management.
2. To study the various ratios related to current assets and liabilities.
3. To study the financial performance of the company with the help of accounting ratio.
4. To study of problems & obstacles in the current assets and liabilities management of company.
5. To make suggestions to company for effective management of current assets and liabilities.

#### **Hypotheses:**

##### **1. Hypotheses- 1**

**H0 Null Hypothesis** - There is a positive relationship between efficient current assets and liabilities management and the profitability of the company.

**H1 Alternative Hypothesis** - There is no any positive relationship between efficient current assets and liabilities management and the profitability of the company.

##### **2. Hypotheses- 2**

**H0 Null Hypothesis** - There are problems & obstacles in the current assets and liabilities

management and its impact on profitability of the company.

**H1 Alternative Hypothesis** - There are no any problems & obstacles in the current

assets and liabilities management and its impact on profitability of the company.

### Testing Of Hypothesis:

- 1) Accepted as there is a positive relationship between efficient Current assets and liabilities management and profitability of the company.
- 2) The companies more efficient in managing their Current assets and liabilities are expected to pose high level of profitability and vice versa. According to Hypothesis
- 3) is accepted as the different components of the Current assets and liabilities which are management of cash, management of receivables & payables and management of Debtors & creditors have a major effect on the management of the Current assets and liabilities in the company. In the same way it is accepted the hypotheses

- 4) That there is a negative relationship between liquidity and profitability of the companies as so the companies with high level of liquidity are expected to post low level of profitability and vice versa.

### Scope of the Study:

The scope of the study is identified after and during the study is conducted. The main scope of the study was to put into practical the theoretical aspect of the study into real life work experience. The study of management of current assets and liabilities is based on tools like Ratio Analysis, Statement of changes in Current assets and liabilities. However, a total approach should be followed which covers all the company's activities relating to vendor-customer and product.

### Research Methodology:

#### Sample Size:

Sr. No.	Post	Total	Samples Selected	Sampling Method
1	President	1	1	Systematic Sampling
2	Manager	1	1	Systematic Sampling
3	Finance Manager	1	1	Systematic Sampling
4	Cost Accountant	1	1	Systematic Sampling
5	Chartered Accountant	1	1	Systematic Sampling

#### Sources of Data Collection:

##### A) Primary Data:

The Primary data will be collected from Questionnaire, Observations and Personal Interaction with Finance Manager and other staff members.

##### B) Secondary Data:

- 1) Personal Interview
- 2) Observations
- 3) Personal Interaction

#### Method of processing the data collected:

- Chi-Square Test.
- MS – Excel
- Mean, Median and Mode.
- Percentage

##### 4) Questionnaire

##### 5) Google Form

The major source of data for this project will collected through annual reports, Profit and Loss Accounts of last year and some more information collected from internet and text sources.

#### Tools of Data Collection:

- Ratio Analysis
- Proportion
- Graphs, Report or Charts.
- Calculators, Printing Presses or typewriters

**Limitation of the Study:**

1. Study is limited to the accounting year 2023-2024
2. Study is based on information provided by the company.
3. Study is that Current assets and liabilities management does not take into account the price level changes.

**Findings:**

Findings are the end result of the project study. It is the conclusion, which the research establishes after analyzing the data from the questionnaire. Some of the findings the researcher found out after carefully analyzing. The questionnaire is as follows:

- 1) The way of Current assets and liabilities was managed has a significant impact on both profitability and liquidity.
- 2) There is a negative relationship between liquidity and profitability of the company so company with high level of liquidity are expected to post low level of profitability and company with low level of liquidity are expected to post high level of profitability .
- 3) There is a possible positive relationship between efficient Current assets and liabilities management and profitability. Company more efficient in managing their Current assets and liabilities are expected to pose high level of profitability and vice versa.
- 4) The ultimate objective of any company is to maximize the profit; but preserving liquidity of the company is an important objective too.
- 5) Efficient Current assets and liabilities management involves planning and on the one hand and avoid excessive investment in these assets on controlling current assets and current liabilities in a manner

that eliminates the risk of inability to meet due short-term obligations the other hand.

- 6) Profitability can be increased in the expense of liquidity.
- 7) Current assets and liabilities Management is a very sensitive area in the field of financial management as it involves the decision of the amount and composition of current assets and the financing of these assets.

**Suggestions or Recommendation:**

- 1) Establish systems to measure Current assets and liabilities. Check whether. Levels of Current assets and liabilities can be measured accurately and regularly, ideally on a daily basis, and certainly on a weekly basis.
- 2) It needs system that will allow the company to state the, amount of cash, bills receivable, bills payable, debtors and creditors.
- 3) Record past and current levels of Current assets and liabilities knowing the point.
- 4) This helps in setting a realistic budget and will enable the company to establish times of the month/year when elements of Current assets and liabilities are higher/lower.
- 5) Management of cash is one of the most important areas in the management of Current assets and liabilities in company.
- 6) Managing cash should involve the following issues:
  - a. The preparation and use of cash budget.
  - b. Management of short-term cash investment.
  - c. Use of cash management models.
- 7) Companies should determine how much Current assets and liabilities should be invested and how should

the investment in Current assets and liabilities be financed.

- 8) The decision regarding the level of overall investment in Current assets and liabilities is a cost/benefit trade-off between Liquidity & profitability, or Cash flow & profits.

### Conclusion:

Firms are created to generate revenues for their owners in the long-term. However, the long-term value is a sum-total of short – term values.

Current assets and liabilities management takes care of the short – term value creation. Current assets and liabilities management requires managing the short-term levels of investment and financing them.

Managing Current assets and liabilities levels refer to the investment in cash, inventories and receivables as well as short-term financing sources such as trade credits and bank loans.

Current assets and liabilities is the lifeline of every industry, irrespective of whether it's a manufacturing industry, services industry.

Current assets and liabilities is the prime and most important requirement for carrying out the day-to-day operations of the business. Current assets and liabilities gives the much-needed liquidity to the business. Current assets and liabilities Finance reduces the overall fund requirement, required to build up the Current Assets, which in turn help you improve your Turnover Ratio.

Most of capital is managed will have a significant impact on Profitability of those companies. We have found a strong negative relationship between net operating profitability and the liquidity and a positive relationship between efficient Current assets and liabilities management and profitability of the company.

On basis of the above information, we may further conclude that these results (findings) can be further strengthened if the companies manage their Current assets and liabilities in ways that are more efficient. Management of Current assets and liabilities means "management of current assets and current liabilities, and financing these current assets".

If those companies properly manage their cash, accounts receivables and inventories in a proper way, this will ultimately increase profitability of those companies.

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**The Impact of Goods and Services Tax (GST) on Small and Medium Scale Industries: A Special Reference to Satara MIDC**

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**DOI - 10.5281/zenodo.15145871**

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**Abstract:**

*This study investigates the impact of the Goods and Services Tax (GST) on Small and Medium Scale Industries (SMEs) in the Satara MIDC region. The implementation of GST aimed at simplifying India's tax structure and promoting ease of doing business. This research analyzes operational efficiency, compliance costs, and market competitiveness pre- and post-GST, utilizing both qualitative and quantitative methodologies. Findings indicate that while GST introduced initial burdens, long-term effects include operational benefits and competitive growth.*

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**Keywords:** *Goods and Services Tax, SMEs, Satara MIDC, operational efficiency, compliance costs.*

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**Introduction:**

The introduction of the Goods and Services Tax (GST) in India on July 1, 2017, marked a significant reform in the country's indirect tax regime. GST was designed to consolidate various indirect taxes into a single framework, thus simplifying compliance and promoting a unified market. Small and Medium Scale Industries (SMEs) form a vital part of India's economy, contributing to employment and GDP. This study focuses on understanding how GST affects SMEs in the Satara MIDC (Maharashtra Industrial Development Corporation) area.

**Literature Review:**

**Mr. Tone Prakash Krishna (2020)** This paper makes a descriptive study about the basic concept of GST, its working mechanism in India, and its impression on various economic sectors. The journey of GST from 2000 to 2017 is set out in the tabular form. In the paper, a comparison is being made between the previous taxation system and the GST taxation system. The overall impact of taxes on the various sector

is being reduced by removing multiple tax systems. Various changes in taxation are being made after GST implementation. GST has a great impact on to survive the business in the long run. History shows many countries economic structure is being improved through the adoption of GST.

**Dr. K. R. Manjula (2020)** The vision of the author is to provide an analytical study of GST on the benefits of employees. The organizations to run for long-duration employees are important sources. An employer must provide employees various incentives like gifts, free cab or subsidized facilities, free food facilities, etc. to get work done from them. GST has affected the Indian economy by simplifying tax structure, increase in production and growth of industries, GST has reduced production cost in the domestic markets these increases export rate of our country, etc. The main objective is to bring awareness among employees about the organization. Employees must communicate and changes must be made after discussion with employees. Misunderstanding must be avoided between employer and employees



for achieving the goals of the organization and employee's hard work should be appreciated by satisfying their needs.

**Amar Ranjan Dey (2020)** The Goods and Service Tax (GST) after Independence will be very necessary and huge and indirect reforms of the country's fiscal system. It aims at promoting and improving the country's economic growth. It is a —comprehensive tax that incorporates all of the state and central government indirect taxes and the single economy in a seamless national market. It will be easier to administer due to its straightforward and self-management character. The GST will be the largest fiscal reform covering multiple taxes in a single system of total taxation. It is designed to incorporate a consumer-based system instead of a manufacturing system. GST will help everyone in the economy without any doubt, but the benefits of the outbreak of the GST would benefit ordinary citizens. There are also hopes for economic well-being in this new tax structure.

**Dr. Bhimshankar Kharase (2020)** GST plays a very important role in grounding every single specific type of indirect tax and paving it into single taxation. Goods and service will be taxed at various GST rates including Zero percent, Five percent, Twelve percent, Eighteen percent, and Twenty Eight percent. The dual GST model is currently being implemented in India. IGST and CGST and SGST and IGST is levied on merchandise imported across the all-India inter-state boundary by the central government. From the author's point of view, the main aim is to understand about GST and MSMEs and to explore GST's effect on MSMEs. Before the implementation of GST, to start a business in a specific state, there was also a cumbersome procedure that consisted of various steps and specifications. Now, one just has to register for GST, which is much faster and much simpler than the previous system. GST gave the small and medium-

sized enterprises (SMEs) an edge in competitiveness so they can become competitive at the international level. Within this special committee, the government group has on its agenda to master the issues of the small self-employed.

### **Objectives of the Study:**

**The following are the Objectives of the study**

1. To study the Goods and Service Tax
2. To study awareness level about the compliance of GST.
3. To make some suggestions.

### **Hypothesis:**

**Following are the Hypothesis of the study**

H0 -: There is no impact of awareness about the compliance of GST on the complexity of the GST.

H1-: There is impact of awareness about the compliance of GST on the complexity of the GST.

### **Research Methodology:**

- 1. Data Collection:** The research employs both primary and secondary data collection methods. Surveys and structured interviews were conducted with approximately 80 SMEs in Satara MIDC, while secondary data was drawn from government reports, academic journals, and existing literature.
- 2. Research Type:** The study is descriptive and analytical Research.

**Nature of study:** Quantitative study

**Sample size:** 80 samples is selected for the study purpose

**Sampling Method:** Purposive Sampling Method.

**Respondents:** Small, Medium, Micro and Large scale enterprises in Satara Taluka.

### **3. Research Instrument Questionnaire Method**

For the collection of primary data we will design the questionnaire according to

the objectives and hypothesis under the study, The questions in the questionnaire will be defined as per the variables and indicators required to analyse impact of GST on the Small and Medium scale Industries in Satara Taluka.

#### 4. Tools of Data Analysis:

Descriptive statistics: Percentage, Frequency, Mean, Standard Deviation  
Graphical Method: Pie chart and Bar diagrams

#### 5. Limitation of the Study:

The study geographically limited only for Small and Medium scale Industries in Satara MIDC. This study is only focus on impact of GST on Small and Medium scale Industries in Satara Taluka.

#### 6. Data Analysis and Interpretations

Data were analyzed using statistical software for quantitative metrics and thematic analysis techniques for qualitative insights.

#### 1. Awareness about the Goods and Services Act among the respondents Mean and Standard Deviation analysis:

The following statements related to the awareness about the Goods and Services Act consists of some statements that respondents say or feel about their various views about the Goods and Services Act. Researcher has used 5 point likert scale to indicate the extent to which samples are agree or disagree with each statement to describe the awareness of respondents about the Goods and Services Act. Researcher has used Mean and Standard Deviation for analysis.

**Table 1: Awareness about the Goods and Services Act among the respondents Mean and Standard Deviation analysis**

SL. No.	Statements	Mean	Std. Deviation
1	I have heard about the Goods and services Act	2.05	0.778
2	I have read about the Goods and Services Act	2.44	0.855
3	I have knowledge about various rules and regulations under GST	2.38	1.084
4	I know about the procedure for registration of GST.	2.74	1.199
5	I am aware about Applicability of various rules under GST.	1.89	0.779
6	I am aware about the GST Council	1.53	0.503
7	I am confident about preparation of forms /documents required for sales and purchases	1.98	0.636
8	I attend the GST Awareness Programmes	2.68	0.792
9	I have knowledge about preparation of GST returns and filling GST Returns/ Calming Input Tax Credit	2.03	0.656
10	Overall I consider myself well aware about the requirement of GST filing and Compliances	1.99	0.665

Above table shows that the opinion of respondents about the Goods and Services Act. Researcher has used 10 statement to find that the awareness of respondents about the Goods and Services Act. The mean value ranges from the 2.74 to 1.53 which shows that respondents are Strongly agree, Agree and Neutral to the statements. The highest

mean is 2.74 with S.D. 1.119 hence average number of respondents is agree to I know about the procedure for registration of GST. The lowest mean is 1.53 with S.D. 0.503 hence average number of respondents are strongly Agree to I am aware about the GST Council.

#### 2. Hypothesis Testing:

H0 -: There is no impact of awareness about the compliance of GST on the complexity of the GST.

H1-: There is impact of awareness about the compliance of GST on the complexity of the GST.

To check the significance and test the hypothesis researcher has used one sample t

test was applied with a critical test value of '3'. The value of '3' was taken into consideration because it is the mid-point of the scale.

**Table 2: One Sample t-test**

SL. No.	Statements	T	df	Sig. (2-tailed)	Mean Difference
1	I have heard about the Goods and services Act	-15.656	79	<.001	-1.100
2	I have read about the Goods and Services Act	-7.956	79	<.001	-.687
3	I have knowledge about various rules and regulations under GST	-4.524	79	<.001	-.562
4	I know about the procedure for registration of GST.	-2.613	79	.011	-.388
5	I am aware about Applicability of various rules under GST.	-14.112	79	<.001	-1.162
6	I am aware about the GST Council	-17.886	79	<.001	-1.262
7	I am confident about preparation of forms /documents required for sales and purchases	-8.439	79	<.001	-.800
8	I attend the GST Awareness Programmes	.847	79	.400	.075
9	I have knowledge about preparation of GST returns and filling GST Returns/ Calming Input Tax Credit	-13.303	79	<.001	-.975
10	Overall I consider myself well aware about the requirement of GST filing and Compliances	-13.608	79	<.001	-1.012

Table 2 shows the results of the t-test for the awareness of GST Compliance and their impact on complexity of GST. Small and Medium scale Business regarding the Goods and Services Act. It is found that the significance value is below 0.05 for all the statements, but for four statements the t

#### **Conclusions and Suggestions:**

This study aimed to investigate the relationship between awareness of Goods and Services Tax (GST) compliance and its impact on the perceived complexity of GST among small and medium-scale businesses. Overall, the research indicates that while the introduction of GST posed initial difficulties for SMEs in Satara MIDC, it has ultimately led to enhanced operational efficiencies and competitive advantages. Continuous support and education regarding

value is negative hence, overall it can be concluded that (except these four statements) the null hypothesis is rejected and alternate hypothesis is accepted that **There is impact of awareness about the compliance of GST on the complexity of the GST.**

compliance are essential for maximizing the benefits of GST.

#### **Suggestions:**

**Training Initiatives:** Regular workshops to educate SME owners about GST compliance and benefits.

**Technological Support:** Encourage the adoption of accounting software tailored for GST management.

**Government Policies:** Advocate for policies that address challenges faced by SMEs during GST implementation.

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## Role of NABARD in Agriculture Development

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DOI - 10.5281/zenodo.15145934

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### Abstract:

*NABARD is set up by the Government of India as a development bank with the mandate of facilitating credit flow for promotion and development of agriculture and integrated rural development. The mandate also covers supporting all other allied economic activities in rural areas, promoting sustainable rural development and ushering in prosperity in the rural areas. With a capital base of Rs 2,000 crore provided by the Government of India and Reserve Bank of India, it operates through its head office at Mumbai, 28 regional offices situated in state capitals and 391 district offices at districts. The objective of this research is To Study about of NABARD bank. And NABARD Role in Agricultural sector development. Research is based on secondary data. The various functions of NABARD are Credit Functions, Developmental and Promotional Functions, Supervisory Functions, Institutional and Capacity building, Role in Training etc. The paper attempts to analyze the role of NABARD and its functioning in development of rural India.*

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### Introduction:

NABARD is an apex body in agricultural and rural development area they handle policy, planning and operational activities of that area. NABARD is set up by government of India for the purpose of facilitating credit flow for promotion, refinancing, development of agricultural and rural development purpose. NABARD bank head office at Mumbai. The Government of India and Reserve Bank of India invested (Capital) 2000 Crore in NABARD. The Government of India and Reserve Banks of India provide fund to NABARD. NABARD bank central office in Mumbai with 28 Regional offices in various states and 391 District level offices. The bank facilitated the co-operative banks, regional rural banks, Commercial banks to improving credit flow. The NABARD also refinance to farm sector, non-farm sector, women and weaker sector peoples etc. The RBI set up CRAFICARD (The Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development) on his report they

recommended in November 1979 to RBI establishing the National Bank for Agriculture and Rural development bank. That result the NABARD established in 12 July 1982.

### Objective of the Study:

1. To Study Concept of NABARD bank.
2. To Study NABARD Role in Agricultural sector development.

### Methodology:

The study is descriptive nature. The Study based on secondary data collected from various sources Magazines, Internet Website, News Paper, Research Papers and journals

### About NABARD Bank:

#### Functions of NABARD:

**1) Credit Functions:** NABARD provide credit facilities to agricultural and rural development sector peoples, institutions, Banks, Industries etc.

**2) Supervisory Function:** NABARD bank play role of supervisory. The NABARD comes under Supervision of Reserve Bank of India the RBI directly control and guide to NABARD. The NABARD supervise for proper functioning of co-operative banks and Regional Rural banks.

**3) Developmental and Promotional Functions:** In Promotional and Development function is credit planning, Funds Provide for Special Projects, Water Shed Development Fund, Livelihood Development, Environmental Protection , Kisan Credit Card, Farmers Club Programme, Government Sponsored Scheme, etc. Scheme Introduced NABARD for the purpose of Development and Promotional.

**4) Institutional and Capacity Building:** The NABARD help to Co-operative banks and RRBs for prepare development action plans. Play role of intermediate of State Government and Co-operative banks. Provide guidance to other Co-operative banks for the purpose of MoUs. Provide financial assistance, technical knowledge, monitoring and evaluation cells to Co-operative banks and RRBs and also Provide Staff Training facilities.

**5) Training and Development Function:** The NABARD Provide training facilities to bank Staff. Provide training for senior and middle level employees of Co-operative, RRBs and Commercial banks. Also the NABARD provide financial assistance to banks for computerization of operation, human resource development and Management improvement activates. NABARD provide training facilities in National Bank Staff College, Lucknow, National Bank Training Centre, Lucknow, Zonal Training Centre, Hyderabad, Regional Training Centre, Mangalore, Regional Training Centre, Bolpur ,Bankers Institute of Rural Development , Lucknow

#### **NABARD Role:**

- It is an apex refinancing institution providing credit facilities to agricultural sector.
- NABARD is an apex body for making planning, operations and polices for the field of agricultural and rural development.
- It is apex agency for co-ordinate to Agricultural and Rural development activities and State Government, Central Government, RBI, National Level Institution for implementation of new Schemes.
- NABARD Prepare annual basis credit plans for all districts in the country and these plans for the base for annual credit plans of all rural financial agencies.
- The NABARD promotes Research in the field of agricultural and rural development.

Also NABARD help to generation of employment in rural areas. They introduced lot of refinance and promotional schemes for agricultural development purpose. The focus has been on greater credit flow and provision of linkages for small, cottage and village industries, handicrafts and other rural crafts and service sector in the decentralized sector in the rural areas.

#### **Objectives of NABARD Bank:**

- 1) Provide credit to agriculture and rural sector development
- 2) Supervise Agricultural and Rural financial Institutions
- 3) Promote practices, policies and innovation conducive to rural development

#### **Mission of NABARD Bank:**

Provide equal support to agricultural and rural prosperity through effective financial support, Services, Institutional development and other innovative strategy etc. and Provide refinance facility.

**Associates of NABARD:**

Total eight international associated of this Institutes. They are as follow.

- 1) World Bank Group & the International Development Association
- 2) KfW of Germany
- 3) Swiss Agency for Development & Cooperation
- 4) Commission on European Community
- 5) Asian Pacific Agricultural Credit Association
- 6) International Fund for Agricultural Development
- 7) GTZ of Germany
- 8) Organization of Petroleum Exporting Countries.

These institutes are also providing finance, guidance for implementation schemes.

**NABARD Role in Agricultural Development: as under**

**1. Credit Planning:** Provide credit facilities to customer block-wise, bank-wise, farm wise and Nonfarm wise sector. ground level planning exercise facilitates each branch of the bank in the district to prepare a village level credit plan, develop strategy to implement the plan to achieve physical & financial targets, which are monitored by individual bank for all its branches and reviewed by the District Level Coordination Committee quarterly block-wise, bank-wise & activity-wise. NABARD target to institutional credit for agricultural sector to be raise from Ru.10 lakh crore in 2017-18 to raise Ru. 11 lakh crore in 2018-19. At national level NABARD facilitates GoI, RBI and State Governments to evolve policy that can accelerate credit flow for integrated rural development.

**2. Seasonal Agricultural Finance:** NABARD provide seasonal credit for agricultural and rural activities. Provide short-term credit to farmers to raise seasonal crops production. NABARD coordinated the interest subvention scheme in respect of cooperative banks and RRBs.

**3. Refinance Facility to Agricultural Sector:** The institute support to various agricultural and rural activates for the purpose of development of this sector.

**4. Investment Credit Support:** NABARD provide credit to investment purpose for asset creation, purchase new assets, Technology up gradation, equipment development etc. its resulting increased production.

**5. Kisan Credit Card Scheme (KCC):** NABARD introduced Kisan Credit Card with the help of this scheme loan facilities provide to farmers crop loans by providing adequate, timely, cost effective and seasonal agricultural loan provide to NABARD with single window system. Current NABARD extension of kisan Credit Card Scheme facilities to fisheries and animal husbandry farmers. Also this scheme provides short term loan and covered under Personal Accident Insurance Scheme against accidental death and permanent disability.

**6. Watershed Development:** NABARD has been work for watershed development as a comprehensive approach to enhance productivity of dry land through conserving soil, rainwater and vegetation. It is pioneering model in community based natural resource management Participatory Watershed Development. During 2008-09, 18 watershed projects with grant assistance of Rs.216 million were sanctioned and Rs.36.1million disbursed.

**7. Capacity Building for Adoption of Technology:** The NABARD introduced the scheme of Capacity Building for Adoption of Technology through training to farmers to facilitate them to adopt innovative methods of farming. The NABARD collaboration with different research institutes, Agricultural Science Centers, Agriculture Universities on bio-globules, vermin culture, bio-manures, organic farming, poly-house technology, medicinal and aromatic plant cultivation, etc.

**8. Farmers Clubs:** The Basic objectives of farmers Club program is to organize farmers in an informal organization to have easy & uninterrupted access to institutional credit and generate adequate bargaining power to deal with agencies, more importantly agriculture input suppliers and bulk produce buyers. Forum of Farmers' Club envisages farmers' exposure to agricultural technologies and practices, which are most appropriate to their agro-climate & motivate them to adopt them to enhance productivity, output & profitability.

**9. Agricultural Insurance:** Agriculture Insurance Company of India Ltd was established in December 2002 with an authorized capital of Rs.15,000 million. NABARD has subscribed the paid up capital of Rs.2,000 million and the remaining by five public sector general insurance companies

**10. National Level Commodity Exchanges:** Commodity market offers a market-based instrument to the farming community for managing risks and uncertainty in a liberalized environment. To strengthen the marketing infrastructure in the country, NABARD has been an equity partner in the major national level commodity exchanges, viz., Multi-Commodity Exchange and National Commodities and Derivatives Exchange.

**11. Co-Financing:** Commercial banks in particular are wary of taking credit risk while financing high tech, large scale, export oriented agricultural projects or those involving sunrise technologies, though they have expertise of financing industrial units having these characteristics. To instill confidence in banks and ensure credit flow to such projects, NABARD has entered into agreements for co-financing with 14 commercial banks.

**12. Support to Weaker Sections:** NABARD has introduced special programs for the uplifting weaker sections in the

society like the small and marginal farmers, scheduled castes and scheduled tribes, etc

**13. Support to Small Farmers:** Refinance policy of NABARD for production credit (short term loan) stipulates that banks earmark 30% of their total lending to small and marginal farmers

**14. Support to Tribal Development:** NABARD provides a separate line of credit on liberal terms, for Development of Tribal Population in predominantly tribal areas. NABARD also sanctions Short Term credit limits to cooperative banks for financing collection and marketing of various types of minor forest produce by scheduled tribes.

**15. Supporting Grant to Agencies:** NABARD continued to extend grant support to NGOs, RRBs, DCCBs, Farmer Clubs and Individual Rural Volunteers for promoting and nurturing quality SHGs. Efforts continued towards roping in new Self-Help Promoting Institutions and supporting the existing ones.

**16. Capacity Building:** Capacity building of stakeholders is crucial for up-scaling the SHG movement and maintaining the quality & sustainability of SHGs. NABARD supports capacity building programs for SHG members, officers of commercial banks, cooperative banks, RRBs, PRIs, and Government departments including IAS officers. With a view to fine tuning the strategies for up-scaling support to the MF sector, NABARD conducted three zonal workshops covering its own staff at Hyderabad, Lucknow and Patna.

**17. Farmers' Technology Transfer Fund:** NABARD has established Farmers' Technology Transfer Fund the objective is promoting & transferring technology, information dissemination, establishing linkages with market, enhancing productivity and production in agriculture, animal husbandry & fisheries through area based projects, conducting workshops, seminars and capacity building programs by



organizing farmers informal association, producer groups, joint liability groups.

#### **18. Farm Innovation & Promotion**

**Fund:** NABARD established the Farm Innovation and Promotion Fund to promoting innovative concepts and feasible projects in agriculture and allied activities, development of marketable prototypes, technology, patenting, extension support, marketing etc. Projects involving commodity exchange, rainfed rabi cropping, ultra high density orchard of guava, village farm development, protected vegetable cultivation in villages and efficient use of carbon & plant nutrients under dry land agriculture etc.

#### **19. Research & Development Fund:**

NABARD has constituted a Research and Development Fund for supporting activities, such as research projects, studies, training, conduct of seminars and other related activities on matters of importance to agriculture, agricultural operations and rural development. R&D Fund as grant assistance for research projects, studies, training and other activities like conduct of seminars, preparation of occasional papers etc. For increased dissemination of research findings in the areas of agriculture and rural development, publication of Occasional Papers is also supported by NABARD.

**20. Institutional Development:** The financial health and growth of Cooperative Banks & RRBs continue to be the area of concern to NABARD. In view of their role in credit dispensation and the changing economic environment, NABARD has been striving towards improving these institutions.

#### **Findings:**

1. NABARD is playing important Role in Agricultural development in India.
2. Farmers are not aware about NABARD Bank and Scheme of NABARD.

#### **Conclusion:**

The NABARD play very important role in rural and agricultural development. The institute is an apex body in agricultural sector hence they introduced new scheme related to agricultural. Currently NABARD bank is very actively work in India but lack of awareness about this institute the NABARD bank, State Government and Central Government can conduct awareness programs in villages, city and district level agricultural sector. The Scheme introduced the NABARD but the process of that scheme is very dely. The NABARD cannot provide One window system in taking loan and other facilities related scheme.

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## Sustainable Entrepreneurship in E-Commerce and Their Impact on Environmental Sustainability

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DOI - 10.5281/zenodo.15146034

### Abstract:

Businesses have been expected to pave the way towards environmental sustainability due to their notably significant contribution towards polluting the environment through waste, gas emissions and plastics generated. The responsibility does not necessarily begin with one individual within a business though— employees at every level of the business must work together to bring about change. Green Business entrepreneur achieving popularity day by day. It is the new buzzword in business. Though the concept of green business is not new, but it is becoming increasingly vital in today's business climate. The world is going green and so are the companies. Now going green has become the new success mantra in market to differentiate the products and services from their competition. It has also become a platform for innovation.

**Keywords:** Sustainable Entrepreneurship, Effects on Environment, Eco – friendly Business.

### Introduction:

Sustainable entrepreneurship in e-commerce is the practice of developing and selling products in an environmentally and socially responsible way. It involves creating a profitable business while also helping society and the planet. Sustainable development is based on the three pillars of sustainability: **economic**, **environmental** and **social** sustainability. Environmental sustainability encourages people to live in a way that doesn't put stress on natural resources. But does that mean the term 'sustainable e-commerce' is contradictory, given shopping encourages the consumption of materials.

That all depends on the individual business's practices. Any brand that's truly dedicated to sustainable e-commerce will outline transparent plans on how it aims to lower emissions, avoid unnecessary packaging, and generally reduce its impact on the planet.



adopting sustainable e-commerce as part of the business strategy here are the best ways we can do it:

- Reduce unnecessary packaging
- Offset your impact
- Lower your transport emissions
- Empower your customers
- Remove recycling barriers
- Reducing returns
- Try “e-commerce”
- Host your e-commerce site on a green platform

E-commerce businesses generally produce fewer emissions than in-person stores (also known as brick-and-mortar

stores). The study carried out by MIT found ecommerce to be more sustainable than traditional retail in more than 75% of the scenarios developed in their base case. Another study suggests that online shopping at large retailers in the US is 17% more carbon-efficient than visiting traditional stores.

### **Literature Review:**

A. Concept and Implementation of E-commerce E-commerce has been regarded as the activity of buying and selling products and services using the internet. The business model is designed in a way that it provides its offerings online and gives the opportunity to the consumers for selecting and purchasing the desired products. Planning for Ecommerce business is critical as this allows the firm to take into consideration the related dynamics and implementation of the business model, consider the probable adversities and challenges that may arise during the process and functionality. The planning further considers the associated risks and limitations which the company may be exposed to and so an effective contingency plan may be developed through critical planning and considerations. The other aspect is technology selection along with mediums and approaches. To function online, it is vital that the firm selects the most adequate technology to carry out the desired tasks and activities. In this regard, the considerations need to be made in accordance with the nature and type of customers along with the capabilities, resources, and kind of business that is involved in the process. The technology usage may differ for varied businesses and their specific target audiences and a critical analysis in this regard could be conducted to ensure optimum results. E-commerce Business Model Source Customer acquisition could be regarded as another critical element related to the implementation of Ecommerce. Businesses

use a huge range of tools for reaching out to consumers such as search engine marketing, display advertisement, email campaigns, social media marketing, and much more. With regards to the sales principle of awareness, interest, desire, and action (AIDA) it could be noted that customer acquisition cost will be higher for the brands that are new in the market, and in comparison, it would be lower for those that have already established an offline presence in the industry. Customer engagement is another imperative dynamic related to the successful implementation of Ecommerce. The fact that customer concerns and requirements are constantly evolving, it has become vital for businesses to make sure that their developed online business model has the ability and features of providing a robust support mechanism for queries, issues, and information to the consumers. In this regard, social media presence has been identified to be a successful approach to catering to such concerns and effectively implementing online business activities.

### **Benefits Of Using Sustainable E-Commerce For Business:**

Sustainable ecommerce doesn't just benefit the environment and conscious consumers — the company itself can benefit too.

Here are the top benefits of having sustainable ecommerce in a business strategy:

**Attracts more customers** – More shoppers are choosing sustainability as a metric for whether or not they want to support a brand. In fact, there was a 71% increase in Google searches for sustainable goods between 2016 and 2021

**Reduces impact on the planet** – By cutting back on plastic packaging businesses can reduce the amount of fossil fuels they rely on, and the amount of natural resources they consume

**Saves money** – Running factories and warehouses on renewable energy can be cheaper for businesses, especially if they switch to either solar or wind power. Similarly, using electric vehicles to deliver ecommerce goods can cut fuel costs

**Attracts more employees** – 71% of employees and employment seekers say that environmentally sustainable companies are more attractive prospects, according to a survey by the IBM Institute for Business Value (IBV). And nearly half of people surveyed said they would accept a lower salary to work for these organizations

**Prepares businesses for the future** – Fossil fuels are finite, which means businesses will have to make the switch to more sustainable practices in the near future. These changes have already started to happen too, with governments around the world announcing tighter laws on unsustainable business practices

**Can reduce tax** – Some countries, such as the UK, offer tax incentives for any businesses that are switching to more sustainable processes

### Usage and Significance of E-Commerce Business on Environment:



E-commerce has resulted in being a highly imperative concept for businesses in the modern world. Organisations can make use of the technology to not only reach out to a higher set of audiences but also increase the effectiveness and efficiency of work.

The elimination of geographical boundaries has been the core use and significance of Ecommerce that has allowed organisations to expand their work operations and effectively carry out market development.

Firms have been making use of global consumer base and identify the demand of their products and services in various markets of the world. In the emerging economy, E-commerce has resulted in being a necessary and vital element of business strategy.

E-commerce has caused downward pressure on inflation due to increased competition and cost savings. With more and more businesses establishing their presence in the industry through Ecommerce, the prices of products and services have reduced.

Competition has influenced companies to keep their prices at a minimum because customers have ample substitutes in the market.

E-commerce has made it easier for companies to set-up their presence and start their businesses due to lesser investment requirements and easier operations. With E-commerce, organisations have been able to start their projects and start functioning at a small scale.

Due to no need of developing a physical presence, lesser initial capital and investment is required and this promotes business start-ups.

With a higher number of E-commerce businesses taking place, more jobs are created in the economy and better employment rates are established.

Customers on the other hand are given a good purchase experience through which they can easily go through a huge variety of products and chose their required goods and services without any hassle or wastage of time.

E-commerce has changed the way businesses used to carry out their operational and functional activities, allowing organisations to optimize on various opportunities. Going global, a huge number of businesses have been able to enter new markets and make use of higher outreach overall.

Further, internet technology for businesses allows them to improve their communication and allow doing business more easily. Earlier, it was highly challenging for customers to interact or communicate with companies or present their concerns.

Reaching out to businesses and forwarding the concerns to the right authorities was considered daunting for consumers and this often led to dissatisfaction between individuals. Also, the whole process of communication was very time taking and lengthy which restricted consumers from presenting their queries to the firms or give their feedback for improvements.

E-commerce has made it much easier and feasible for consumers to interact with the companies and put forward their concerns regarding the products and services. Using the internet, customers can easily communicate with the concerned authorities and attain prompt responses from the brand.

This has allowed businesses to achieve high customer satisfaction and retain consumers for a longer period. Considering that customer retention is difficult in the contemporary environment, effective communication results in adding value to this aspect.

### **Conclusion:**

E-commerce has changed the way businesses used to operate and function. Organisations have been able to attain various opportunities and benefits on which they have optimized to attain a good position

and image in the marketplace. With regards to business performance, it has been identified that firms are able to significantly augment their performance level due to increased marketplace, better growth opportunities, lesser operating costs, a fewer requirement of investments, lesser risks, and more. While ample companies have taken use of this business model and achieved a high growth rate, others have not been able to rightly optimize on the opportunities. Along with several advantages, firms also face certain limitations and challenges related to implementing Ecommerce. It has therefore been concluded that even though various potential benefits are present related to E-commerce, organizations have to develop a critical strategic approach to attain those advantages in an adequate manner. Through effective leadership and the right planning, companies may utilize the opportunities and develop a significant position in the industry.

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## Recent Trends and Challenges in Commerce

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DOI - 10.5281/zenodo.15146160

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### Abstract:

*With the rise of food delivery platforms, consumer preferences have shifted between small local restaurants and large chain outlets. This study aims to analyze the key factors influencing consumer choices—including pricing strategies, discount offers, online reviews, and the ranking algorithms of food delivery apps—to determine if consumers favor small restaurants over chain outlets and whether platform algorithms disproportionately benefit big brands. Adopting a quantitative research methodology, data was collected by circulating a structured questionnaire to 100 local respondents. The collected data was subsequently analyzed using statistical tests such as Chi-Square, Spearman's Rank Correlation, and Ordinal Logistic Regression via Jamovi software. The findings of this study will help small restaurant owners better understand customer behavior and optimize their marketing strategies, thereby enhancing competitiveness in the digital food delivery market.*

**Keywords:** *Consumer Preference, Small Restaurants, Chain Outlets, Food Delivery Platforms, Discounts, Review, Algorithmic bias.*

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### Introduction:

In recent years, food delivery platforms have revolutionized the restaurant industry by providing consumers with convenient, on-demand access to a wide range of dining options. Platforms such as Swiggy, Zomato, and UberEats have not only expanded the market reach for restaurants but have also altered the dynamics of consumer decision-making. In this digitally driven environment, understanding consumer preferences is crucial, particularly when comparing the performance of small, local restaurants with that of large chain outlets.

Small restaurants typically offer unique, locally inspired cuisine and personalized service; however, they often face challenges in gaining visibility on digital platforms that may favor the extensive resources and brand recognition of chain outlets. A significant factor contributing to these challenges is the

ranking algorithm employed by food delivery platforms. These algorithms, which determine the order in which restaurants appear, can potentially influence consumer choices by disproportionately highlighting chain outlets over smaller establishments.

Additionally, several key factors—such as pricing strategies, discount offers, and online reviews—play a critical role in shaping consumer preferences. Pricing strategies reflect not only the perceived value of a restaurant's offerings but also interact with promotional activities to attract customers. Similarly, online reviews serve as an important source of social proof, influencing the level of trust consumers place in a restaurant. The combined effects of these factors, along with the influence of ranking algorithms, create a complex landscape.

Overall, this study seeks to elucidate the multifaceted factors that drive consumer preferences in the digital food ordering

market. By providing empirical evidence on the interplay between pricing strategies, online reviews, and algorithmic visibility, the research aims to offer actionable insights for small restaurant owners, improve the fairness and transparency of food delivery platforms, and inform policymakers about the need for balanced competitive practices in the industry.

### Significance of the Study:

The significance of this study extends to a variety of stakeholders. For small restaurant owners, the research offers a comprehensive understanding of the factors that influence consumer preferences. This enables them to develop and refine strategies aimed at attracting more customers. The findings serve as a critical tool for these businesses to tailor their marketing efforts and operational decisions based on consumer behavior insights.

Food delivery platforms also benefit from the study by gaining an independent assessment of their ranking algorithms. The research highlights how these algorithms may favor certain types of restaurants over others, providing platforms with the opportunity to review and potentially improve the fairness and transparency of their systems. Such improvements can lead to a more balanced marketplace, fostering better relationships with all vendor types and ensuring a wider selection of options for consumers.

For consumers, the study offers valuable insights into how various factors such as online reviews, discount offers, and branding strategies influence their purchasing decisions. Understanding these dynamics empowers consumers to make more informed choices. By evaluating whether algorithmic biases exist that disproportionately favor large chain outlets over small local businesses, the research provides evidence-based insights that could inform the development of regulatory

measures. These measures may be essential in creating a more level playing field, ensuring that all businesses have the opportunity to compete fairly, and ultimately protecting consumer interests.

### Objectives:

1. To examine whether consumers prefer small restaurants or chain outlets when ordering through food delivery platforms.
2. To analyze the impact of pricing and discount offers on consumer loyalty toward small restaurants.
3. To investigate the influence of online reviews and ratings on customer preference for small restaurants over chain outlets.
4. To evaluate whether food delivery platform ranking algorithms disproportionately favor large chain restaurants over small businesses.

### Hypotheses:

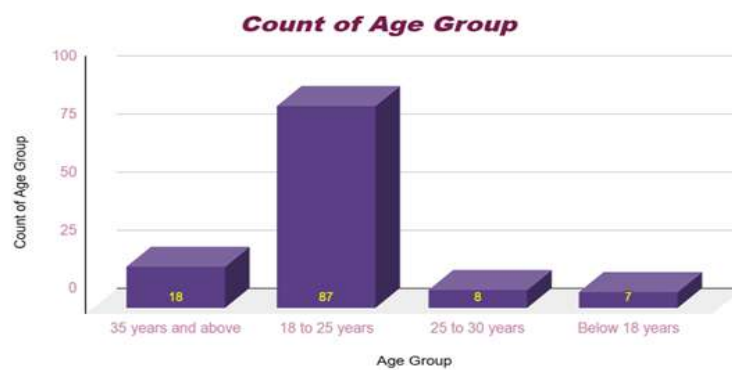
- H<sub>01</sub>: There is no significant difference in consumer preference for small restaurants and chain outlets on food delivery platforms.  
 H<sub>a1</sub>: There is a significant difference in consumer preference for small restaurants and chain outlets on food delivery platforms.  
 H<sub>02</sub>: Pricing and discount offers have no significant influence on consumer loyalty toward small restaurants.  
 H<sub>a2</sub>: Pricing and discount offers significantly influence consumer loyalty toward small restaurants.  
 H<sub>03</sub>: Online reviews and ratings do not significantly impact customer preference for small restaurants over chain outlets.  
 H<sub>a3</sub>: Online reviews and ratings significantly impact customer preference for small restaurants over chain outlets.  
 H<sub>04</sub>: The ranking algorithm of food delivery platforms does not significantly favor big brands over small restaurants.  
 H<sub>a4</sub>: The ranking algorithm of food delivery

platforms significantly favors big brands over small restaurants.

**Research Methodology:**

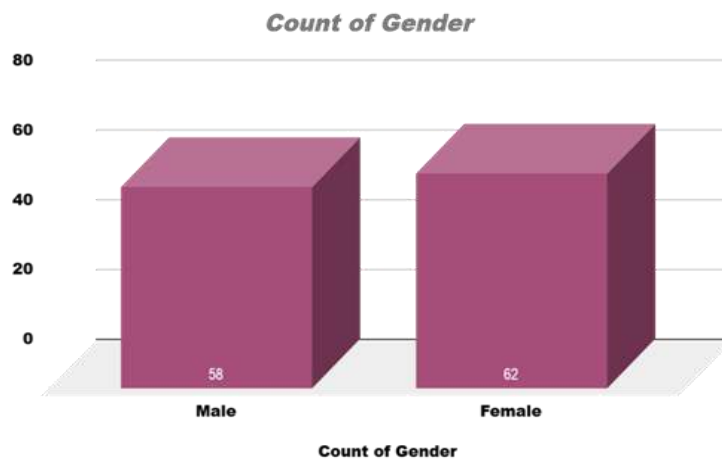
Component	Description/Procedure
Research Design	Quantitative, cross-sectional survey
Population & Sampling	Target population: Users of food delivery apps (e.g., Swiggy, Zomato). Convenience sampling of local respondents; target sample size of approximately 100 respondents.
Data Collection	Data collected via a self-administered questionnaire distributed through Google
Data Analysis and Interpretation	Descriptive Statistics, Contingency tables, Chi-square Tests, and Spearman’s Rank Correlation

**Data Analysis and Interpretation:**



**Chart 1.1: (Source: Primary Data)**

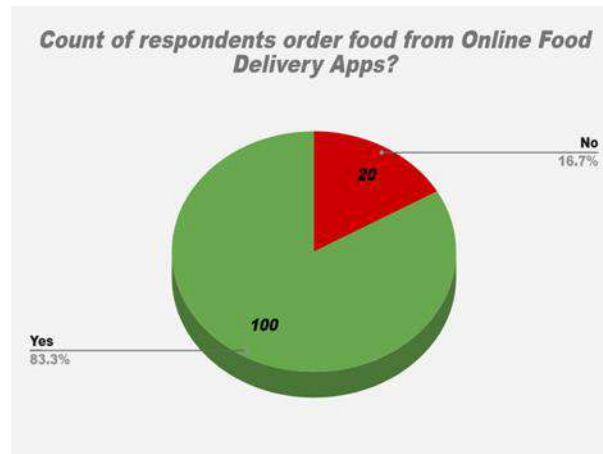
Out of 120 respondents, 87 were aged 18–25 years, 18 were 35 years and above, 8 were 25–30 years, and 7 were below 18 years. This distribution indicates that the majority of respondents are young adults



**Chart 1.2 : (Source: Primary Data)**

Out of 120 respondents, 58 were male and 62 were female. This indicates that the sample is fairly balanced by gender, with approximately 48% male and 52% female respondents.





**Chart 1.3 : (Source: Primary Data)**

Out of the 120 respondents, 100 (83.3%) actively order from online food delivery apps, while 20 (16.7%) do not. This indicates that the analysis and subsequent hypothesis testing will focus on the 100

respondents who are users of these platforms, ensuring that the study's findings reflect the experiences and preferences of the relevant target population.

Restaurant Preference	Frequency of Choice					Total
	1	2	3	4	5	
1. Small Restaurants	6	7	14	14	0	41
2. Chain Outlets	0	14	30	9	6	59
<b>Total</b>	6	21	44	23	6	100

**Table 1.1 : Frequency of Choice by Restaurant Preference  
(Source: Primary Data)**

**$\chi^2$  Test Results**

Statistic	Value	df	p-value	N
$\chi^2$	18.6	4	< .001	100

Chi-square test of independence, which yielded a  $\chi^2$  value of 18.6 with 4 degrees of freedom and a p-value less than 0.001, which rejects the null hypothesis ( $H_{01}$ ) that there is no significant difference in consumer preference for small restaurants and chain outlets on food delivery platforms.

The contingency table reveals distinct patterns in ordering behavior, supporting the alternative hypothesis ( $H_{a1}$ ) that consumer preferences for small restaurants versus chain outlets are significantly different.

**Table 1.2 : Spearman's Rank Correlation**

Variable	Spearman's $\rho$	df	p-value
Importance of Pricing to order from small restaurants	—	—	—
Likelihood of repeatedly ordering from a small restaurant	0.477	98	< .001

(Source: Primary Data)

The Spearman's Rank Correlation analysis produced a coefficient of 0.477 with 98 degrees of freedom and a p-value of less than 0.001. This result indicates a moderately strong positive association between the importance consumers place on pricing and discount promotions and their

likelihood to repeatedly order from small restaurants. The highly significant p-value supports the alternative hypothesis, confirming that pricing and discount strategies play a key role in enhancing customer loyalty toward small restaurants.

**Table 1.3 : Importance of Online Ratings & Review**

Restaurant Preference	Importance of Online Ratings & Review					Total
	1	2	3	4	5	
1. Small Restaurants	6	2	6	8	19	41
2. Chain Outlets	1	4	23	15	16	59
<b>Total</b>	7	6	29	23	35	100

(Source: Primary Data)

**Chi-Square Test Results:**

Statistic	Value	df	p-value	N
$\chi^2$	13.8	4	0.008	100

The chi-square test yielded a value of 13.8 with 4 degrees of freedom and a p-value of 0.008, which is below the conventional significance threshold of 0.05. This indicates that there is a statistically

significant association between the importance placed on online ratings and reviews and the type of restaurant preference.

Perceived Ranking Bias	Visibility Satisfaction					Total
	1	2	3	4	5	
1	0	0	2	2	0	4
2	0	5	7	5	1	18
3	0	0	10	13	4	27
4	0	2	8	18	0	28
5	4	6	5	3	5	23
<b>Total</b>	4	13	32	41	10	100

**Table 1.4 : Visibility Satisfaction by Perceived Ranking Bias**

(Source: Primary Data)

**Chi-Square Test Results**

Statistic	Value	df	p-value	N
$\chi^2$	42.6	16	< .001	100

The chi-square test ( $\chi^2 = 42.6$ ,  $df = 16$ ,  $p < .001$ ) indicates a statistically significant association between perceived ranking bias and visibility satisfaction of small restaurants. The findings imply that respondents who perceive a higher bias in the ranking algorithm—meaning they believe it favors big brands—tend to report different levels of satisfaction with the visibility of small restaurants compared to those who perceive lower bias. Consequently, we reject the null hypothesis ( $H_{04}$ ) and accept the alternative hypothesis ( $H_{a4}$ ), concluding that the ranking algorithm significantly favors big brands over small restaurants.

### Findings and Conclusion:

The study examined consumer preferences for small restaurants versus chain outlets on food delivery platforms and the influence of discounts, online reviews, and algorithmic bias, produced several significant findings. The demographic analysis revealed that the majority of respondents were young adults (aged 18–25), with a fairly balanced gender distribution. Out of 120 respondents, 100 actively use food delivery apps, ensuring that the subsequent analyses reflect the behaviors of actual platform users.

The analysis of ordering frequency by restaurant preference demonstrated a statistically significant difference between the two groups ( $\chi^2 = 18.6$ ,  $df = 4$ ,  $p < .001$ ), indicating that consumer ordering behavior varies markedly between those who favor small restaurants and those who prefer chain outlets. Further, Spearman's Rank Correlation showed a moderately strong positive association ( $\rho = 0.477$ ,  $p < .001$ ) between the importance consumers place on pricing and discount promotions and their likelihood of repeatedly ordering from small restaurants. This supports the idea that

effective pricing and discount strategies can enhance loyalty toward small restaurants.

Moreover, the investigation into the impact of online reviews and ratings revealed a significant relationship ( $\chi^2 = 13.8$ ,  $df = 4$ ,  $p = 0.008$ ) with restaurant preference, suggesting that consumer perceptions of online ratings influence their choices on food delivery platforms. Lastly, the analysis of algorithmic bias via the relationship between perceived ranking bias and visibility satisfaction demonstrated a strong association ( $\chi^2 = 42.6$ ,  $df = 16$ ,  $p < .001$ ). Respondents who perceived higher bias in the ranking algorithm—indicating a preference for big brands—tended to report lower satisfaction with the visibility of small restaurants.

Overall, the findings lead to the rejection of the null hypotheses across the different dimensions of the study, confirming that discounts, online reviews, and algorithmic bias significantly influence consumer preferences on food delivery platforms. The study concludes that while pricing and discount strategies can drive loyalty towards small restaurants, online ratings and perceived algorithmic favoritism play critical roles in shaping consumer choices between small restaurants and chain outlets.

### Limitations:

- The sample size is relatively small, which may limit the generalizability of the findings.
- Reliance on self-reported data could introduce response and recall biases.

### Suggestions:

- Restaurant owners should optimize pricing and discount strategies based on customer feedback.
- Food delivery platforms should enhance the transparency of their ranking algorithms.

- Marketers should leverage online reviews to build stronger brand trust.
- Policymakers should consider regulations to promote fair visibility for small restaurants.
- Industry analysts should conduct longitudinal studies to further validate these findings.

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## Investor's Preference Towards Systematic Investment Plan in A Mutual Fund

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**DOI - 10.5281/zenodo.15146216**

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### **Abstract:**

*All individual desire to be financially healthy and secured .There are multiple investment options available in the market. Many common people wanted to investment in share market but the inadequate knowledge of capital market and lack of profession expertise common investor are still hesitant to invest in capital market.*

*Mutual fund is the most suitable investment platform for the common man as it offer to invest in a diversified professionally managed basket of securities at a relative low cost .Now a days SIP( systematic Investment Plan ) very popular in the market .The SIP planning is a smart financial planning method that allows you build wealth over a period of time by saving small amounts of money each month .This paper discuss the SIP benefit given to the customers as comparison to Lump-sum investment and also study the total investment in SIP of India in last five year. It help us to observe the investor preference toward SIP in Mutual Funds.*

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### **Introduction:**

All individual desire to be financially healthy and secured .There are multiple investment options available in the market. Many common people wanted to investment in share market but the inadequate knowledge of capital market and lack of profession expertise common investor are still hesitant to invest in capital market.

Mutual fund is the most suitable investment platform for the common man as it offer to invest in a diversified professionally managed basket of securities at a relative low cost .Now a days SIP( systematic Investment Plan ) very popular in the market .The SIP planning is a smart financial planning method that allows you build wealth over a period of time by saving small amounts of money each month .This paper discuss the SIP benefit given to the customers as comparison to Lump-sum investment and also study the total investment in SIP of India in last five year. It

help us to observe the investor preference toward SIP in Mutual Fund.

### **Introduction of Mutual Fund:**

All individuals desire to be financially healthy and secured. The financial security of an individual is dependent on her income, saving and investment. Investment is commitment of funds in real assets or financial assets .All financial investments are risky but the degree of risk and return differ from each other. The knowledge of financial investment and the art of its management are the basic requirement for a successful investment also lies in its liquidity apart from risk and return on investment.

Over the year the financial services in India have undergone revolutionary changes. The process of financial sector reforms economic liberalization and globalization of Indian capital market had generated and augmented the interest of the investors in equity but due to inadequate knowledge of the capital market and lack of

the professional expertise the common investors are still hesitant to invest their hard earned money in the corporate securities. The advent of mutual fund has helped in garnering the investable funds of this category of investors in a significant way. As a professional experts manage mutual fund investment in the relieves investors from the emotional stress involved in buying and selling of securities.

A mutual fund is a trust that pools the saving of a number of investors who share a common financial goal .The money thus collected is then invested in capital market instruments such as shares, debentures and other securities .Thus a mutual fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified professionally managed basket of securities at a relatively low cost. Indian mutual fund industry has two distinct types of sponsors public –sector and private sector The number of fund floated by public sector sponsors are minimal compared to private sector players.

#### **The Objective of the Study:**

1. To know which form of Investment (SIP or Lump Sum) earns more growth.
2. To provide insights and recommendation for investors in making informed decisions through Systematic Investment Plan in mutual fund in the India market.
3. To understand Systematic investment plan scheme given a better return.

#### **Systematic Investment Plan:**

The systematic investment plan is the alternative open to large and small investors to select the best yield, liquidity protection of funds against risk of loss and tax gain from the investment market. The systematic investment scheme a tax advantage is available to an investor who

can receive capital gain, it is a common pool of cash into which investors position their investments that are to be invested according to a pre-stated target .To meet the pre-stated purpose, the funds raised by the investors are invested by the fund manager.

According to the investment goal of that specific scheme the fund manager invests this collected fund in Debt and equity. Mutual funds investing in equity related instruments cannot be categorized as risk free or secure because equity investments are inherently risk in nature ,while funds investing in fixed income instruments are reasonably safe and those investing exclusively in public securities are the safest .The systematic investment plan is a smart financial planning method that allows you to build wealth over a period of time by saving small amounts of money each month

Under the normal circumstances the investors have either recurring or lump sum surplus fund to invest .If the investors do not have lump sum amount to invest systematic investment plan is good idea. Now a days there are many option available in the SIP

#### **Types of SIP:**

1. Flexible SIP
2. Top – Up SIP
3. Perpetual SIP
4. Trigger SIP
5. SIP with pause Facility
6. Smart SIP or Goal Based SIP

#### **Benefits of SIP:**

##### **1) convenient Investment Method:**

SIP offer a convenient Investment method enabling easy and hassle –free contribution toward Mutual funds. This systematic approach simplifies investing for individual regardless of their familiarity with the financial markets making it an accessible avenue for building wealth over time.

**2) Rupee cost averaging:**

This method involves investing a fixed sum regularly allowing you to acquire more units when prices are low and fewer when they're higher effectively leveling out your investment cost over time

**3) Power of compounding:**

The power of compounding is the silent force behind SIP, turning your investment returns into more earnings. This compounding effect significantly boosts your investment over time transforming even small contributions into a substantial fund.

**4) Flexible Investment Amount:**

This feature SIP empowers investors with the ability to adjust their investment amounts according to their financial capacities. This flexibility ensures

that investing remains within reach for everyone accommodating changes in financial circumstances without compromising on investment objective

**5) Cost – Effective:**

Investing through SIP is cost – effective it minimizes the financial burden on investors. This method allows for the gradual building of a portfolio with relatively small amounts of money.

**6) Professional Management:**

SIPs benefit from professional management, with seasoned experts overseeing Mutual Fund portfolios. This management ensures that your investments are strategically aligned to navigate market dynamics effectively capitalizing on opportunities for growth while managing risks

**Month-wise SIP contribution collected from FY 2020-21 to 2024-2025**

Month	SIP Contribution Rupees Crore				
	FY 2024-25	FY 2023-24	FY 2022-23	FY 2021-22	FY 2020-21
<b>Total during FY</b>	2,37,427	1,99,219	1,55,972	1,24,566	96,080
<b>March</b>		19,271	14,276	12,328	9,182
<b>February</b>		19,187	13,686	11,438	7,528
<b>January</b>	26,400	18,838	13,856	11,517	8,023
<b>December</b>	26,459	17,610	13,573	11,305	8,418
<b>November</b>	25,320	17,073	13,306	11,005	7,302
<b>October</b>	25,323	16,928	13,041	10,519	7,800
<b>September</b>	24,509	16,042	12,976	10,351	7,788
<b>August</b>	23,547	15,814	12,693	9,923	7,792
<b>July</b>	23,332	15,245	12,140	9,609	7,831
<b>Jun</b>	21,262	14,734	12,276	9,156	7,917
<b>May</b>	20,904	14,749	12,286	8,819	8,123
<b>April</b>	20,371	13,728	11,863	8,596	8,376

In above data show that every year increase the investment in SIP. In financial year 2020-2021 total investment SIP in India 96,080 crore and investment in 2024-2025

**Conclusion:**

As already discussed earlier if a person does not have a lump sum amount they cannot think about lump sum investment they are investment in SIP and an investor who has a lump sum amount and opt SIP that how and

SIP 2,37,427 total increment is 247.11%. It shows the investors' preference towards the SIP.

where they will park their fund and hence we can conclude as under. If we have a lump sum of money and the market is bullish, it is better to opt STP (systematic transfer plan) and they should park their fund in liquid fund and mandate should be given to AMC

of liquid fund to transfer the fund systematically.

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## Investor's Preference Towards Systematic Investment Plan in A Mutual Fund

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DOI - 10.5281/zenodo.15146284

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### Abstract:

*Green World with Green Initiatives, Sustainable Future with Justifiable Human Survival- these are the buzzwords and Alarming Concepts of the present era that roar within the aisle of modern research. Sustainable development supports the long-term goal with the implementation of systems, frameworks, and support from global, national, and local entities. Green HRM is one of the initiatives for sustainable development in Management. Green Human Resources Management (GHRM) is a set of policies, practices, and systems that promote a company's employees' green behavior to create an environmentally sensitive, resource-efficient, and socially responsible organization. The objectives of this study are to explore the elementary concept of Green Human Resource Management, to highlight the role of Green HRM in Sustainable Development, and to address the challenges and solutions while implementing Green HRM Practices. The research is primarily based on secondary data. Secondary data is collected from different websites and journals. The study concludes that the concept of Green HRM is a fruitful and measurable tool that can provide a base for sustainable management. However, hurdles like lack of awareness of these practices among management, the less satisfactory involvement of stakeholders in environmental issues, and the lack of compulsion of eco-friendly attitudes, hamper the proper implementation of Green HRM Practices in every organization. The research suggests that Organizations can include environmental criteria in job descriptions and interview questions, and use platforms that highlight eco-friendly job opportunities.*

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**Key Words:** *Green Initiatives, Sustainable Development, Green HRM*

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### Introduction:

Green World with Green Initiatives, Sustainable Future with Justifiable Human Survival- these are the buzzwords and Alarming Concepts of the present era that roar within the aisle of modern research. Progressive degradation of the natural environment due to human exploitation brought about the need to introduce the concept of sustainable development. Sustainability refers to society's ability to exist and develop without depleting the natural resources necessary to live in the future. Sustainable development supports this long-term goal with the implementation of systems, frameworks, and support from global, national, and local entities. Green

HRM is one of the initiatives for sustainable development in Management.

Green Human Resources Management (GHRM) is a set of policies, practices, and systems that promote a company's employees' green behavior to create an environmentally sensitive, resource-efficient, and socially responsible organization.

Green HRM is a holistic approach to management and has many facets and dimensions. This study tries to concentrate on the core role of Green HRM in sustainability with its different dimensions and facets. Let's take a glance at these aspects:

**Objectives of the Study:**

1. To explore the elementary concept of Green Human Resource Management.
2. To highlight the role of Green HRM in Sustainable Development.
3. To address the challenges and solutions while implementing the Green HRM Practices.

**Research Methodology:**

The research is conceptual and primarily based on secondary data. For this extant literature related to the topic from different databases, websites, and other available sources is collected.

**Review of Literature:**

1. Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., & Muller-Camen, M. (2011) in their study named “State-of-the-Art and Future Directions for Green Human Resource Management” explained that leading firms around the world are beginning to shift from reliance on processes that exploit the environment toward those that are environmentally sustainable.
2. AlKetbi, A., & Rice, J. (2024) in their research article named “The Impact of Green Human Resource Management Practices on Employees, Clients, and Organizational Performance: A Literature Review” emphasized that Green HRM Practices Emerge as a Crucial tool for fostering environmentally conscious attitudes and behaviors among employees, ultimately contributing to enhanced employee satisfaction and improved organizational ecological performance.
3. Renwick, D. W. S., Redman, T., & Maguire, S. (2013) in their article “Green Human Resource Management: A Review and Research Agenda” stated that green HRM has a direct positive effect on environmental performance, and green transformational leadership was not significant in moderating the relationship.

**Key Issues:****Concept of Green HRM:**

Green Human Resource Management (GHRM) means the association of human resource practices with environmental management principles. Here the aim is to promote sustainable development within an organization by inculcating eco-friendly behaviors among employees. This includes adopting practices like:

- **Eco-friendly Recruitment:** Hiring candidates who are environmentally conscious and share the organization's commitment to sustainability.
- **Green Training and Development:** Offering training programs that emphasize environmental conservation and sustainable work practices.
- **Performance Management:** Including environmental performance criteria in employee appraisals.
- **Green Rewards and Compensation:** Recognizing and rewarding employees for their contributions to sustainability goals.
- **Employee Involvement:** Encouraging active participation in environmental initiatives

**Role of Green HRM in Sustainable Development:**

Green Human Resource Management (GHRM) plays a prominent role in promoting sustainable development.

**1. Eco-friendly Recruitment and Selection**

- **Role in Sustainable Development:** Attracting and selecting environmentally conscious candidates ensures that new hires are aligned with the organization's sustainability goals. It helps in building a workforce that is committed to environmental aspects.

**2. Green Training and Development**

- **Role in Sustainable Development:** By providing training programs focused on environmental management and sustainable practices, employees become

more aware of their impact on the environment. This training fosters a culture of sustainability within the organization.

### 3. Sustainable Performance Management

- **Role in Sustainable Development:** Integrating environmental performance indicators into the appraisal system encourages employees to adopt eco-friendly practices and recognize their contributions to sustainability.

### 4. Green Compensation and Rewards

- **Role in Sustainable Development:** Rewarding employees for their efforts in promoting sustainability can drive motivation and reinforce environmentally responsible behavior.

### 5. Green Workplace Practices

- **Role in Sustainable Development:** Implementing green practices within the workplace reduces the organization's ecological footprint and promotes a healthier work environment.

## Challenges and Solutions while Implementing Green HRM Practices

### 1. Lack of Awareness and Commitment

- **Challenge:** Not all employees or management members may be aware of the importance of GHRM or be committed to implementing sustainable practices.
- **Solution:** Companies must conduct awareness campaigns and training sessions to educate everyone about the benefits and importance of GHRM. Demonstrate management's commitment by leading by example.

### 2. Initial Costs and Investments

- **Challenge:** Implementing green initiatives often requires upfront investments, such as purchasing eco-friendly technology or revamping existing processes, which can be a financial burden for some organizations.
- **Solution:** The organizations should start with small, cost-effective changes and gradually scale up. Look for government

grants or subsidies that support sustainability efforts.

### 3. Resistance to Change

- **Challenge:** Employees may resist changes to their usual work routines or may not understand the necessity for new green practices.
- **Solution:** The management of the organizations must communicate the long-term benefits of GHRM clearly and involve employees in the planning and implementation process. Provide incentives and rewards for those who embrace and promote green practices.

### 4. Measuring and Monitoring Performance

- **Challenge:** It can be difficult to develop and implement metrics to measure the effectiveness and impact of GHRM practices.
- **Solution:** It is essential to Establish clear, quantifiable environmental performance indicators and regularly monitor progress. Utilize technology and software to track and report on sustainability metrics.

### 5. Integration with Existing Systems

- **Challenge:** Integrating GHRM practices into existing HR systems and processes can be complex and time-consuming.
- **Solution:** The organizations must have to develop a phased implementation plan that allows for gradual integration. Seek support from HR consultants or experts in GHRM for guidance.

### 6. Regulatory and Compliance Issues

- **Challenge:** Navigating the various environmental regulations and ensuring compliance can be challenging, especially for organizations operating in multiple jurisdictions.
- **Solution:** It is very important to Stay informed about relevant regulations and seek legal advice when necessary. Develop a compliance framework that can be adapted to different regulatory environments.

**Conclusion:**

From the above discussions, it can be interpreted that nowadays Sustainability and related issues have become the major aspects to be considered for the smooth survival of human beings. The concept of Green HRM is a fruitful and measurable tool that can provide a base for sustainable management. However, hurdles like lack of awareness of these practices among management, the less satisfactory involvement of stakeholders in environmental issues, and the lack of compulsion of eco-friendly attitudes hamper the proper implementation of Green HRM Practices in every organization.

**Suggestions:**

1. Organizations can include environmental criteria in job descriptions and interview questions, and use platforms that highlight eco-friendly job opportunities.
2. Workshops, seminars, and online evaluation courses that cover topics like energy conservation, waste management, and sustainable resource use should be conducted.
3. The employer should set clear environmental objectives and key performance indicators (KPIs) for employees, and their performance based on these criteria.
4. Incentives such as bonuses, recognition awards, and eco-friendly perks for employees who contribute to the organization's sustainability initiatives should be offered.

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## A Research Study on Strategies for Achieving Sustainable Development

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DOI - 10.5281/zenodo.15146370

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### **Abstract:**

*Achieving sustainable development requires a well-balanced approach that connects economic, social, and environmental goals. This Paper explores different strategies to promote sustainability in today's world. Key strategies include utilizing renewable energy sources, like solar and wind energy, to decrease dependence on fossil fuels and address climate change. The idea of a circular economy, which focuses on reducing waste and reusing materials, is also crucial for sustainable development. Encouraging companies to adopt eco-friendly practices and operate responsibly is essential for promoting sustainability. In urban areas, sustainable planning—such as green buildings, effective public transit, and enhanced infrastructure—is critical to mitigate the impact of urban growth on the environment. From a social standpoint, addressing inequality and improving access to education, healthcare, and vital services ensures that all individuals benefit from sustainability. Governments, corporations, and individuals must work together to create policies, ideas, and initiatives that protect the environment while supporting economic and social progress. This document emphasizes the significance of a cooperative approach to build a sustainable future for everyone.*

**Keywords-Sustainable Development, Renewable Energy, Solar Power, Wind Power, Circular Economy, Waste Reduction, Green Business Practices, Eco-friendly Operations, Sustainable Cities, Urban Planning.**

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### **Introduction:**

Sustainable development is a worldwide objective that emphasizes the equilibrium between economic advancement, environmental conservation, and social welfare. As the planet encounters significant issues such as climate change, resource depletion, and rising inequality, discovering effective methods to accomplish sustainable development has become increasingly crucial. To guarantee a brighter future for both individuals and the earth, we must implement approaches that foster long-term advancement without damaging the environment or neglecting any group.

This research paper examines essential strategies that can assist us in realizing sustainable development. These strategies include shifting to renewable energy alternatives like solar and wind

power, which can lessen dependency on fossil fuels and address climate change. The paper further highlights the significance of a circular economy, where materials are reused and waste is curtailed. Advocating for green business methods, where businesses prioritize environmental responsibility, is yet another critical strategy. Moreover, sustainable urban planning, which develops eco-friendly cities featuring improved infrastructure and public amenities, is vital for diminishing the environmental footprint of increasing populations. Finally, tackling social inequality through enhanced access to education, healthcare, and fundamental needs guarantees that sustainability advantages all individuals.

By analyzing these strategies, this paper seeks to emphasize how we can

collaborate to forge a more sustainable and just world for upcoming generations.

### **Strategies for Achieving Sustainable Development:**

Achieving sustainable development necessitates a comprehensive approach that combines economic, social, and environmental factors. As the globe encounters major issues such as climate change, resource depletion, and inequality, it is crucial to implement effective strategies to guarantee long-term, fair progress. Below are several essential strategies for advancing sustainability:

#### **1. Transitioning to Renewable Energy:**

One of the most crucial strategies for attaining sustainable development is shifting from fossil fuels to renewable energy sources such as solar, wind, hydroelectric, and geothermal power. These sources are not only environmentally friendly but also lessen dependence on non-renewable resources that drive climate change. Renewable energy technologies are progressing swiftly, making them more available and economical. By investing in and enhancing renewable energy infrastructure, nations can decrease greenhouse gas emissions, lower energy expenses, and generate employment in clean energy industries.

#### **2. Adopting a Circular Economy:**

A circular economy emphasizes minimizing waste and maximizing resource reuse. Unlike the conventional linear economy, which adheres to the "take, make, dispose" framework, the circular economy advocates for recycling, reusing, and refurbishing materials, products, and resources to keep them utilized for the longest time possible. This method not only diminishes waste but also preserves essential natural resources and reduces environmental pollution. Firms can apply circular economy principles by creating products that are durable, repairable, and recyclable, thus

aiding sustainable production and consumption patterns.

#### **3. Promoting Green Business Practices:**

Businesses play a crucial role in influencing sustainable development. By embracing green business practices, companies can lessen their environmental footprint, boost efficiency, and contribute to social welfare. These practices encompass reducing energy use, curbing emissions, utilizing sustainable raw materials, and implementing eco-friendly production processes. Furthermore, businesses can weave corporate social responsibility (CSR) into their operations, ensuring that their actions have a positive effect on society and the environment. Motivating companies to regard sustainability as a fundamental value not only enhances their reputation but also fosters a wider cultural transition towards sustainable development.

#### **4. Sustainable Urban Planning and Development:**

As urban populations rise, cities are emerging as pivotal areas where sustainable development can be realized. Sustainable urban planning entails designing cities that reduce their environmental impact while encouraging social inclusion and economic development. Key features of sustainable cities include:

**Green infrastructure:** Integrating parks, green roofs, and urban forests into city designs to enhance air quality and create recreational spaces.

**Energy-efficient buildings:** Erecting structures that are energy-efficient and constructed with sustainable materials to minimize energy use and carbon emissions.

**Public transportation systems:** Establishing accessible, affordable, and environmentally friendly transportation options to lessen dependence on private vehicles, reduce pollution, and alleviate traffic congestion.

**Waste management and water conservation:** Enforcing systems that

minimize waste production, encourage recycling, and preserve water resources.

Sustainable urban planning is not solely about creating eco-friendly areas but also about ensuring that cities are inhabitable for all residents, regardless of financial status, by providing access to fundamental services such as housing, education, and healthcare.

### 5. Addressing Social Inequality:

Sustainable development cannot be accomplished without tackling social inequality. It is essential to guarantee that all individuals have equitable access to fundamental needs like clean water, education, healthcare, and social services to foster a fair and just society.

#### Approaches to diminish inequality encompass:

**Improving education access:** Education provides individuals with the knowledge and skills necessary to enhance their quality of life and contribute to sustainable development. Guaranteeing that everyone, especially marginalized groups, can obtain quality education is a vital step in alleviating social inequalities.

**Enhancing healthcare access:** Offering universal healthcare access contributes to improving public health and quality of life while also minimizing economic disparities.

**Reducing poverty:** Initiatives such as job creation, social safety nets, and economic empowerment can assist in lifting individuals out of poverty, generating opportunities for them to engage in and benefit from sustainable development.

By confronting these social issues, sustainable development guarantees that the advantages of economic and environmental advancement are equally distributed among all members of society.

#### Materials and Strategies:

In this research paper, we explore various strategies to attain sustainable

development by employing both qualitative and quantitative methods. The materials and methods utilized include:

**Data Sources:** Secondary information from governmental publications, global organizations (such as the UN, World Bank, and World Health Organization), and pertinent academic papers on sustainable development, renewable energy, circular economy, urban planning, and social equality.

**Case Studies:** Actual examples of nations, cities, and corporations that have successfully executed sustainable development strategies. These case studies are utilized to illustrate the real-world application of theoretical strategies.

**Interviews and Surveys:** Insights from professionals in the areas of environmental science, sustainable business practices, and urban planning. This aids in identifying essential challenges, opportunities, and the effectiveness of different strategies.

#### Case Study:

To exemplify the efficiency of these strategies, the research paper will feature a case study of Sweden, which is at the forefront of sustainable development. Sweden's shift to renewable energy, execution of a circular economy, and robust social policies for education and healthcare have established it as a benchmark for sustainability.

**Renewable Energy in Sweden:** Sweden has pledged to achieve 100% renewable energy use by 2040. The nation has already decreased its carbon emissions by more than 25% since 1990, primarily due to the widespread integration of hydropower, wind, and solar energy.

**Circular Economy in Sweden:** Sweden is renowned for its waste management system, where 99% of its waste is either recycled or transformed into energy. The country's circular economy framework emphasizes

material reuse, waste reduction, and product recycling in a highly efficient fashion.

**Social Equality:** Sweden's social policies, including universal healthcare and free education, are vital in guaranteeing that every citizen can access the advantages of sustainable development. These initiatives have played a significant role in diminishing social inequality and enhancing the overall quality of life.

#### **Results:**

Based on the examination of strategies and case studies, the research revealed that:

**Transition to Renewable Energy:** Nations that heavily invested in renewable energy technologies experienced a notable decline in greenhouse gas emissions. For example, Sweden's reliance on renewable energy has lessened its carbon footprint while promoting economic growth and generating green jobs.

**Circular Economy:** Corporations and cities that embraced circular economy principles minimized waste and optimized resource efficiency. For instance, Sweden's waste-to-energy facilities have aided both energy generation and waste reduction.

**Social Equality:** Tackling social inequality through initiatives like universal healthcare and education guarantees that all individuals have access to prospects for sustainable living. In Sweden, the fall in poverty levels and enhancements in educational and healthcare access have demonstrated a clear connection to sustainable development.

**Business Practices:** Firms that embraced eco-friendly business practices and corporate social responsibility (CSR) reported enhanced levels of customer loyalty and brand trust, while also aligning with environmental objectives.

#### **Future Directions:**

While advancements have occurred, realizing global sustainable development

necessitates ongoing effort and innovation. Future avenues for research and practice encompass:

**Technological Innovation:** Ongoing development and investment in renewable energy technologies like solar, wind, and energy storage are vital. Emerging technologies such as artificial intelligence (AI) and blockchain might also assist in enhancing energy efficiency and supply chain transparency.

**Policy Integration:** Governments around the globe must weave sustainable development goals (SDGs) into their national policies and make sure these are effectively executed. International cooperation is essential for tackling global challenges like climate change and inequality.

**Urban Sustainability:** The emphasis on sustainable cities will grow as urban populations expand. Smart city technologies, green building standards, and sustainable public transportation systems will become increasingly important in creating cities that are both environmentally friendly and inclusive.

**Social Equity and Education:** Future research ought to concentrate on discovering innovative solutions to diminish inequalities inside and among countries. Policies designed to enhance access to education and healthcare, especially in underdeveloped regions, will be crucial for attaining global sustainability.

#### **Literature Review:**

An evaluation of existing literature on sustainable development indicates that sustainability is a complex issue encompassing environmental, economic, and social aspects. Major studies reviewed consist of:

**The Brundtland Report (1987):** This pioneering report characterized sustainable development as fulfilling the needs of the present without jeopardizing the ability of



future generations to fulfill their own needs. The UN Sustainable Development Goals (SDGs): These global objectives, established in 2015, offer a framework for governments and organizations worldwide to combat poverty, inequality, and climate change while encouraging sustainable economic growth and social advancement.

**Circular Economy Models:** Researchers like Ellen MacArthur have made substantial contributions to circular economy investigations, highlighting the necessity of designing systems that eradicate waste and perpetually reuse resources.

**Renewable Energy Transition Studies:** Investigations in renewable energy, such as the studies by Jacobson et al. (2017), demonstrate that transitioning to renewable energy is technically achievable and could greatly decrease global greenhouse gas emissions.

**Social Sustainability:** Literature concerning social sustainability emphasizes the significance of policies that foster social equity and accessibility to resources, particularly regarding developing countries.

### Conclusion:

In conclusion, sustainable development is about finding a balance between growing the economy, protecting the environment, and ensuring the well-being of all people. As we face big challenges like climate change and inequality, it's more important than ever to adopt strategies that support long-term growth without harming the planet or leaving anyone behind. This paper has highlighted key strategies such as using renewable energy, promoting a circular economy, supporting eco-friendly businesses, creating sustainable cities, and reducing social inequality. By working together and implementing these strategies, we can build a better future that benefits both people and the planet for generations to come.

*Ms. Harshada Jadhav*

### Acknowledgement:

This research paper could not have come to fruition without the guidance and support of numerous individuals and organizations. I would like to express my sincere appreciation to:

My supervisor for their invaluable insights, encouragement, and support throughout the research process.

Experts and professionals who took part in the interviews and shared practical knowledge on sustainable development strategies.

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## A Research on Indian Startup Funding

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DOI - 10.5281/zenodo.15146434

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### Abstract:

*In the present decade, India is planning a vital shift in the direction of startup welcoming policies and a business-friendly or entrepreneur's environment. India is one of the fastest growing countries in terms of entrepreneurship. Entrepreneurship is an essential input for economic development, creating new markets or opportunities. Currently, India is promoting entrepreneurship enthusiastically but it's a huge challenge for government as well as large population of India to create employment via startups.*

*This paper intention at offering an analytical overview of the boom and potentialities of startup systems in India i.e the progress made by India so far. Therefore, this research can contribute to a better understanding of the Investment and financing strategy of entrepreneurial ventures. Another important point to understand how funding changes with time is an important aspect. Currently, India is promoting entrepreneurship enthusiastically but it's a huge challenge for government as well as large population of India to create employment via startup*

**Keywords:** *Startup, Entrepreneurship, Investment, Ventures, Employment.*

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### Introduction:

The Indian startup Ecosystem started in the late 1960s with the start of TCS, followed by Infosys in 1981 and others. These startups started as software services serving Indian software needs, and later expanding to exporting software services.

The dot-com era was a blessing for many startups, which included marketplaces, ecommerce and vendors. And finally, modern day startups comprised of the latest technology started around 2007-2008, and comprised e-commerce, logistics, marketplaces, and advertising startups. Startups like Flipkart (2007) and IXIGO (2008) were part of these. Currently, there are more than 5,200 startups in India putting it in the fourth spot just behind US, UK, and Israel (Nasscom, 2018), where Bangalore, Mumbai, and Delhi-NCR form 68% of start-up base with 44% foreign investments.

Being so startup friendly the country has attracted numerous numbers of investors, both national and international. Therefore a large amount of money is poured into the startup ecosystem. Also due to government support, technology boom and rise of tier-2 and tier-3 cities has boosted the startup ecosystem. Tier II Cities like Varanasi, Kochi and Indore and others have also attracted a few startups. Events like the launch of Startup India initiative, Digital India Initiative, US elections and the Indian bank note demonetization had a huge impact on the startup community in recent years. Military events like the surgical strike on Pakistan border by Indian army impacted the funding in India.

The dataset is acquired from Kaggle.com as "Indian Startup Funding. It includes columns with the date funded, the city the startup is based out of, the names of the funders, and the amount invested (in USD). This will also help to realize how big events like US elections and Indian

banknote demonetization, in this case, affect the funding of different startups.

**Statement of Research Problem:**

The aim of the present report is to study factors like date of funding, the city the startup is based out of, the names of the funders, and the amount invested (in USD). This study also helps to a better understanding of the investment and financing strategy of entrepreneurial ventures.

**Research Methodology:**

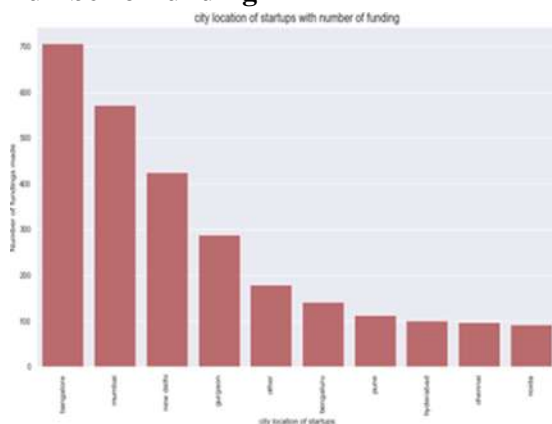
The study mostly relies on secondary data and is descriptive in its approach. The data was gathered from a diverse range of sources including journals, articles, newspapers, books and official website such as kaggle.com & the economic survey report.

**Objectives:**

1. To check the funding ecosystem change with time.
2. To check Top cities play a major role in funding.
3. To check startup funding & industry vertical are independent or dependent.

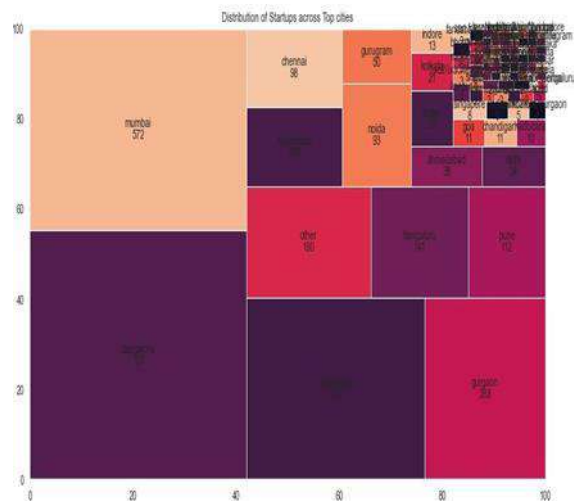
**Analysis & Interpretation:**

**Figure 1: City location of startup with number of funding**



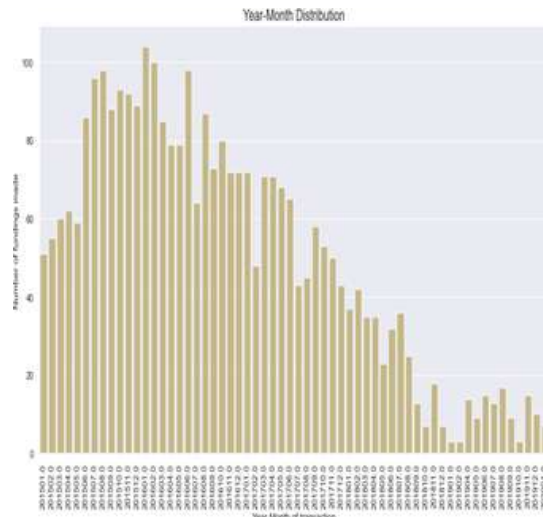
**Interpretation:** From the above graph we observe that Top cities play major role in getting funding amount.

**Figure 2: Distribution of startups across Top cities**



**Interpretation:** From the above square plot we observe that Bangalore city attracts more number of investors followed by Mumbai & New Delhi.

**Figure 3: Funding ecosystem change with time**



**Interpretation:** Above graph shows how funding varies from one month to another.

Analysis of funds of startup in India:

- Maximum funding to a Startups is:3900000000.0
- As we can see Rapido Bike Taxi got maximum funding of 3900000000.0 USD. Now last see least funding.
- Minimum funding to a Startups is:16000.0
- Now as we can see Hostel Dunia, Play your sport, Yo Grad, Enabli and

CBS are least funded Startups i.e, 16000 USD.

- On Average Indian startups got funding of : 18429897

**Aim:** To check startup funding and Industry Vertical are independent or dependent.

**Hypothesis:**

H0: Whether a startup receives funding is independent on Industry Vertical.

H1: Whether a startup receives funding is dependent on Industry Vertical

**Variable Considered:**

Funding amount and Industry vertical.

**Test statistics and P value:**

By using software, we got the results

X-squared = 319186

Df = 799,

p-value < 2.2 e-16

**Result:**

Here P-value < 0.05 hence, we reject H0.

**Conclusion:**

This results indicate that there is statistically significant relationship between the funding amount and Industry Vertical

**Findings:**

1. A large no. of startups based in metropolitan cities like Bangalore & Mumbai are funded, which maybe due to the fact that talent availability is massive in these cities.
2. Rapido Bike Taxi got maximum funding of 3900000000.0 USD. Also Hostel Dunia, play your sport, Yo Grad, Enabliare least funded startups i.e. 16000 USD.
3. Technology-based startups which provide their service to the everyday consumer are very probable to get a lot of funding like Flipkart & Paytm.
4. Flipkart, Paytm, & Rapido Bike taxi are one of the most funded startups

whereas Ola Cabs and Swiggy were funded the most number of times.

5. By using Chi square test we prove that there is statistically significant relationship between the funding amount and city location. Also there is statistically significant relationship between the funding amount and Industry vertical.

**Conclusion:**

Indian Startup are now spread across the India. Startups in India face a variety of obstacles including regulatory obstacles in adequate infrastructure and lack of market knowledge successful business have shown that proactive masers can overcome this challenges such as performing research building strong relationship with stack holder and asking for mentorships and advice from session business owner. Indian startups have the opportunities to be highly successful and to aid in the country's economic growth.

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**Issues and Challenges of the Weekly Market in Maharashtra: A Special Reference to Karad taluka of Satara District**

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**DOI - 10.5281/zenodo.15146486**

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**Abstract:**

*Weekly market is not only place for available goods to the villagers but also providing sell opportunity for local produce and minor forest product in rural area. People who live in rural area not possible to go to town or city for shopping for basic requirement likes-daily needs etc. In Study area, Major portion of the population depends on agriculture and milk products. Nearest surrounding all villagers visit to the weekly market to purchase. They sell those surplus produce in near weekly market. Weekly markets play important role in rural areas providing employment and income generation process. But it is observed that rural weekly markets in Karad taluka have been facing many issues and challenges due to the number of factors that affect the smooth transactions in the market and its growth. The purpose of this paper to identify some of the issues in the weekly market that seller and buyers are facing through the personal visit and interviews with the sellers and buyers, it was found that the weekly markets in many places lack even basic facilities to run the market. e.g., compound wall, market shed, toilet, hospital, dustbins, security control system etc. During the interview it was found that the local authority of the markets needs to develop the basic facilities of the market for smooth transactions and growth of village economy. In this paper has focused on infrastructure of the weekly market places.*

**Keywords: Weekly Markets, Village Economy, Rural Area**

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**Introduction:**

About 70% of India's peoples live in rural areas. Almost one third of the national income created from rural India. Rural markets are an important part of the total market of India. In rural area permanent market facilities is not available so weekly markets play importance role for available basic needs there. It gives various opportunities, whether for marketing durables, garments, daily used goods or financial services. The rural marketer is faced with an entirely different set of conditions and problems when marketing in rural areas as compared to urban areas. For the successful way of rural markets, a basic requirement is infrastructure. The lack of such infrastructure is aggravating the distribution challenges in rural India.

Weekly market is very historic concept of trade and commerce, in ancient time also concept of weekly market was there and people used to buy and sell and exchange. Weekly market is also called 'Haat', Bazar. They continue to play a vital role in the rural economy these markets provide people an opportunity not only to purchase consumer goods, but also to sell surplus agricultural and allied products.

Each weekly market caters to the need of a minimum of 10 to a maximum of 50 villages, drawing around 4000 persons who come to buy and sell a range of daily needs. Market is held on weekly bases. Sellers sell in one weekly markets on one day and move to another on the next day. It is a place to sell and buy various types of goods for example vegetables, fruits and

pulses. Weekly market is trading place of local small traders on specific day of every week to sell their goods.

Two types of sellers were sold his goods under this market they are as permanent seller and temporary seller. Permanent seller had permanent shops for trading of goods with permanent sheds other than temporary sellers because they are selling his goods at temporary place. They are not regular so they set up a shop for the day and close them on the day of evening.

#### Review of Literature:

- 1 Saxena, H. M. (1988)<sup>1</sup> has explained in his book “Rural Markets and Development” about the weekly market that, the development of fairs(mela) and weekly markets (haat, bazaar) were landmark in the field of rural marketing, both these rural trading institutions, wherever developed are still continue to serve the needs of rural people.
- 2 Aggarwal, P. K. (2007)<sup>2</sup> Point out in his book “Tribal development planning in India” tribal’s, exploited by government agencies and contractors in marketing of non-timber forest product.
- 3 Hasnain, N. (2007)<sup>3</sup> his book “Tribal India” Mention that Tribals area regular market are still a rarity among them. In most of the cases people assemble in an assigned place and on an appointed time and exchange their commodities wish each other. The market held in tribal regions usually trade in commodities of local use like vegetables, cereals, meat, spices, salt, utensils, agricultural tools and implements clothing, cosmetics etc.

#### Objectives of Studies:

- 1 To study the profile of weekly market in Satara district.

- 2 To examine the issues and challenges of weekly market in Karad taluka of Satara district.

#### Methodology:

The study is analytical in nature and confined only to Karad taluka in Satara district where the numbers of weekly markets are more. This study is based on both primary and secondary data. For collection of primary data, 10 rural weekly markets from Karad taluka are selected. Further from each market 10 sellers and 10 buyers are selected randomly for the purpose of the study altogether 50 buyers and 50 sellers are interviewed using a questionnaire. The secondary data are collected from various books and published articles from journals and local government offices.

#### Selection of Study Area and Sample:

Present study is based on Satara district of Maharashtra state. Satara district is included total 11 tehsils the purpose of present study, we have selected only the Karad taluka of satara district. In the karad taluka have 217 villages under the 204 Grampanchayats. There are 19 rural weekly market in study area. We have to selected 10 weekly market (Rural area) places. We have visited to the sampled weekly market on the market day and interviewed the sellers and buyers with the help of questionnaires and collected important information from the marketing point of view.

#### Weekly markets:

70 % population living in rural areas. Only 30% population lives in urban area. Urban area people fulfil all basic requirement by big market like- Big shops, Shopping malls, Big Bazaar and Super markets etc, but rural population not able to purchases the commodity from urban market, mean while they are also want to purchases the all commodity of urban shop. In Maharashtra these types of problem solve by weekly markets, mainly in rural area

stabilized a market in a week in the village. Nearest surrounding all villagers visit to the weekly market purchase to all type daily

needs as like- vegetables, fruits, cloths and foods etc. below the table show weekly markets status of Satara district.

**Table -1: Taluka wise weekly markets in Satara district**

Weekly Markets		
Taluka	No of village	No of weekly market
Khandala	65	06
Phaltan	125	12
Wai	126	05
Mahabaleshwar	110	01
Javali	153	07
Koregaon	138	11
Khatav	139	21
Man	104	16
Satara	205	12
Patan	338	15
Karad	216	19
<b>Total</b>	<b>1719</b>	<b>125</b>

Source: <http://www.satara.gov.in>

Weekly market is not only place for available goods to the villagers but also providing sell opportunity for local agriculture product.

#### Weekly markets in Karad Taluka:

Karad Taluka have 216 villages and 19 weekly market places. Karad is a taluka of Satara district, Below the table show the detail of weekly market and distance from nearest town/ city of karad.

#### Issues and Challenges of the weekly markets:

#### Distance:

In the rural area to be big distance between village and market that why people cannot go to nearest market place so he prefers to weekly market for purchase necessary goods. In study area 17.1 percent weekly village market to nearest statutory town distance is 1-10 km, 26.8 percent village distance is 10-20 km and 56.1 percent village distance is more than 20 km. Table -2 show the details.

**Table -2: Weekly Market lists of Karad Taluka of Satara district**

Sr. No	District Name	Village Name	District (Distance in km)	Nearest Statutory Town (Name)	Nearest Statutory Town (Distance in km)
1	Satara	Pal	28	Karad	32
2	Satara	Umbraj	37	Karad	17
3	Satara	Masur	43	Karad	15
4	Satara	Charegaon	39	Karad	20
5	Satara	Shirawade	41	Karad	15
6	Satara	Wadgaon Haveli	60	Karad	09
7	Satara	Shenoli	79	Karad	13
8	Satara	Tambve	57	Karad	11
9	Satara	Kole	64	Karad	08
10	Satara	Kolewadi	69	Karad	10
11	Satara	Wing	70	Karad	10
12	Satara	Kale	71	Karad	15

13	Satara	Ond	73	Karad	15
14	Satara	Nandgaon	26	Karad	10
15	Satara	Mhasoli	80	Karad	22
16	Satara	Undale	76	Karad	18
17	Satara	Belawade Bk.	74	Karad	18
18	Satara	Yelgaon	84	Karad	19
19	Satara	Karad	59	Karad	00

SOURCE: <http://www.censusindia.gov.in/2011census>

## 2. Gender Empowerment:

**Table -3: No of sellers in the weekly markets**

Sr.No	Weekly Markets	Male	Female	Total
1	Pal	116	47	163
2	Kale	201	115	316
3	Masur	110	34	144
4	Charegaon	72	18	90
5	Nandgaon	39	4	43
6	Shirawade	83	22	105
7	Shenoli	169	52	221
8	Tambve	37	20	57
9	Kole	85	49	134
10	Ond	19	07	26
	<b>Total</b>	<b>931</b> <b>(71.67%)</b>	<b>368</b> <b>(28.33%)</b>	<b>1299</b> <b>(100%)</b>

Source: Field work

In weekly market as a seller female proportion participation is very low. Table – 1 Shows that 71.67% of the seller are male and only 28.33% of the seller are female.

## 3. Drinking water facilities at Working place:

In the market place pure drinking water facilities like hand pump and other availabilities only 30% markets, table -4 shows the drinking water facilities availabilities in the weekly markets.

**Table – 4: Drinking water in weekly Market**

	Frequency	Percent
Yes	3	30
No	7	70
Total	10	100

Source: Field work

## 4. Washroom facilities:

In the weekly markets only 10% availability of toilet facilities market, it is very poor condition and buyers and seller

both face the problem in the market day of unable facilities. Chart -5 shows the toilet facilities in the market area.

**Table – 5: Washroom facilities**

	Frequency	Percent
Yes	1	10
No	9	90
Total	10	100

Source: Field work

## 5. Lights facilities:



No electricity connection in the weekly markets, seller arrange own light facilities.

#### 6. Shade facilities:

Only 20% shade facility available in the weekly market, sellers face challenge in the rainy and summer season. Table -5 show the detail

**Table-6: Shade facilities in the weekly markets**

	Frequency	Percent
Yes	2	20
No	8	80
Total	10	100

Source: Field Work

#### 7. Concrete Road Facilities:

Concrete Road Availabilities In The Weekly Market Are Only 30percent,

Soseller And Buyers Faced Many Problems In Rainy Season To Carry Their Goods Easily. Table -6 Shows The Detail Below

**Table -7: Concrete Road Facilities In The Weekly Markets**

	Frequency	Percent
Yes	3	30
No	7	70
Total	10	100

Source: Field Work

#### 8. Parking Facilities And Space:

Buyers And Sellers Come With Their Vehicles At The Market Place. In The Weekly Markets Parking And Space Is Good

Role Play And Attract To Him Also. Below The Table Show The Parking Facilities Availabilities In The Market Place

**Table -8: Parking Facilities And Space In The Weekly Markets**

	Frequency	Percent
Yes	5	50
No	5	50
Total	10	100

Source: Field Work

#### Conclusion:

Weekly markets important role plays in rural areas providing employment and weekly market sellers in their activity. The study found that they do not have adequate infrastructure facilities at their working place. The government should support to encourage their activity. In Maharashtra more than 70% population lives in rural area and state per capita income is increasing so demand in rural area continue increasing day by day. Weekly market is providing good opportunities for rural area.

income generation. This study examines the issues and challenges faced by the

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## A Study on “View of Students Towards Government Job and Private Job

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DOI - 10.5281/zenodo.15146548

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### Abstract:

*Employment preferences among students have always been influenced by various factors, including job security, salary, work-life balance, and career growth opportunities. This study explores students' perspectives on government and private sector jobs, analyzing their motivations, concerns, and expectations. While government jobs are often preferred for stability, benefits, and social status, private sector jobs attract students with higher salary potential, faster career progression, and dynamic work environments. The research also examines how factors such as educational background, family influence, and economic conditions shape students' career choices. Understanding these preferences can help policymakers, educators, and employers create better career guidance programs and job opportunities that align with students' aspirations.*

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### Introduction:

Now a days, to get job is more difficult and competition increases in all sectors. In that situation, we have to study the students view towards government and private job. Many of students want to get government job because of security, facility, etc. but it is not easy. It is very difficult to take stand for either of these two forms of administration as both have its advantages and some limitations. The reason behind this confusion is not unknown but something very obvious, as both provide scopes in different ways and have their limitations of own. Job satisfaction in a particular field varies with how content an individual is with his or her job and for both of these, different people have different views. Since the beginning, government jobs in our country are the most sought after jobs and most of the people preferred to take government jobs instead of putting in risk their career to a private job.

As the time passed, with modernization and globalization many multi-national companies have entered into

our country that offers lucrative packages along with other perks and thus luring the youth who even sometimes give up their government jobs and enter into such companies.

### Statement of Research Problem:

This study aims to investigate the perspectives of students regarding government and private sector employment, analyzing their perceptions of factors like job security, salary expectations, career growth opportunities, work-life balance, and social impact when considering a career path in either the public or private sector, with the goal of understanding the key determinants influencing their job preferences and identifying potential areas for policy improvement in the employment landscape.

### Objectives:

1. To study the preference of male and female towards government job and private job.
2. To study the preference of undergraduate students and postgraduate

students towards government and private job.

- To study the view of stream wise students towards government and private job.
- To study view of rural and urban area students towards government and private job.

**Research Methodology:**

A survey will be conducted among a representative sample of students, including questions on their views about job security, salary, career advancement, work-life balance, and social impact in both government and private sector roles.

**Sample Size:**

Determination of sample size Yamane’s formula was used to get exact sample size

∴ The sample size=153

**Data Analysis**

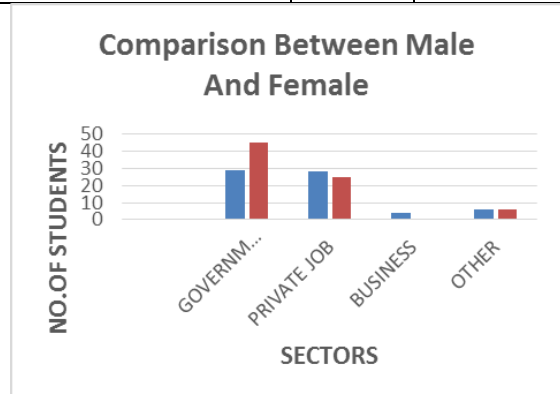
**Graphical Representation:**

To represent our data graphically, we use the bar diagram, pie chart, etc.

- To study the preference of male and female towards government job and private job.

**Table No. 1**

	Male	Female
Government Job	29	45
Private Job	28	25
Business	4	0
Other	6	6



**Interpretation:** From the above diagram, females prefer most government job as

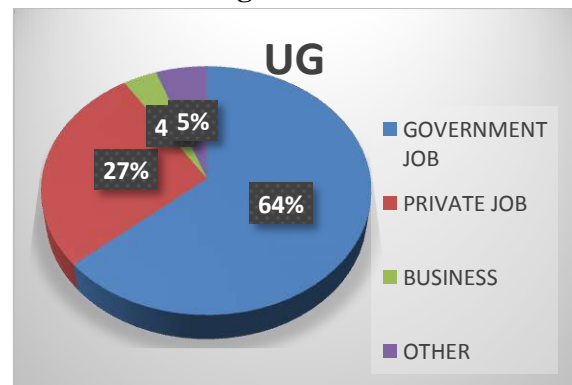
compare to the males and males prefer most private jobs as compare to the females.

- To study the view of the undergraduate and post-graduate students towards the govt. and private job.

**Table No. 2**

	UG	PG
Government Job	70	10
Private Job	30	20
Business	4	2
Other	6	1

**Figure No. 2**



**Figure No. 3**

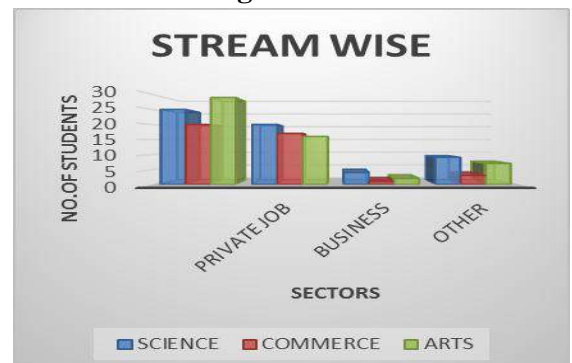
**Interpretation:** From the above pie chart, undergraduate students prefer most government job and post-graduate students prefer most private job.

- To study the view of stream wise students towards government and private job.

**Table No. 3**

	Science	Commerce	Arts
Government Job	25	20	29
Private Job	20	17	16
Business	4	1	2
Other	9	3	7

**Figure No. 4**

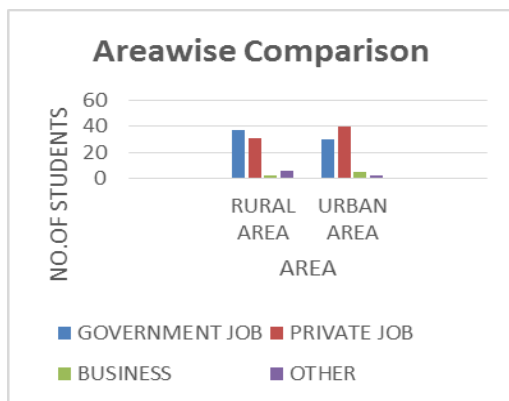


**Interpretation:** From the above diagram, arts students prefer most government job as compare to commerce and science students.

**4) To study the view of rural and urban area students towards govt. and private job.**

**Table No. 4**

	Rural	Urban
Government Job	37	30
Private Job	31	40
Business	2	5
Other	6	2



**Interpretation:** From the above diagram, rural area students prefer most govt. job as compare to urban area students. Urban area students prefer private job.

#### Chi-square test for independency:

**Objective:** To study preference of students towards government job and private job according to faculty

**Table No. 5**

Opinion	Faculty		
	Science	commerce	Arts
Government job	25	20	29
Private job	20	17	16

**Aim:** To check education and opinion are independent or dependent.

#### Hypothesis:

$H_0$ : The student's preference towards government job and private is independent of faculty.

$H_1$ : The students preference towards government job and private is dependent of faculty.

We get, X-squared = 1.1123, d.f = 2, **p-value = 0.5734**

#### Conclusion:

Here P-value > 0.05 hence, we accept  $H_0$  at 5% level of significance.

The students preference towards government job and private is independent of faculty.

#### Conclusion of the Study:

1. Females prefer most government job as compare to the males and males prefer most private jobs as compare to the females.
2. Undergraduate students prefer most government job and post-graduate students prefer most private job.
3. Arts students prefer most government job as compare to commerce and science students.
4. Rural area students prefer most govt. job as compare to urban area students. Urban area students prefer private job.
5. The students preference towards government job and private is independent of faculty.

#### Scope of the Study:

1. We can circulate our analysis to different related institutions, so that it may help them in future planning.
2. If the same survey would be conducted by any government or private institutes, they will get more confidential information which result in more reliable results.

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## A Study on AI (Artificial Intelligence) in Email Marketing

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DOI - 10.5281/zenodo.15146617

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### Abstract:

*This research paper explores the impact of Artificial Intelligence (AI) on email marketing, examining its advantages and the future potential it holds. AI has revolutionized email marketing by enhancing personalization, improving targeting, and optimizing campaigns in real-time. The study highlights how AI helps businesses automate tasks, understand customer behavior, and make smarter decisions, resulting in improved engagement, customer satisfaction, and sales. The paper also delves into the future of AI in email marketing, including upcoming trends like voice-controlled emails, predictive analytics, and more efficient automation. This study offers insights into the evolving landscape of email marketing powered by AI and discusses potential challenges and ethical concerns.*

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**Keywords:** Artificial Intelligence, AI, Email Marketing, Future, ROI, Customer.

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### Introduction:

Email marketing has long been a cornerstone of digital marketing strategies. However, as the digital landscape evolves, businesses are leveraging advanced technologies like Artificial Intelligence (AI) to enhance the effectiveness of their email marketing campaigns. AI allows marketers to create smarter, more personalized email

experiences that resonate with individual customers. By automating tedious tasks and analyzing large sets of data, AI makes email marketing more efficient and results-driven. This research examines the role of AI in email marketing, its current advantages, and the future possibilities that AI presents for the industry.

### Email Marketing:

Email marketing is the use of email to send advertisements, offers, updates, or other content to a target audience. It is a direct way for businesses to reach potential and current customers. Through email marketing, businesses aim to build

relationships, engage customers, and promote their products or services. Personalization and segmentation are key components in making email marketing more effective, and AI plays a crucial role in enhancing these elements.



**Artificial Intelligence (AI):**

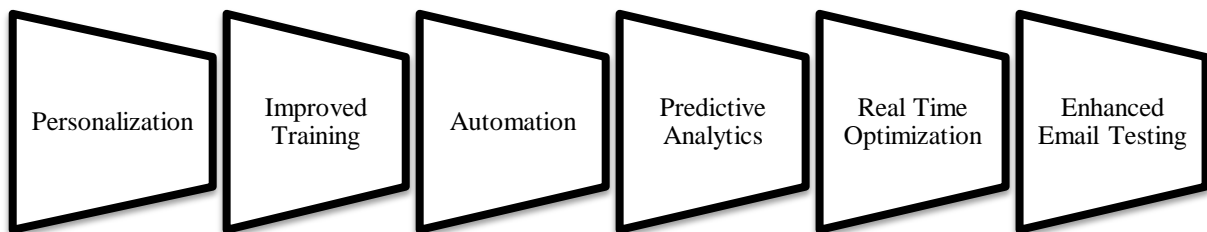
AI refers to the ability of machines to perform tasks that traditionally require human intelligence, such as learning from data, understanding language, recognizing patterns, and solving complex problems. AI systems use algorithms and vast amounts of data to simulate human cognitive functions. It has applications in many fields, including voice assistants like Siri, autonomous vehicles, and data analysis.

**Objectives of the Study:**

1. Identify the major **Advantages of AI (Artificial Intelligence) in Email Marketing.**
2. To study identify **Future of AI (Artificial Intelligence) in Email Marketing.**

**Research Methodology:**

This study is mainly based on primary and secondary data. The data required for such study been collected from secondary sources such as books, journals, articles, research paper and websites. This is descriptive study.

**Advantages of AI (Artificial Intelligence) in Email Marketing:**

**1. Personalization:** AI enables businesses to send highly personalized content to individual customers based on their preferences, behaviors, and past interactions. Personalized emails lead to higher engagement rates and improved customer loyalty.

**2. Improved Training:** AI allows marketers to segment their email lists more effectively by analyzing customer data. It can categorize customers into specific groups, ensuring that each group receives messages tailored to their interests and needs.

**3. Automation:** AI automates repetitive tasks such as scheduling emails, segmenting audiences, and tracking responses. This saves time and reduces the need for a large marketing team, making campaigns more efficient.

**4. Predictive Analytics:** AI can analyze patterns in customer behavior to predict

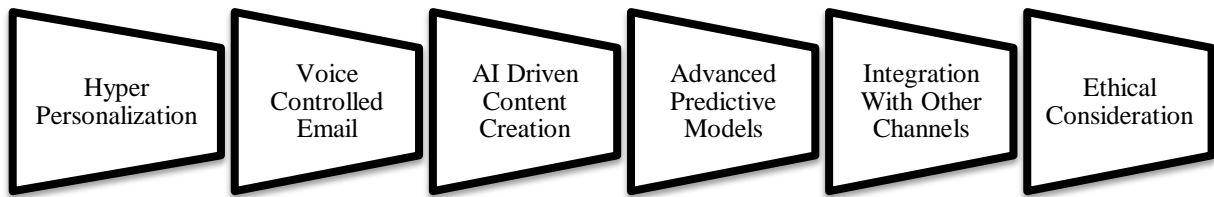
future actions, such as when a customer is likely to make a purchase or open an email. This helps businesses optimize the timing and content of their email campaigns.

**5. Real Time Optimization:** AI can make real-time adjustments to email campaigns, such as changing subject lines, images, or send times based on live data. This allows businesses to continuously improve the performance of their emails.

**6. Enhanced Email Testing A/B Testing:** AI can streamline A/B testing by quickly testing different email versions and identifying the most effective strategies for specific audiences.

**Future of AI (Artificial Intelligence) in Email Marketing:**

The future of AI in email marketing is promising, with several emerging trends-



**1. Hyper Personalization:** AI will enable even more personalized emails that adapt to a customer's preferences, location, and real-time behavior. This could result in emails that are almost uniquely crafted for each recipient.

**2. Voice Controlled Email:** With the rise of voice assistants like Siri and Alexa, email marketing may evolve to allow customers to interact with emails through voice commands. This could lead to more interactive and conversational email experiences.

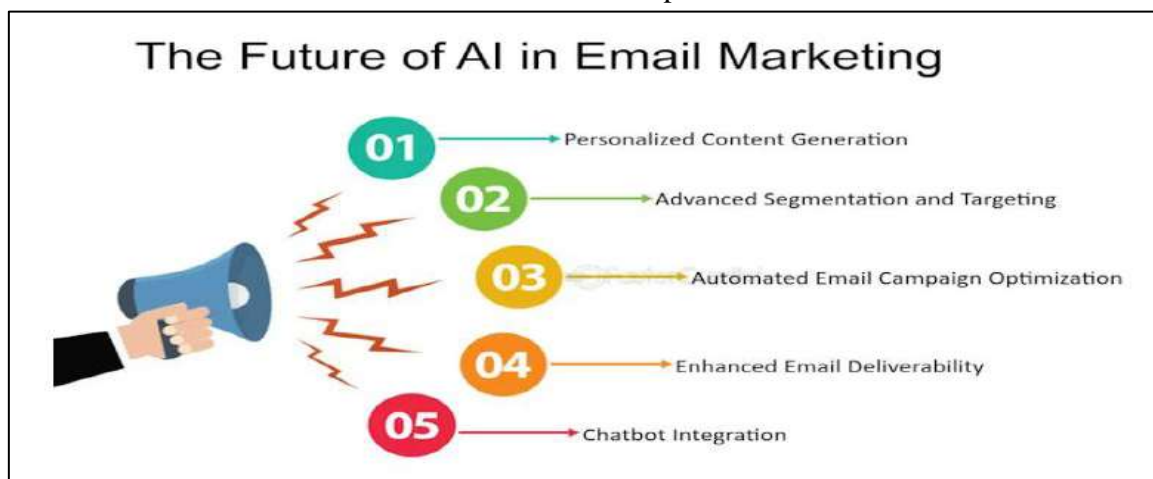
**3. AI Driven Content Creation:** AI will assist in automatically generating content for emails, including subject lines, images, and

body text, based on past email performance and customer preferences.

**4. Advanced Predictive Models:** AI will continue to enhance its ability to predict customer behavior, helping businesses send emails at the most opportune moments, thereby increasing conversions.

**5. Integration with Other Channels:** AI will help integrate email marketing with other digital marketing channels such as social media, SMS, and mobile apps, providing a seamless customer experience.

**6. Ethical Consideration:** As AI gathers more personal data, businesses must be mindful of privacy concerns and ensure that they comply with regulations such as GDPR to protect customer information.



#### Findings:

1. To find out the above study the AI-powered email marketing discovery significantly saves time and delivers improved accuracy in targeting, segmentation, and campaign optimization.
2. To find out the above study the AI-powered personalized and timely emails result in higher open rates,

click-through rates, and overall customer engagement.

3. To find out the above study the AI reduces the need for manual intervention, helping businesses save on labor costs while increasing the efficiency of their campaigns.
4. To find out the above study the AI ability to learn from past campaigns and adjust in real-time means email marketing strategies can continually

improve, resulting in long-term success.

**Conclusion:**

AI is revolutionizing email marketing by offering powerful tools for personalization, targeting, and optimization. As the technology advances, businesses can expect even more innovative applications that will enhance customer engagement and improve overall marketing results. The future of AI in email marketing is filled with potential, with opportunities for hyper-personalization, voice-controlled emails, and smarter automation. However, businesses must also address ethical concerns related to data privacy and ensure they use AI responsibly. By leveraging AI, businesses can build stronger relationships with customers, increase sales, and stay ahead of their competitors.

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## Recent Trends and Future Prospects of E-Marketing

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**DOI - 10.5281/zenodo.15146661**

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### **Abstract:**

*E-marketing, the online marketing of products or services has come a long way with the advancement of technology and shifting consumer patterns. This article discusses emerging trends in e-marketing, considering their implications on businesses and consumers. E-marketing has revolutionized how businesses interact with consumers in the digital era. This paper explores the new trends in e-marketing, including personalization, social media pull, video marketing, voice search optimization, and incorporating cutting-edge technologies such as AI and AR. By reviewing how these trends affect consumer behavior and business practices, we shed light on the necessity for businesses to change and innovate with this rapidly evolving marketplace. Finally, successful e-marketing leverages technology to deliver customized, interactive, and socially conscious marketing experiences that appeal to today's consumers.*

**Keywords:** *E-marketing, Social Media Marketing, Search Engine Optimization (SEO), Content Marketing, Personalization, Consumer Behavior, Mobile Marketing, Data Analytics, Influencer Marketing, Video Marketing, Voice Search, Artificial Intelligence (AI) etc.*

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### **Introduction:**

With the advent of the internet and digital technologies, e-marketing has revolutionized conventional marketing practices. With the use of online media, companies are able to access larger numbers of people and connect with consumers more personally. This paper explores key trends influencing e-marketing in the present times. The quick evolution of technology and the spread of the internet have revolutionized the world of marketing. E-marketing, or electronic marketing, is the advertising of products and services using digital platforms, which allows companies to communicate with a larger number of customers and connect with consumers in a more powerful way than ever before. As increasingly more consumers buy online, grasping the latest trends in e-marketing becomes essential for companies looking to remain competitive.

In the digital world of today, personalization is no longer an extravagance but a necessity. Customers increasingly demand personalized experiences that are customized to their preferences and requirements. This has necessitated the use of advanced data analytics and artificial intelligence in marketing, enabling customized content and products. Social media has also become a significant e-marketing tool, using influencers and user-generated content to extend brand messages. In addition, technological advancements such as video marketing, voice search optimization, and automation have transformed the way brands interact with their audiences.

With changing consumer habits, it is crucial for companies to remain sensitive to these trends and modify their marketing strategies to suit them. This paper seeks to examine the most important trends influencing the e-marketing environment,

their implications for consumers and businesses, and the need for innovation in digital marketing campaigns.

**Objective:**

1. To study the concept of E-Marketing.
2. To study the significance of E-Marketing in the present scenario.
3. To examine the recent trends of E-Marketing.
4. To examine the future prospects for E-Marketing.

**Research Methodology:**

The current study is of descriptive type. This research paper is predominantly dependent on the secondary data. These data are gathered from various books and websites. For completing constructed objectives of the study the secondary data have been compiled.

**Meaning of E-Marketing:**

E-marketing, short for electronic marketing refers to the use of digital channels and technologies to promote products, services, and brands. It encompasses various online marketing strategies and techniques designed to reach and engage consumers over the internet.

**Definition of E-Marketing:**

E-marketing is defined as the process of promoting and selling products or services through electronic media, primarily on the internet. This includes a variety of digital tools such as websites, social media platforms, email, search engines, and mobile applications. The main goals of e-marketing are to connect with consumers, increase brand awareness, drive traffic to online platforms, and ultimately generate sales and leads.

**Importance of E-Marketing:**

E-marketing, or electronic marketing, is an essential part of contemporary business strategies. Its significance can be emphasized through a number of significant advantages:

**1. Global Reach:** E-marketing enables companies to access a global market, transcending geographical limitations. This opens doors for customer acquisition from various markets.

**2. Cost-Effective:** In contrast to conventional marketing practices, e-marketing tends to involve lower investment, making it possible for even small enterprises to compete effectively.

**3. Target Advertising:** It enables specific targeting based on demographics, interests, and behaviors and improves the possibility of conversion by communicating with the right people.

**4. Measurable Outcomes:** E-marketing offers analytics and tracking features, allowing companies to gauge the success of their campaigns and make informed decisions.

**5. Increased Customer Engagement:** Social media and electronic mail marketing enable one-to-one communication with customers, establishing relationships and loyalty.

**6. 24/7 Accessibility:** Online marketing enables companies to work 24/7, making products and services available to clients at any time.

**7. Customer Insights:** Tools for e-marketing enable the collection of important information regarding customer behavior and tastes, to guide product development and marketing.

**8. Adaptability:** The campaigns can be real-time optimized, depending on the performance statistics, to make changes as they go and learn from them.

**9. Brand Awareness:** Utilizing various online platforms makes the business more

visible, and thus companies can build and reinforce their brand image in the market.

**10. Competitive Advantage:** Companies that use e-marketing effectively can remain competitive by taking advantage of the most recent digital trends and technologies.

#### **Key roles in E-Marketing:**

**1. Content Marketer:** Develops and shares relevant content such as blog posts, articles, videos to grab and connect with potential customers.

**2. Social Media Marketing Manager:** Creates and implements social media plans on platforms such as Facebook, Instagram, and Twitter to establish brand presence and customer engagement.

**3. SEO Specialist:** Aligns website content and organization to appear higher on search engine results pages (SERPs).

**4. Digital Marketing Manager:** Directs the overall digital marketing strategy, campaign planning and execution across multiple channels.

**5. Email Marketing Specialist:** Develops and executes email marketing campaigns to qualify leads and facilitate conversions.

**6. PPC Specialist:** Directs paid search campaigns on sites such as Google Ads and social media to produce targeted traffic.

**7. Copywriter:** Produces effective marketing copy for websites, emails, and other digital mediums

**8. Data Analyst:** Gathers, examines, and interprets marketing data to guide decision-making and campaign optimization

**9. User Experience (UX) Designer:** Concentrates on designing user-friendly website interfaces to improve the customer experience

**10. Graphic Designer:** Designs visual content such as banners, info graphics, and social media images for marketing campaigns

**E-marketing can include several components, such as:**

**1. Social Media Marketing:** Utilizing platforms such as Facebook, Instagram, and Twitter to interact with customers.

**2. Email Marketing:** Sending targeted promotional emails to prospects and customers.

**3. Search Engine Optimization (SEO):** Optimizing web content to increase visibility on search engine results pages.

**4. Content Marketing:** Developing and sharing relevant content to attract and engage a certain audience.

**5. Pay-Per-Click (PPC) Advertising:** Running paid search and social media advertisements to generate traffic and conversions.

In general, e-marketing uses technology to develop efficient marketing strategies that are measurable and dynamic, providing companies with the capacity to study consumer behavior and improve their strategies based on it.

#### **Recent Trends in E-Marketing:**

##### **1. Personalization:**

**Data-Driven Customization:** E-marketing is making greater use of data analytics to personalize experiences for specific users. Technologies like AI and ML study consumer behavior, enabling personalized content, product recommendations, and targeted advertisements.

**Dynamic Content:** Web sites and e-mail that tailor content to the preferences or history of the user boost engagement and conversion.

##### **2. Social Media Marketing:**

**Influencer Collaborations:** Brands are collaborating with influencers to effectively reach niche audiences. Influencers may bring authenticity and credibility to promotional campaigns.

**User-Generated Content:** Having customers share their experience on social

media creates community and trust, shaping purchase decisions.

### 3. Video Marketing-

**Live Streaming:** Real-time engagement through live video has become more popular, enabling brands to connect with consumers in a genuine manner.

**Short-Form Videos:** TikTok and Instagram Reels have made short, innovative video content go viral, making it an essential e-marketing tool.

### 4. Voice Search Optimization-

**Voice-Activated Devices:** The use of voice assistants (e.g., Siri, Alexa) has affected SEO tactics. Marketers need to optimize for voice search, with a concentration on natural language processing and local SEO.

### 5. Chatbots and AI Integration-

**Real-Time Customer Support:** Chatbots provide instant answers to customer queries, boosting user experience and business efficiency.

**Predictive Analytics:** AI technologies assist in predicting consumer behavior, allowing proactive marketing.

### 6. Sustainability and Ethical Marketing-

**Eco-Conscious Campaigns:** Customers are increasingly inclined towards brands that are environmentally conscious. E-marketing campaigns now emphasize sustainable behavior and openness.

**Social Responsibility:** Brands are utilizing campaigns that emphasize their social cause commitments, shaping consumer loyalty.

**7. Augmented Reality (AR) and Virtual Reality (VR)-Immersive Experiences:** AR and VR enrich product visualization, enabling customers to engage with products virtually. This is particularly powerful in industries such as fashion and property.

### 8. Email Marketing Innovations-

**Interactive Elements:** Adding videos, surveys, and animated graphics to emails improves engagement.

**Segmentation and Automation:** Sophisticated segmentation tactics address particular groups of consumers, while

automation makes campaign management easier.

**Future Prospects of E-Marketing -** The prospects of e-marketing are promising due to several factors that highlight its potential for growth and innovation. Here are some key aspects that illustrate the future outlook for e-marketing:

**1. Growing Internet Penetration-**With the ongoing growth of internet penetration worldwide, more consumers are going online. This increase offers marketers a bigger audience pool, and hence e-marketing becomes a crucial strategy for reaching out to prospective customers.

**2. Expansion of Mobile Marketing-**Mobiles are becoming as common as air, and mobile marketing is going to expand further. Marketing strategies being optimized for mobile platforms, whether apps or responsive web design, provide marketers the opportunity to reach consumers regardless of their location.

**3. Data Analytics and Personalization-**Personalization efforts will be boosted by the capacity to gather and analyze consumer data. Insights can be utilized by marketers to develop customized content, product suggestions, and targeted campaigns, enhancing customer experiences and conversions.

**4. Social Media Impact-**Social media sites continue to be central to how consumers are reached. The expansion of social commerce, wherein social media sites enable purchases directly on such websites, offers brands a chance to reach consumers and drive sales through targeted ads and influencer marketing.

**5. Video Marketing-**Video content remains the online engagement leader. Adding short videos, live streaming, and tutorials to marketing campaigns can increase brand awareness and customer interaction, satisfying the need for visually engaging content.

**6. Voice Search and Smart Devices-**

Increasing voice-activated device usage requires voice search optimization. Marketers need to adjust SEO techniques to become visible in voice search results, affecting how brands reach consumers.

**7. Artificial Intelligence and Automation-**

AI technologies are revolutionizing e-marketing. From customer support chatbots to automated email campaigns, AI has the ability to automate processes, enhance targeting accuracy, and enhance the efficiency of customer interactions.

**8. Content Marketing Growth-High-**

quality, relevant content remains essential in gaining and retaining customers. As customers look for information-rich and engaging content, brands can use blogs, podcasts, and webinars to establish credibility and authority.

**9. Ethical Marketing and Sustainability-**

As consumers become increasingly socially aware, brands that focus on sustainability and ethical marketing will be more appealing to their audience. Socially responsible messaging and transparency will be the deciding factors in consumer choice.

**10. New Technologies-**

New technologies like augmented reality (AR) and virtual reality (VR) offer new marketing opportunities. Brands can develop immersive experiences that make product interaction more engaging, resulting in increased engagement and sales.

**Findings:**

**1. Personalization as the Norm:** The need for customized marketing experiences has never been greater, with customers anticipating that brands will personalize interactions according to their unique preferences and behaviors. This requires continued investment in data analytics and customer relationship management.

**2. Social Media Impact:** Social media websites significantly influence consumer sentiment and buying behaviors. Brands

have to use social media for real-time engagement and user-generated content to build a strong community and enhance brand allegiance.

**3. Video Content Supremacy:** Video marketing continues to be the most effective form of capturing attention. Marketers need to prioritize using various types of video, including live and short-form, to drive high engagement and visibility.

**4. Voice Search Optimization:** The emergence of smart speakers and voice-activated devices necessitates the need for companies to optimize for voice search. This involves perfecting SEO strategies to fit conversational searches and local searches.

**5. AI and Automation Integration:** AI tools, such as chatbots and predictive analytics, automate marketing processes and improve customer experience. Companies that adopt AI technologies are bound to experience enhanced efficiency and enhanced targeting abilities.

**6. Ethics and Sustainability:** With consumers increasingly concerned about ethical and sustainability issues, brands that emphasize open practices and socially conscious messaging will build deeper relationships with their audience.

**7. Emerging Technologies:** The use of technologies such as AR and VR offers new opportunities for immersive marketing experiences, enabling brands to engage consumers in new and innovative ways that deepen product knowledge and interaction.

**Conclusion:**

The development of e-marketing is a reflection of the shift in consumer behavior and technology. Companies need to keep up with these trends in order to remain competitive, offering customized, interactive, and socially conscious marketing experiences. The future of e-marketing is rosy and promising. With advancements in technology and changes in consumer behavior, marketers need to be flexible and

innovative, adopting new tools, trends, and methods to engage with their audience. Focusing on personalization, data-driven approaches, and ethical practices will be essential in designing and maintaining effective e-marketing campaigns in the future.

While companies evolve with these trends, they are confronted with opportunities and challenges. The move towards personalized marketing represents a paradigm shift in the way brands interact with consumers, requiring an enhanced understanding of customer tastes through data analysis. Social media's increasing influence enforces the importance of real and compelling content, and video marketing leverages the strength of storytelling to engage with people. Additionally, the development of voice search technology demands brands to redefine their SEO tactics in order to remain visible in this new digital world.

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Social media marketing case studies.

Reports on consumer behavior and AR/VR trends.



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## A Research Study on the Building Sustainable Futures: The Role of Sport and physical Education in Development Goals

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**DOI - 10.5281/zenodo.15146723**

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### **Abstract:**

*This research examines how sport and physical education (PE) can significantly contribute to achieving the United Nations' Sustainable Development Goals (SDGs). It investigates how sports can enhance health and well-being (SDG 3), offer improved education (SDG 4), promote gender equality (SDG 5), and unite people (SDG 10). The study emphasizes the ways in which sports and PE activities assist individuals in maintaining health, developing life skills, and improving mental well-being. It demonstrates that sports can provide opportunities for all, including women, youth, and individuals from diverse backgrounds. The research also addresses certain challenges, such as limited access to sports programs or facilities, and explores ways to address these issues. It underscores the necessity of establishing policies that advocate for inclusive sports and forming partnerships that can supply resources. The research findings indicate that increased engagement in sport and PE can foster stronger, healthier communities and assist in achieving global development objectives. It presents actionable recommendations for governments, schools, and organizations on leveraging sports to enhance the world.*

**Keywords-** *Sport, Physical Education (PE), Sustainable Development Goals (SDGs), Health and Well-being, Quality Education, Gender Equality, Life Skills, Mental Health, Access to Sports, Global Development, Sports Programs*

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### **Introduction:**

This research paper investigates how sport and physical education (PE) can assist in advancing the United Nations Sustainable Development Goals (SDGs). Sport and PE are vital not just for maintaining fitness, but they also significantly contribute to enhancing mental health, cultivating essential life skills, and supporting education. By comprehending how sport influences these domains, we can recognize its role in fostering healthier, more educated, and robust communities.

A crucial element is the way sport and PE can enhance mental health. Engaging in physical activity has been demonstrated to alleviate stress, anxiety, and depression, resulting in improved physical and emotional well-being. This complements SDG 3: Good Health and Well-being, which

aims to guarantee healthy lives for all. By participating in consistent physical activities, individuals can elevate their overall well-being, develop emotional resilience, and efficiently cope with stress, all of which assist people in leading healthier lives.

Sport and PE additionally promote the development of life skills such as teamwork, leadership, communication, and problem-solving. These skills are vital for personal development and achievement in various aspects of life, encompassing education and employment. The life skills acquired through sports enable individuals to become more self-assured and competent, facilitating enhanced overall development. In this manner, sport serves as a significant resource for cultivating abilities that extend beyond mere physical activity.

Regarding education, sport and physical education can significantly influence students. Involvement in PE programs assists students in becoming more concentrated, disciplined, and engaged in their educational pursuits. Physical activity is known to enhance focus and memory, which can result in improved academic success. This aligns with SDG 4: Quality Education, which endeavors to provide inclusive and equitable education for all. PE imparts not only physical competencies but also invaluable lessons about health, collaboration, and individual responsibility.

**Here are five key roles of sport and physical education (PE) in promoting the Sustainable Development Goals (SDGs):**

**1. Promoting Health and Well-being (SDG 3):** Sport and PE are essential in enhancing both physical and mental health. Engaging in regular physical activity lowers the chance of chronic diseases, strengthens the immune system, and aids in the prevention of issues such as obesity, heart disease, and diabetes. In addition, physical education supports mental wellness by alleviating stress, boosting mood, and fostering social interaction. Sport can also increase awareness regarding health matters and healthy living, aiding in the pursuit of global health objectives.



**2. Supporting Quality Education (SDG 4):** Sport and PE aid in the attainment of quality education by improving students' cognitive abilities, enhancing focus, and imparting crucial life skills like discipline, teamwork, and leadership. Physical education programs within schools assist students in honing

motor skills, boosting concentration, and elevating their academic achievements. Sport also creates chances for learning beyond conventional classroom settings, encouraging lifelong education and personal development.



**3. Advancing Gender Equality (SDG 5):**

Sport and PE are instrumental in fostering gender equality by promoting equal involvement of women and girls. Sports create avenues for women to transcend traditional gender norms, enhance their self-esteem, and challenge societal expectations. Through participation in sports, girls and women acquire empowerment, leadership attributes, and the capability to succeed in fields frequently dominated by men. PE initiatives that advocate for inclusivity contribute to bridging the gender divide in both sports and education.



**4. Development of Life Skills (SDG 4: Quality Education, SDG 10: Reduced Inequality):** Sports and physical education assist individuals in cultivating vital life skills like teamwork, leadership, communication, discipline, and problem-solving. These skills are fundamental for personal development and achievement in different facets of life. Through engagement in sports, individuals learn to resolve



conflicts, collaborate with people from varied backgrounds, and adapt to obstacles. These experiences aid in fulfilling SDG 4 (quality education) and SDG 10 (reduced

inequality), as they provide individuals with the essential skills required to excel in education, the workforce, and society.



## GOAL 10 REDUCED INEQUALITIES

Reduce inequalities within and among countries

**Join the #GlobalGoals movement!**

The #SDGBookClub helps children learn about the Sustainable Development Goals.

### 5. Improving Mental Health and Well-being (SDG 3: Good Health and Well-being):

Sports and PE serve as effective instruments for enhancing mental health. Engaging in physical activity unleashes endorphins, alleviating stress, anxiety, and depression while enhancing overall mood. Consistent involvement in sports can result

in improved self-esteem, resilience, and coping mechanisms, thereby fostering positive mental well-being. By incorporating PE programs within schools and communities, we can assist individuals in developing mental and emotional resilience, leading to healthier, more fulfilling lives and supporting SDG 3 (Good Health and Well-being).

**Sustainable Development Goal #3  
Good Health and Well-being**

Sustaining the health of people is proven to sustain the prosperity of society, and MapleGreen has the ability and responsibility to do so starting with our cherished employees.

Providing safety equipment & clothing

MG  
Proper vehicle operations training & meeting emissions standards

Ensuring a safe working environment for all employees

Sustaining the health of people & the planet by preventing exposure to hazardous chemical pollution & contamination

Encouraging an open dialogue between employees & managers to promote awareness of mental, emotional, & physical health topics

#MGSUSTAINABILITY

**Objectives:**

**Examine the function of sport and physical education (PE):** in facilitating the accomplishment of the United Nations Sustainable Development Goals (SDGs),

particularly SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education).

**Identify the influence of sport on cultivating life skills,** such as leadership, teamwork, and discipline, which contribute

to personal development and academic success.

**Explore the psychological health advantages** of physical activity, including the reduction of stress and enhancement of emotional resilience.

**Assess the significance of sport in boosting access to education and promoting social inclusion**, especially for marginalized populations (SDG 10: Reduced Inequality).

**Provide suggestions for enhancing sports and PE programs** in educational settings and communities to optimize their contribution to the SDGs.

### Materials and Strategies:

#### Materials:

Surveys and questionnaires for students, educators, and community members to collect data on their experiences with sport and PE.

Case studies of current sports programs that support SDGs.

Academic literature, reports, and policy documents related to sport, physical education, and SDGs.

Interviews with educators, coaches, and policymakers to gain insight into the impact and obstacles of integrating sports into sustainable development initiatives.

#### Strategies:

Conduct qualitative and quantitative research, including surveys, interviews, and case studies.

Review and evaluate existing sports programs, PE curricula, and their results relating to the SDGs.

Identify deficiencies in access to sports and physical education within various regions and communities.

Evaluate the efficiency of policy initiatives aimed at integrating sports into development programs.

Focus on sports programs that advocate for mental health, life skills, gender equality, and community involvement.

### Case Study:

A case study could target a particular sports program or school district that has woven physical education into their educational framework and community development. For instance:

#### Case Study Example:

The "Sport for All" initiative in a rural area where a school-based sports program advances physical activity, mental health awareness, and social inclusion for both boys and girls. The study could monitor enhancements in academic achievement, physical health, and social interactions within the community, illustrating how the program bolsters the SDGs, especially SDG 4 (Quality Education) and SDG 10 (Reduced Inequality).

### Results:

**Impact on Health and Well-being (SDG 3):** Surveys and interviews indicate that students engaged in regular physical activities exhibit improved physical health, fewer stress occurrences, and increased emotional well-being.

**Improved Academic Performance (SDG 4):** Students involved in PE programs show enhanced concentration, problem-solving abilities, and teamwork skills, resulting in better academic performance.

**Gender Equality and Social Inclusion (SDG 5 and 10):** Sport programs that offer equal opportunities for both girls and boys help dismantle gender stereotypes, boost female participation in education, and encourage community inclusion.

**Life Skills Development:** Participants in sports programs express improved life skills such as leadership, communication, and resilience, aiding their personal and professional development.

### Future Directions:

#### Policy Integration:

Future research could investigate how governments and educational

institutions can more effectively incorporate sport and PE into national development agendas.

**Expansion of Access:**

Addressing the deficit in access to sports facilities and programs in underdeveloped regions, particularly within rural and marginalized communities, should be a priority.

**Inclusion of Mental Health Programs:**

More focus should be placed on incorporating mental health education and assistance within sports and physical education programs, particularly for young individuals.

**Global Collaboration:**

Investigating the contribution of global organizations, such as UNESCO and the World Health Organization, in endorsing sport-based initiatives for sustainable advancement in low-income nations.

**Literature Review:**

A literature review must investigate various studies that analyze the convergence of sports, physical education, and the SDGs. This encapsulates:

**Sport and Health:** Studies on how engaging in physical activity enhances physical health and mental wellness (SDG 3). **Sport in Education:** Research demonstrating how physical education programs improve academic outcomes and aid students in acquiring essential life skills (SDG 4).

**Gender Equality and Sport:** Literature addressing how sports can confront gender stereotypes and foster equal opportunities for all genders (SDG 5).

**Social Inclusion:** Research emphasizing how sporting initiatives can unite communities, diminishes social disparities, and encourages social unity (SDG 10).

**Global Impact:** Studies examining the influence of sports on community advancement and its capacity to instigate global transformation (SDG 17).

**Conclusion:**

In conclusion, this research shows how sport and physical education (PE) play an important role in achieving the United Nations Sustainable Development Goals (SDGs). Sport helps improve physical health, reduce mental health issues like stress and anxiety, and promote overall well-being, supporting **SDG 3: Good Health and Well-being**. It also helps people build important life skills such as teamwork, leadership, and problem-solving, which are valuable for personal growth and success in many areas of life.

Sport and PE are key in **SDG 4: Quality Education**, as they improve focus and discipline, helping students do better in school. These activities also encourage equality and inclusion, giving everyone, no matter their gender, background, or abilities, the chance to participate. This supports **SDG 5: Gender Equality** and **SDG 10: Reduced Inequality**. Overall, sport and PE have a positive impact on health, education, and social equality. They create opportunities for personal growth and stronger communities. For a better future, it is important to keep promoting access to sport and physical education for all, helping to reach the SDGs and improve lives around the world.

**Acknowledgements:**

I would like to convey my heartfelt appreciation to all those who supported and contributed to this research. Special gratitude goes to the students, educators, and community participants who took part in the surveys and interviews. I also wish to acknowledge my academic advisor and colleagues for their mentorship and constructive feedback. This study would not have been achievable without the essential insights provided by experts in the domains of sports, physical education, and sustainable development. Finally, I recognize the organizations and institutions

that offered resources and case studies that informed this research.

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## The Role of Entrepreneurship Development in Sustainable Development

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**DOI - 10.5281/zenodo.15146816**

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### **Abstract:**

*This research paper explores the role of entrepreneurship development in fostering sustainable development. It examines the complicated relationship between entrepreneurial innovation and the achievement of environmental, social, and economic sustainability. By analysing case studies and theoretical frameworks, this paper demonstrates how entrepreneurial ventures can drive transformative change, contributing to the realization of the United Nations Sustainable Development Goals (SDGs). This research investigates into the mechanisms through which entrepreneurship development programs can be designed to promote sustainable business models, foster green innovation, and empower marginalized communities. Furthermore, it addresses the challenges and opportunities associated with integrating sustainability principles into entrepreneurial ecosystems, highlighting the need for collaborative efforts among policymakers, businesses, and civil society.*

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**Keywords:** *Entrepreneurship, Entrepreneurship Development, Sustainable Development*

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### **Introduction:**

The 21st century is marked by unexpected global challenges, including climate change, resource depletion, social inequality, and economic instability. In response, the concept of sustainable development has gained importance, emphasizing the need for a balanced approach that integrates environmental, social, and economic considerations. Entrepreneurship, traditionally viewed as a driver of economic growth, is increasingly recognized as a crucial for achieving sustainable development. This paper investigates the collaborative relationship between entrepreneurship development and sustainable development, exploring how entrepreneurial innovation can contribute to a more equitable and environmentally responsible future. This paper aims to analyse the mechanisms through which entrepreneurship development programs can be designed to foster sustainable business models, promote green innovation, and empower marginalized communities.

### **Objectives:**

1. To study the role of Entrepreneurship Development in achieving the United Nations Sustainable Development Goals (SDGs).
2. To explore the role of innovative entrepreneurship in creating sustainable solutions.

### **Theoretical Framework:**

The relationship between entrepreneurship and sustainable development can be understood through several theoretical lenses;

Entrepreneurship is an important factor of industrial development of a country. It is the primary trait of an entrepreneur. The degree and quality of entrepreneurship differ from entrepreneurs to entrepreneurs. However, there are certain cogent determinants which affect the development progress and growth of entrepreneurship. In practice entrepreneurship changes the direction of

economies, industries or markets. It initiates new products and develop organisations and means of production to make them marketable. It introduces quantum leaps in technology and forces the reallocating of resources away from existing uses to new and productive uses. It also disrupts the status quo and reshapes the process of economic development and society on a new course.

### **1. Definition of Entrepreneur and Entrepreneurship:**

#### **Entrepreneur:**

Every business begins with an entrepreneur, someone who develops an idea by identifying gaps in the market. They then try to start a company to bring a product or service to the market. Success can depend on the level of drive, innovation, perseverance, and business acumen the entrepreneur possesses.

An entrepreneur is an individual who starts and runs a business with limited resources. This individual is responsible for all the risks and rewards of their business venture. The business idea usually encompasses a new product or service rather than an existing business model

#### **Key Takeaways:**

- Entrepreneurs are individuals who undertake the organization of a new business and the risks and rewards that come with it.
- Entrepreneurs tend to be classified as those who take on high-growth, high-risk innovations.
- Small business owners are those who oversee an established business with an established product and customer base.
- Successful entrepreneurs are seen as a driving force in the modern economy.
- “Entrepreneurship is the purposeful activity of an individual or group of associated individuals, undertaken to initiate, maintain or organise, a profit-oriented business unit for the

production and distribution of economic goods or services.”

#### **Joseph Schumpeter:**

“Entrepreneurship as a process and entrepreneurs as Innovators who use the process to shatter the status quo. Through new combinations of resources and new methods of commerce. Entrepreneurship essentially consists in doing things that are not generally done in the ordinary course of business routine”.

### **2. Entrepreneurship Development:**

Entrepreneurship plays a crucial role in the economic development of the country. The most important reason of the poverty and under development in the backward countries is rate the lack of entrepreneurship. Different theories of entrepreneurship throw light on the qualities, attitudes, behaviour, personality and psychological make-up of entrepreneurs. The business environment also plays a significant role in the development of entrepreneurship. An entrepreneurship development programme means a programme designed to help person in strengthening his entrepreneurial motive and in acquiring skills and capabilities necessary for playing his entrepreneurial role effectively. Towards this end, it is necessary to promote his understanding of motives, motivation pattern, their impact on behaviour and entrepreneurial value. A programme which seeks to do this can qualify to be called an entrepreneurship development.

### **3. Features of Entrepreneurship Development:**

1. Identification and careful selection of entrepreneurs for training.
2. Developing the entrepreneurial capabilities of the trainee.
3. Ensuring a viable industrial project for each potential entrepreneur.
4. Equipping the trainee with basic managerial understanding.

5. Helping him to secure necessary financial, infrastructural and related assistance.

#### 4. Meaning of Sustainable Development Goals:

The 17 Sustainable Development Goals (SDGs) are the world's best plan to build a better world for people and our planet by 2030. Adopted by all United Nations Member States in 2015, the SDGs are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the environment. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, equality and job opportunities while tackling climate change and working to preserve our ocean and forests. That is why the SDGs are designed to bring the world to several life-changing 'zeros', including zero poverty, hunger, AIDS and discrimination against women and girls.

- Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet.
- For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies.
- Eradicating poverty in all its forms and dimensions is an indispensable requirement for sustainable development. To this end, there must be promotion of sustainable, inclusive and equitable economic growth,

creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems.

#### Research Methodology:

This research is theoretical and descriptive in nature. The necessary secondary data was collected from various journals, magazines, research publications, Government websites etc.

#### Entrepreneurship Development and Sustainable Business Models:

Entrepreneurship development programs play a crucial role in fostering sustainable business models. These programs can provide entrepreneurs with the knowledge, skills, and resources needed to develop and implement sustainable business strategies. Key components of effective entrepreneurship development programs include:

**Sustainability Training:** Providing entrepreneurs with training on sustainability principles, environmental management, and social impact assessment.

**Mentorship and Networking:** Connecting entrepreneurs with experienced mentors and industry experts who can provide guidance and support.

**Access to Funding:** Facilitating access to funding for sustainable ventures, including impact investment and green financing.

**Incubation and Acceleration:** Providing incubation and acceleration programs that support the growth of sustainable businesses. Sustainable business models are characterized by their integration of environmental and social considerations into core business operations examples include:

**Circular Economy Models:** Businesses that prioritize resource efficiency, waste

reduction, and product lifecycle management.

**Social Enterprises:** Businesses that address social or environmental problems while generating revenue.

**Benefit Corporations (B Corps):** Businesses that are legally required to consider the impact of their decisions on all stakeholders.

### **Green Innovation and Technological Advancements:**

Entrepreneurship is a key driver of green innovation, which involves the development and adoption of technologies and practices that reduce environmental impact. Entrepreneurs can leverage innovation to address pressing environmental challenges, such as climate change, pollution, and resource depletion.

### **Examples of green innovations include:**

**Renewable Energy Technologies:** Solar, wind, and geothermal energy technologies that reduce reliance on fossil fuels.

**Sustainable Agriculture Practices:** Organic farming, precision agriculture, and vertical farming techniques that enhance resource efficiency and reduce environmental impact.

**Waste Management and Recycling Technologies:** Advanced recycling technologies, waste-to-energy systems, and composting solutions that reduce waste and promote circularity.

**Electric Vehicles and Sustainable Transportation:** Electric vehicles, ride-sharing services, and public transportation systems that reduce greenhouse gas emissions.

### **Empowering Marginalized Communities:**

Sustainable entrepreneurship can play a crucial role in empowering marginalized communities by creating economic opportunities and addressing social inequalities. Social entrepreneurship,

in particular, focuses on developing business models that benefit underserved populations. Examples of initiatives that empower marginalized communities include:

**Microfinance Programs:** Providing access to small loans and financial services for low-income entrepreneurs.

**Skills Training and Vocational Education:** Equipping marginalized individuals with the skills needed to start and manage businesses.

**Community-Based Enterprises:** Supporting the development of businesses that are owned and operated by community members.

**Fair Trade Initiatives:** Promoting fair trade practices that ensure fair prices and working conditions for producers in developing countries.

### **Challenges and Opportunities:**

While entrepreneurship offers significant potential for driving sustainable development, several challenges remain:

**Lack of Access to Funding:** Sustainable ventures often face difficulties in accessing funding due to their supposed risk and long-term investment horizons.

**Regulatory Barriers:** Complex and inconsistent regulations can hamper the development and growth of sustainable businesses.

**Lack of Awareness and Education:** In many entrepreneurs there is lack of awareness of sustainability principles and best practices.

**Market Barriers:** Sustainable products and services may face market barriers due to higher costs and consumer preferences.

### **Opportunities:**

**Growing Consumer Demand:** It is found that there is increasing consumer awareness and demand for sustainable products and services.

**Technological Advancements:** Rapid advancements in green technologies and



digital platforms is big opportunity for new entrepreneurs for their career.

**Policy Support:** Increasing government support for sustainable entrepreneurship through policies and incentives gives boost to the prospectus entrepreneurs for starting their new venture.

**Collaborative Partnerships:** Growing collaboration among businesses, governments, and civil society organizations this is new opportunity for entrepreneurs to start their business enterprises.

#### Case Studies:

Following are the enterprises which plays important role in Sustainable Development.

**Patagonia:** This outdoor clothing company has integrated sustainability into its core business strategy, emphasizing product durability, repair, and recycling.

**Interface:** This carpet tile manufacturer has adopted a circular economy model, aiming to eliminate waste and create a restorative impact.

**SELCO India:** This social enterprise provides sustainable energy solutions to low-income households in rural India, empowering communities and reducing poverty.

**M-PESA:** This mobile money transfer service has revolutionized financial inclusion in Kenya, providing access to financial services for millions of people.

#### Recommendations:

- There is need of Strengthen entrepreneurship development programs and integrate sustainability principles into entrepreneurship training and support programs.
- Promotion of green innovation is necessary by providing fund and incentives for research and development of green technologies.
- Fostering collaborative partnerships is necessary to encourage collaboration

among businesses, governments, and civil society organizations.

- To develop supportive policies for implementation of policies and regulations that promote sustainable entrepreneurship.
- To create awareness and provide education to the entrepreneurs and consumers about the importance of sustainable development.
- To increase access to funding and create innovative financing mechanisms for sustainable ventures.
- To Support social entrepreneurship and invest in social enterprises that address social and environmental problems.

#### Suggestions:

1. Policymakers should create supportive regulatory frameworks and incentives for sustainable businesses.
2. Entrepreneurship development programs incorporate sustainability principles into their training and support services.
3. Implementation of strategies for increasing access to finance and technology for sustainable entrepreneurs.
4. Fostering collaboration between entrepreneurs, researchers, and other stakeholders to drive sustainable innovation.
5. To increase consumer awareness of sustainable products and services.
6. To Promote education around sustainable business practices.

#### Conclusion:

Entrepreneurship development is a critical catalyst for sustainable development. By fostering sustainable business models, promoting green innovation, and empowering marginalized communities, entrepreneurs can drive transformative change and contribute to the achievement of the SDGs. This paper has highlighted the collaborative relationship between entrepreneurship and sustainability,

demonstrating the potential for entrepreneurial ventures to create a more equitable and environmentally responsible future. However, realizing this potential requires collaborative efforts among policymakers, businesses, and civil society. By addressing the challenges and seizing the opportunities, we can harness the power of entrepreneurship to build a sustainable and prosperous world for all.

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## Sustainable Development: An Individual Perspective

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**DOI - 10.5281/zenodo.15146914**

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### **Abstract:**

*Present paper is conceptual in nature and intent to explore the understanding of society on sustainable development based on brainstorming and observations from the society practices; which are perceived to hinder the sustainable development. The 17 sustainable development goals (SDG) decided by United Nations have been depicted vis-s-vis the initiatives taken by Indian government have also been mentioned. The expected efforts to be done by individual citizens towards sustainability have been proposed. Despite the fact that the government and agencies all over the world are working towards the attainment of sustainable development; ultimately the cooperation and participation of citizens directly and indirectly is going to contribute for the attainment of goals. The article concludes with research questions and hypotheses to facilitate the further empirical research in the domain of sustainable development.*

**Keywords:** *Sustainable Development, Consumerism, Sustainable Development Goals, Eco-System, Sustainable Development and Individual.*

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### **Introduction:**

The most popular phrase amongst researchers and in the conferences these days in commerce and management is Sustainable development. A lot of discussions and conceptual researchers have been taking place on sustainable development and the discussions on alternative development business models have been proposed. Majority alternative development models are untested. There finds a need to look into practical implementation aspects of sustainable development at different levels i.e. at the level of central government, state government, local government and at individual level. Sustainable Development is not a buzzword but a word carries value; the word sustainability is life. It is now an oasis in the desert and that desert the human has been creating which in turn is denting the entire eco system. The entire future of life on the earth is depend now on one concept

i.e. Sustainable Development. The prime multiple issues concerning development are; Global warming, Increase in carbon emission and green house gases, Changed weather conditions which has been denting the eco system.

The development is expected to bring happiness to the mankind and all wellbeing of all creators in the eco system but it does not seem happening. Hence, the metric of development needs to be evaluated once. The present metrics of development in the world followed are, percentage increase in GDP, per capita income, per capita consumption, increase in the total economy of the nation, exports trade indicators, foreign reserves, nuclear power, military power, development of urban area, construction and so on. The indicators are moreover economic indicators and are generally accepted as the indicators of development but it is at the cost of destruction of nature and environment which

has been witnessing time and again. The indicators of preservation and conservation of nature and environment are not considered as an indicator of development even though these indicators are appreciated a lot. The world accepts United States of America as a developed nation but not Finland and Bhutan since these nations are topping in happiness index and purely organic states.

The major destruction of nature and environment has happened in last 70 years especially post Second World War period; where the massive industrialization has started taking place and the human and its consequences philosophy of development has caused this destruction. No other creature than human being is responsible for the destruction of environment and nature. The fact of nature's destruction and economic development is that the poor face consequences of destruction made by rich. It is applicable to both with the case of an individual and nation.

### Review of Literature:

In 2015 the members of United Nations has adopted 17 goals of sustainable development to comply till 2023. These goals are narrated below along with the actions government of India has taken to comply. NITI Aayog report on SDG India Index 2023-24 has narrated the actions of government of India towards SDG (Bery, 2024)

1. No Poverty: End poverty in all its forms everywhere. The government of India has taken initiative as, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Deen Dayal Antyodaya Yojana (DAY) – National Rural Livelihood Mission (NRLM), Deen Dayal Antyodaya Yojana (DAY) – National Urban Livelihood Mission (NULM), Pradhan Mantri Jan Dhan Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, PM Awas Yojana, DDU- Grameen Kaushalya

Yojana, PM Jeevan Jyoti Bima Yojana and National Social Assistance Programme (NSAP), Atal Pension Yojana.

2. Zero Hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. The government of India has taken initiatives like, Pradhan Mantri Garib Kalyan Anna Yojna / National Food Security Act, 2013, Pradhan Mantri Samman Nidhi ( PM – Kisan ), National Food Security Mission, PM Poshan Abhiyan, Kisan Credit Card ( KCC), PM Kisan Sampada Yojana , PM Fasal Bima Yojna, National Mission of Sustainable Agriculture, Mission for Integrated Development of Horticulture, National Mission for Edible oils- oil Plant ( NMEO-OP) National Live Stock Mission, Soil Health Card Scheme, Scheme for Modernization and Reforms through Technology in Public Distribution System ( SMART- PDS)

3. Good Health and Well-Being: Ensure healthy lives and promote well-being for all at all ages. The government of India has taken initiative as, National Health Mission, Pradhan Mantri Jan Arogya Yojana( Ayushman Bharat), Mission Indradhanush 5.0, Saksham Anganwadi and POSHAN Abhiyan 2.0, Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), PM Matru Vandana Yojana, PM Jan Aushadhi Scheme, National Ayush Mission ( NAM), Pradhanmantri Swasthya Suraksha Yojana, Pradhan Mantri TB Mukh Bharat, Anaemia Mukh Bharat

Janani Suraksha Yojana ( JSY)

4. Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The government of India has taken initiative as, Samagra Shiksha, New India Literacy Programme, Mid Day Meal Scheme( PM POSHAN), Pre and Post matric Scholarship schemes for SCs, PM SHRI (School for Rising India ), Eklavya Model Residential Schools, Rashtriya Avishkar Abhiyan

(RAA), National Means cum Merit Scholarship, Padhe Bharat Badhe Bharat (PBBB), Skill Strengthening for Industrial value enhancement (STRIVE – EAP), PM Uchcharat shiksha abhiyan (PM- USHA),

5. Gender Equality: Achieve gender equality and empower all women and girls. The government of India has taken initiative as, Beti Bachao Beti Padhao Scheme, Sukanya Samrudhi Yojna ( Girl Child Prosperity Scheme), MUDRA Yojana, Janani Suraksha Yojana ( JSY), Shakti Sadan, Kastruba Gandhi Balika Vidyalay ( KGBV), Pragati Scholarship Scheme for Girls, Women help line Scheme, One Stop Centre Scheme.

6. Clean Water and Sanitation: Ensure availability and sustainable management of water and sanitation for all. The government of India has taken initiative as, Swachh Bharat Mission, Jal Jeevan Mission ( JJM), AMRUT 2.0 Scheme, PM Krishi Sinchayee Yojan(PMKSJY), Mission Amrit Sarovar, Jal Shakti Abhiyan- catch the rain, Atal Bhujal Yojana, Pradhan Mantri Krishi Sinchayee Yojna, National River conservation Programme (NRCP), Namami Gange-Integrated Ganga Conservation Mission, National perspective Plan NPP.

7. Affordable and Clean Energy: Ensure access to affordable, reliable, sustainable and modern energy for all. The government of India has taken initiative as, SAUBHAGYA scheme, PM Ujjwala scheme, Unnat Jyoti by affordable LED for all ( UJALA), PM- KUSUM Scheme, Rooftop Solar Programme, Green Energy Corridors (GEC), Bio- Energy Programme, National Green Hydrogen Mission, Deen Dayal Upadhyaya Gram Jyoti Yojana, National Solar mission, Faster adoption and Manufacturing of Electric Vehicle (FAME ) Scheme, PM Surya Ghar Muft Bijli Yojna, Electric Mobility Promotion Scheme ( EMPS)

8. Decent Work and Economic Growth: Promote sustained, inclusive and

sustainable economic growth. The government of India has taken initiative as, full and productive employment and decent work for all, Production linked incentives(PLI) scheme, PM Employment Generation Programme ( PMEGP), Skill India, Pradhan Mantri Krushal Vikas Yojana(PMMY), National Apprenticeship Promotion Scheme(NAPS), Skill Development Mission, Deendayal Upadhyaya Antyodya Yojana, National Urban Development Mission, Udyami Bharat Scheme

9. Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. The government of India has taken initiative as, Digital India, PM Gatishakti – National Master plan for multimodal connectivity, Industrial Corridor Development Programme, National Logistic Policy, North East Industrial Development Scheme (NEIDS), Udyami Bharat Scheme, Bharatmala Project, PM Mega Integrated and Apparel (PM MITRA), Border Area development Programme (BADP) ( ACA), Pradhan Mantri Gram Sadak Yojna (PMGSY), Make in India / Start Up India, Ease of Doing Business Initiatives.

10. Reduced Inequalities: Reduce inequality within and among countries. The government of India has taken initiative as, Aspirational Districts and Block Programme, Vibrant Village Programme, Pradhan Mantri Vishwakarma Scheme, Umbrella Programme for Development of Minorities, Umbrella Programme for development of Scheduled castes, Scheduled tribe and other vulnerable groups, Scheme for development and other backward classes and Denotified Nomadic and Semi Nomadic Tribes, PM Development initiatives for North East Region, Scheme for Development of Economically Backward Classes (EBCs), Pradhan Mantri Jan Vikas Karyakram (PMJVK)

11. Sustainable Cities and Communities: Make cities and human settlements inclusive, safe, resilient and sustainable. The government of India has taken initiative as, Smart Cities Mission, PM e – Bus Seva Scheme, Atal Mission For Rejuvenation, of Urban Transformation ( AMRUT), Swachh Bharat Mission – Urban, Pradhan Mantri Awas Yojna – Urban, City Investment to Innovation, Integrate and Sustain 2.0(CITIIS)

12. Responsible Consumption and Production: Ensure sustainable consumption and production patterns. The government of India has taken initiative as, Lifestyle for Environment (LIFE), National policy on Biofuels, PM – KUSUM Scheme, Renewable energy .Renewable Energy Global Investment Promotion Meet and Expo( RE- INVEST), National Clean India Fund O(NCEF)

13. Climate Action: Take urgent action to combat climate change and its impacts. The government of India has taken initiative as, National Action Plan on Climate Change, National Mission for Sustaining the Himalayan Ecosystem, National Clean Air Programme,National Mission for Green India, National Solar Mission, National Mission for Enhanced Energy Efficiency, National Water Mission Compensatory Afforestation Fund Management And planning Authority ( CAMPA), atinal mission for Sustainable Agriculture, National Cyclone Risk Mitigation Project

14. Life below Water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. The government of India has taken initiative as, Neel Kranti Mission (Blue Revolution), National Plan for Conservation of Aquatic Ecosystem (NPAAE), Pradhan Mantri Matsya Sampada Yojan, Sagarmala Project, Interlinking Of River, National Coastal Mission, Ocean Services, Technologies, Observation Resources Modelling and

Sciences (OSTORMS), Mangrove Initiatives for Shoreline Habitats and Tangible Income

15. Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. The government of India has taken initiative as, National Afforestation Programme (National Mission for Green India), Intigrated development of wild life Habitats, Project Tiger, Project Elephant, Nagar Van Yojana,National Action Programme to Combat Desertification , National Agroforestry Policy.

16. Peace, Justice and Strong Institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. The government of India has taken initiative as, PRAGATI 2.0: Pro – Active Governance and Timely Implementation, Modernisation of Police Forces, RIT (Right to Information Act), Rashtriya Gram Swaraj Abhiyan, Integrated Child Protection Scheme ( ICPS), Development of Infrastructure Facilities For Judiciary including Gram Nyayalayas.

17. Partnerships for the Goals: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development. The government of India has taken initiative as,

The Government of India has initiated aforementioned policies and programs to attend sustainable development goals and their respective state government's needs to continue and the local government needs to take these policies and programs to the beneficiaries. A bureaucratic system has laid down to percolate the benefits of the programs. Besides this the state and local government needs to take additional programs towards sustainable development suited to the local requirements. The policies and programs supported by individual

citizens and families will conquer the objectives and lead to happy life.

#### Discussions:

The current quest to attain economic development has raised various issues like, work pressure, tensions, which leads to unhappy life and caused increase in the diseases which leads to increase in the consumption of medicines. The pharmaceutical industry is profoundly reporting their growth; which we term as an indicator of development.

India is striving fast on the track of development. It is on the verge of becoming the third largest economy in the world. Being the number one nation in terms of population the nation is seen as a biggest market by developed nations. Development is needed but not at the cost of destruction hence, in Indian the scenario before thinking on any further development in terms of economy we need to think on basic P's where still India is lagging much behind and these P's are,

1. **Population:** Is mounting and so called said population dividend being the young nation in the world has not seen getting yet. Question arises do our nation has enough resources to comply the basic needs of population?
2. **Poverty:** The rate of poverty is constant since independence and now economists are reporting widening gap between rich and poor one.
3. **Pollution:** The major cities in the nation are arrested with massive air pollution; capital of India Delhi is an example of heavy pollution. Rural India has got soil pollution. Major rivers are polluted and sound pollution found everywhere.
4. **Pure Drinking Water:** Still after 75 years of independence the citizens are away from pure drinking water. Pure and free drinking water at public places is not available. The impure water is inviting many deceases.

5. **Primary Health Care:** Rural India is deprived from the adequate health care facilities. Urban cost of health care is out of reach of common people.

6. **Primary Education:** The targeted gross enrolment ratio speaks on the adequacy of educational system in the nation.

7. **Pure Food:** Government extended the Food security bill and claiming that enough food grains are available but the issue of secured food is on the verge and raised the concern about health.

#### Sustainable living by Individuals:

The world has witnessed many evolution and revolution by a civilization which has changes the scenario to make it right. In India too such moments from local, state and national level has changed the scenario. The moment by the individuals would be of a great help to attain the sustainable development goals in an effective manner. The social activists and NGOs have already flagged the issues concerning the destruction of nature and environment exhibiting demonstrations like chipko andolan, Narmada Bacho andolan and the like. The major environmental concerns in India are, air pollution, water pollution and water storage, food storage, waste management and loss of biodiversity. Indian is planning to become world's third largest economy on the backdrop of above basic issue. The projected trends seem to be falsifying since the environmental concerns are going to have an impact on the entire eco system which is likely to hinder the economic development. The alternative business models which permits economic development without denting the environment is the only key toward development.

The consumption of individuals i.e. consumer behavior in the market decides the overall consumption and ultimately decides the production and existence of entire supply chain management. The premise is that; the

responsible consumption i.e. consumerism determines the moment in the economy and many of the SDG goals can be attained easily owing the responsible consumerism. (Consumerism is the propensity to consume and keep consuming. It is the drive to buy and own more stuff and to define one's identity through what they own. Economists view consumerism as a positive for consumer spending and GDP growth. Others like psychologists and sociologists, however, see negative effects of rampant consumerism ranging from creating anxiety in individuals to social ills.) The discussion in this section has taken as to the efforts individual as a citizen of this nation, as a responsible consumer can make to contribute towards the sustainable development goals. This premise is against market economy which promotes increase in the consumption of individual and many a times the consumption is unwarranted products and services.

Following discussion is an effort to narrate the efforts individual citizen can initiate to contribute individually towards every sustainable goal decided by United Nations.

1. **No Poverty:** Help people below poverty line to grow in terms of education and earnings.
2. **Zero Hunger:** Avoid food waste at home and outside.
3. **Good Health and Well-Being:** Practice Yoga and Meditation. Take sufficient exercise every day and follow the appropriate diet. Precaution is better than cure.
4. **Quality Education:** Motivate students to take education to enrich skills, knowledge and importantly shape the way to think in right. Present education is moreover exam oriented. The learning of Indian ethos is foremost important.
5. **Gender Equality:** have a benevolent behavior with every human being irrespective of cast and creed.

6. **Clean Water and Sanitation:** Self-discipline regarding sanitation. Do not spit; do not litter on roads, public places. Save water and do not pollute the water bodies.

7. **Affordable and Clean Energy:** save energy should be mission of every house and shift to renewable energy like solar energy.

8. **Decent Work and Economic Growth:**

9. **Industry, Innovation and Infrastructure:** industry to develop sustainable technology, sustainable green products at affordable prices. Develop green infrastructure. Use of natural material in the development of infrastructure. Development of Green houses. Development of supply chain to collect the products after use especially packaging material for recycling or reuse.

10. **Reduced Inequalities:** society is free from caste and creed and we all are human beings.

11. **Sustainable Cities and Communities:** Rainwater harvesting, solar energy Cooperative farming, terrace garden, vertical garden for growing our needed vegetables.

12. **Responsible Consumption and Production:** the citizens should follow the three R's i.e. Reduce (the amount of waste you produce), Reuse (items as much as you can before replacing them) and Recycle (items wherever possible). Here individual can contribute immensely to restrict the consumption which in turn will determine the production of demanded product.

- a. Can we specify the needs and accordingly determine the consumption? So to purchase only adequate.
- b. Can we prefer parching the indigenous products and services?
- c. Can we prefer purchasing the refilling products?
- d. Avoid use and throw culture.
- e. Demand for recycle products.
- f. Demand for organic products
- g. Say no to plastic



- h. Say no to tobacco products, fast food and carbonated beverages.
  - i. Prefer public transportation.
13. **Climate Action:** The collective efforts to reduce the effect of climate change.
14. **Life below Water:** Make use of organic substance to dilute the water pollution.
15. **Life on Land:** be a contributory part of the eco system. Produce no waste. No horns in the cities to compact with sound pollution
16. **Peace, Justice and Strong Institutions:**
17. **Partnerships for the Goals:**

#### **Collective efforts to achieve all SDG:**

It is a General saying that, 'Old is Gold' and we need to study era where people were happy and enjoying the life with peace. Till today people with limited expectations and away from material satisfaction seem to be happy (generation baby boomer Born between 1946 and 1964 and **Generation X:** Born between 1965 and 1976). We need to find the root causes of present distractions and need to adopt the era of happiness again with the help of advanced technology. Ministry of education has taken a step towards redesigning the educational system in India remembering the enriched educational system we had those days of Nalanada and Takshashila. The trend of consuming organic products has also on the rise. The adoption of lifestyle has also began changing with yoga and traditional Indian exercise followed by ayurvedic prescriptions. So the reversal trends are witnessing in respective domains and in the days to come the reversal is going to happen to catch hold of happy life.

The entire discussion has reached to set a few questions and to formulate following hypotheses to probe using scientific research design.

#### **Research questions:**

1. Government of India has initiated many schemes to attain the sustainable development goals. Many of the schemes are very old. Are all these schemes functioning today? Entire of the schemes are attaining their objectives. Is the beauracracy is held responsible for attainment and non attainment of the goals of respective schemes?
2. Is the state government of Maharashtra is implementing the schemes by central government? Are these schemes attaining the set objectives?
3. Is the self sufficiency and self reliance a prime solution for sustainable development?
4. Does different economic philosophies and sustainable development are related? Is this capitalism distracting sustainable development and socialism supports sustainable development?
5. Does the common person aware of Sustainable development and his role, contributions and expectations in sustainable development?
6. Does the sustainable development efforts are marching towards the more greener, self reliance and technological advanced village.
7. Does the different generations looks sustainable development in the same way? The generations like, X generation, Y generation, Millennium generation, Z generation, Alpha generation and the like.
8. Does the demographic profile and understanding on sustainable development associated?
9. Does the alternative development business models are economically viable and financially feasible?
10. Can we have such economically viable development models?
11. Do we have our science and technology faculty ready to develop the sustainable technology?

**Hypotheses:**

1. Economic indicators of a nation are positively correlated with carbon and greenhouse gases emission.
2. There is an association with economic systems and indicators of sustainable development.
3. The demographic profile of individual and family are associated with the indicators of sustainable life of individual and family.
4. Consumption of an individual and family are inversely related to indicators of sustainable development.

**Conclusion:**

The environment destruction of earth can be stopped by the efforts of Government supported by the citizens. The moment of responsible consumerism is likely to attain

sustainable development goals. Micro planning, making awareness on the sustainable development, making accountable and responsible individual citizen is necessary. With respect to every sustainable goal the plans and programs needs to be given to individual for an implementation with the support of local government. The stringent rules and regulations are needed which may dent the indicators of economic development but foster the sustainability. The ultimate goal of every human being is happy life where the earth becomes greener and life in the eco system is enjoying the cause of existence.

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## Recent Trends and Challenges in Commerce

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DOI - 10.5281/zenodo.15146953

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### **Abstract:**

*Online marketing is a set of powerful tools and methodologies used for promoting products and service through the internet. Online marketing includes a wider range of marketing elements than traditional business marketing due to extra channels and marketing mechanism available on the internet. Online marketing is advertising and marketing the products or services of a business over Internet. Online marketing relies upon websites or emails to reach to the users and it is combined with e-commerce to facilitate the business transactions. In online marketing, you can promote the products and services via websites, blogs, email, social media, forums, and mobile Apps. Online marketing strategy is critical for organization operating in markets with high internet penetration. Online shops introduced the physical analogy of goods and services at a regular “bricks and mortar” shopping centers or retail Centre and many type of online shopping. Business-to consumer (B2C) online shopping and business-to-business (B2B) online shopping. Online stores in business to buy from other business. Online stores enable the customer to check the firm’s product and services to view the images or photos of the product sand in for ming the product information’s and specifications, price etc. Online marketing strategy is a critical for organization operated with very high internet penetration. Online marketing strategies are*

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**Keywords:** Social Media Marketing, Email Marketing, Content Marketing, Social Media Marketing.

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### **Introduction:**

Social media marketing is the utilization of social media stages and sites to advance an item or administration. Despite the fact that the terms e-marketing and computerized marketing are as yet reviling in the scholarly community, social media marketing is winding up more prevalent for the two specialists and scientists. Most social media stages have worked in information examination apparatuses, which empower organizations to track the advance, achievement, and engagement of advertisement crusades. Organization address a scope of partners through social media marketing, including present and potential clients, present and potential representatives, columnists, bloggers, and the overall population. On a vital level,

social media marketing incorporates the administration of a marketing effort, administration, setting the degree.

### **Statement of the Problem:**

Online marketing is playing a vital role today. Marketing strategies are very important for creating awareness about the products. This is the one tool where customers can easily get to know about the product features, varieties, price, and other contents which are very essential for the customers for making buying decision. On the other hand, the company will also be benefited as these strategies helps in increasing sales of products. Hence this study is undertaken to A Study on Application of Online Marketing Strategies for Increasing Sale of Consumables Product

in Myntra.

### Objectives of the Study:

1. To Study the online marketing strategies of the Myntra
2. To Study the promotional strategies of Myntra
3. To find the level of satisfaction to the customers of Myntra
4. To study the effectiveness of online marketing strategies in increasing the sale of products of Myntra
5. To suggest appropriate suggestions and to draw conclusion.

### Methodology adopted:

Research methodology:-The research methodology used in this study is mainly designed as an empirical work based on both secondary data and primary data, obtained through pre-tested questionnaire, internet browsing, direct personal interviews of selected persons involved in this sector as well as.

### Sample size:

The study is conducted on the basis of 50 selected sample and findings are drawn based on their response.

### Analysis and interpretation of data:

**Table 1: Gender wise classification of respondent.**

Gender	No. of Respondent	Percentage
Male	35	70%
Female	15	30%
Total	50	100%

(Sources: Primary data Compiled)

The table shows that 35 respondents are male and remaining 15 respondents are female.

**Table.2: Age classification of the respondent**

Age	No. of respondent	Percentage
Below 20	12	24%
20-25	15	30%
25-30	10	20%
30-35	8	16%
Above 35	5	10%
<b>Total</b>	<b>50</b>	<b>100%</b>

(Sources: Primary data Compiled)

### Significance of the Study:

Online marketing is important, because it aligns with the way consumer market purchasing decisions. Studies by analyses such as gather indicate that increasing number of consumers use social media and research on mobile internet to carryout preliminary products and price research before making final decisions. Online marketing enables to build relation with consumers and prospects through regular, low-cost personalized communication. Hence this study is intended to know the online marketing strategies used by Myntra to increase the sales.

### Scope of the Study:

This study is done with reference to the Myntra, Manjari. Which helps to understand about implementation of online marketing strategies for increasing sales of consumable products in Myntra

### Limitations of the study:

Sample size is very low Opinion is based on a particular area Respondent's bias might have influenced Same customers refused to co-operate.

The table shows that 12 respondents are below 20 age, 15 respondents are 20-25 age, 10 respondents are 25-30 age, 8 respondents are 30-35 age and 5 respondents are above 35 age.

**Table.3: Classification on the basis of education qualification**

Education Qualification	No. Of respondent	Percentage
SSC	4	8%
Plus two	15	30%
Graduate	20	40%
Postgraduate	6	12%
Other	5	10%
Total	50	100%

The table shows that respondents education qualification. Respondents are SSLC, 15respondents are plus two, 20 respondents are graduate, 6respondents are postgraduate, and remaining 5respondents are other. Respondents of ten buy the product through online

**Classification of the respondent according to categories of products that the consumer buys in Myntra:**

**Table 4: The table shows that categories of products that the consumer buys in Myntra**

Particulars	Total	Rank
Clothing	213	1
Handbags	189	3
Cosmetics	109	4
Footwear	203	2
Other	107	5

The table shows that the clothing is the most preferred product respondents buys in Myntra because the variety of cloths, brand and quality etc. And minority of respondents buys other types of products.

The graph shows that the majority of the respondents buy cloths in Myntra. This is due to the varieties of cloths and attractive offers and discounts etc...And minority of respondents buys other types of products.

**Classification of Motivation factors to buy in Myntra:**

**Table5: factors motivates to buy in Myntra**

Factors	5	4	3	2	1
Delivery time	13	14	6	3	4
Price	9	12	20	5	4
Quality	43	6	1	0	0
Availability	3	6	9	21	11
Brand	22	20	8	0	0
Size	1	5	7	16	21
Payment Mechanism	11	24	13	2	0

Above table shows that the factors motivate to buy in online Myntra the factors affects on buy in Myntra in that case delivery time is more as well as payment

mechanism is satisfactory also the quality highly rating and all factors which is important in online shopping in Myntra.

**Classification factors you to buy in Myntra:****Table 6: Classification factors you to buy in Myntra**

Factors	5	4	3	2	1	Total	%
Delay Time	65	96	18	6	4	189	75%
Price	45	48	60	10	4	167	66%
Quality	215	24	3	0	0	242	96%
Availability	15	24	27	42	11	119	47%
Brand	110	80	24	0	0	214	85%
Size	5	20	21	32	21	99	39%
Payment Mechanism	55	96	39	4	0	194	77%

The table shows that 75% respondents express that delivery time factor motivates them and 66% respondents are using price factor and 96% respondents are using quality factor and 47% respondents are using availability factor and 85% respondents are using brand factors and 39% of respondents are using size factor and 77% respondents are using payment mechanism

factor.

The respondents express that quality is the factor that motivates them to buy products through online. Quality is one of the major factors that the customers consider most while buying products compared to the other factors. And minority of respondent's size factor motivates to buy product through online.

**Classification of respondent before making a selection of product in Myntra:****Table 7: The table shows that the no. of respondents sees before making a selection of products in Myntra**

Factors	Total	Rank
Advertisement	158	3
Price	195	1
Discounts	149	4
Brand	174	2
Rating	136	5

The table shows that the no. of respondents sees before making a selection of products in Myntra. 10% respondents are selection of products by rating and 40% respondents are selection of products by price and 30% respondents are selection of products by brand and remaining 20% respondents are selection of products by

advertisement. The graph shows that majority of respondents make selection of products by considering the price factor because of attractive offers and discounts and minority are considering rating of products while selecting products of Myntra.

**Table 8: The table shows that no. of respondents rates the promotion of Myntra in comparison to others**

Particulars	No. of respondents	Percentage
Poor	4	8%
Average	13	26%
Good	20	40%
Verygood	7	14%
Excellent	6	12%
<b>TOTAL</b>	<b>50</b>	<b>100%</b>

The table shows that the 8% respondents are poor rating about Myntra and 26% respondents are average rating about Myntra and 40% respondents are good rating about Myntra and 14% respondents are very good rating about Myntra and remaining 12% respondents are excellent

rating about Myntra. The graph shows that the majority of respondents are good rating about the Myntra because of good quality of products and attractive offers and discounts etc...And minority of respondents is poor rating about Myntra.

**Table 9: The table shows the problems faced by the customers of Myntra**

Problems	No. of respondents	Percentage
Quality	8	16%
Return policy	13	26%
Hidden charges	6	12%
Security	11	22%
Delivery problems	12	24%
<b>Total</b>	<b>50</b>	<b>100%</b>

The table shows the problems faced by the Myntra customers. 26% are return policy problems, 24% are delivery problems, 22% are security problems, 16% are quality problems and 12% are hidden charges while conducting online purchase through Myntra. This is done to know the

problems faced by the customers of Myntra. From this we can identify that the return policy is 1st rank. Delivery problems, security, quality and hidden charges got the 2nd, 3rd, 4th and 5th rank respectively.

#### **Respondents like to recommend others to buy products of Myntra:**

**Table 10: Respondents like to recommend others to buy products of Myntra**

Particulars	No. of respondents	Percentage
Yes	35	70%
No	15	30%
<b>Total</b>	<b>50</b>	<b>100%</b>

The table shows that the 70% of respondents like to recommend others to buy products of Myntra and 30% respondents are not like to recommend others to buy products of Myntra. The good quality of products and attractive offers and discounts and good return policy etc. And minority of respondents are not like to recommend others to buy products of Myntra.

the quality is the high factor for motivates them to buy products through Myntra. Whereas size and availability are least factor 70% of respondents are affect the promotion strategy of buying decision in Myntra 69.8% of respondents are satisfied the some features of Myntra Majority of the respondents are buying the product through online in occasionally (32%) of respondents are prefer Amazon and 30% of respondents are prefer Flipkart for online shopping 42% of respondents purchase clothing and near 32% of respondents purchase footwear in Myntra Most of the respondents ranked 1st for price and next is brand factor are considering for the selection of product 40%

#### **Findings:**

The follow findings that appeared while analyzing the study 87% of respondents have rates the delivery charge is the high promotional strategies of Myntra Most of the respondents (96%) have rates

of respondents are good rating about the Myntra 80% of respondents are got any special offers from Myntra 50% of respondents are neutral with the product information of Myntra Among the respondent 26% of respondents felt problem in return policy and 24% of respondents felt problem in delivery while conducting online purchase in Myntra 70% of respondents are respondents like to recommend others to buy products of Myntra

**Suggestions:**

The following are the suggestions that appeared while analysing the study Since few of the customers are buying products through offline, awareness need to be created for increasing online payment mode Usage of products by the customers is required to be more as few of the customers are buying yearly also Promotional strategies need to be improved so as to motivate the customers to make buying decision The company has to make ease for searching products what they are looking for Special offer need to be provided for attracting the customers Complete

**References:****Journals**

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information about the product need to be advertised for better understanding of the product Lucky draw, coupons, etc. are required to promote the customers and also to increase the sales The company has to give in for mall customers for the new products launching time.

**Conclusion:**

Today online marketing strategies are very important for the customers to get to know about the products and also for the company to increase their sales which in turn helps to achieve their goals like profitability and survival. Marketing strategies are means for achieving the organizational goals. Social media marketing, e-mail marketing, content marketing etc. are some of the online marketing strategies that helps consumers in selecting the right products at the right time and at the right cost where customers can get a clear understanding of the products. Customer satisfaction is one of the major and significant factors that has to be met with the help of various marketing tools and techniques.

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## Role of Artificial Intelligence in Sustainable Development of Human Resource Development

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DOI - 10.5281/zenodo.15147003

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### Abstract:

Artificial Intelligence (AI) is transforming Human Resource Development (HRD) by introducing new ways to optimize and personalize learning, career development, and talent management. As AI becomes more sophisticated, its impact on HRD is growing, enabling organizations to develop their workforce more efficiently, proactively, and inclusively.

Literature review: Artificial intelligence is a field of wisdom concerned with structure computers and machines that can reason, learn, and act in such a way that would typically bear mortal intelligence or that involves data whose scale exceeds what humans can dissect. AI is a broad field that encompasses numerous different disciplines, including computer wisdom, data analytics and statistics, tackle and software engineering, linguistics, neuroscience, and indeed gospel and psychology. On an functional position for business use, AI is a set of technologies that are grounded primarily on machine literacy and deep literacy, used for data analytics, prognostications and soothsaying, object categorization, natural language processing, recommendations, intelligent data reclamation, and more.

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### Introduction:

**Artificial Intelligence (AI)** is transforming Human Resource Development (HRD) by introducing new ways to optimize and personalize learning, career development, and talent management. As AI becomes more sophisticated, its impact on HRD is growing, enabling organizations to develop their workforce more efficiently, proactively, and inclusively.

### Literature review:

Artificial intelligence is a field of wisdom concerned with structure computers and machines that can reason, learn, and act in such a way that would typically bear mortal intelligence or that involves data whose scale exceeds what humans can dissect. AI is a broad field that encompasses numerous different disciplines, including computer wisdom, data analytics and statistics, tackle and software engineering, linguistics, neuroscience, and indeed gospel

and psychology. On an functional position for business use, AI is a set of technologies that are grounded primarily on machine literacy and deep literacy, used for data analytics, prognostications and soothsaying, object categorization, natural language processing, recommendations, intelligent data reclamation, and more.

### Types of Artificial Intelligence:

Artificial intelligence can be organized in several ways, depending on stages of development or conduct being performed. For case, four stages of AI development are generally honored

**1. Reactive machines:** Limited AI that only reacts to different kinds of stimulants grounded on preprogrammed rules. Does n't use memory and therefore can not learn with new data. IBM's Deep Blue that beat chess champion Garry Kasparov in 1997 was an illustration of a reactive machine.

**2. Limited memory:** Utmost ultramodern AI is considered to be limited memory. It can use memory to ameliorate over time by being trained with new data, generally through an artificial neural network or other training model. Deep literacy, a subset of machine literacy, is considered limited memory artificial intelligence.

**3. Theory of mind:** proposition of mind AI doesn't presently live, but exploration is ongoing into its possibilities. It describes AI that can emulate the human mind and has decision-making capabilities equal to that of a human, including feting and flashing back feelings and replying in social situations as a human would.

**4. Self-Aware:** A step above proposition of mind AI, tone-apprehensive AI describes a fabulous machine that's apprehensive of its own existence and has the intellectual and emotional capabilities of a mortal. Like theory of mind AI, self-aware AI does not currently exist

#### **Benefits of AI:**

AI can automate workflows and processes or work singly and autonomously from a mortal platoon. For illustration, a smart factory may have dozens of different kinds of AI in use, similar as robots using computer vision to navigate the factory bottom or to check products for lights, produce digital halves, or use real-time analytics to measure effectiveness and affair. Human error reduction: AI can exclude homemade crimes in data processing, analytics, assembly in manufacturing, and other tasks through robotization and algorithms that follow the same processes every single time.

Eradicate repetitious tasks: AI can be used to perform repetitious tasks, freeing human capital to work on advanced impact problems. AI can be used to automate processes, like vindicating documents, transcribing phone calls, or answering simple client questions like “what time do

you close? ” Robots are frequently used to perform “dull, dirty, or dangerous” tasks in the place of a mortal.

Speedy and precise: AI can reuse further information more snappily than a human, finding patterns and discovering connections in data that a human may miss. horizonless vacuity.

Infinite availability: AI is n't limited by time of day, the need for breaks, or other mortal encumbrances. When running in the pall, AI and machine literacy can be “always on,” continuously working on its assigned tasks.

Accelerated exploration and development: The capability to dissect vast quantities of data snappily can lead to accelerated improvements in exploration and development. For case, AI has been used in prophetic modeling of implicit new pharmaceutical treatments, or to quantify the mortal genome.

#### **Operations and use cases for Artificial Intelligence:**

Recognition of speech, Converting the spoken words into written text automatically, Recognizing the image, Differentiating the colorful aspects of an image, Converting words and sentences from one language into another. Prophetic modeling data to read specific issues with high degrees of granularity. Data analytics Find patterns and connections in data for business intelligence. Cyber security Overlook networks for cyber attacks anonymous.

**Human Resource Development (HRD)** is a strategic approach aimed at enhancing workers' chops, knowledge, and capacities. It goes beyond training, encompassing conditioning that foster particular and professional growth. HRD ensures workers are equipped for current places and unborn challenges by integrating training, career development, performance operation, and leadership civilization. This

alignment of hand growth with organizational pretensions is vital for long-term success. HRD enterprise may include structured literacy, mentorship, leadership development, and digital tools, fostering a culture of nonstop enhancement where workers are encouraged to grow and pursue new openings. significance of Human Resource Development( HRD) mortal Resource Development( HRD) is a critical element in erecting a successful association. Its significance extends far beyond training, impacting colorful aspects of both hand well- being and organizational success.

**1. Improving employees performance and productivity:** At the core of HRD is the improvement of hand chops and effectiveness. By furnishing targeted training and development openings, associations can significantly boost hand performance. exploration shows that companies investing in comprehensive training programs witness a 218 advanced income per hand compared to those that do n't. This enhancement not only benefits individual workers but also contributes to the overall effectiveness of the association.

**2. Retaining talent and employee engagement:** HRD plays a crucial part in retaining top gift. workers who feel that their growth is valued are more likely to stay with an association. In fact, associations with strong development programs report 59 lower development rates. Engaged workers aren't only more productive but also more pious, reducing development costs and fostering a stable pool.

**3. Innovation and creativity:** In a terrain where change is constant, rigidity is crucial. HRD encourages nonstop literacy, enabling workers to acclimatize to new technologies and assiduity shifts. Companies that foster a culture of literacy are 46 more likely to be leaders in their respected sectors. This commitment to ongoing development drives invention, allowing associations to stay ahead of competition.

**4. Developing leadership and Succession:** Planning another crucial component of HRD is future preparation. HRD makes sure the company is prepared to manage changes with ease by identifying and nurturing future leaders. Since leadership development programs provide a pool of competent executives who can steer the business toward sustained success, they can boost organizational income.

**5. Organizational Performance:** The organization's overall success is influenced by HRD. HRD contributes to the creation of a workforce that is not just competent and driven but also genuinely invested in the company's success by coordinating employee development with business objectives. The organization gains a competitive edge as a result of this alignment, which improves performance overall.

#### Why Does AI Matter in HRM?

Because AI has the potential to improve employee satisfaction and free up HR practitioners' time for more worthwhile, less monotonous tasks, it is significant in HRM. AI can assist in automating repetitive processes, such responding to frequently asked queries by new hires. By collecting data on work performance and feedback from coworkers throughout the year, drafting a performance review, and developing personalized learning plans for staff members, it can enhance employee development. HR companies can save time on manual chores like writing job descriptions or emailing job candidates by utilizing generative AI. AI offers new prospects for efficiency and effectiveness, whereas human capital management software has traditionally been utilized to increase HRM's efficacy.

Utilizing artificial intelligence to optimize time management allows HR professionals to dedicate greater attention to essential tasks, including collaborating with

business unit leaders to formulate staffing strategies, evaluating trends in employee performance and satisfaction, and executing innovative approaches to improve the employee experience while aligning with the organization's objectives.

### **Advantages of AI in Human Resource Management:**

Given the multitude of vital responsibilities, the time of an HRM team is invaluable. AI can significantly alleviate their workload by automating repetitive tasks, such as composing responses to candidates and generating other content, thereby freeing up time for AI-enhanced analysis and more strategic activities.

**1. Time efficiency in administrative functions:** Artificial Intelligence can streamline the manual and repetitive elements of human resources, such as crafting new job advertisements or identifying the most suitable candidates for available positions. By gathering information regarding your organization's culture and the qualifications required for a specific role, AI can generate job descriptions that HR can review and finalize, ensuring they are both accurate and attractive to high-calibre talent.

**2. Decision making based on data analysis:** The HR department can leverage AI to make more informed choices by collecting data on employee performance and engagement levels. This information provides HR teams with critical insights that can help pinpoint specific challenges within the workforce and implement appropriate solutions. For example, during a skills assessment of the workforce, AI can assist in cataloging existing skills from employee profiles and comparing them with the most in-demand skills based on current job listings or market trends. This enables HR professionals to identify skills shortages within the organization and formulate up

skilling or recruitment strategies to address these gaps.

**3. Increased engagement:** The data aggregation capabilities of AI render it an essential resource for delivering personalized employee experiences that foster a sense of value and engagement among employees. For instance, AI can monitor employee achievements throughout the year, their learning behaviours, and performance indicators. This information can subsequently be utilized to develop individualized development plans tailored to each employee's needs.

### **Implementing AI in Human Resources:**

When implementing AI for human resources applications, it is essential to utilize accurate and timely data. AI models require data to learn and produce relevant outputs, making a dependable data set vital for effective AI deployment within your department.

There are two primary options to consider when integrating AI into human resource management. The most prevalent method is to incorporate AI as an integrated feature within an HR application. For instance, a generative AI tool can be embedded in recruitment software to assist recruiters in drafting job requisitions. The benefit of having AI embedded in applications is that it is accessible at the moment of need, seamlessly integrated into the workflow, and does not necessitate extensive AI expertise for deployment and usage.

Alternatively, your organization may opt to deploy AI models on a cloud-based platform, allowing for customization to meet specific organizational needs or use cases. Cloud deployment facilitates the scaling of models and provides the necessary resources for training them. However, many HR departments may refrain from refining and training their own models due to the associated costs, the requirement for

advanced AI knowledge, and the necessity of such efforts only arising when a very specific AI application is needed.

Another consideration when deploying AI in your organization is whether your business requirements are better served by "classic AI" or generative AI. Classic AI excels at analyzing large data sets to provide recommendations, identify variances, and detect trends. In contrast, generative AI is designed to create new text, images, videos, audio, and other content based on user prompts. These functionalities can assist in tasks such as summarizing employee feedback. Both classic AI and generative AI capabilities can be found embedded within HRM applications.

Following deployment, it is crucial to ensure that the newly implemented AI is achieving the intended results. This involves regular monitoring and updates by collecting data on user satisfaction and functionality of the new technology.

#### **Conclusion:**

- 1) With this research we can conclude that, artificial intelligence cannot replace the humans in human resource development.
- 2) With proper implementation of A.I we can make Human resource activities more easier and faster, also avoid engaging employees in repetitive tasks .
- 3) Applying AI may not be affordable for smaller organizations as it is a costlier affair.
- 4) Huge data analysis will be made easier with appropriate use AI
- 5) Future anticipation or HR. strategies can be planned with optimum use of AI.

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**Comparative Study on Perception of Urban vs Rural Organic Jaggery  
Consumers of Satara Taluka**

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*Research Scholar, D. G. College of Commerce, Satara.*

**DOI - 10.5281/zenodo.15147063**

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**Abstract:**

*Food is one of the essential needs of human beings (as of all creatures) and agriculture is the prime source of food of all living beings. Man has been responsible for the origin of agriculture very early in his evolution. Human beings continued to practice, evolve and develop this science of producing food in its manifold aspects in all ages and regions of the world. Twentieth century has been the witness of most technological agricultural changes leaving remarks on rural landscape and population. This technical revolution, which is continuing to be dominant method for food production, depends on on-farm and off farm resource usage. Invention of machinery has put labour out of farm while variety of chemical fertilizers have increased yield without any concern of environmental measures for economic reasons. Sustainable food production became more and more vital after facing with social, ecological and economic impacts of industrialized agriculture. Societies find solution by demanding for low-input, regional and seasonal products with the respect of environment, health and social welfare of the region. There have been organizations and policies have been established in developed countries to take measures in food production.*

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**Keyword: Perception, Organic Jaggery, Jaggery Consumer etc.**

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**Introduction:**

Food is one of the essential needs of human beings (as of all creatures) and agriculture is the prime source of food of all living beings. Man has been responsible for the origin of agriculture very early in his evolution. Human beings continued to practice, evolve and develop this science of producing food in its manifold aspects in all ages and regions of the world. Twentieth century has been the witness of most technological agricultural changes leaving remarks on rural landscape and population. This technical revolution, which is continuing to be dominant method for food production, depends on on-farm and off farm resource usage. Invention of machinery has put labour out of farm while variety of chemical fertilizers have increased yield without any concern of environmental measures for economic reasons. Sustainable

food production became more and more vital after facing with social, ecological and economic impacts of industrialized agriculture. Societies find solution by demanding for low-input, regional and seasonal products with the respect of environment, health and social welfare of the region. There have been organizations and policies have been established in developed countries to take measures in food production. Organic Agriculture as one solution to problems of industrialized agriculture based on Holistic Production Management systems which aims creating integrated, humane, environmentally and economically sustainable agricultural production systems. Consumers of industrialized countries have shown a great attention towards organic products starting from 90.s. Food safety and quality issues have triggered the awareness of consumers

and people start to be suspicious towards conventional products. Moreover, today's educated society is showing great interest to their and children's health and prefer foods with more nutritional values, less additives and more coming from natural production methods. Consumers increased knowledge about the relationship between diet and health, and their awareness of food quality features, as well as their access to information about new production and processing technologies have resulted in a constantly increasing demand for improved quality food; being organic food within this trend. Food consumption patterns are rapidly changing nowadays as a result of environmental issues, concern about the nutritional value of food and health issues. Organic farming is a technique, which involves cultivation of plants and rearing of animals in natural ways. This process involves the use of biological materials, avoiding synthetic substances to maintain soil fertility and ecological balance thereby minimizing pollution and wastage. It relies on ecologically balanced agricultural principles like crop rotation, green manure, organic waste, biological pest control, mineral and rock additives. While Consumer perception is a marketing concept that encompasses a customer's impression, awareness and or consciousness about a company or its offerings. It is typically affected by advertising, reviews, public relations, social media, personal experience and other channels.

#### **Review of Literature:**

Brijesh Sivathanu (2015) have identified the factors affecting consumers' preference towards organic food products. The main aim of the study was to understand the preference of consumers and to identify the factors influencing consumers towards organic food products. Both primary and secondary data were used. The primary data were collected with structured questionnaire and five point likert scaling technique. An

exploratory study was conducted after an extensive literature survey. The sample size was used to find out the determinants of preference among the consumers. The results indicate that the reasons for consumers preference to buy organic food products are various factors including demographic characteristics of the consumers. It has been observed that the females have more preference for organic foods as compared to male consumers and also more number of respondents is educated people between the age group of 29-39 years. People who have higher income prefer organic foods and their perception of organic food is healthy, safe, high nutritional value and environment friendly products. The research brought out some suggestions that the determinants of consumers preference towards organic food products and which will be useful to the marketers to design a suitable marketing mix and to incorporate and implement the various marketing strategies by the marketers and other factors impacting the preference of the consumers in the various strategies of the society. Also there is a need to build up more trust among the consumers and get the proper government certification for the organic food products.

S. Amutha and M. Kanagarathinam (2017) have released a study on "Consumers' Preference for OFP." 550 customers made up the sample size, and a convenient sampling technique was applied. The Friedman rank test and chi-square were used to gather and examine the data. According to the study's findings, the majority of consumers are married, retired workers who have a strong preference for organic foods. Organic food products are highly preferred by the majority of consumers who read food labels before making an organic purchase. The Friedman test results show that the majority of consumers choose to purchase organic food goods for three primary reasons: price, freshness, and increased income.

Dasari. Pandurangarao, K.Chiranjeevi, D. Suryachandra Rao(2017)have discovered the elements influencing Hyderabad and Secuderabad consumers' decisions to purchase OFP. 500 customers made up the study's sample, and they were questioned using a standardized questionnaire to look at the main determining elements to make use of organic food items. Factor analysis, reliability testing, and percentage analysis were used to examine the data. The results of a factor analysis test of 35 variables showed that 10 factors—labels, health and environmental concerns, brand, advertising, safety, accessibility, price, freshness, and store location—were the most important. The three main issues that influenced the decision to purchase OFP were safety, the environment, and health. They recommended that the marketers create environmental and health-related advertising initiatives. Thus, the organic sector is still in its early stages. extensive marketing push to raise awareness of OFPs and Urban and semi-urban consumption can support the growth of organic food markets.

R.Ayaswarya and S.Vasanthi (2018)have tried to gauge Thirucirappalli Corporation's "Consumer level of preference towards organic food products." 50 responders were chosen as the research sample utilizing stratified random sampling methods, and one-way ANOVA and percentage analysis were used to examine the data that was gathered. They stated that the study's importance lay in raising consumer awareness and influencing their tastes and inclinations, which will raise demand for organic products both domestically and internationally. Because they are chemical-free, environmentally friendly, and address health issues, people favor organic products over conventional ones. The alternative hypothesis was accepted in the analysis, while the null hypothesis was rejected. The researchers ultimately come to the conclusion that consumers' concerns about the environment and their health have led to

an increase in their preferences. An additional OFP preference was the OFP's taste and natural appearance.

#### **Research Gap:**

The researcher has made extensive spade work and collected research studies and literature reviews pertaining to the objectives. After studying the collected literature and research papers, it is found that many of the studies concentrated on consumer buying behavior, consumer perception, awareness level, buying intention, factors influencing towards purchasing of organic food products. But no comparative study location-based is done in specific organic product .

#### **Statement of Problem:**

In emerging nations, use of pesticides in agriculture is becoming a significant health hazard. Since the Pandemic of Covid-19, favouritism for organic food has risen significantly and it is seen in customers and vendors reactions through alteration of food habits. On the other side can the reason behind such alteration can be like wellness and environmental issues or other reason like vendors, doctor's reference. The researcher was having following questions into her mind before conducting the present study: Do the urban and rural consumers' have same perception while purchasing organic jaggery? What is the reason behind purchase of organic jaggery?

Does anything motivate consumers towards organic jaggery consumption?

#### **Objectives of the Study:**

The current intends to combine the themes extracted from recent works of literature, which serve as a base for more exhaustive research, as well as the data collected from the present scenario to determine area-wise consumer buying patterns towards organic jaggery. In precise, the research fundamentally aims to inspect



the significant attributes influencing the consumer's purchase decision-making structure. A holistic view of interrelation among the variables which affect rural and urban consumer's purchase intent concerning organic jaggery of Satara Taluka.

#### The research objectives proposed are:

To investigate the factors influencing consumer perception of rural and urban consumers towards organic jaggery in Satara Taluka.

To study the effect of selected demographic factors on consumer's perception towards organic jaggery choice of rural and urban consumers in Satara Taluka.

#### Hypothesis:

H<sub>0</sub>: There is a significant relationship between location of the residence of consumers' and their perception in purchase of organic jaggery.

H<sub>1</sub>: There is a no significant relationship between location of the residence of consumers' and their perception in purchase of organic jaggery.

#### Scope:

The study, which was carried out in satara city and five villages of Satara Taluka,

aims to determine perception that organic jaggery consumer has which ultimately resulted in his/her purchase.

#### Limitations of the study:

The present research is limited to the following:

The study was conducted among the organic jaggery consumers of Satara City and 5 villages of Satara Taluka only The sample size was limited to 50 respondents from both categories.

The primary source of collection was used which will may be not embrace the same findings for whole district, state or country.

#### Research Methodology:

The primary and secondary data were used for data collection. The secondary data were collected from various websites, journals and magazines. The primary data was collected by means of structured interview schedule. Convenient sampling techniques has been used in the study and the sample size is 50 , In order to analyse the objectives of the study, several statistical methods are tested.

### Analysis and Interpretation:

#### 1. Frequency table on Demographic:

##### Profile of Respondents:

Demographic Profile	Frequency	Percentage	
Age	Below 20	7	15
	21-40	13	25
	41-60	25	50
	Above 60	5	10
Gender	Male	24	47
	Female	26	53
Marital Status	Married	29	58
	Unmarried	21	42
Total Family Members	1-3	19	39
	4-6	21	41
	7 and above	10	20
Educational Qualification	SSC	4	9
	HSC	15	30

	Diploma	5	10
	Graduate	26	51
Occupational Status	Government Service	13	26
	Private Service	10	20
	Business	10	20
	Farming	15	30
	Retired	2	4
Monthly Income (in Rupees)	Below 10000	2	4
	10001-20000	35	70
	20001-30000	8	16
	Above 30000	5	10
Location	Urban	25	50
	Rural	25	50
Total Respondents		50	100

Altogether the responses from fifty participants were taken into consideration. Based on the above (Table 1.9.1), age was taken as the number of years completed by the respondent at the time of study conducted, and respondents were classified into four groups based on their age as there were four classes of age from Below 20, 21-40, from 41-60, and Above 60 . Most participants fall in the age group between 41-60 years old, making 50% of the participants, which indicates that a large number of middle-aged people are well aware of organic products and tend to purchase more organic jaggery when compared to the young and old-aged group. Participants were identified as either male or female. Results reveal that ,Females are more willing to participate and tend to showcase an increased likeliness towards purchasing organic jaggery. Considering the respondent's marital status, they were identified as either married or unmarried.

Out of the total respondents, married people are more eager to purchase organic jaggery. Concerning the total number of people in the family, most of the people who actively participated and purchased organic products belong to a family consisting of 4-6 members. Most of the respondents purchasing organic jaggery had graduation, Therefore it is inferred that people who are qualified tend to show increased purchase behaviour. Regarding occupational status, most of the participants surveyed were business people, as they were inclined to make organic purchases This outcome shows that individuals with considerable as well as medium income desire to purchase organic products. However, then these respondents are exceptionally influenced by the changes in the price. A slight disparity in the cost of organic produce can influence their purchase pattern. In all 50 respondents were distributes as 25 from rural area and 25 from urban area.

## 2. Factor's hindering consumer's organic purchase:

Hindering factors	Urban		Rural	
	Mean	Rank	Mean	Rank
High Price	9.58		9.18	
Non-availability	9.26		8.45	
Lack of variety	8.21		8.28	
Inability to distinguish	8.06		7.96	
Lack of Trust	7.96		7.56	
Lack of Information	7.12		7.22	

Based on the research, the list mentioned above (Table 1.10.2) displays the factors hindering consumers' organic purchases. As results reveal, most respondents ranked the high cost of organic products as the major contributing factor for non-purchase, with the highest mean of urban was 9.58 while rural was 9.18. Consumers opined that organic products are priced a way higher when compared to conventional products, and hence they could not afford to purchase it on a regular basis even though they are well aware about the health benefits gained out of it. Moreover, unavailability or timely inaccessibility of the needed products were ranked second with a mean of urban was 9.26 while rural was 8.45 and lack of variety in the organic products available in stores were ranked third with a mean score of urban was 8.21 and rural was 8.28, making them go for the conventional ones. Even though we cannot store these items for an extended period since it does not comprise additives and synthetic substances to keep from the bugs, this factor has contributed a lot to the non-purchase of organic products. Most respondents, with a mean score of urban was 8.06 and rural was 7.96, find it challenging to distinguish organic products from other inorganic products. Besides, the lack of trust with urban was 7.96 and rural was 7.56 and a lack of information with a mean score of urban was 7.12 and rural was 7.22 makes their organic purchase difficult. They seem to be unaware of the various certifications and labelling which claims a product as organic. In addition, respondents frequently question the products they get in stores as organic will be organic or not. Lack of information concerning the production technique adopted hinders their organic purchase. It is vital to figure out the causes which restrict or discontinues consumers from organic purchase; thereby, the corrective measure can be adopted by the marketers to improve their purchase

preference. Various articles ought to be delivered to cater to the purchaser's necessities, and the product has to be reasonably priced. Researchers should focus on organic storage procedures without additives.

### **3. Factor's Motivating Consumer's Organic Purchase:**

The list mentioned above (Table 1.10.3) displays the factors which motivate the consumers for repeated organic purchases. The results reveal that product quality was ranked one and considered to be the highest motivating factor, with a mean value of Urban respondents was 9.26 and rural was 9.18. A more significant part of the respondents believed that organic products evade additives and artificial flavouring with no compromise on quality aspects like freshness and nutritional aspects containing lots of vitamins and minerals. Moreover, product quality was guaranteed by the presence of a certified organic logo on the food label and hence proved to be produced with high-quality standards. Benefits gained from consumption were ranked as second with a mean value of Urban respondents was 8.67 and rural was 9.01 as they believed organic consumption enables them to improve their immunity power and is suitable for their skin, teeth, hair, and nails. Apart from the nutritional value, respondents who purchased organic products tend to believe organic products taste better with good appearance than the non-organic products and ranked third with a mean score of urban respondents was 8.24 and rural 8.60. Moreover, they were much attracted to the packaging provided by the organic stores, with a mean score of urban respondents was 8.03 while rural was 8.05. The overall satisfaction attained over the services provided, e.g. parking facility available, home delivery, after-sale services, and timely availability of products in stores, was ranked with a mean score of urban respondents was 6.04 while rural was 6.15.

Finally, the recommendation from friends tends to be the least motivating factor, with a score of urban respondents was 4.11 and rural was 4.25, as respondents always believed in the satisfaction attained through first-hand information or direct experience.

### **Findings, Suggestion and Conclusion:**

#### **Findings:**

Hypothesis examined there is no significant relationship between location of the residence of consumers' and their perception in purchase of organic jaggery, and it has been accepted.

Age and purchase intention, majority of regular, occasional and potential buyers of organic jaggery in Satara Taluka fall under the age group of 41-60. It is inferred that youngsters show an increased willingness to purchase organic products since they cannot afford to purchase it on a regular basis; the mid-age group has therefore replaced it with increased financial stability.

Gender and purchase intention, the majority of women in Satara Taluka tend to purchase more frequently when compared to men; they play a prominent role in household decision-making, especially for food items in both urban and rural areas.

Total family members and purchase intentions, majority of the respondents, who are married and have children at home, tend to purchase more of organic jaggery in both urban and rural areas.

Highly educated consumers have more intention to purchase organic jaggery than others in both urban and rural areas. .

Occupational status and income level on purchase intention, farmers are more interested in consumption of organic jaggery in both urban and rural areas.

In both urban and rural areas, Consumers' income level is directly associated with their purchase pattern as the price of organic products are way higher when compared to conventionally grown. Compared to low-income people, medium

and high-income people show a higher likelihood of organic consumption; however, the overall relationship between income and consumption is insignificant.

Word of mouth has strong influence on purchase.

#### **Suggestions:**

Despite of the location, Higher percentage of consumers are willing to pay up to a quarter more for organic food than non-organic food. This can be helpful in developing pricing options, especially for organic food marketers.

Location doesn't matter, Although they have several health benefits, organic food has a higher manufacturing cost owing to slower crop development, demanding farming in terms of labour, and a low number of government-induced subsidies. Due to these reasons, there is a challenge in lowering the cost of organic products.

Furthermore, educational programs aimed at improving diet awareness while minimizing diseases might benefit consumers by educating them about preventable diseases. The earlier kids learn about diet and nutrition, the more likely they will be able to make healthy eating choices.

More people are willing to spend on organic foods by making good food choices since they know the benefits. According to the findings of the survey, organic products are mostly consumed by women and families with children. Targeting these groups through different marketing strategies has the potential to look into any specific requirements they may have.

To create a caring attitude towards organic brands or products, words such as "safe" and "healthy" should be emphasized in packaging, creating a brand image, and advertising.

#### **Conclusion:**

Due to man's insatiable need to maximize short-term profits, the use of pesticides and insecticides in agricultural

production has skyrocketed. This use of herbicides and insecticides has enhanced crop productivity and product longevity, but has also raised the prevalence of lifestyle-related disorders. Consequently, some farmers have turned to organic farming as a solution. However, this approach has met with limited success in most nations, prompting the need for a better understanding of the reasons that drive people to choose organic produce. The purpose of this study was to better understand the reasons that drive people to choose organic produce. There is still a long way to go for the organic fruit and vegetable sector, despite most participants displaying a basic familiarity with organic food products. The study found that only a small percentage of consumers in India are familiar with the core concept of organic food (without chemicals) and the India Organic emblem. Since most respondents rely on newspapers and television for news, reaching out to them in these mediums would be effective. As convenient as it would be to provide busy city dwellers grow bags and make them self-sufficient, this is not a viable option for the them. Nevertheless, with the purchasing power of rural and urban people, a large percentage of respondents (potential consumers) can be converted into regular buyers if organic jaggery are made more accessible, perhaps by increasing their availability in supermarkets. According to the study, the availability of organic produce in supermarkets will lead to a rise in their overall consumption. Additionally, consumers' perceived susceptibility of their own exposure to the adverse health effects of consuming conventional food goods over organic produce such jaggery is the one of the most important factor in driving dietary changes among consumers. Furthermore, the formation of an attitude on the part of consumers can be influenced by a variety of other elements, including health awareness, the perception of availability, a preference for quality, and an improvement in taste.

The study also found that consumers' intentions to buy organic produce were affected by their levels of knowledge and awareness subjective norms, willingness to pay, perceived behavioural control, certification and labelling, and the customers' willingness to use. The findings also revealed a few key distinctions between regular buyers from occasional and potential buyers. For regular buyers, the production method was the deciding factor, whereas for occasional buyers, the trust and satisfaction they felt after each purchase was most important. Potential buyers want to know that organic jaggery are readily available to them. Thus, the study's findings recommend that organic jaggery stakeholders take these variables into account when advocating for organic products and positively channel consumers' attitudes toward buying organic. Also, expanding the market for organic produce by gaining the public's confidence and adopt a healthier diet and lifestyle.

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## Ergonomics in Corporate Sector: A Review

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DOI - 10.5281/zenodo.15147109

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### **Abstract:**

*Ergonomics is the study of how humans interact with systems and its about how to create systems that promote human well-being. The term ergonomics is derived from the Greek words ergon (work or labour) and nomos (natural law). Wojciech Jastrzębowski, a professor, created the term ergonomics in 1857. His work was reissued with an English version in 1997, making it well recognized. The relationship between "labour" and "health," or the types of "health problems" induced by "working," was frequently mentioned even in ancient Egypt, Greece, and Rome. The association between working circumstances and pathology was originally systematized from an occupational health viewpoint in "De morbis artificum diatriba," a classic by Italian physician Bernardino Ramazzini (1633-1714). In this book, ailments seen among metal mining workers included not just respiratory problems like asthma and TB caused by small particles, but also the consequences of uncomfortable working postures on miners' bodies. It may be argued that the age of industry, ushered in by the Industrial Revolution of the 18th century, necessitated a clarification of the link between labour and health. This study focuses on whether the notion is generally accepted in the business sector, is management aware of it, and, if so, how it has been applied.*

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**Keywords:** *Ergonomics, Health Problems, Labour, Ailments*

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### **Introduction:**

The development of preventative measures based on an ergonomic viewpoint, as well as ergonomic methodologies and approaches such as measuring occupational tiredness and establishing principles in scientific labour management, had to wait until the early twentieth century. Józefa Joteyko, a Polish scientist, released "The Science of Labour and Its Organization" in English in 1919, in which he examined the measurement of occupational weariness as well as concepts in scientific labour administration. Another branch of ergonomics is the study of human mistakes, which has been conducted mostly in the United States since the conclusion of World War II. Accidents involving airplanes, such as one in which a US Air Force aircraft crashed into the Rocky Mountains, were so

common at the time that the investigating team, which included psychologists and aeronautical engineers, looked into the cause. The conclusion was that the pilots misunderstood the altimeter owing to poor interface design. Taking human cognitive qualities into account, the altimeter for airplanes was developed to feature a single, easy-to-read pointer. This is how the science of human factors has evolved within the framework of applied psychology. This scientific discipline is not only delivering safe and user-friendly designs, including those aimed at minimizing human mistakes and those characteristic of intuitive products for casual users as well as consumer devices, but is also broadening its focus to include fields like healthcare, social services, aviation, transportation systems, and public infrastructure.

### **Origin of Ergonomics in Japan, And Modern Ergonomics:**

The first significant figure in ergonomic research in Japan was Gito Teruoka, who established the Kurashiki Institute of Science of Labour in 1921 and took on the role of director. That same year, Kan-ichi Tanaka's book titled "Research of Efficiency: Ergonomics" was released. In this publication, Tanaka introduced the concept of human engineering to Japan, a field that, in contrast to the science of labour, was influenced by American psychology and emphasized the efficient use of human capabilities. In the United States, numerous textbooks on ergonomics authored by researchers like Woodson, McCormick, and Sanders have been released since the 1950s.

### **Objectives:**

The aim of this study is to fill the gaps in evidence between ergonomics and the well-being of employees, concentrated on ergonomics, ergonomic practice and employee performance.

### **Research Methodology:**

This study is based on secondary data collected from various sources such as research articles, books, dissertations etc.

### **Literature Review:**

#### **Baba Md Derosa , Dian Darina Indah Daruisb , Ishak Mohamed Basirc\*(2015)**

The aim of the study was to assess the level of ergonomic awareness regarding manual material handling (MMH) activities among workers, to evaluate any discomfort or bodily pain experienced by the workers through the Body Parts Symptom Survey, and to analyze the risk of low back pain (LBP) and musculoskeletal disorders (MSD) associated with MMH practices using the Rapid Upper Limb Assessment (RULA) method. This research specifically targeted workers within the manufacturing

department. A total of 36 subjects were chosen, all of whom worked double shifts, totalling eight hours per day, and were engaged primarily in tasks involving MMH. The primary data was collected via a questionnaire distributed to the workers. Participants voluntarily provided their information after receiving an explanation from the researcher regarding the study's objectives and the questionnaire items. The selection of research respondents took place in the production area. A total of 32 individuals participated in the questionnaires related to ergonomics. The analysis of the data was conducted using SPSS software. The information gathered from the employees was categorized into two segments: frequency and percentage tables. Descriptive analysis was employed to elucidate the demographics of the respondents. The results indicate that the existing methods require further examination and prompt adjustments should be implemented. It is advisable for management to enhance efforts in raising awareness about ergonomics among workers, particularly during manual material handling (MMH) activities, to reassess MMH practices and review job roles or workstations. The study revealed a significant lack of knowledge among workers regarding ergonomics and MMH. Furthermore, there was an absence of a dedicated safety and health program at their workplace. Additionally, most of the programs that were organized proved to be ineffective and did not significantly impact the workers.

#### **Petra Marková and Katarína Lestyáska Škurková(2023)**

The study presented in this paper focuses on the findings from an analysis of local muscle load assessment and model-based measurements of upper limb muscle forces exerted by two workers in selected air-conditioning unit production workplaces. A variety of methods were employed to gain a thorough understanding of the workplace

issues being examined. An ergonomic analysis, utilizing a questionnaire, was conducted at these locations to identify the risk factors present, assess the deficiencies in working conditions, and evaluate the severity of the challenges faced by the workers. The conclusions drawn from the collected data were compared against the relevant legislative regulations concerning physical activity, as well as psychological and sensory stress, in relation to the current workload, which collectively represents the total strain on the human body during work activities. The primary aim of ergonomics is to enhance both the work environment and the overall work process. Through the analysis of local muscle load assessments and model-based measurements of upper extremity muscle strength, ergonomic improvements could be proposed to enhance the quality of life for workers. Organizational strategies were implemented to meet these objectives, and in addition to these measures, technical solutions may also be employed to further improve the quality of future employment.

**Kian Sek Tee, Eugene Low, Hashim Saim, Wan Nurshazwani Wan Zakaria, Safinaz Binti Mohd Khialdin, Hazlita Isa, M. I. Awad, and Chin Fhong Soon(2017)**

This paper has provided a comprehensive review of various methods and devices utilized in ergonomics assessment. The evaluation and comparison of ergonomics assessment methods, specifically RULA and REBA, are conducted by examining the parameters, professions, and postures from case studies presented by different researchers. Both survey-based methods demonstrate their significance in assessing the ergonomic risks faced by workers in their respective environments, contingent upon their application relative to specific professions and postures. In terms of ergonomics assessment devices, a comparison of IMU and Kinect across various applications is

undertaken to evaluate their performance, reliability, and features. The results indicate that IMU-based devices yield more favourable outcomes, whereas Kinect-based devices exhibit potential for future enhancements. In conclusion, it is essential for workers to acknowledge the importance of ergonomics in identifying potential risk factors present in their workplaces. Increasing workers' awareness of these issues may help protect them from hazardous activities or environments.

**Anas Ali , S.M.Qutubuddin , S.S.Hebbal , A.C.S.Kumar(2012)**

The aim of this study is to analyse the working poses of workers engaged in various activities carried out on the forest mill through the use of various instruments of postural analysis and determining various risk factors associated with MSDS. The study was conducted on food mills located in the northern part of Karnataka in India, where thousands of workers participate in these events. Since this is an unorganized sector, today it has not been available statistics on the level of accidents, the number of people used and other problems. Hence the only means of these data are through conversations and direct dialogue with the people associated with this profession. Methodology used is Questionnaire and interview technique ,Direct observation and activity analysis, and Visual Analogue Scales Ergonomic ignorance is known to be observed in an industry where work is ongoing. Violations of support devices exist in different types of activities carried out in food factories where a considerable number of workers work in bad poses. This indicates that the body pose needs to be changed. On the basis of analysis of results and scores obtained by the various tools applied in analysis of the working conditions and postures, it can be concluded that, there is a lack of ergonomics planning and methods in small scale and unorganised saw mills which are very large



in numbers and employ thousands of workers. Thus the workers are under moderate to high risk of Musculoskeletal disorders (MSDs). The average points for ROLA and REBA were high, and the percentage of neck and trunk points was high for subjects analysed, indicating that immediate changes are required at work. It has also been shown that methods such as deformation index, which take into account repetitive factors, are often performed without the desired rupture of the work environment and organizational attention. The appropriate tools are not available to perform effective routine maintenance. Most of the operations carried out at factories are often supported primarily by high-term highways and manual operations that pose health risks. Personal protective devices such as headphones and plug devices are often considered irrelevant and uneasy, with manual gloves not being used properly.

**Olabode, Segun Oluwaseun; Adesanya, Atinuke Regina; Bakare, Akeem Abayomi(2017)**

The purpose of this study is to determine the level of ergonomics and awareness to increase the efficiency of the employees of the design organization to determine factors that hinder the efficiency of the employees of the design organization. In the above research, it is clear that there is a low level of ergonomic awareness in Nigeria. The test also shows that several factors are preventing the effective implementation of ergonomics in Nigeria. This can range from proper research to inadequate organizational practices, resource limitations, technological changes, employee and ergonomic designation, staff considerations, and ergonomics Knowledge and integration into education. Organizations need to know the benefits issued by ergonomics and train their employees to be able to integrate into the organization's ergonomic projects. Finally, they need to integrate the worker/human elements into the ergonomic design process.

*Dr. Suvarna Ashok Kurkute*

**Mrs. Toopalli Sirisha Dr. Nalla Bala Kalyan**

The goal of this study was to find out the control of suitability of workplace and equipment designs and the work posture ergonomics at Tube Products of India, a Unit of Murugappa Group, to study about the working culture of Ergonomics at Tube Products. From the study, it is identified that the nature of the job is repetitive which may cause carpal tunnel syndrome. The risk of injury is greater when highly repetitive jobs are combined with low-force exertions such as in assembling task involving the hands, wrists, elbows and shoulders. As a result, management can assign work to workers on a rotational or random basis. The survey shows that few respondents often think they are involved in vibration tasks. Continuous use of lively tools such as exercise can cause the effects of hand vibrations. These effects can cause wrist pain, numbness, tingling, and sensitivity to fingers, hands and touching hands. Therefore, management can design the equipment by improving adhesion with hooks or straps or magnets. This will decrease the level of vibration.

#### **Conclusion:**

Above literature shows that though the concept of ergonomics is too old still its use is limited in corporate sector. Employees though are considered as an asset of any organisation and the success of organisation too depends upon the human resource, still lot of care about employees comfort is not considered. In developed countries the concept is been originated and used but as far as developing nations are considered they are lagging behind in respect of ergonomics. The studies also reveal that the awareness of this concept among both employers and employees is yet very less and a serious thought regarding the same is yet to be a reality. Ergonomics is still an untouched area where there is still a wide scope for research and awareness about the same

should be created especially in the corporate sector. To maintain the health of the human resources and to increase their efficiency it is of vital significance to study ergonomics not only by the employers but also by the employees which can keep them safe and secure from hazards.

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## A Critical Study of Self-Management Lessons From Karma Yoga of Bhagavad Gita In The Today's Life

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**DOI - 10.5281/zenodo.15147162**

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### **Abstract:**

*In 21st century self management is crucial factor to prove and develop oneself. Even students of the college are in stress, due to cut throat competition in market. It is very difficult for every student to manage as expectations from parents, industry and society are increases day by day. As a result everyone expect to get merit number, prizes. Target oriented study mainly focuses on marks and merits. Acquiring of knowledge is basic object of education system. But due to changing situation in liberalization, privatization and globalization.*

*Even in this situation, if students will be able to handle different situations by using self management as included in Karma yoga of Bhagavad Gita. Meditation, mindfulness, self control are different ways for self management. Ultimate satisfaction and happiness will be achieved though self management when work and study without expecting results will be practiced. For this purpose study of self management lessons from karma yoga of Bhagavad Gita is very much needed.*

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### **Introduction:**

In 21st century self management is crucial factor to prove and develop oneself. Even students of the college are in stress, due to cut throat competition in market. It is very difficult for every student to manage as expectations from parents, industry and society are increases day by day. As a result everyone expect to get merit number, prizes. Target oriented study mainly focuses on marks and merits. Acquiring of knowledge is basic object of education system. But due to changing situation in liberalization, privatization and globalization.

Even in this situation, if students will be able to handle different situations by using self management as included in Karma yoga of Bhagavad Gita. Meditation, mindfulness, self control are different ways for self management. Ultimate satisfaction and happiness will be achieved though self management when work and study without expecting results will be practiced. For this purpose study of self management lessons

from karma yoga of Bhagavad Gita is very much needed.

### **Objectives of the Study:**

1. To Study awareness of karm yoga in Bhagavad Gita in college students.
2. To Study the practices of self management in college students.
3. To Suggest Remedies

### **Limitation of the study-**

This study is limited only to students of D. P. Bhosale College, Koregaon Dist. Satara

### **Review of Literature:**

**Kanfer, Frederick H. Gaelick-Buys, Lisa (1991)** published research paper titled as Self-management methods. The study reveals general structure for behavioral interview therapy a theoretical framework of self-regulation. It includes methods for therapeutic change tasks and assignments, creating the context

for change, contracts, modification of the environment, self-monitoring, changing self-generated behavioral consequences, self-generated aversive consequences.

**Kate R. Lorig, Dr.P.H., Halsted R. Holman, M.D. (2003)** published research paper titled as Self-management education: History, definition, outcomes, and mechanisms. Study includes three tasks—medical, role and emotional management. It also includes six skills like resource utilization, the formation of a patient-provider partnership, action planning, problem solving, decision making, and self-tailoring. This article covers history of self-management. Papers also includes evidence of the effectiveness of self-management interventions and posits a possible mechanism. In conclusion the article discusses problems and solutions for integrating self-management education into the mainstream health care systems.

**Dharmrajsinh Pravinsinh Chauhan (2005)** published paper on Mythical Concept of Karmayogaincluded in the book ‘The Foreigner’ by Arun Joshi. The book was published in 1968. Book focuses on debate on the Indian English literary terrain. Joshi attempts to demonstrate that people are using the mythical concept of Karmayoga which is included in the second and third chapters of the Gita, in the construction of the foreigner's primary subject, which is devotion to life and practice rather than passive detachment. In reality, he distinguishes between detachment and attachment. Joshi is influenced by the *Bhagawad Gita* in the formulation Bhagvad Gita unjustifiably interpreted as an illustration of Lord Krishna's Karmik. The present paper examines how the Hindu philosophy associated with the *Bhagavad Gita* aids the characters in overcoming life's challenges. An effort has been made to investigate the theistic and atheistic perspectives of characters, as well as how beliefs aid in their survival.

**Simon Pearse Brodbeck (2007)** published research paper entitled as Cricket and the Karmayoga A comparative study of peak performance. This paper focuses the idea of ‘non-attached action’, a non-teleological attitude allied to peak performance within armies and sports teams.. This attitude is related specifically to cricket through analysis of typical accounts (of the kind given by ex-player commentators) of the psychological approach of expert cricketers, and through comparison with the philosophy taught by Krishna to Arjuna in the *Bhagavadgita*. Particular attention is paid to notions of non-agentive behaviour, of playing one's ‘natural game’ and of being ‘in the zone’, and to techniques of mental preparation and mental hygiene. The essay is framed by a wider juxtaposition of cricketing activity and discourse with martial activity and discourse in the *Mahabharata* and in Europe.

**Gobinda Bhattacharjee (2021)** published Research Paper titled as A Study on Karmayoga in Bhagavad Gita. The philosophy of ‘karma’ is a doctrine to consider being the foundation stone of the entire Indian Philosophical outlook. The *Bhagavad Gita* is most beloved scripture of Indian thought and one of the prime chapters of this scripture is the ‘law of karma’. According to it, every man profit from what he does and suffers from what he does. Karmayogais mainly based on *niskam-karma*. We have to give up the attachment and the fruit regarding the action. So, the action is our *Svadharna*, fruit or result is not our concern. The *Gita* said that the nature of *Karma* was natural, inherent in man’s existence and everybody has to work. Hence an attempt is made here to discuss the law of *karma* as considered by the *Bhagavad Gita*.

**Michael J. Mahoney (2023)** published research paper on research issues in self management. He discussed different issues on self management like covert behavior modification, the viability to self-

management, the relative efficacy of various self-management techniques, the necessary conditions for maintenance of self-managing, the current status of self-imposed consequences and the role of stimulus variable.

### **Research Methodology:**

This study is based on primary data which is collected through Google forms questionnaire. Total student respondents from D. P. Bhosale College, Koregaon. Secondary data is collected through books, Magazines, Research Articles, News papers, Blogs, websites.

### **Concept of Self management:**

Self-management are the abilities that allow everyone to control your thoughts, emotions, and behaviors to effectively achieve your goals. They empower you to take charge of your life and direct it purposefully. Self-management involves self-awareness, self-control, self-motivation, and the ability to adopt new behaviors or change old unproductive habits. Self management is buzz word in today's era. As expectations from different stakeholders are increasing day by day. Even completion in education field turns the students to examination based approach.

Self management skills include Time management, goal setting, self discipline, stress management, problem solving, adaptability, self reflection and many more. Even developing strong self management provides us foundation for personal effectiveness and success in life. It is based on your life objectives and values preserved. Self management is useful for pursuing goals in a purposeful and focused manner. Self management skills are essential for the purpose of achieving goals, empowering personal growth, handling different responsibilities, managing emotions, achieving consistency, enabling work success.

### **Concept of Karmyoga in Bhagvad Gita:**

Karm Yoga is self less action which is covered as philosophy of work and action derived from the Bhagvad Gita. It is one of the most important spiritual novel. It advocates performing everyone's duties and responsibilities without attachment of results or outcomes. It means that without worrying about success, failure, rewards, or recognition doing of work to best of your ability is needed. The idea behind it is that focusing on the process rather than outcome. Individuals can reduce anxiety, pressure and stress through self less action. It will lead to more peaceful and fulfilling work experience. Karm Yoga promotes a sense of inner calm and detachment. It allows to handle work related challenges.

Karm Yoga is rightly applicable to students of the college. It will be helpful to develop holistically. Success does not mean in money only but it must be on the basis of happiness and satisfaction. For self management meditation and mindfulness programme is very much required.

### **Data Analysis and Interpretation:**

On the basis of this the study has been organized regarding self management and karm Yoga relevance awareness in college students of D.P. Bhosale College, Koregaon District Satara. For that purpose google form questionnaire has been prepared. And primary data is collected. Data analysis and interpretation shows as follows-

#### **1. In present era, Whether you have to face Stress / work pressure / Study pressure while in work / on duty?**

On this question, out of 145 respondents 62.76% (91 respondents) has responded stress at sometimes. 15.86% (23 respondents) responded as often and always. It is inferred that that stress or study pressure is on students. As semester examinations are conducted by University. As a result, mental stress is on students.

**2. To what extent do you apply the principles of Karma Yoga (performing duties without attachment to outcomes) in your daily work?**

For this question, 22.07% (32 respondents) responded answer as Always, while 32.41% (47 respondents) responded Often. Even 33.10% (48 respondents) as sometimes. It is inferred that application of principles of Karma Yoga, students are using in their life. This application is useful to normalize stress in life.

**3. How often do you engage in practices that align with Karma Yoga, such as mindfulness, meditation?**

On this question, 25.52% (37 respondents) responded daily using, while 15.86% (23 respondents) practicing it in every week. It is revealed that students are engaging practices daily or weekly which are align with Karma Yoga. For stress management it is important.

**4. In present days, What is your opinion regarding Meditation or Mindfulness for self management ?**

On this question 69.66% (101 respondents) responded meditation is most required. While 17.93% (26 respondents) responded as meditation is required at sometimes. It is inferred that most of respondents felt necessary meditation to overcome the problem of stress.

**5. Are you interested to learn /read more about Karma yoga for Self Management?**

On this question, 58.62% (85 respondents) responded as more interest to learn karma yoga for self management. While 32.41% (47 respondents) responded as upto some extent they are ready to learn Karma Yoga for self management. It is inferred that most of respondents are ready to learn Karma Yoga for self management.

**6. In upcoming period, are you ready to spend time for meditation/mindfulness for Self Management?**

On this question (51.72%) 75 respondents are ready to spare daily time for meditation and 24.83% (36 respondents) ready to spare time once in a week. It is inferred that due to increased stress level, students are ready to spare time. Even students are engaged in academic, sports, cultural and many other activities in college life. Even they are ready to spare time. It shows importance of meditation. It is revealed that meditation is very much required for college students.

**Findings:**

From the above analysis and interpretation, it is found that students are facing stress problem. It is found that self management is required to overcome stress in students. It is also found that students are ready to learn Karma Yoga and ready to spare time for meditation and mindfulness.

**Suggestions:**

On the basis of this study it is suggested that college to arrange short term course on meditation. As this course will be useful for every student in self management.

**Conclusion:**

Stress is vital part of everyone's life. Even students have to face study pressure due to competition. For this purpose self management as described in Karma Yoga is much needed. Meditation or mindfulness programs will be beneficial to students to overcome this situation. Even students are ready to spare time for that purpose which clearly shows necessity of meditation course. Mental fitness is very much required for every student to achieve success and happiness in life.



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## A Study on Awareness among the college students regarding E-commerce Security Tools

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DOI - 10.5281/zenodo.15147216

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### Abstract:

*This study aims to assess college students' awareness of e-commerce security tools. With the increasing popularity of online shopping and digital transactions, ensuring secure online practices has become crucial. The research examines students' knowledge of various e-commerce security tools, including encryption, multi-factor authentication (MFA), secure payment gateways, and anti-fraud measures. Data was collected through surveys administered to a sample group of college students, focusing on their understanding of security risks in e-commerce and the tools used to mitigate them. The findings indicate that while most students are aware of basic security concepts, there is a significant gap in their knowledge regarding advanced security tools and best practices. This study highlights the need for educational initiatives to increase awareness and promote secure online shopping behaviors among young consumers.*

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**Keywords:** *e-commerce Security, Online Shopping Safety, Security Tools e-commerce*

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### Introduction:

E-commerce has become a significant force in global retail in recent years, fundamentally changing how people shop and how businesses operate. As more consumers rely on digital platforms for transactions, the need for robust security measures to protect users from cyber threats has never been more critical. With the growth of e-commerce, the risks of identity theft, online fraud, and data breaches have also increased. To mitigate these risks, various security tools have been developed for e-commerce, including multi-factor authentication (MFA), firewalls, secure payment gateways, and encryption technologies. However, many users—especially college students who frequently use the internet and shop online—still lack adequate knowledge and understanding of these security measures.

### Statement of Problem:

The rapid growth of e-commerce has made online shopping an essential part of daily life for many, particularly college students who are actively engaged with digital platforms. However, this increase in online transactions has also resulted in a rise in cyber threats, including identity theft, data breaches, and fraud. Despite the availability of various security tools designed to protect e-commerce transactions, many consumers, especially college students, may lack sufficient awareness and understanding of these protective measures.

This study aims to address the issue of limited awareness among college students regarding e-commerce security tools. Although these students frequently use digital services, it remains unclear whether they have adequate knowledge about the security mechanisms available to safeguard their personal and financial information during online shopping. Without this understanding, students may inadvertently

expose themselves to online risks, making them vulnerable to cybercrimes.

Therefore, the primary focus of this research is to assess the level of awareness among college students about the various security tools and practices that can ensure safe e-commerce transactions. This study will explore existing knowledge gaps and provide recommendations for enhancing awareness and education on e-commerce security tools, ultimately promoting safer online shopping practices.

### Review of Literature:

In this research, I gathered information from newspapers, periodicals, and various articles to supplement my findings from Google, Wikipedia, expert opinions, and several research papers.

I reviewed existing studies on e-commerce security tools, online transaction risks, and awareness levels across different demographics, particularly among students. Additionally, I discussed the common types of security tools used in e-commerce, such as encryption, two-factor authentication (2FA), SSL certificates, and firewalls.

### Objective of Study:

1. To assess students' knowledge of various e-commerce security tools, such as SSL, encryption, firewalls, and payment gateways.
2. To identify the e-commerce security tools that are most commonly used by college students.
3. To evaluate students' understanding of the potential risks associated with e-commerce transactions.
4. To examine the factors that influence students' awareness of e-commerce security tools.

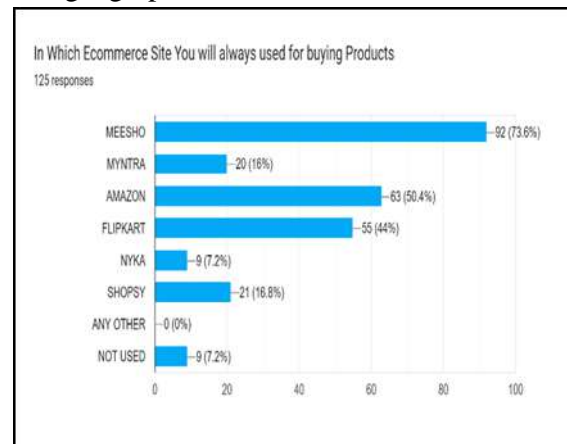
### Scope of the Study:

This study provides information about E-commerce security tools.

It assists students who are unfamiliar with E-commerce security tools.

### Methodology of Study:

**Sample Selection:** Randomly select students from various disciplines to ensure a diverse representation in terms of age, education, and geographic location.



**Data Collection:** Surveys or questionnaires will be administered to assess the level of awareness among students. The questions will focus on the types of security tools with which students are familiar, their perception of the importance of these tools in e-commerce, and their knowledge of safe online shopping practices.

**Analysis Method:** Conduct quantitative analysis using Google Forms to evaluate general awareness and understanding. Additionally, qualitative responses will be examined to identify common misconceptions or gaps in knowledge.

### What is Security:

Security refers to the measures, actions, and systems put in place to protect people, information, assets, or systems from harm, damage, unauthorized access, or attacks. It can be applied in various contexts, including physical security (protecting buildings or people), data security (protecting digital information from unauthorized access or corruption), and cybersecurity (protecting computers, networks, and online systems from threats like hacking, malware, and phishing).



Generally, security aims to ensure confidentiality (keeping information private), integrity (maintaining the accuracy and trustworthiness of information), and availability (ensuring systems and data are accessible when needed). In the context of digital or e-commerce security, for example, security tools like encryption, multifactor authentication (MFA), and secure payment systems are designed to protect personal and financial information during online transactions, making it harder for malicious actors to exploit vulnerabilities.

### Research Design:

**Type of Research:** This study will use a descriptive research design to assess the awareness levels of college students regarding e-commerce security tools.

**Sample Size:** Data will be collected from a total of 125 respondents, specifically focusing on college undergraduate students. The information will be gathered using Google Forms.

**The questionnaire** will be distributed digitally through online survey platforms, such as Google Forms.

### Data Collection and Implementation:

The Following Chart Showing most buyers used the Meesho Platform to buy Product.

Sr. No	Name of Security	Respondent YES (%)	Respondent No (%)
1	SSL CERTIFICATE	67.2	34.4
2	KNOW MALWARE	57.6	42.4
3	ACCOUNT TAKEOVER	72	28
4	SQL INJECTION	52.8	47.2
5	MULTI-FACTOR AUTHENTICATION	52.8	47.2
6	DIGITAL SIGNATURE	75.2	24.8
7	SECURE PAYMENT PROCESSORS	84.8	15.2
8	ENCRYPTION SOFTWARE	73.6	26.4
9	ACCESS MANAGEMENT	73.6	26.4
10	FIREWALL	73.6	26.4

Table Showing Responses of E-commerce Security Tools 84.4% of Students Know Secure Payment Processors. 28% of

### Findings:

- 1. General Awareness:** While students may be familiar with basic security concepts such as passwords and HTTPS, they often lack detailed knowledge of more advanced security tools, including SSL certificates, encryption techniques, and two-factor authentication.
- 2. Influence of Education:** Students studying in technical or cybersecurity-related fields tend to have a higher level of awareness compared to those in other disciplines.

Students are not aware of Account Takeovers as well and 26.4% of Students are not aware of Firewalls.

### 3. Challenges in E-Commerce

**Security:** Many students may not recognize certain risks, such as phishing attacks, fraud, or data breaches, which can be mitigated by using appropriate security tools.

### Suggestions:

- Integration of Cybersecurity Education in College Curricula:** Colleges should incorporate cybersecurity awareness programs as part of their academic curriculum. This can include dedicated modules on e-commerce security, the importance

of online privacy, and how students can protect their digital transactions. By making cybersecurity education a formal part of their education, students will be better prepared to navigate the risks associated with online shopping.

- **Workshops and Seminars on E-commerce Security:** Institutions should organize workshops, webinars, and seminars focusing on the latest e-commerce security tools and practices. These events can provide practical demonstrations of secure online shopping methods, encryption tools, and how to recognize potential cyber threats. Interactive sessions can further engage students and ensure better retention of the knowledge shared.
- **Awareness Campaigns on Social Media Platforms:** College students are active on social media and digital platforms. Institutions and organizations could run awareness campaigns on these platforms to educate students about the importance of using secure e-commerce tools. Visual content like infographics, videos, and step-by-step guides can be shared to highlight the benefits of using security tools like multi-factor authentication and encrypted payment systems.
- **Collaborations with E-commerce Platforms and Security Providers:** Colleges can collaborate with e-commerce platforms and cybersecurity firms to provide students with access to free or discounted security tools such as VPNs, password managers, and identity protection services. Partnering with these organizations could help raise awareness and give students access to tools that they might otherwise overlook.
- **Create an Online Resource Centre:** Colleges could set up an online portal or resource centre where students can

access educational materials on e-commerce security. This could include articles, tutorials, case studies, and other resources that provide valuable insights into protecting personal and financial data while shopping online.

- **Promote the Use of Multi-Factor Authentication (MFA):** Encouraging students to adopt multi-factor authentication (MFA) for their online accounts, including shopping platforms, can significantly reduce the risk of unauthorized access. Institutions could partner with e-commerce websites to provide tutorials or guides on how to set up MFA on popular online platforms.
- **Conduct Periodic Surveys to Assess Awareness:** Institutions can periodically survey students to gauge their awareness levels about e-commerce security. The surveys will help track improvements and identify areas where more education is required. Feedback from these surveys can guide the development of future awareness programs and help tailor them to the students' needs.
- **Create a Peer Education Program:** Encourage students who are knowledgeable about cybersecurity to share their expertise with their peers through a peer education program. These students could host informal sessions or discussions on e-commerce security, creating a supportive environment where students feel more comfortable asking questions and learning from one another.
- **Promote the Use of Secure Payment Methods:** Encourage students to use trusted and secure payment gateways when making online purchases, rather than relying on less secure options. Institutions can provide students with information on which payment

methods offer the best protection, such as credit cards with fraud protection or digital wallets with encryption features.

- **Encourage Proactive Security Practices:** Students should be encouraged to regularly update their passwords, use strong, unique passwords for different accounts, and avoid clicking on suspicious links in emails or text messages. Raising awareness about these simple but effective habits can help prevent many common security breaches in e-commerce.

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## Marketing of Library Information Services

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DOI - 10.5281/zenodo.15147254

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### Abstract:

*The information explosion is growing very rapidly day by day. In this regard as a social institution Libraries play a vital role. Libraries are dealing with different types of knowledge and information. These knowledge and information centers are directly or indirectly involving themselves in the marketing system. The purpose of this paper is to describe the concept of marketing in the field of Library and Information perspective. Libraries serve as vital centers for knowledge dissemination, yet their services often remain underutilized due to a lack of awareness among users. Marketing of library services has emerged as a crucial strategy to enhance user engagement, improve service utilization, and ensure the sustainability of library operations. This paper explores various marketing strategies applicable to libraries, discusses challenges in their implementation, and examines prospects for library marketing. This study is mainly focused on the relations between the Marketing system and the Library and Information Services. This paper also focused on the implementation of the 7Ps in the marketing of Library and Information Services. There are some limitations discussed in this study which are treated as barriers to marketing of Library services. As it is known that the libraries and Information centers are non-profit organizations, so there will be the question of how can these be related to the marketing systems. This paper is focused on those factors which answer all the above questions.*

**Keywords:** *Library, Information, Marketing of Library Services, Marketing tools, Information Commodity, Marketing Strategy*

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### Introduction:

Marketing is a set of strategies and techniques that belongs to administrators outside of librarianship. As librarians, we are all involved in the process of marketing. The impact of new technology and new methods of information explosion are challenges of Library services. Libraries are storehouses of knowledge because all libraries are full of various types of materials such as books, journals, e-books, CDs, manuscripts, non-books materials, etc. It is a big challenge to disseminate this knowledge and get user satisfaction. So marketing is essential for libraries. Many libraries have come to appreciate the contribution and application that marketing concepts can make. Marketing is a process that carries goods from producers to ultimate consumers. Marketing in the library context, is those

instruments through which information both raw and processed is disseminated to users. Marketing of library services is the process of planning, pricing, promotion, and distributing library products to its users. To render library services with the help of modern technology and marketing tools.

### Meaning/ Definition of Marketing:

Marketing definition includes activities undertaken by a business establishment or an individual to promote their services and products. Marketing includes promotion, advertisement, and selling products and services to consumers. Marketing is concerned with gaining market leadership, understanding customers and their needs, creating customer values, and satisfying customers. Some popular

definitions of marketing are mentioned below:

Philip Kotler Marketing Guru has defined; “Marketing is analysis, Planning, Implementation, and control of carefully formulated programs designed to bring about a voluntary, exchange of values. With markets to achieve organization objectives offering in term of target markets needs and desire using effective pricing, communications, and distribution to inform, motivate and services the markets”.

The American Marketing Association offers the following definition: “Marketing (Management) is the process of planning and execution of the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals.”

From the above definitions, it can be seen that marketing is a strategic process involving analysis, planning, implementation, and control. It focuses on creating programs that facilitate voluntary exchanges of value between businesses and their target markets. The goal is to achieve organizational objectives by understanding customer needs and desires. This is accomplished through effective pricing, communication, and distribution strategies that inform, motivate, and serve the market.

#### **Importance of Marketing in Libraries:**

Marketing library services enhances visibility, increases user engagement, and maximizes resource utilization. It also helps libraries stay relevant in the digital age, where competition from online resources is intense. Effective marketing ensures that users recognize the value of library services, leading to increased satisfaction and loyalty. Marketing in the case of libraries is necessary to offer benefits to users’ wants, reduce barriers to use and access, persuade and inform the users, and carefully plan to satisfy users’ needs effectively. “Marketing is so basic that it cannot be considered a

separate function within the library. Marketing is a central dimension of the entire library. It is the entirety of the library’s operations and services seen from a point of view of its final result, that is, from the customer’s point of view.”

Gupta and Savard, (2010). A library without users is useless, there is a need to let the users be aware of the benefits of the library in the provision of information resources and services to succeed. To attract clients, generate non-user awareness, and raise awareness of available services and resources, libraries need to find ways to promote services and resources to clients as effectively as possible. As such, promotional approaches are used to convey the availability and value of services and resources to target markets and should be designed to cause library users and non-users to act (Helinsky, 2008; Webreck Alman, 2007) Yi (2016).

#### **Need for marketing of Library Services:**

According to Chandratre and Chandratre (2015) following factors are responsible for encouraging the library profession to develop a marketing approach in its operations and services;

- The information explosion (rapid growth of reading material)
- The technology revolution
- Escalating library costs/ budget cuts
- Increase of user-based services;
- Networking demands/ complexity in information requirements
- Competition by database vendors
- Reading habits among people declining due to reasons such as the onslaught of television and the Internet

#### **Application of Ranganathan’s five laws:**

Ranganathan’s famous “Five Laws of Library Science” has been discussed in the light of marketing by many authors. Interestingly, these laws can be said to be

relatively well aligned with marketing theory. From these laws logical corollaries are derived that can be directly related to marketing. (See Table 1 below.) The reader (sometimes called the customer) is king, and is the focal point of the library; thus the

whole organization (resources, services, facilities, rules and regulations, procedures) becomes customer-focused. As the table below demonstrates, each of these laws has important implications regarding basic marketing strategies.

The law	Actions to be taken	Marketing implications
Books are for use	Optimum use of resources, facilities, and services.	Acquiring appropriate information material and ensuring sufficient resources and services are available for the use of users. Convenient location, effective signage, and longer opening hours; helping hands for using resources and services.
Every reader his/her book	Meeting user's needs satisfactorily	Collecting and interpreting information, understanding the needs of users, and matching with the organizational resources.
Every book its reader	Reaching out to users	Publicizing value and benefits, promotional campaigns, advocacy, public relations, personal communication, etc.
Save the time of the user.	User benefits and preferences	Repackaging information into appropriate form, and availability of information when needed. Ensuring quality of services and offerings.
The library is a growing organism.	Adapting to future user needs	Mobilizing resources, dealing with uncertainty about future user needs, new services, new customer groups, new environments, etc.

### Marketing Strategies:

Marketing library resources and services is not difficult. Few ways of marketing the library services:

- ❖ Organize an information literacy program.
- ❖ Organize Workshops/ Seminars/Training Programmes for library staff with advanced technology and expert people.
- ❖ Organize book exhibitions to attract users to the library.
- ❖ Create a library web page for the user.
- ❖ E-Mail catching.
- ❖ Use library wall space for display.

### Principles of marketing of library services:

The following 7 principles apply to library and information services;

**Product:** Libraries provide a good number of services to their user through various ways e.g. New Arrivals, OPAC, CAS, SDI, Web-based Services, and ILL these personal

assistance referral services are the product of libraries.

**Price:** This is a very important principle of the library budget. Without a budget, no one library cannot purchase any materials for the library.

**Place:** The place of service is based upon knowledge of the market of the library it is essential for user needs, areas are required information eg. SDI is provided to selective users by collecting the areas in which they require information.

**Promotion:** It is an important principle of marketing. Users not be aware of library systems. Hence it is essential to promote library services. Every year new students join the library at the beginning of the academic year library must provide an awareness program/orientation program, library interaction, etc.

**Participant:** All human factors who play a part in reference and information services is a very important factor without participant feedback any program is not successful.

**Physical Evidence:** Physical evidence can support marketing programs by providing services to library users.

**Process:** It is related to processes management it consists of processes planning, control, and operation planning to be available to the user.

**Marketing Tools:** To all information resources and services available on the doorstep of the user with the following marketing tools.

#### **Traditional Marketing Tools:**

**Library Tours:** It needs to be organized for new and existing members to market the library services. User while on tour you can promote your services.

**Library Broachers:** Brochures' have on role as a marketing tool. Thus it is very useful to all library services. It gives users an outline of the library, its services and products, and library rules. That's why the design of the broacher is a very attractive and simple language.

**Leaflets:** Leaflets can be used as guides to the library and its special collections. They can be kept in the library at a location which is placed so that anyone who enters the library attracts him.

**Posters:** A poster is a very good way of communication. They can draw attention when displayed at a location and provide brief information about an event, services, etc.

**Newsletters:** Newsletters can be used by the library to convey information about new activities, new services, events, and fee/rule change information regarding the library can be included to convey a message to readers about the awareness of the library.

**Library Month / Day:** Organizing a national library day/ month can be an effective way to marketing of library services.

**Extension Activities:** Book displays, lecture series, quizzes, Debating, Seminars, Competitions, exhibitions, etc. are the

extension activities that can be used in the marketing of library services. These activities have a positive impact on the image of the library and motivate people to be included in the library.

**Advertising:** It is an important tool for marketing News Paper Journal Magazine Radio, T.V. Web, etc. can be used by the library to advertise its help in image building of a library.

#### **Social Media Tools:**

**Facebook:** Facebook is a key example of social media tools. It is the most popular social media platform for marketing Library & Information services. It can be used for marketing in several ways using a Facebook page librarians can draw users' attention to useful hidden library materials and users not aware of such grey literature. Aware of all library events on the descriptive home page. Using Facebook interact with user to know their information needs. Using Facebook to send short-time notifications to library patrons for upcoming library activity etc. Facebook is a free social networking website that allows registered users to create profiles, and upload photos, and video sending messages, and librarians are used it to keep in touch with the user.

**My Space:** Libraries have taken advantage of these tools to post calendars, custom catalogues, search tools, and blog features to improve their presence.

**Blog:** Using these tools librarians develop subject-specific blogs and play a leading role in scholarly communication and research findings. Shearing information for specific groups, and specific subjects, allow users to contribute content. Library pattern write articles on topical issues and expect an instant reaction for them.

**Twitter:** Twitter is a microblogging application to keep staff and users updated on daily activities for exams. Frequently collection. Use this for instant messaging or status updates. Ask question on problem and

gate feedback on the spot to using twitter. To use this on daily updating of library activities

**YouTube:** YouTube is the World's largest platform in the world for marketing library services Librarians can use this for inaugural lectures, Conferences Workshops, Seminars, and Orientation Programmes disseminated via YouTube.

**Flicker:** Use this tool to share and distribute new images of the library collection, new facilities of the library, and the cover page of new arrivals of books and journals that can be disseminated to users via Flicker.

**Linked In:** Linked In is one of the best social media platforms for library professional it can gate to connected patterns with specialties in their particular field of interest via Linked In It is used to SDI, Specialised Services.

**Library Things:** A tool that enriches the library OPAC once an account is created a list of books with ISBNs is sent to library things. It can be used to send a list of current publications to the user.

**Pinterest:** It is a free graphical and emerging social media tools library that can make its profile and create boards, Photos, and Videos of the library. Libraries are using the latest technologies and trends to make their services popular and user-friendly.

Libraries are using the latest technologies and trends to make their services popular and user-friendly.

### **Conclusion:**

Marketing library services ensure their continued relevance and user engagement. By leveraging traditional and digital marketing strategies, libraries can enhance their visibility and utility. Overcoming challenges through training, technological integration, and collaboration will further strengthen the impact of library marketing efforts.

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**Grievances Redressal Mechanism in AR Engg. and Innovations, Pvt. Ltd.  
Satara**

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**DOI - 10.5281/zenodo.15147270**

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**Abstract:**

AR Engg. and Innovations, oil filtration machine manufacturing industry is characterized by stringent operational processes, regulatory compliance requirements, and the necessity for maintaining high standards of health, safety, and environmental protection. In such an environment, employee grievances can arise from various sources, including working conditions, management practices, interpersonal conflicts, and career development opportunities. Therefore, an effective grievance redressing Mechanism is essential to ensure a harmonious workplace, enhance employee engagement, and maintain productivity. The purpose of this article is to understand process of existing grievance redressal system and to understand it's impact on employee and organizational culture. A close ended structured schedule, discussion and observation are the sources used to collect the primary data. Sample unit of study are Workers as well as Management staff of AR Engg. and Innovations, Pvt. Ltd. Satara The population of organization is 105 out of which 9 samples are management staff and remaining 96 samples are workers. 105 samples selected for the feedback. Census sampling technique is preferred in this study. Study reveals a clear difference in perception between workers and management regarding the Grievance process's effectiveness and impact. Workers generally demonstrate higher awareness, engagement, and confidence in the grievance handling process, believing it positively affect job satisfaction, inclusivity, and trust. In contrast, management tends to hold more neutral or less optimistic views on the process's outcomes. It highlights the need for improved communication, alignment in expectations, and more active management involvement to bridge the gap and enhance the effectiveness of the grievance redressal system in fostering a positive organizational culture.

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**Keywords: Grievances Redressal Mechanism, Job satisfaction, Effectiveness, AR Engg, Organization Culture.**

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**Introduction:**

AR Engg. and Innovations Pvt. Ltd., is a leader in the oil filtration machine manufacturing industry, manufacturing transformer oil filtration machines. AR Engg. and Innovations has developed different types of Insulating Oil upgrading systems suitable for in-house and onsite operation. The plant is suitable for Transformer & Capacitor Manufacturers, Transformer Repairers, Transformer Owners, Oil filtration service providers etc.

Grievance is a feeling of discontentment or dissatisfaction or distress or suffering or unhappiness among the workers. Every employee has certain expectations which he/she want to be fulfilled by the organization. Present organization is characterized by stringent operational processes, regulatory compliance requirements, and the necessity for maintaining high standards of health, safety, and environmental protection. In such an environment, employee grievances can arise from various sources, including working

conditions, management practices, interpersonal conflicts, and career development opportunities. So the workers have grievances against their immediate supervisor or against the management as a whole or against the systems and practices. In AR Engg. And Innovation, employees are not satisfied with grievance redressal mechanism. They think grievances are not addressed promptly which leads to employee dissatisfaction. There is a communication gap between managerial staff and workers which leads to misunderstandings and dissatisfactions. Employee grievances are a critical aspect of human resource management as they directly impact employee satisfaction, productivity, and overall organizational climate. If not addressed promptly and effectively, grievances can lead to significant issues such as decreased morale, reduced efficiency, and increased turnover. By implementing a robust grievance redressal mechanism, the organization can enhance employee engagement, reduce turnover, and improve overall workplace morale. Additionally, fostering a transparent and supportive environment will not only strengthen employee trust but also boost organizational reputation, making it an attractive workplace for current and prospective employees. Therefore, present organization needed effective grievance redressing Mechanism to ensure a harmony at workplace, enhance employee engagement, and maintain productivity of the organization.

#### **Review of Literature:**

Researcher has reviewed few previous research journals to probe into the gaps in previous researches.

(Shree, 2024) This paper examines the grievance redressal mechanism within the framework of administrative law. This study analyses various models of grievance redressal and suggested strengthening grievance redressal system as a critical

component of good governance, fostering trust between citizens and government and enhancing the rule of law.

(Hossain & Pande, 2022) This book reviews the evidence on Grievance redress mechanisms (GRM) from around the world. The review concludes with simple framework for understanding the key element of successful GRMs as identified through the review process. Viz. Citizen capacity to complain, State capacity to respond and Proactive transparency. This book highlights why grievance redress mechanism matter, overview of the literature, methodology and major finding on GRMs contribution to the development process. GRMs and corruption, GRMs and public service delivery, GRMs and citizen trust and participation, GRMs and excluded and marginalized groups and Unintended consequences of grievance redress mechanism.

(Chavan, 2022) The aim of this study is to find out the opinion of the consumers regarding consumer grievance redressal mechanism. Study revealed that majority of consumers have knowledge about Consumer grievance redressal mechanism but they are unaware about rights and responsibility as a consumer. They think it is time consuming and most of complaints are pending and they are carrying some misconceptions.

(Avadhesh, 2022) Article is based on the study of grievance handling mechanism in Refinery. According to author Grievance may be any genuine or imaginary feeling of dissatisfaction or injustice experienced by employee towards his job, management policies and procedures. It must be expressed by the employee and brought to the notice to the management. If it is not dealt, then there would be collective dispute. Then it would be difficult to handle.

(Sapna, 2019) This article highlights review in connection with industrial relations and employee retention. According to the author most of the previous researches discussed

theoretical discussion. However, this article creates lots of confusion and failed in delivering the purpose of study.

(Arindam, 2018) Author believes that grievances mainly exist due to the differences between the employee expectations and management practice. Most grievance seriously disturb the employee. Study reveals that grievance handling mechanism in the bank is satisfactory. Bank is making efforts to resolve the grievances but there is absence of formal mechanism system.

(Tirno & Chowdhuri, 2020) This study analyzed different styles for grievance handling management with their effectiveness at the factory level. It believes that collaboration style is most effective for grievance handling management.

(Taru, 2016) Author identifies the most common factor for arising the grievances are wages and salary, work environment, promotions, transfer, lack of communication and interdepartmental relationship. Author believes that Effective grievance handling is an essential part of cultivating good employee relations and running organization smoothly and gaining good productivity of work.

(Mohanasundarm, 2023) Author thinks that grievance is very difficult to define because it is intangible, unseen and unobserved. Imaginary feeling of dissatisfaction and injustice due to the employee relationships.

(Dhanabhakyaam & P, 2019) Author thinks that in all cases managers should strive for the most effective possible resolution that will satisfy both parties. This study conducted to identify the employees' perception and it reveals that if the employee has grievance regarding work environment then it can be solved through different training methods. Author believes that grievance mainly exists in the organization because of dissatisfaction of employees and if management paid the attention on this

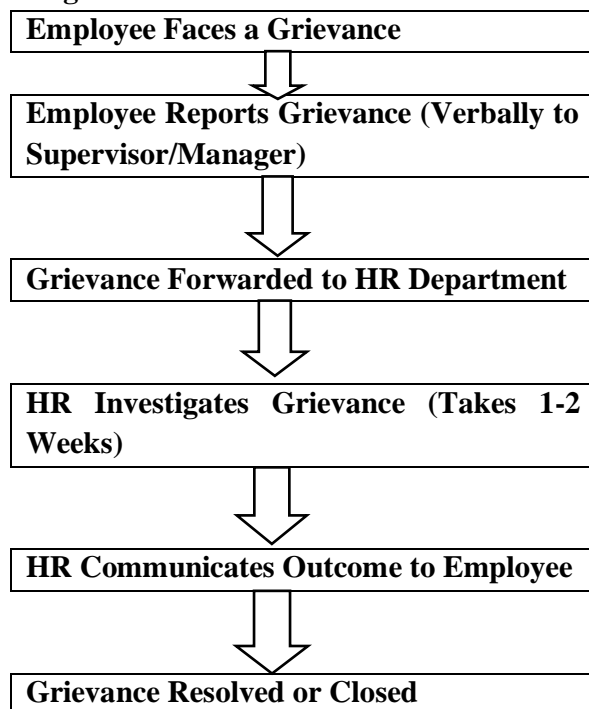
issue definitely it will increase the morale and performance of employees.

After analyzing these researches researcher is motivated to check the existing system in the organization and eager to know more about the opinion of existing staff towards the grievance redressal process and to understand the opinion difference between workers and managerial staff.

#### **Methodology:**

The present study is descriptive in nature. Aim of study is to understand process of grievance redressal in Organization and to evaluate the process to understand it's impact on employee and organizational culture. Both primary and secondary data have been used to collect the data. Close ended structured Schedule is an instrument used to get the opinion of workers and managerial staff. The secondary data was collected through, Books, Internet, Magazines, Articles, Company website, Manuals, etc. The sample unit was Workers as well as Managerial staff of AR Engg And Innovations, Pvt. Ltd. Satara. Geographical scope is limited to the organization. Total 105 samples taken for the study. Of which 9 samples are managerial staff and 96 are workers. Census sampling technique is preferred in this study. Collected data is analyzed by simple statistical tools like percentage, mean, standard deviation.

**Data Analysis and Discussion:  
Existing Grievance Redressal Process in  
Organization:**



Above chart shows that Employees encountering an issue report it within the organization. Grievances are communicated verbally, often informally, to the supervisor or manager. If the supervisor/manager failed to resolve the grievance, it is send to the HR department for review. The HR team conducts an investigation to understand the root cause of the grievance and to formulate a resolution. It took one to two-week time. Once a resolution is determined, HR communicates the decision to the worker. If the resolution satisfies the worker, the grievance is marked as resolved. Otherwise, it is closed without further action.

After probing into the details of facts and discussion with workers and managerial staff. It is observed that Grievances are reported verbally without a formal written record. This can lead to misunderstandings, lack of accountability, and loss of critical details. Initial verbal reporting to supervisors gives scope for biasness or conflict of interest, especially if the grievance involves the supervisor. 1–2-week investigation period

may delay resolution, would dissatisfied and demotivated the workers. Result is communicated to the employee without their involvement in discussions, leads to misunderstanding with the resolution redressal process. Sometimes have chance to leave underlying issues unresolved. Workers show dissatisfaction towards Absence of formal mechanism to appeal the grievance. Existing grievance redressal process focuses solely on resolving grievances rather than preventing recurrence.

After analyzing the opinion of both workers and managerial staff following notable results described in major findings.

**Major Findings:**

1. Workers awareness is more than management in Grievance redressal process. Informal sources like colleagues or superiors are the primary way workers learn about the grievance handling process, while formal tools like the employee handbook are not utilized at all by both workers and management staff.
2. The grievance process is generally well-utilized, by workers than managerial staff. Most of employees approach the HR department first, when they have grievance, while the immediate supervisor and other options are less utilized. Workers perceiving grievance redressal process is more accessible while management shows a higher level of uncertainty about its accessibility. There is a difference in complaint reporting preferences between workers and management, with workers favoring verbal reporting and suggestion boxes, while management leans more toward email communication and team meetings.
3. Workers mostly observe informal or detailed written guidelines, while management predominantly perceives guidelines as partially clear but lacking

full coverage Workers mostly see the process focusing on logging complaints and taking immediate action, while management largely emphasizes initial assessment and conducting detailed investigations when necessary.

4. Most workers believe HR or their supervisors handle grievance investigations, while management sees HR and a complaint officer as responsible, but some workers hold a different opinion, feeling that there is no proper investigation. A key difference in focus between workers and management when determining the best course of action, focusing on lasting solutions. management places more emphasis on compliance with regulations and standards, while workers prioritize the feasibility and practicality of the solution.
5. Managerial staff have differing opinions on implementing corrective actions: management emphasizes communication and detailed planning, while workers focus on assigning responsibilities and monitoring progress through regular meetings. Employees have different views on effective of corrective actions, with workers focusing on finding the root cause, while management gives more importance to follow-up audits and inspections.
6. Workers focusing on creating and enforcing new policies, while management emphasizes building a strong feedback and reporting system. Most workers' express confidence in
7. using the grievance redressal procedure, but a small portion of management remains less assured.
8. There is a key difference in opinion of employees on grievance resolution methods, as workers prefer the open-door policy, while management relies more on opinion surveys to address

grievances. Managerial staff have different perspectives on grievance issues, with workers highlighting discrimination and unfair treatment, while management prioritizes harassment and policy violations. Management staff has doubt on management addresses concerns, whereas workers feels that management listens, while more management members feel that management does not take concerns seriously.

9. Managerial staff have different views on reusing the grievance handling procedure, with management more willing to use it again, while workers are more unsure or unlikely to do so. Both workers and management staff agree that improvements are needed in the grievance handling procedure to make it more effective.
10. There is a clear difference in opinion between workers and management on the frequency of grievances, workers believing it occurs less often, while managerial staff views them as happening more frequently. Both workers and management agreeing that interpersonal conflicts are the main issue. However, workers report more work-related problems, while management said about compensation and benefits.
11. Workers feeling that it takes longer time to resolve the issue, particularly for cases that take 2-4 weeks or more, while management believes the process is quicker. Feedback on the grievance redressal process is generally sought regularly, though some employees feel it is sought only occasionally or rarely.

#### **Conclusion:**

In conclusion study reveals a clear difference in perception between workers and management regarding the process's effectiveness and its impact. Workers

generally demonstrate higher awareness, engagement, and confidence in the grievance handling process, believing it positively affects job satisfaction, inclusivity, and trust. In contrast, management tends to hold more neutral or less optimistic views on the process's outcomes. Difference in opinion among the managerial staff and workers shows the lack of standardisation and serious execution of Grievance Redressal policy of the organisation. Non availability of formal paper work of registration of grievance shows the ignorance of organisation towards serious issues of the workers. The findings highlight the need for improved communication, alignment in expectations, and more active management involvement to bridge the gap and enhance the effectiveness of the grievance redressal system in fostering a positive organizational culture. Workers generally perceiving a positive impact on job satisfaction, trust, and inclusivity, while management's views are more neutral or less positive. Overall, the study emphasizes the importance of fostering better collaboration and understanding between workers and management to optimize the grievance redressal process and ensure its success in promoting employee satisfaction and a positive workplace culture.

#### **Suggestion:**

1. Organisation should ensure to all employees, regardless of their role or tenure, clear and easy access to the grievance redressal process. Regular training sessions and workshops should be conducted to keep employees informed about the procedures and whom to approach.
2. Develop formal, documented procedures for grievance reporting to avoid reliance on verbal or informal guidelines. This will create transparency and consistency in handling complaints.
3. Enhance communication between the grievance handling team and

employees. Timely updates on the status and outcome of grievances should be communicated to ensure trust and satisfaction among employees.

4. Make root cause analysis a key part of the grievance process to identify and address underlying issues. This will help prevent recurring problems and foster a more proactive approach to conflict resolution.
5. Implement mechanisms for regularly collecting employee feedback on the grievance procedure. Use feedback form for continuous improvement, ensuring that the system evolves in response to employees' needs and concerns.
6. Build greater confidence in the system by reinforcing confidentiality, fairness, and impartiality in grievance handling. Employees should feel safe and supported when using the system without fear of retaliation.
7. Leverage the grievance mechanism as a tool to positively influence organizational culture. Encourage open dialogue and collaboration, promoting a work environment where issues are addressed respectfully and solutions are sustainable.
8. Improve communication between the grievance team, workers, and management to align perceptions and foster mutual understanding.
9. Organize workshops where workers and management can collaboratively discuss and align on the goals and outcomes of the grievance redressal process.

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## The Impact of Artificial Intelligence on E-commerce

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### Abstract:

*Artificial intelligence (AI) is one of the technological advancements that have redefined many industries including e-commerce. AI can be utilized in improving customer experience as well as in supply chain management, confirming that automation is crucial in contemporary e-commerce business managing. The role of AI in enhancing personalization, customer service, inventory management, fraud prevention, and in other areas will be analyzed in relation to the transformation of e-commerce. Furthermore, this paper will highlight the possible adverse effects of AI integration in e-commerce and offer recommendations regarding the future of e-commerce.*

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### Introduction:

Artificial Intelligence (AI) is having an increasingly large impact on e-commerce by offering new ways to automate processes, improve client relations and assist enterprises to remain relevant in a more digitized world. Solutions such as machine learning, natural language processing, and computer vision are being applied to various facets of e-commerce including product recommendations, AI customer support through chatbots, inventory control, and even modernized techniques for pricing and detecting fraud. Not only have these technologies made businesses more efficient, there has also been a shift in the relationships companies have with their clients towards a more individualized, quicker and safe form of shopping which is overly responsive to consumers' needs. As e-commerce companies are further adopting AI to perform highly sophisticated and clients centric functions, it becomes very important to analyze the impact of AI in this space. There are also worries concerning AI integration like how it affects privacy, high expense in implementation, and ethics of AI judgement. With all these difficulties, e-commerce still benefits a lot in

its advancements and innovatory developments due to AI technology, adding its importance with every technological advancement further expected. This paper aims to evaluate the continuous developments of AI technology and its integration with e-commerce and business in general.

### Implementing AI Technologies in E-commerce:

#### **1. Customization in the world of e-commerce, differentiation through personalization has become a necessity:**

Customers expect to receive services adjusted to their needs and AI is pivotal in satisfying these needs. AI-driven algorithms sift through enormous volumes of customer information, including browsing habits, buying patterns, and even their age and gender, to provide useful suggestions. These suggestions improve the user experience, as customers are more satisfied, conversion rates are higher, and customer loyalty further increases.

**For example,** Netflix and Amazon are well known for AI segmenting products and media as content because of their enhanced browsing behavior, buying habits,



demographic information and even region. Through AI personalization, businesses engage with customers better and both parties reap the benefit in the long run.

## **2. Customer Service and Virtual Problem Solvers – Chatbots:**

The role of AI-powered chatbots has changed the face of services offered in ecommerce. Intelligent virtual assistants are now able to use Natural Language Processing (NLP) to interact with customers and provide them with instant responses and support. From answering general product inquiries to more complex duties such as order tracking, dealing with returns, and customer grievances, chatbots perform a wide range of activities without human intervention. Chatbots have drastically decreased response time and have improved customer experiences satisfaction when it comes to customer support.

### **Advantages of AI in E-commerce:**

#### **1. Better Customer Experience:**

AI improves the overall customer experience through personalized recommendations, quick response via chatbots, and content tailored to specific customers. Such enhancements lead to increased customer satisfaction, higher interaction, and enhanced brand loyalty.

#### **2. Improved Operational Efficiency:**

AI streamlines many operational procedures, ranging from inventory control to supply chain management. Through automation of processes that would otherwise involve human intervention, AI lowers the cost of operations, enhances efficiency, and enables businesses to utilize resources more efficiently.

#### **3. Data-Driven Decision Making:**

AI allows e-commerce companies to use data to make better-informed decisions. Through the analysis of large amounts of data, AI can identify trends, customer tastes, and market conditions that might otherwise be overlooked. Such insights give a

competitive edge and allow companies to create more efficient strategies.

#### **4. Cost Reduction:**

AI saves money by automating functions like customer support, inventory management, and fraud detection. This results in reduced labor expenses, fewer mistakes, and quicker response times. This means that companies can invest resources in other areas of strategy, including marketing and product development.

### **Challenges of AI Adoption in E-commerce:**

#### **1. Data Privacy and Security Concerns:**

AI is dependent on customer data to provide personalized experiences and streamline processes. The use of such data, however, raises security and privacy concerns. E-commerce companies have to comply with data protection laws, like GDPR, and use strong security practices to safeguard customer data from cyber-attacks.

#### **2. High Implementation Costs:**

The use of AI technologies on e-commerce websites necessitates large expenditure on infrastructure, software, and skills. The small and medium enterprises can also find it hard to embrace AI because the expenses are very high in the first instance. This, however, will decline with time as technologies keep improving.

#### **3. Ethical Considerations:**

The application of AI in e-commerce poses ethical concerns over bias, fairness, and transparency. AI systems may unintentionally reinforce biases within the training data, resulting in discriminatory decisions. It is necessary for e-commerce businesses to ensure that their AI systems are fair, transparent, and unbiased to build customer trust.

### **Future Directions:**

The prospects of AI in e-commerce look good. As technology advances, fresh applications are in the works that will

improve e-commerce even more. For instance, AI in conjunction with AR could lead to virtual try-on for clothing and beauty products, and voice-controlled assistants with AI may find themselves used in more shopping processes. More accurate prediction analysis and personalization ability is also in store, courtesy of advancements in AI.

Over time, AI is bound to be a necessary weapon for e-commerce companies to compete in a highly digitalized marketplace. The implementation of AI technologies will not just make operations easier but also craft more interactive and immersive customer experiences, fueling growth and innovation in the sector.

#### Conclusion:

AI has revolutionized the e-commerce sector by enhancing personalization, customer experience, inventory management, and detection of fraud. Through data-driven decision-making, improved operational effectiveness, and cost savings, AI has enabled e-commerce companies to provide improved experiences and increase growth. Although there are issues of data privacy, cost of implementation, and ethics, the advantages of AI in e-commerce cannot be overlooked. As technology advances in AI, the importance of AI in e-commerce will grow, providing new prospects for growth and innovation in the digital world.

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## The Impact of Social Media Marketing in E-Commerce Sales

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### **Abstract:**

*Social media as a marketing platform has revolutionized the eCommerce sector to a great extent. Social media marketing is pivotal in driving eCommerce sales by improving brand awareness, customer interaction, and efficient advertisement. This paper examines the impact of social media marketing on eCommerce sales, its most important strategies, and how it is increasing in importance with the advancement in the digital economy.*

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### **Introduction:**

The fast expansion of the internet and the enhanced utilization of social media platforms have transformed the manner in which businesses interact with their consumers. Social media marketing has developed from being a simple tool of communication to a driving force of eCommerce success. Social media platforms such as Facebook, Instagram, Twitter, LinkedIn, and TikTok offer businesses the leverage to reach huge audiences, market products, and establish brand loyalty.

**This research paper examines the contribution of social media marketing in eCommerce sales, its advantages, disadvantages, and best practices.**

**1. The Contribution of Social Media Marketing to eCommerce Sales** Social media websites present eCommerce companies with special chances of reaching their potential customers, establishing brand awareness, and generating sales. The following are the major factors describing the contribution of social media marketing to eCommerce sales:

**2. Brand Reach and Awareness** Social media websites have billions of active users, which gives eCommerce companies an

unprecedented opportunity to reach a large number of people. With paid ads, organic posts, and influencer collaborations, brands can create awareness and increase their reach. The higher a brand is visible on social media, the higher the chances that consumers will take their products into consideration.

**3. Customer Interaction and Relationship Creation** Social media allows companies to communicate directly with customers in real-time. Customer inquiry response, sharing user content, and interactive campaigns enable companies to create more solid relationships with customers. Positive interaction builds trust and loyalty, raising the chances of conversion and repeat purchase.

**4. Targeted Advertising** Social media provides sophisticated targeting features, enabling companies to deliver tailored advertisements to targeted consumer groups. Tools such as Facebook Ads and Instagram Ads allow brands to target prospective buyers by demographics, interests, behaviors, and even past purchases. Targeting maximizes the likelihood of reaching users who are likely to convert.

**5. Influencer Marketing** Influencer marketing is one of the strong weapons for

eCommerce brands. By partnering with influencers, eCommerce businesses can reach out to the influencer's audience and use the influencer's credibility. Such marketing creates organic connections and gains trust among prospective customers, driving more conversions and sales.

**6. Social Commerce** The embedding of shopping functionality within social media sites has enabled social commerce. Sites such as Facebook and Instagram enable users to search for products, see product details, and purchase without exiting the application. This frictionless shopping experience greatly reduces the purchase barriers, enabling customers to easily convert directly from social media.

### **Strategies for Successful Social Media Marketing in eCommerce:**

In order to efficiently use social media marketing for increasing eCommerce sales, companies need to follow the below strategies:

- 1. Regular Content Generation** Content is the pillar of social media marketing. Generating quality and relevant content that will connect with the target audience is essential. It can be in the form of promotional posts, tutorials, behind-the-scenes stories, and user-generated content. Posting regularly and keeping a brand voice consistent on different platforms is important to build awareness and interaction.
- 2. Leverage User-Generated Content** User-generated content (UGC) is a great asset for eCommerce brands. Getting customers to share their experiences, reviews, and photos can go a long way in building brand credibility. UGC is also social proof, which affects the purchasing decisions of potential customers.
- 3. Leverage Paid Advertising and Retargeting** Paid social media advertising is critical to increasing reach and driving sales. By using retargeting, companies have the opportunity to re-engage visitors who have

engaged with the business but have not made a purchase. Retargeting ads remind customers of what they previously looked at, making the chances of conversion higher.

**4. Social Proof and Reviews** Social media offers a platform where customers can leave their reviews and testimonies. Customer endorsements can serve as social proof, inspiring other users to believe in the brand and buy from it. Brands need to be actively involved in monitoring and answering reviews to ensure a positive image.

**5. Analytics and Performance Tracking** Monitoring performance indicators like engagement rates, click-through rates, and conversion rates is crucial to measuring the success of social media campaigns. Leveraging analytics tools offered by social media sites, eCommerce companies can make informed data-driven decisions to optimize their plans and enhance their campaigns.

### **Challenges in Social Media Marketing for eCommerce**

- 1. Although social media marketing has many advantages, eCommerce companies encounter various challenges when using these platforms:**
- 2. High Competition** With millions of companies using social media to market themselves, it is easy to get lost in the crowd. Companies need to constantly innovate and develop something new to attract the attention of their customers.
- 3. Ad Fatigue** Too much exposure to repeating ads can bring about ad fatigue, where audiences get used to advertisements. It can have negative effects on engagement and conversion.
- 4. Algorithm Changes** Social media companies keep changing algorithms, which will influence the display of content. Marketers should be aware of these changes and adjust their practices in line to stay effective.

5. Privacy Issues With social media websites gathering large volumes of user information, privacy issues have emerged as a major problem. eCommerce companies need to carefully handle these issues and ensure that they adhere to data protection laws, including the GDPR.

**Conclusion:**

Social media marketing is now a core component of the eCommerce ecosystem. Through platforms of brand exposure, customer interaction, targeted marketing, and influencer collaboration, social media allows online commerce companies to drive sales and establish long-term customer relationships. Businesses, though, must remain aware of the pitfalls and constantly evolve their strategies to beat the competition. Through proper strategy, partnership marketing through social media can significantly boost and bring success to the online commerce industry.

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## Need and Importance of Green Accounting for Sustainable Development

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### **Abstract:**

*In today's world, many companies are facing numerous environmental problems due to their focus on maximizing profits, the increasing demands of consumers, rapid advancements in technology, and the unsustainable consumption of natural resources. Corporate sustainability has become one of the biggest challenges for these companies. Therefore, this study aims to explore how accounting, as the language of business and a source of information are important for sustainability. The research paper investigates different approaches to corporate sustainability using Green Accounting. Through continuous efforts to find the most suitable accounting system for sustainable development, green accounting has emerged as a potential indicator of sustainability. This research article relies on primarily as well as secondary data and modern accounting practices. It also provides a methodology and data types that can help improve the green accounting system in India and promote sustainable development in the corporate sector.*

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**Keywords:** *Need of Green Accounting, Eco-Accounting, Green Accounting System, and Sustainable Development.*

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### **Introduction:**

Green accounting is related to environmental aspects, information and environmental eco-auditing systems it has been defined as the identification, tracking, analysis, and re- porting of the materials and cost information associated with the environmental aspects of an organization. Green accounting is relatively modern and a developing field. However, in India the green accounting is considered at an infant stage because, the implementation of green accounting in organizations. But, in India lack of awareness, lack of green and ethical education and so on. The primary role of green accounting is to attempt the social environmental problems.

Green Accounting which also takes social and environmental factors into consideration that has been given several names over the last few years, including, for

example, environmental accounting, triple bottom line accounting, and sustainable accounting. India has been facing the twin problems like protecting the environment and promoting economic growth. Responsibility towards environment has become one of the most crucial areas of social responsibility. Concern over environmental and land degradation has grown in recent years. This degradation is mostly caused by many forms of pollution, such as soil erosion, deforestation, water and air pollution, and sound pollution. These issues are becoming a global occurrence. In addition to harming human health, this issue lowers economic output and results in a loss of amenities. Determining dependable revenues that are also ecologically sustainable is a challenge for corporate sectors. Environmental accounting is widely accepted in green accounting.

Transparency in accounting about environmental expenses is known as "green accounting." It lists the expenses and advantages that an organisation experiences as a result of its involvement in environmental-related activities. The identification, measurement, and distribution of environmental costs, their incorporation into business operations, the recognition of environmental liabilities, and the dissemination of the results to the company's stakeholders as part of financial statements are all typically included in green accounting. Additionally, e-commerce helps to advance and improve green accounting.

#### **Statement of the Problem:**

One of the most important tools for understanding how the environment affects the economy is green accounting. Green accounting provides data that highlights the contribution of natural resources to economic growth and the costs associated with pollution or resource degradation. Businesses should devote some of their resources to ecological balance and environmental preservation. As a result, it is expected that corporate organisations will take into account the use of items that may be environmentally harmful. In India, green accounting is still in its infancy. Some companies are creating a separate environmental policy department, putting pollution control measures into place, following applicable rules and regulations, and providing enough information on environmental factors in their annual reports. There are several difficulties in environmental accounting and reporting, including the method of environmental accounting. This research paper aims to know the need and importance of green accounting practices for sustainable development.

#### **Objectives of the Study:**

1. To study components and aspects of green accounting.
2. To study the how green accounting important for sustainable development.
3. To study the advantages and disadvantages of Green Accounting.

#### **Research Methodology:**

**Primary Data:** The primary data required for the study was collected from the accountants. With the help of questionnaire for study purpose.

**Secondary Data:** Secondary data was collected through various books, journals, magazines.

**Sample Design:** The Researcher adopted convenient sampling method for the selection of accountants. Those relating to the accounting works and they are using green accounting for their organizations.

**Sample Size:** Researcher selected 50 respondents for his study. The criteria for selection of the sample were the organizations were using green accounting system in their organization in last two or more years.

#### **Scope of Green Accounting:**

Green accounting involves estimation of environmental expenditures, capitalization of those environmental expenditures, identification of environmental liabilities and measurement of environmental liabilities. Environmental expenditures are expenses or costs related to environmental measures including production-related costs and product research and development expenditures which are incurred primarily for ensuring protection of environment. Environmental liabilities Obligation to pay future expenditure to remedy environmental damage that has occurred due to past events, activities or transactions or to compensate a third party that has suffered from damage. It

may even include a contingent environmental liability that depends on occurrence or non-occurrence of one or more future uncertain events or to compensate a third party that has suffered from such damage. These Green Accounting has the wide scope of sustaining business organizations and environment.

#### **Types of Green Accounting:**

**A) Green management accounting:** It involves the recognition, gathering, assessment, examination, internal documentation, and application of data related to materials and energy flow.

**B) Green Financial Accounting:** emphasizes the reporting of environmental liability expenses and other major environmental expenditures.

**C) Green National Accounting:** It emphasizes national resource stocks and the costs of externalities, among other factors.

#### **Important Things To Use Of Green Accounting:**

- Before implementing green accounting, a company must clearly define its accounting goals and environmental strategy.
- Assess the stakeholders, the organization's relationship with them, and the level of risk. Identify the environmental elements at work, how to quantify them, and the costs involved in achieving the goals.

- Acknowledge strategies for cost and resource reduction by encouraging innovative ideas. Continue using green accounting techniques to track the gradual decrease in environmental expenses.
- It is necessary to set up a personal account for environmental costs. It will help evaluate and communicate environmental effectiveness and spending.
- Expenses and benefits associated with environmental factors must be included in the income statement.
- It is necessary to establish an additional ecological value-added statement.

#### **Limitation Of Green Accounting:**

- There isn't a uniform accounting approach.
- It is not feasible to compare two countries or companies if their accounting methods and standards are differ.
- It primarily takes into account expenses within the company while excluding societal costs.
- Input for Green Accounting is difficult to obtain since costs and benefits related to the environment are hard to quantify.
- The initial expense for its tools and application is substantial.

**Table No1: Age-wise Classification of Accountants**

Age	Number of Respondents	Percentage of respondents
<b>25- 35</b>	21	42%
<b>36-45</b>	12	24%
<b>46-55</b>	10	20%
<b>Above</b>	7	14%
<b>Total</b>	<b>50</b>	<b>100</b>

(Source: Compiled by Researchers)

Table No.1 revealed that the younger accountant is more engaged in green accounting. Because of advancement and its adoption is easier to understand of this age

group. It is observed that accountants in the age of 46 to 55 and above 55 are less used green accounting, because they believe old age or traditional accounting system.



**Table No. 2: Gender Based Classification of Respondents**

Gender	Number of Respondents	Percentage of respondents
Male	34	68%
Female	16	32%
<b>Total</b>	<b>50</b>	<b>100</b>

(Source: Compiled by Researchers)

Above table No.2 shows that the majority of the accountants are (68%) or interested in using green accounting according to their response. accountant male. Female accountant is not

**Table No. 3: Category Based Classification of Respondents**

Occupation	Number of Respondents	Percentage of respondents
Banking	9	18%
Hotel	11	22%
Retail Shop	13	26%
Education	7	14%
<b>Construction</b>	<b>10</b>	<b>20%</b>
<b>Total</b>	<b>50</b>	<b>100%</b>

(Source: Compiled by researchers)

Table No 3 indicate that among all the retailers are using green accounting regularly numbers (26%) because of time and money saving. Hoteliers also using the green accounting to their business and accountants are happy to use this accounting system. After the large number hotel users the education sectors also used green accounting of they also comfortable with these accounting.

**Table No.4: Agreement Level of use of Green Accounting**

Statement	1	2	3	4	5	Total Score	Mean Value	Percentile Value
Useful to Hotel Industry accounting	2	6	12	14	16	50	3.72	74.4
Weighted Score = (Satisfaction Level x No. of Respondents)	2	12	36	56	80	186		
Useful to Educational sector	5	10	12	18	5	50	3.16	63.2
Weighted Score = (Satisfaction Level x No. of Respondents)	5	20	36	72	25	158		
Useful to Construction accounting	10	9	8	16	7	50	3.02	60.4
Weighted Score = (Satisfaction Level x No. of Respondents)	10	18	24	64	35	151		
Useful to Banking accounting	8	9	17	11	5	50	2.92	58.4
Weighted Score = (Satisfaction Level x No. of Respondents)	8	18	51	44	25	146		
Useful to retail shop accounting	5	11	13	9	12	50	3.24	64.8
Weighted Score = (Satisfaction Level x No. of Respondents)	5	22	39	36	60	162		

(Source: Compiled by Researcher)

Table No. 4 shows the weighted score, mean and percentile value of using green accounting agreement level of green accounting. Agreement Level of use of Green Accounting Score 1 represent Strongly Dissatisfied Agree and score 5

Satisfaction Level (Weightages)	1	2	3	4	5
No of Respondents	2	6	12	14	16
Weighted Score = (Satisfaction Level x No. of Respondents)	2	12	36	56	80

$$\text{Mean Score} = \frac{\text{Total Weighted Score}}{\text{Total Sample}}$$

$$\text{Mean Score} = \frac{2+12+36+56+80}{50}$$

$\frac{186}{50} = \text{-----} = \mathbf{3.72}$
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Total score 186 divided by No. of respondents 50= 3.72. The highest possible mean score 5=100%. Then mean score 3.72 = 74.40%.

The data reveals that about green accounting is useful to their industries or not the accountants give their responses 50 respondents have reported their responses regarding different types of industries is required or not the green accounting. 74.4 percent accountant agreed about green accounting is useful to the hotel industries. And 58.4 % accountant are reported their responses regarding agreement of use of green accounting to Banking industries.

#### Conclusion:

Green accounting practices are at a promising phase in India. The Indian corporate sector strives to comply with the terms and regulations concerning environmental protection. Currently, there

represent strongly agreed. For example, the score of first industry “Agreements about Hotel industry, Educational and retail as well as other sectors are trying to use” is ascertained as under.

are no well-defined policies established at the National, State, or even company level to guarantee adherence to environmental standards. Environmental accounting serves as a concrete instrument in implementing sustainable development. Green accounting is also necessary for the social accountability of businesses. The significance of environmental accounting is growing due to rising environmental issues, as well as economic, social, and technological advancements. This accounting method is achieved via environmental accounting. This accounting will make a significant contribution to sustainable development.

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## Significance of AI on E-Commerce Advertisement

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DOI - 10.5281/zenodo.15147315

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### Abstract:

*In the rapidly evolving landscape of digital marketing, online advertising has emerged as a pivotal tool for businesses to connect with their target audiences. This research paper aims to investigate the effectiveness of online advertising in reaching specific target audiences. The study employs a combination of quantitative and qualitative research methods to analyze the impact, reach, and engagement of online advertising campaigns across various platforms.*

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### Introduction:

The advent of the internet has ushered in an era of unprecedented connectivity and has fundamentally altered the landscape of marketing and advertising. As businesses navigate this digital terrain, the focal point has shifted towards online advertising as a cornerstone strategy for reaching and engaging specific target audiences. This paradigm shift stems from the inherent capabilities of online platforms to deliver targeted messages with unparalleled precision, allowing businesses to tailor their promotional efforts to the unique characteristics and preferences of their intended audience.

The scope and potential of online advertising are vast, encompassing a multitude of platforms, formats, and strategies. From social media platforms like Facebook and Instagram to search engines like Google, businesses now have an array of tools at their disposal to deploy strategic campaigns aimed at capturing the attention and loyalty of their desired consumer base. This transition from traditional advertising channels to the dynamic and interactive realms of the internet brings forth a myriad

of opportunities, challenges, and considerations that warrant thorough investigation.

### Literature Review:

The evolution of online advertising has closely mirrored the rapid expansion of the internet and the transformation of consumer behavior in the digital age. To contextualize the current study on the effectiveness of online advertising in reaching target audiences, it is essential to delve into the existing literature, examining the historical progression, key components, and influencing factors of online advertising.

#### 1. Historical Evolution of Online Advertising:

The inception of online advertising can be traced back to the early days of the internet when banner ads emerged as the primary vehicle for digital promotion. These static, clickable images paved the way for more interactive and dynamic formats, such as pop-up ads and flash banners. As the internet continued to mature, the introduction of search engine advertising, particularly with Google AdWords, revolutionized the landscape by allowing

businesses to target users based on their search queries. The subsequent rise of social media platforms further diversified the channels available for advertisers, offering new ways to engage with audiences on a personal level.

## **2. Key Components of Online Advertising:**

Online advertising is a multifaceted domain encompassing various components, each contributing to its overall effectiveness. Search engine advertising relies on algorithms to match user queries with relevant ads, ensuring a high degree of relevance. Display advertising, including banner ads and rich media, leverages visual elements to capture attention. Social media advertising harnesses the vast user bases of platforms like Facebook, Instagram, and Twitter, allowing advertisers to target audiences based on demographics, interests, and behaviors. Additionally, video advertising has gained prominence, offering immersive storytelling opportunities.

## **3. Factors Influencing Effectiveness:**

Several factors influence the effectiveness of online advertising campaigns. Targeting precision is a critical determinant, with the ability to tailor messages to specific demographics contributing to increased relevance and engagement. Ad format and creativity play a pivotal role, as visually appealing and interactive ads tend to capture attention more effectively. Furthermore, the timing and frequency of ad placements, as well as the alignment with the overall digital marketing strategy, impact campaign success. Consumer trust and privacy concerns also come into play, highlighting the delicate balance between personalization and respecting user privacy.

## **4. Online Advertising and Consumer Behavior:**

Research has consistently demonstrated the profound impact of online advertising on consumer behavior. The

ability to create personalized and targeted messages allows advertisers to influence purchasing decisions. Studies indicate that well-executed online advertising campaigns can enhance brand recall, shape brand perceptions, and ultimately drive consumer action. The interactive nature of digital advertising, particularly on social media platforms, fosters a sense of engagement and community, influencing consumer attitudes towards brands.

## **5. Online Advertising and Brand Awareness:**

Online advertising has proven to be a potent tool for building brand awareness in the digital era. Visibility on popular online platforms translates to increased brand exposure, especially when coupled with strategic targeting. Social media, in particular, offers a unique environment for brands to cultivate a digital presence, interact with audiences in real-time, and create shareable content that amplifies brand visibility organically.

## **Objectives of the study:**

The objectives of the study are designed to provide a comprehensive understanding of the effectiveness of online advertising in reaching target audiences. Each objective addresses a specific aspect of online advertising, allowing for a thorough investigation and analysis. The study aims to:

**1. Assess Reach and Frequency:** To quantify and evaluate the extent to which online advertising campaigns reach the intended target audiences. To analyze the frequency of exposure to online ads and its impact on audience recall and engagement.

**2. Analyze Targeting Strategies:** To examine the effectiveness of various targeting strategies employed in online advertising, including demographic targeting, behavioral targeting, and contextual targeting.

To identify the strengths and weaknesses of different targeting methods in reaching specific audience segments.

### **3. Evaluate Impact on Brand Awareness:**

To measure the impact of online advertising on brand awareness by assessing changes in brand recall and recognition among the target audience. To explore how different online advertising formats and channels contribute to building and reinforcing brand awareness.

### **4. Assess Impact on Consumer Behavior:**

To investigate the influence of online advertising on consumer behavior, including purchase intent, product consideration, and decision-making processes. To identify the factors within online advertising campaigns that have a significant impact on shaping consumer attitudes and actions.

### **5. Identify Challenges and Opportunities:**

To identify and analyze challenges faced by businesses and advertisers in the realm of online advertising, such as ad fatigue, ad-blocker usage, and privacy concerns. To explore opportunities for optimizing online advertising strategies, leveraging emerging technologies, and overcoming common hurdles.

**6. Explore Engagement Metrics:** To analyze quantitative metrics, such as click-through rates, conversion rates, and engagement levels, to measure the success and effectiveness of online advertising campaigns. To correlate engagement metrics with the targeting strategies employed to understand which elements contribute most to audience interaction.

**7. Provide Actionable Insights for Optimization:** To synthesize the findings into actionable insights that businesses and marketers can use to optimize their online advertising strategies. To offer recommendations for refining targeting, creative elements, and overall campaign design to enhance the effectiveness of online advertising in reaching and engaging target audiences.

By addressing these objectives, the study aims to contribute valuable insights into the complex dynamics of online advertising, offering practical guidance for businesses seeking to maximize their impact in the digital realm.

### **Methodology:**

The methodology section outlines the systematic approach used to conduct the study, ensuring reliability, validity, and a comprehensive understanding of the effectiveness of online advertising in reaching target audiences.

**1. Research Design:** Employ a mixed-methods research design, integrating both quantitative and qualitative approaches for a holistic analysis.

Conduct surveys to gather quantitative data on audience perceptions, behaviors, and responses to online advertising.

Conduct interviews to collect qualitative insights into the nuances of audience preferences, perceptions, and experiences with online advertising.

**2. Sampling:** Utilize a purposive sampling technique to select participants who represent the target audience of the online advertising campaigns under scrutiny.

Ensure diversity in demographics, considering factors such as age, gender, geographic location, and online behavior.

### **3. Data Collection:**

**Quantitative Data:** Develop a structured survey questionnaire focusing on key variables such as ad recall, engagement, and purchase intent. Distribute the survey through online platforms, social media, and email to reach a broad and diverse audience. Collect data on click-through rates, conversion rates, and other relevant metrics from advertising platforms.

**Qualitative Data:** Conduct in-depth interviews with a subset of participants to delve into their experiences, perceptions, and emotional responses to online

advertising. Utilize open-ended questions to allow for a nuanced exploration of participants' attitudes toward different advertising formats and strategies.

#### 4. Variables and Measures:

**Dependent Variables:** Ad recall, brand awareness, consumer behavior (e.g., purchase intent). Click-through rates, conversion rates, engagement metrics.

**Independent Variables:** Targeting strategies (demographic, behavioral, contextual). Ad format (e.g., display ads, video ads). Frequency and timing of ad placements.

#### 5. Data Analysis:

**Quantitative Analysis:** Utilize statistical software to analyze survey data, employing descriptive statistics and inferential statistics (e.g., regression analysis) to identify correlations and patterns.

Interpret quantitative metrics to gauge the success of online advertising campaigns.

**Qualitative Analysis:** Employ thematic analysis to identify recurring themes and patterns in interview transcripts.

Extract qualitative insights that complement and enrich the quantitative findings, providing a more comprehensive understanding.

**6. Ethical Considerations:** Obtain informed consent from participants, ensuring their privacy and anonymity. Adhere to ethical standards in data collection, analysis, and reporting, ensuring the confidentiality and well-being of participants.

**7. Validity and Reliability:** Enhance internal validity through careful survey and interview design, ensuring that measurements accurately reflect the intended constructs. Foster reliability through consistent data collection methods, clear operational definitions, and rigorous analysis procedures.

#### 8. Limitations:

Acknowledge potential limitations, such as sample bias, reliance on self-

reported data, and external factors influencing participants' responses. Discuss the scope and generalizability of the findings within the context of the study.

By implementing this robust methodology, the study aims to generate valuable insights into the effectiveness of online advertising in reaching and engaging target audiences, providing a foundation for actionable recommendations and contributing to the evolving field of digital marketing research.

#### Findings:

Here's a general outline of how findings might be presented:

##### 1. Quantitative Findings:

**Reach and Frequency:** Analyze the survey data to quantify the reach of online advertising campaigns.

Evaluate the frequency of exposure and its correlation with audience recall and engagement.

**Targeting Strategies:** Assess the effectiveness of various targeting strategies (demographic, behavioral, contextual).

Identify which targeting methods had the most significant impact on reaching specific audience segments.

**Impact on Brand Awareness:** Examine the data to measure changes in brand awareness, considering ad formats and channels.

Correlate brand awareness metrics with different elements of online advertising campaigns.

**Impact on Consumer Behavior:** Analyze survey responses and interview data to understand the influence of online advertising on consumer behavior.

Identify key factors shaping purchase intent, product consideration, and decision-making processes.

**Engagement Metrics:** Evaluate quantitative metrics such as click-through rates, conversion rates, and engagement levels.

Determine which elements of online advertising campaigns contributed most to audience interaction.

## 2. Qualitative Findings:

**Themes and Patterns:** Conduct a thematic analysis of interview transcripts to identify recurring themes and patterns in participants' responses.

Explore qualitative insights that provide depth and context to the quantitative findings.

**Perceptions and Preferences:** Extract insights into participants' perceptions and preferences regarding different advertising formats, messaging, and creative elements.

## 3. Integration of Quantitative and Qualitative Insights:

**Synthesis:** Integrate quantitative and qualitative findings to provide a comprehensive understanding of the effectiveness of online advertising.

### Recommendations:

Based on the findings, offer recommendations for optimizing online advertising strategies, improving targeting, and enhancing overall effectiveness.

Remember, the actual findings will depend on the unique characteristics of your study, the sample population, and the specific details of the online advertising campaigns under investigation.

### Implications:

The implications of your study on the effectiveness of online advertising in reaching target audiences have broad significance for businesses, marketers, advertisers, and the field of digital marketing as a whole. The following points outline potential implications based on the findings of your research:

#### 1. Strategic Targeting Optimization:

**Implication:** Identify the most effective targeting strategies (demographic, behavioral, contextual) for reaching specific audience segments.

**Actionable Insights:** Marketers can refine their targeting methods to maximize relevance and engagement, ensuring that

advertising messages resonate with the intended audience.

#### 2. Enhanced Brand Awareness and Recall:

**Implication:** Understand the impact of different ad formats and channels on brand awareness.

**Actionable Insights:** Businesses can allocate resources to the most impactful platforms and formats, fostering brand recall and recognition among their target audience.

#### 3. Informed Content Creation and Messaging:

**Implication:** Identify themes and preferences from qualitative data to inform content creation and messaging strategies.

**Actionable Insights:** Marketers can tailor their creative elements based on consumer preferences, ensuring that the content resonates effectively with the audience.

#### 4. Improved Consumer Engagement:

**Implication:** Evaluate the factors contributing to high engagement metrics (click-through rates, conversion rates).

**Actionable Insights:** Advertisers can optimize campaign elements that drive engagement, enhancing the overall effectiveness of online advertising efforts.

#### 5. Strategic Frequency Management:

**Implication:** Understand the relationship between ad frequency and audience response.

**Actionable Insights:** Marketers can strategically manage the frequency of ad placements to avoid audience fatigue and optimize the impact of their campaigns.

#### 6. Mitigation of Challenges:

**Implication:** Identify challenges such as ad fatigue, ad-blocker usage, and privacy concerns.

**Actionable Insights:** Businesses can develop strategies to mitigate these challenges, ensuring a more seamless and positive user experience with online advertising.

#### 7. Adaptation to Consumer Behaviour:

**Implication:** Understand how online advertising influences consumer behaviour.



**Actionable Insights:** Advertisers can adapt their strategies to align with the identified influencers of consumer behaviour, optimizing campaigns for desired outcomes.

#### **8. Future Research Avenues:**

**Implication:** Recognize gaps in knowledge and potential areas for further research.

**Actionable Insights:** Researchers and academics can build on these insights, contributing to the ongoing evolution of understanding in the dynamic field of online advertising.

#### **9. Ethical Considerations and Privacy Compliance:**

**Implication:** Acknowledge and address privacy concerns raised by participants.

**Actionable Insights:** Advertisers can ensure that their online advertising practices align with ethical standards and prioritize user privacy, building trust with their audience.

#### **10. Competitive Edge:**

**Implication:** Implementing optimized strategies can give businesses a competitive edge in the digital marketplace.

**Actionable Insights:** Companies can leverage the findings to outperform competitors in online advertising effectiveness, potentially leading to increased market share and revenue.

By understanding and applying the implications derived from your study, businesses and marketers can enhance the precision, impact, and ethical considerations of their online advertising strategies, fostering stronger connections with their target audiences in the digital landscape.

#### **Conclusion:**

In conclusion, our study illuminates the intricacies of online advertising effectiveness in reaching target audiences. Targeting precision, diversification of ad formats, strategic frequency management, and the influence on consumer behavior emerge as critical factors. Ethical considerations and privacy compliance underscore the need for responsible

advertising practices. As businesses navigate this dynamic landscape, the findings provide actionable insights, offering a strategic compass for optimizing campaigns and fostering meaningful connections in the digital realm. Looking ahead, the study highlights avenues for further exploration, emphasizing the continuous evolution and adaptation required in the ever-changing landscape of online advertising.

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## The Role of Skills in Sustainable Employment- A Review

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**DOI - 10.5281/zenodo.15147324**

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### **Abstract:**

*This research explores the existing literature regarding role of skills in sustainable employment. Sustainable employment relies on the ongoing growth and use of important skills. In the current fast-changing job market, employers look for candidates who have basic knowledge and can also adapt, innovate, and succeed in various settings. The purpose of the literature review is to assess the various skills for sustainable employment. Skill development is vital for creating jobs and improving livelihoods. In our rapidly changing world, the need for a skilled workforce is more important than ever. As industries change and new technologies arise, up skilling is necessary for both workers and companies. Developing skills is key to increasing job opportunities by closing the gap between employer needs and workforce capabilities.*

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**Keywords: Skill Development, Employability, Training, Sustainability, Entrepreneurship, Technical and Vocational Education.**

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### **Introduction:**

Skills are essential for making the best use of human resources. A skilled workforce is not only valuable but also necessary for long-term economic growth. The World Youth Skills Day 2022 emphasized "learning and skills for life, work, and sustainable development," especially during the current recovery phase. The rising youth population presents both challenges and opportunities for policymakers everywhere. The growing reliance on technology and the evolving job market highlight the need to equip young people with skills for employment and entrepreneurship. This will help them adapt to changes and become positive change-makers. Technical and vocational education and training (TVET) institutions play a crucial role in fostering entrepreneurial values that benefit young individuals, economic progress, and a sustainable society. A comprehensive approach is needed to integrate entrepreneurial learning and employable skills into vocational

training, preparing youth for jobs, decent work, and entrepreneurship. Collaboration among TVET institutions, businesses, labour unions, policymakers, think tanks, public policy experts, and development partners is essential to effectively implement skill development programs.

The National Education Policy-2020 is designed to meet future demands and challenges effectively. It aims to address skill shortages by promoting vocational education in schools. At least half of all students in both school and higher education will have access to vocational training. Offering one vocational course to each student before they finish 10+2 can make a significant impact.

### **Review of Literature:**

**Harishchandra J Sharma (2016)**, study titled "Employability Skill Literature Review in India", has examined the previous studies underlining the impact of skill in developing employability in India. The analytical skills, the skill of developing self-

understanding, the efficiency to improve general management and work culture, developing leadership quality, problem solving ability and communication skills are all responsible to increase the level of employability among the human resource in India. The employability level will help in bridging the skill gap and that could only be done when the higher education incorporates the skill as an essential part in their curriculum. The article focuses on the point that all those workers who have the multi-tasking ability can sustain in gainful employment for a longer duration.

**Karanveer and Amandeep (2015)** study titled “Skill Development in Higher Education: Trends and Issue”. This work has thrown light on the current scenario of higher education in our country. The demand for skill education is clearly felt throughout the educational system, particularly at the higher levels. The study focuses on the options available to students at higher levels and proposes several strategies to improve the learning pattern and incorporate skill development as an integral part of their syllabus. The study also states that India ranks seventh in the world in terms of filling job vacancies, indicating that the country is having significant difficulty in the fields of IT personnel, accounting and finance staff, receptionists, secretaries, office support staffs, legal staff, researchers, teachers, executive managers, nursing staffs, and others. Even though many universities have been established in the past decade, there has been little improvement in job market absorption. This is mainly due to the absence of effective skill and training programs in their syllabi and curricula. These universities tend to focus on traditional education methods instead of preparing students to meet the needs of the job market.

**Meenal Sharma and Abhishek (2018)** discuss the topic "Shifting Dynamics of Skills in India," focusing on the urgent need

to skill the youth for improved economic growth. With 62% of its population aged between 15 and 59, India, as the youngest nation, must quickly respond to harness its demographic advantage. Addressing this challenge now is crucial for India to develop a skilled workforce of 700 million by 2022. Additionally, the rise of technology and artificial intelligence presents a significant threat, as labour-intensive jobs are increasingly replaced by capital-intensive and automated methods. Therefore, it is essential to equip the population with modern skills to help them compete effectively and secure their futures.

**Vandanasaini (2015)** in her study titled “Skill Development in India : Need , Challenges and Ways Forward “ has given a detailed view on the current scenario of job market of our country and the need of skill development programme to be undertaken as the major initiative to deal with the problem of massive unemployment. The study discusses the demand and supply mismatch in the job market, the geographical difficulties faced by the youths, the low literacy rate with poor quality of learners, poor infrastructure, poor public private partnership, and informal- formal skill gaps etc. as the main reasons to hinder the economic growth of the nation.

**Sanjeeb Hazarika (2016)** in this study titled “Skill Development for Rural Entrepreneurship: A Study of State Institute of Rural Development (SIRD), Assam” that SIRD played an important role in Assam to provide various skill development training facilities specially focusing on rural development. Various programmes like building of Resource centre, Development and management of growth centre, common facility centre and resource centre in Information Technology division, SATCOM training programmes were also undertaken and conducted on a regular basis by SIRD. The research report also highlighted the fact

that lack of awareness is the main reason of low outcomes.

**Conclusion:**

From the above reviews it has found that, Employability is a multifaceted concept that requires attention from various stakeholders. By addressing the challenges and implementing strategic measures, India can empower its workforce to successfully navigate the dynamic job market. Improving employability is critical not only for individuals' professional growth, but also for the overall economic development of the country. Employers and hiring managers agree that having employability skills is essential for getting a job in the corporate world. Communication, attitude, leadership, decision-making, and teamwork are among the talents required. The empirical model tested the hypothesis that there is a substantial relationship between students' employability abilities and business and human resource strategies, particularly in terms of recruitment and training processes.

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## A Study on New Approaches of Accounting Technology

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DOI - 10.5281/zenodo.15147339

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### Abstract:

*This research paper delves into the evolving landscape of accounting practices, aiming to explore and analyze the new approaches that have emerged in recent years. With advancements in technology, globalization, and changes in business environments, traditional accounting methods are being challenged, leading to the development of innovative approaches. This study investigates the impact of these new approaches on financial reporting, decision-making processes, and overall organizational performance.*

**Keywords:** *Emerged, paradigms, Likert scales, static nature, robotic etc*

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### Introduction:

The field of accounting has witnessed a paradigm shift in recent years, with traditional methods being reassessed in light of technological advancements and dynamic business environments. This paper aims to examine the novel approaches that have emerged in accounting practices and their implications for businesses. The study is driven by the need to understand how these innovations are reshaping financial reporting, decision-making processes, and organizational strategies.

### Literature Review:

The evolution of accounting practices has been shaped by a myriad of factors, including technological advancements, globalization, regulatory changes, and shifts in business paradigms. This literature review explores the historical context of accounting methods, discusses the challenges posed by traditional approaches, and identifies the driving forces behind the emergence of innovative accounting practices.

### 1. Historical Evolution of Accounting:

Accounting, as a discipline, has evolved over centuries in response to changing economic landscapes. Traditional accounting methods, rooted in historical cost accounting and double-entry bookkeeping, have been the backbone of financial reporting for centuries. However, as the business environment becomes increasingly complex and dynamic, the limitations of these traditional methods become apparent.

### 2. Challenges of Traditional Accounting:

Traditional accounting methods face several challenges in addressing the complexities of the modern business environment. The historical cost accounting model, for instance, is criticized for providing a backward-looking perspective that may not accurately reflect an entity's current value or future prospects. Moreover, the static nature of annual financial statements may hinder timely decision-making in today's fast-paced business world.

### 3. Technology and Accounting:

The integration of technology into accounting processes marks a significant turning point in the field. Blockchain technology, in particular, has gained

attention for its potential to revolutionize the way financial transactions are recorded and verified. The decentralized and transparent nature of blockchain has the potential to enhance the accuracy, security, and efficiency of financial reporting, mitigating the risk of fraud and errors.

#### **4. Data Analytics and Artificial Intelligence (AI):**

The advent of data analytics and AI has opened new horizons for accounting professionals. These technologies enable the processing and analysis of vast datasets, allowing for more sophisticated risk assessments, fraud detection, and predictive modelling. The use of machine learning algorithms in financial forecasting and decision-making has the potential to provide more accurate and timely insights.

#### **5. Integrated Reporting:**

Integrated reporting represents a departure from the siloed nature of traditional financial reporting. This approach emphasizes the interconnectedness of an organization's financial, environmental, social, and governance (ESG) performance. Integrated reporting frameworks, such as the International Integrated Reporting Council (IIRC) framework, aim to provide stakeholders with a comprehensive view of an entity's value creation process.

#### **6. Environmental, Social, and Governance (ESG) Accounting:**

The growing recognition of non-financial metrics in corporate performance has led to the rise of ESG accounting. Companies are increasingly incorporating ESG factors into their financial reporting, reflecting a broader understanding of organizational success that goes beyond purely financial considerations. ESG metrics are not only important for meeting stakeholder expectations but also for managing risks and ensuring long-term sustainability.

#### **Methodology:**

This section outlines the research design, data collection methods, and data

analysis procedures employed in the study on new approaches in accounting. A mixed-methods approach will be utilized to gain a comprehensive understanding of the impact and implications of innovative accounting practices.

#### **1. Research Design:**

The research design for this study is a mixed-methods approach, incorporating both quantitative and qualitative research methods. This design allows for a nuanced exploration of the various facets of new accounting approaches, combining statistical analysis with in-depth qualitative insights.

#### **Quantitative Research:**

**Sampling:** A representative sample of organizations across different industries will be selected for the quantitative phase of the study. The sample will include a mix of small, medium, and large enterprises to ensure diversity.

**Survey Instrument:** A structured questionnaire will be developed to gather quantitative data. The survey will be designed to capture information on the adoption of specific accounting approaches, perceived benefits, challenges, and the overall impact on financial reporting and decision-making.

#### **Qualitative Research:**

**Sampling:** For the qualitative phase, purposive sampling will be employed to select key informants, including accounting professionals, financial managers, and decision-makers within organizations that have adopted innovative accounting practices.

**Interviews:** In-depth semi-structured interviews will be conducted with the selected participants. The interviews will focus on obtaining detailed insights into the motivations behind adopting new accounting approaches, challenges faced, and perceived outcomes. Open-ended questions will allow for a rich exploration of individual experiences and perspectives.

## 2. Data Collection:

### *Quantitative Data Collection:*

The quantitative data will be collected through an online survey distributed to the selected sample of organizations. The survey link will be sent to participants via email, and data will be collected anonymously to encourage honest responses.

The survey will include closed-ended questions with options for rating scales, multiple-choice, and Likert scales. These questions will cover various aspects such as the use of blockchain, data analytics, integrated reporting, and ESG accounting.

### *Qualitative Data Collection:*

Qualitative data will be gathered through semi-structured interviews conducted either in person or through virtual platforms, depending on the preferences of the participants.

Interviews will be audio-recorded with the participants' consent, and detailed notes will be taken during and after each interview to ensure comprehensive data capture.

The qualitative data collection will focus on obtaining in-depth insights into the participants' experiences and perceptions related to the adoption of innovative accounting approaches.

## 3. Data Analysis:

### *Quantitative Data Analysis:*

Quantitative data will be analyzed using statistical software (e.g., SPSS). Descriptive statistics, such as frequencies, means, and percentages, will be computed to summarize survey responses.

Inferential statistical analyses, such as correlation and regression, may be employed to identify relationships between variables and assess the impact of new accounting approaches.

### *Qualitative Data Analysis:*

Qualitative data will undergo thematic analysis. Transcripts from the interviews will be coded and categorized to identify recurring themes and patterns.

A systematic approach will be used to ensure rigor and reliability in the analysis. Coding and theme development will be conducted independently by at least two researchers, and any discrepancies will be resolved through consensus.

## 4. Ethical Considerations:

The study will adhere to ethical guidelines, ensuring the confidentiality and anonymity of participants. Informed consent will be obtained from all participants, and they will be informed about the purpose of the study and their rights to withdraw at any time.

This comprehensive mixed-methods approach is designed to provide a holistic understanding of the current landscape of accounting practices, incorporating both quantitative trends and qualitative insights from practitioners. The combination of survey data and in-depth interviews will contribute to a robust analysis of the impact and challenges associated with the adoption of new approaches in accounting.

## New Approaches in Accounting:

### 1. Blockchain Technology in Accounting:

**Overview:** Blockchain technology has gained prominence for its potential to revolutionize accounting processes. It operates as a decentralized and transparent ledger that records transactions across a network of computers, ensuring security and integrity.

**Application:** In accounting, blockchain can streamline processes like auditing and financial reporting by providing a tamper-resistant and easily verifiable record of transactions. Smart contracts, self-executing contracts with the terms of the agreement written into code, can automate various financial processes, reducing the risk of errors and fraud.

### 2. Data Analytics and Artificial Intelligence (AI):

**Overview:** The integration of data analytics and AI has ushered in a new era of data-driven decision-making in accounting. These

technologies enable the analysis of vast datasets, offering insights that were previously challenging to attain using traditional methods.

**Application:** In accounting, data analytics and AI are applied to enhance financial forecasting, risk assessment, and fraud detection. Machine learning algorithms can analyze historical financial data to identify patterns and anomalies, contributing to more accurate predictions and proactive risk management.

### **3. Integrated Reporting:**

**Overview:** Integrated reporting represents a departure from traditional financial reporting models by emphasizing a holistic view of an organization's value creation process. It integrates financial, environmental, social, and governance (ESG) factors to provide a comprehensive understanding of the company's performance.

**Application:** Integrated reporting frameworks, such as the International Integrated Reporting Council (IIRC) framework, encourage companies to communicate how they create value over time. By incorporating non-financial metrics, organizations can present a more balanced and transparent picture of their overall impact on stakeholders and the environment.

### **4. Environmental, Social, and Governance (ESG) Accounting:**

**Overview:** ESG accounting focuses on the integration of environmental, social, and governance factors into financial reporting. It reflects a broader understanding of corporate performance that goes beyond financial metrics.

**Application:** Companies are increasingly disclosing ESG metrics to meet the growing demands of socially responsible investors and stakeholders. ESG accounting allows organizations to measure and communicate their sustainability efforts, ethical practices, and governance structures, influencing investment decisions and enhancing reputation.

### **5. Cloud-Based Accounting Systems:**

**Overview:** Cloud-based accounting systems have gained popularity for their accessibility, scalability, and collaborative features. These systems allow real-time access to financial data and facilitate seamless collaboration among stakeholders.

**Application:** Cloud-based accounting systems streamline financial processes, enabling remote access, automatic updates, and secure data storage. This approach enhances collaboration between accounting professionals, management, and other stakeholders, promoting efficiency and accuracy in financial management.

### **6. Robotic Process Automation (RPA) in Accounting:**

**Overview:** RPA involves the use of software robots to automate repetitive and rule-based tasks. In accounting, RPA is employed to automate routine processes, reducing the risk of errors and increasing operational efficiency.

**Application:** RPA can be applied in various accounting tasks, including data entry, invoice processing, and reconciliation. By automating these tasks, accounting professionals can allocate more time to strategic activities that require analytical thinking and decision-making.

These new approaches in accounting reflect the industry's response to the challenges and opportunities presented by an increasingly complex and digital business environment. While each approach offers unique advantages, their effective integration often depends on the specific needs and goals of individual organizations. As the accounting profession continues to evolve, staying abreast of these innovative approaches is crucial for professionals aiming to enhance efficiency, transparency, and value creation in financial management.

### **Implications and future directions:**

#### **1. Implications:**

**Enhanced Transparency:** Adoption of new accounting approaches improves



transparency in financial reporting, benefiting stakeholders by providing a more accurate and comprehensive view of an organization's performance.

**Informed Decision-Making:** Integration of advanced technologies allows for real-time insights, empowering decision-makers with timely and data-driven information to respond effectively to market dynamics.

**Shift in Stakeholder Expectations:** Emphasis on ESG factors and integrated reporting meets evolving stakeholder expectations, attracting socially responsible investors and enhancing corporate reputation.

**Operational Efficiency and Risk Management:** Technologies such as cloud-based accounting systems, robotic process automation, and advanced analytics enhance operational efficiency and improve risk management capabilities.

**Strategic Focus on Sustainability:** Integration of ESG factors reflects a strategic shift towards sustainable business practices, aligning organizations with long-term goals and meeting the expectations of conscious consumers and investors.

## 2. Future Directions:

**Advanced Technology Integration:** Continued integration of technologies like AI, machine learning, and blockchain will drive further automation, efficiency, and the ability to derive actionable insights from data.

**Standardization of ESG Reporting:** Future developments may see a push towards standardizing ESG reporting frameworks, enhancing comparability among organizations and providing stakeholders with consistent information.

**Blockchain in Auditing:** Block chain technology is likely to revolutionize auditing processes, providing a secure and transparent trail of transactions to reduce fraud and enhance the credibility of financial statements.

**Human-Centric Skills:** As routine tasks become automated, there will be a greater

emphasis on developing human-centric skills such as critical thinking and effective communication in the accounting profession.

**Regulatory Adaptation:** Regulatory bodies will adapt to changing landscapes by incorporating new guidelines and standards to support and regulate innovative accounting practices.

**Cybersecurity Measures:** Increased reliance on technology will necessitate robust cybersecurity measures to protect sensitive financial information and mitigate risks associated with data breaches.

In summary, the implications and future directions in accounting underscore a transformative landscape shaped by technology integration, sustainability considerations, and regulatory adaptations, with a focus on transparency, efficiency, and strategic decision-making.

## Conclusion:

The dynamic landscape of accounting is undergoing a significant transformation with the adoption of innovative approaches. Enhanced transparency, empowered decision-making, and a strategic focus on sustainability mark the current implications. Looking ahead, advanced technology integration, standardization of reporting frameworks, and regulatory adaptations will shape the future. The accounting profession's evolution emphasizes the importance of human-centric skills and robust cyber security measures to navigate the changing landscape effectively. In this era of technological advancements and shifting stakeholder expectations, adaptability and strategic thinking remain pivotal for success in the evolving world of accounting.

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**The Impact of E-Commerce on Customers with Special Reference in Wai  
Dist. Satara**

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**DOI - 10.5281/zenodo.15147348**

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**Abstract:**

*E-Commerce plays a crucial role in online transactions over the internet, E-commerce refers to buying and selling of goods and services online through various platform such as Amazon, Flipkart, E-Bay, Meshoo App, it has Artificial Intelligence driven platform today, e-commerce is very important to enhance global shopping trends, making convenience a priority. E-Commerce involves Online stores or platforms, Product listings, Payment system, Shopping carts and checkouts Logistics and delivery. E-Commerce has been already proved that without online transactions all the financial transactions are not performing very well because customers have no time to buying goods and services from manufacturer through visit the stores in market. It is very ease to access the online transaction on one click on 24\*7. The researcher was used survey method for this specific research on customers impact of E-Commerce. The survey was made by using a questionnaire circulated among the customers of the age group between 18-50 through google form. generally, Focus on All the youngsters whose are using online platforms for buying various products and services. Because majority persons are using mobile phones and most of them are using online platform for buying diversified products over the internet. After conducting the research majority youngsters are aware and using E-Commerce websites, apps and they are buying goods and services through online. E-Commerce has major scope in present as well as future also, customers are known about most of the online platform but new manufacturers are unaware about e-commerce. Existing manufacture knew all those things. E-Commerce creates various employment opportunities through online platforms. E-Commerce has active contribution in sales maximization so that's why it has shaping the future career of youngsters.*

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**Keywords : E-Commerce, Amazon, Flipkart, Merchant Websites**

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**Introduction:**

E-Commerce plays a crucial role in online transactions over the internet, E-commerce refers to buying and selling of goods and services online through various platform such as Amazon, Flipkart, E-Bay, Meshoo App, it has Artificial Intelligence driven platform today, e-commerce is very important to enhance global shopping trends, making convenience a priority. E-Commerce involves Online stores or platforms, Product listings, Payment system, Shopping carts and checkouts Logistics and delivery. E-Commerce has been already proved that without online transactions all the financial

transactions are not performing very well because customers have no time to buying goods and services from manufacturer through visit the stores in market. It is very ease to access the online transaction on one click on 24\*7. The researcher was used survey method for this specific research on customers impact of E-Commerce. The survey was made by using a questionnaire circulated among the customers of the age group between 18-50 through google form. generally, Focus on All the youngsters whose are using online platforms for buying various products and services. Because majority persons are using mobile phones

and most of them are using online platform for buying diversified products over the internet. After conducting the research majority youngsters are aware and using E-Commerce websites, apps and they are buying goods and services through online. E-Commerce has major scope in present as well as future also, customers are known about most of the online platform but new manufacturers are unaware about e-commerce. Existing manufacture knew all those things. E-Commerce creates various employment opportunities through online platforms. E-Commerce has active contribution in sales maximization so that's why it has shaping the future career of youngsters.

#### **Objectives of the Study:**

1. To analyze the impact on quality of E-Commerce services after the purchase on demand of customers
2. How E-Commerce affect on customer satisfaction and customized personalized experience.

#### **Hypotheses of the Study:**

H0: There is no impact on quality of E-Commerce Services after the purchase on demand of customers.

H1: There is an impact on quality of E-Commerce services after the purchase on demand of customers.

H0: There is no impact of E-Commerce on customer satisfaction and customized personalized experience.

H2: There is an impact of E-Commerce on customers satisfaction and customized personalized experience.

#### **Changing Scenerios Of E-Commerce In India:**

The Digital literacy in India has led to increasing flow of investment in e-commerce. After COVID-19 most of the customers shift from store shopping to online shopping. Through this COVID-19

pandemic most of the customers has not fulfilling any types of basic needs because the stores and shops were closed due to this reason customers can not received any type of services except basic needs. Basic needs fulfilling by the local authorities in village and also municipal corporations as per their convenience towards quarantine patients due to COVID-19 Pandemic, they can't go to everywhere, so that's the reason for increasing online shopping awareness in customers. Indian E-Commerce market increased by 21.5 % reaching US\$ 74.8 billion market in 2022. According to standard report in 2021 due to post covid-19 effect in India, it helps in increasing sales growth in E-Commerce sector in India.

#### **Major Players In E-Commerce Sector In India**

**1) Amazon:** In India, online shopping has been increasing day by day it involves the major players of online shopping platform is Amazon. Amazon was founded on 5<sup>th</sup> July, 1994 by Jeff Bezos. Amazon is an American multinational company and is headquartered is located in US. This company focuses on E-Commerce advertising and digital streaming as well.

**2) Flipkart:** Flipkart was founded by Sachin Bansal and Binny Bansal in October, 2007. It is one of the leading E-Commerce Marketplaces and is located in Bengaluru. The company initially started as an online bookstore.

#### **Key Elements Of E-Commerce:**

**Online Stores or Platforms:** Websites or apps where consumers can browse products, read reviews, and make purchases. Examples include Amazon, eBay, and Shopify-based stores.

**Product Listings:** These are the details of the goods or services being sold, often including descriptions, images, specifications, and pricing.

**Payment Systems:** Secure online payment gateways like PayPal, Stripe, or direct credit card payments that facilitate the financial transaction between buyer and seller.

**Shopping Cart and Checkout:** The process by which a customer selects products, reviews their order, and proceeds to payment and finalization of the transaction.

**Logistics and Delivery:** E-commerce also involves the logistics of shipping products to customers, which may include warehousing, inventory management, and partnerships with courier companies.

**Customer Service:** Post-purchase support, including returns, exchanges, refunds, and customer inquiries, typically managed through online chat, email, or phone support.

#### **Benefits/ Merits of E-Commerce**

1. Better inventory management
2. Reduced overhead costs
3. Efficient logistics tracking
4. Scalability
5. Seamless customer management
6. Access to a wider range of audience
7. Comprehensive analysis and accurate reports
8. No geographical boundaries
9. Quick response to customer and market demands
10. Round-the-clock availability

#### **Literature Review:**

1. Sunil Kumar Khatri (2022) in his research “A study on e-commerce industry in India: growth in pandemic phase and future challenges” depicted that use of information technology and computers by consumers has also transformed the way of doing business. Continuous increase in internet users is also an important factor for growth of e-commerce with increase in internet connection and smartphones penetration created huge scope in rural areas also. The covid-19 pandemic created uncertainty but on the other hand, it accelerated digital discovery with the expansion of e-commerce. The lockdown circumstances

drove customers to explore online access to huge variety of products and services from the convenience of their homes. This revealed key factors which supported e-commerce development in the pandemic phase and the future challenges for e-commerce.<sup>34</sup>

2. Rithika Sirvi and Gundla Ranga Ramu (2021) in their research paper “The role of e-commerce on customer engagement in 2021” stated that customer buying patterns got a completely new outlook with the changing times and selling distribution has a new dimension. E-commerce platforms became a vital and innovative marketing strategies. This study gives a detailed understanding of e-commerce trends in the current decade. E-commerce platforms are a crucial part of customer life because they meet the expectations of targeted customers by offering unique value of services. It focuses on how e-commerce sites are working on customer engagement.<sup>35</sup>

3. Anam Bhatti and Mohammad Akram Khan (2020) in their research titled “E-commerce trends during COVID-19 pandemic” stated that during the pandemic, e-commerce emerged as a leading source of alternative shopping for consumers who used to purchase from traditional superstores. This study suggested that it is important to balance the costs and benefits as well as related activities in the near future.<sup>36</sup>

4. Raj Kumar and Mohammad Khan (2020) in their research work “Adoption of IT tools in the MSME sector in India” stated that adoption of technology in India is faster because consumer needs are dynamic in nature. Researchers concluded that there is a huge scope of growth for e-commerce industry in the covid-19 pandemic and companies have adapted to this situation.<sup>37</sup>

5. Anurag Verma and Simran Kaur (2018) in their study “Systematic literature review on digital marketing in India: present scenario” stated that companies can benefit from a

variety of modern marketing channels and the rise in social media use is creating new opportunities for modern marketers to draw customers via digital platforms. According to the study there has been a significant trend toward digitalization in India. This research also emphasized on the broad range of consumers that view purchasing services through social networking sites due to their accessibility. It is economical and has a large commercial impact.<sup>38</sup>

6. Parekh Kannan (2017) in his study “Modern marketing: A framework, review and research agenda” depicted the research plan for digital marketing. They made an effort to define digital marketing. Additionally, they developed and projected a supporting framework that highlights crucial phases of the marketing process as well as the development of marketing strategies both of which are heavily reliant on digital technologies. It was concluded through this research that digital marketing needs to be examined so that future researchers can study the challenges with suitable data from field studies.<sup>39</sup>

7. Arushi Mathur (2016) worked on “Usefulness of digital marketing to the government of India”. The Indian government launched programs like Digital India, a novel method of educating and connecting people. This study also revealed that the world is now more focused on the increasing trend of digitalization. Even though the Indian scenario for digitalization is far-fetched, public approval of the idea is a good indicator of India and future digital empowerment.

#### **Research Methodology:**

This study is based on collected through secondary data as well as Primary data, in this research, researcher collected the primary data through questionnaire, researcher has been used observation and survey method and secondary data through textbooks, journal, websites for collecting

the data through customer of 18 to 50 age group, but actually most of the data has collected from youngsters, the researcher has collected the data through 106 customers in Wai city. Researcher collects the information of pre and post purchase behaviour and how e-commerce impact on customers satisfaction.

#### **Background Of The Study:**

E-Commerce sector has been very important to provide good quality products and services as per customers need and it's convenience. Through this E-Commerce customer get personalized experience and customer has been satisfied through received good quality products, its durability, affordable and convenient price of that product, customers personalized experience. This study is based on how customers get satisfied thorough E-Commerce and what will be the role of E-Commerce in customer satisfaction. E-Commerce is very helpful to all the customers for taking major Product decisions through their price, design, durability etc. E-Commerce is very helpful for shaping the future of the business as per business point of view.

#### **History Of E-Commerce:**

E-Commerce is founded in 1999 by K. Vaitheeswaran. He co-founded India's first e-commerce company. K. Vaitheeswaran is known as the “Father of E-Commerce in india” He also co-founded the Fabmall supermarket chain. E-Commerce or Electronic Commerce is the buying and selling of goods and services online. It is one of the way for businesses and individual to conduct transactions without using paper. Business can use websites, Mobile apps, or online marketplaces to sell their products and services. Customers can browse website and buying products and services online. Payment processors and payment gateways allow customers to pay online. There are

various types of E-Commerce stated given below.

**1. Business to Business (B2B):** A business sells its products or services to another business. The buyer may resell the products to consumers. B2B transactions often have larger order values and more repeat purchases Consumers to consumers (C2C)

**2. Consumer to Consumer (C2C):** A consumer sells goods or services to another consumer C2C allows people to sell their personal goods and assets directly to others eg. OLX and Quikr

**3. Business to Consumer (B2C):** A business sells its products or services directly to consumers examples includes Flipkart, Amazon, Jabong.

**4. Consumer to Business (C2B):** A consumer sells goods or services to a business for eg., an IT freelancer who sells their software to a company.

#### Other Types of E-Commerce:

**1. Mobile Commerce:** Transactions made using a mobile device, such as a smartphone or tablet.

**2. Social Commerce:** Transactions made using social media platforms, such as instagram, Facebook, and Pinterest.

**3. Dropshipping :** A delivery model where a retailer sends an order to a wholesaler who then ships the items to the customer.

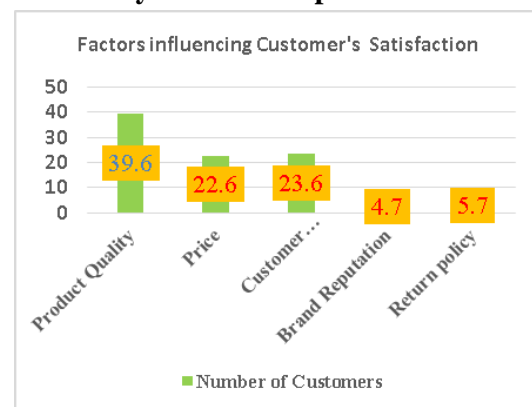
**4. Affiliate Sales:** Selling other brands products in exchange for a commission

#### Data Collection:

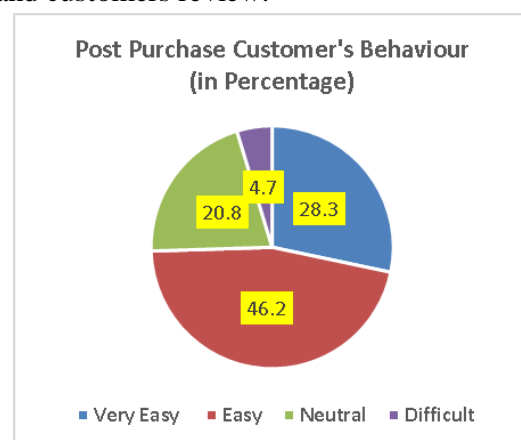
Researcher collects the primary data and secondary data. Primary data has collected through questionnaire, observation, survey and interview method, this data has not published anywhere as per this research, researcher collect the data through questionnaire of 106 respondents. Most of the customers are in between 18 to 40 age group, and data has collected the customers whose are living in Wai and nearby Wai city. The Geographical area is limited which

comes in tehsil Wai. Some of the data has been collected through secondary data such as textbooks, references, magazine, Journal, etc., most of the data has collected through questionnaire to analyze the impact of E-Commerce on customers or youth along with to study the post purchase behavior of customers. How E-Commerce impact on buying and selling of goods and services and how they help to secure payment transactions with personalized experience.

#### Data Analysis and Interpretation:



In this graph, shows that on behalf of response from customers Product quality and customers review are major factors influencing customers satisfaction. Price is one of the most important factors influencing customers satisfactions also. This figures states that 106 customers survey out of which above 40 customers they buy products after showing the product quality and customers review.



In this graph, shows that on behalf of response from customers Product quality

and customers review are major factors influencing customers satisfaction. Price is one of the most important factors influencing customers satisfactions also. This figures states that 106 customers survey out of which above 45 customers post purchase behavior has more satisfactorily impact on customer satisfaction through customer feedback we know the customers has likes shopping online products at their convenience.

In this research, researcher has collected data through questionnaires with the help of Google form and data has already analyzed and interpret through google form. It will helpful to the using percentage method formula and figures are shown what was the impact of e-commerce on customers with the help of bar diagram and pie-charts. Today's Customers will likely live in a present world. Customers has need good quality products and services as per customers convenience because this customers are working as an employee, Businessman, students and any other human beings. Every people has different expectations, desires needs, likes and dislikes. In this research we measure the impact of E-Commerce on Customers. Such as which kind of customers purchase product through electronic way, we analyse Mobile Phones, Age-group, social and economic status impact on customers purchasing power. This study is based on primary data which is collected through questionnaires from 100 number of customers who has done buying various goods and servies through Amazon, Flipkart, Meshoo App, via E-Commerce. This study is based on research conducted between 15<sup>th</sup> September, 2024 to 15<sup>th</sup> November, 2024 that included a questionnaire conducted survey (18 yrs to 50 yrs) from Wai city. To share their experiences thoughts and opinion about buying products is it easy to access or transactions available on one click. It is available 24\*7 or not, whats are the benefits

received from online buying transactions. In order to compare two groups: the quality of e-commerce services before purchase and the quality of e-commerce services after the purchase.

#### **Findings of the Study:**

1. More than 50 % customers satisfied with product variety offered on websites and apps. Product quality and price are the major factors influencing purchase decision online.
2. Digital wallet, Cash on delivery and Debit card play crucial role to pay for online purchase. Customers are satisfied for using E-Commerce services such as websites, apps, for better buying experience.
3. Websites and apps recommended by customers for their online buying and sales E-Commerce helps us to enhance customer engagement.
4. E-Commerce tools develops new skills in customers for buying decisions
5. Majority person has own mobile phones and electronic gadgets, it helps all the customers to increase buying activities at anytime, anywhere and at any place.
6. E-Commerce increases dependability of customers on web technology.
7. In E-Commerce, analyzing customer's behaviours, preferences, and challenges in the context of online shopping.

#### **Conclusions:**

E-Commerce has a profound impact on customers, providing exciting opportunities while presenting unique challenges, customers can benefit from enhanced learning experiences, explore new career pathways and active contributions in shaping the future. E-Commerce impact on social media and prepare for the changing job market dynamics, opportunities and challenges thoughtfully, customers can maximize the benefits of e-commerce and build a successful future in the digital age, psychologists and AI expert to work together

to ensure that these technologies are developed and used responsibly while maximizing their potential to improve human lives the world is counting on you for the next innovation e-commerce. I had profound impact on customers who benefited from learning experiences. E-Commerce growth potential for further growth lies in addressing trust issues and accessibility barriers. Business should focus on secure digital payment systems, transparent policies, and improved customer service to build trust. E-Commerce provides opportunities for innovation enhancing delivery logistics and personalizing customer experiences.

#### Suggestions:

E-Commerce has a need of effective implementation of E-Commerce strategies to increasing most of customers should do secure payment with good quality products providing customers as per its convenience. Most of the customers should know the awareness of E-Commerce buying and selling but some of the Customers should fear about online transactions due to technical fraud customers should not ensure is the digital payment is secure or not. There is a necessity to create awareness of online shopping experience everyone but those things are applicable whenever all the transactions should done through digitally then the fear in minds of customers should reduced and all the customers should use online platforms for buying and selling various things anytime, anywhere, at any place in a one fingertips. In stores or another platform except online there is no received customized personal experience. In online shopping it will be definitely get more benefits through E-Commerce. Social media platforms show very important role in buying online goods and services. Most of the transactions will be done through online so create awareness of E-commerce in senior citizens is very important because they can

not purchase any kind of products online. Websites and apps are more useful for online purchasing but it will be needed to get security for customers and increasing trustworthiness and safely transactions will be done in future.

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## Human Behaviour about Sustainable Development of Urban Development with refence to Satara city

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**DOI - 10.5281/zenodo.15147368**

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### **Abstract:**

*The term Human Behaviour of sustainable urban development refers to the study of how people's thoughts, emotions, and behaviours influence their decisions regarding sustainable practices within urban environments, including factors like environmental awareness, social norms, personal values, and the perception of their ability to make a difference, all impacting their willingness to participate in sustainable urban development initiatives. The human Behaviour of sustainability and sustainable development of Satara City is seen as a primary prevention perspective that can foster well-being in organizations at all the different levels going from the worker, to the group, to the organization, and also to inter-organizational processes. The possibilities for further research and interventio465ns are also discussed. Sustainable urban development is a popular theme as it offers safety and welfare to the inhabitants. However, achieving sustainable urban development is not smooth and linked with various economic, social and environmental challenges. This research paper aims to highlight and discuss these obstacles in light of prime sustainability of urban development with selecting 50 respondents to understands the Human Bahaviour of sustainable urban development of Satara City.*

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**Keyword:** *Human Behaviour, Sustainable Development, Urban Development, Urban Awareness.*

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### **Introduction:**

Sustainable development is a way of growing and developing a society that meets the needs of the present without harming the ability of future generations to meet their needs. It aims to balance the needs of society with the environmental, social, and economic limitations we face. Because at every corner of globe, these subjects are playing vital role in running Socio-Economic activities. Sustainable Development concept is not new, it has been followed by many cultures over the course of history with an aim of maintaining a balance between man and nature as well as economy. For sustainable development, factors such as preserving and protecting the environment and natural resources along with maintaining social and economic equality need to be followed. In this paper, Researcher understands the Human

Bahaviour of sustainable urban development of Satara City.

### **Key aspects of sustainable Development:**

#### **Individual level aspects:**

Attitudes and beliefs about the environment: Grasping how individuals view environmental problems and their own accountability regarding sustainability. Motivation and behavior modification: Recognizing what drives people to embrace sustainable practices such as recycling, utilizing public transportation, or minimizing energy use. Examining the mental processes engaged in selecting sustainable choices, encompassing elements such as perceived advantages and disadvantages.

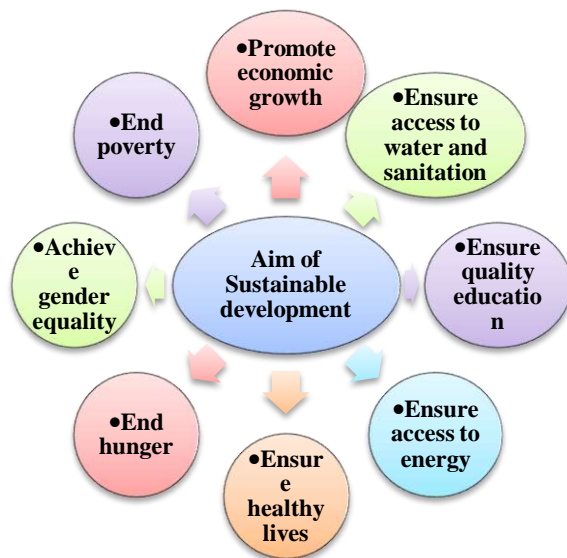
#### **Social level aspects:**

Social norms and influence: Investigating how social norms and peer

pressure affect sustainable actions, and how to use these dynamics to foster positive change. Community involvement: Investigating approaches to enhance community engagement in urban development and sustainability projects. Comprehending the faith in a group's capacity to collectively tackle environmental issues.

#### Urban design and planning aspects:

Place attachment: Exploring how individuals' emotional ties to their community affect their motivation to safeguard the environment. Assessed accessibility and ease: Examining how design features such as availability of green areas, public transit, and pedestrian-friendly streets influence sustainable decisions.



#### Statement of Problem:

Urban specialists also emphasize the way in which commercial, public, and residential areas are structured around cultural and economic hubs. The word urban is frequently employed to distinguish developed, non-farming regions from rural, farming, or underdeveloped areas. It may refer to areas that are incorporated into the worldwide framework of economic production and distribution. All these definitions are significant for Human Behaviour, although not all have been thoroughly examined in research and

theoretical frameworks. Satara City is situated around the hilly area. Researcher is having keen interest about how the people behave about sustainable development of Satara City.

#### Objectives of the Study:

1. To Study the concepts of sustainable development.
2. To study the aspects of sustainable development.
3. To gives the suitable suggestions to urban society of Satara.

#### Research Methodology:

**Primary Data:** The primary data required for the study was collected from the people who are residents of Satara from last 10 years. With the help of questionnaire for study purpose.

**Secondary Data:** Secondary data was collected from newspaper, books, journals, magazines etc.

**Sample Design:** The researcher adopted convenient sampling method for the selection of residents of Satara.

**Sample Size:** Researcher selected 50 respondents' sample data for this study. The criteria for selection of the sample where the respondents are staying this Satara City last ten years.

#### Limitations of the Study:

Limitations of urban sustainable development is environmental, social, and economic factors, challenges in implementing large-scale changes due to limited resources, lack of political will, inadequate public awareness, issues with urban sprawl, social inequities, and the difficulty of addressing historical environmental damage; essentially, achieving a truly sustainable Satara city often faces obstacles related to policy, governance, financing, community engagement, and technological limitations, making it hard to balance all aspects of

sustainability across a diverse population of Satara.

#### Data Analysis:

**Table No1**

##### Age-wise Classification of Respondents

Age	Number of Respondents	Percentage of respondents
25- 35	21	42%
36-45	12	24%
46-55	10	20%
Above	7	14%
<b>Total</b>	<b>50</b>	<b>100</b>

(Source: Compiled by Researchers)

Table No.1 revealed that the younger is more engaged in sustainable development. Because of advancement and benefits of sustainable development. It is observed that the age of 46 to 55 and above 55 are less aware about sustainable development of Satara City.

**Table No. 2**

##### Gender Based Classification of Respondents

Gender	Number of Respondents	Percentage of respondents
Male	34	68%
Female	16	32%
<b>Total</b>	<b>50</b>	<b>100</b>

(Source: Compiled by Researchers)

Above table No.2 shows that the majority of the accountants are (68%) or respondents are male. Female respondents are not aware about sustainable development of Satara City.

**Table No. 3**

##### Classification of Respondents

Occupation	Number of Respondents	Percentage of respondents
Banking	9	18%
Hotel	11	22%
Retail Shop	13	26%
Education	7	14%
Common People	10	20%
<b>Total</b>	<b>50</b>	<b>100%</b>

(Source: Compiled by researchers)

Table No 3 indicate that among all the retailers are aware about sustainable development of Satara City numbers (26%) because of the want fresh air and development. Hoteliers also aware about sustainable development of Satara City and they are happy to sustainable development of Satara City. After the large number hotel users the education sectors also aware about sustainable development of Satara City.

#### Findings:

1. Younger is more engaged in sustainable development.
2. It is observed that the age of 46 to 55 and above 55 are less aware about sustainable development of Satara City.
3. Female respondents are not aware about sustainable development of Satara City.
4. All the retailers are aware about sustainable development of Satara City numbers because of the want fresh air and development.
5. Hoteliers also aware about sustainable development of Satara City and they are happy to sustainable development of Satara City.

#### Suggestions:

1. Satara Zilha parishad try to make awareness about sustainable development among the society.

2. Females' members are trying to know the concept and aspects of sustainable development.
3. Bankers are also knowing the sustainable development aspects.
4. Age group of 46 to 55 and above 56 people are gate informed about sustainable development.

### Conclusion:

Younger individuals are more involved in sustainable development. It has been noticed that individuals aged 46 to 55 and those over 55 are less informed about the sustainable development of Satara City. Female participants are unfamiliar with the sustainable development of Satara City. All retailers recognize the sustainable development figures of Satara City due to the demand for fresh air and growth. Hoteliers are also informed about the sustainable development of Satara City and they are pleased with its progress. Satara Zilha Parishad aims to raise awareness about sustainable development within the community. Female members are aiming to understand the concept and facets of sustainable development. Bankers are also understanding the aspects of sustainable development. Individuals aged 46 to 55 and those over 56 are being educated about sustainable development.

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## Significance of AI on E-Commerce Advertisement

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**DOI - 10.5281/zenodo.15147380**

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### **Abstract:**

*The discipline of computer science known as artificial intelligence (AI) is concerned with building machines or systems that are capable of carrying out operations that ordinarily call for human intelligence. This study aims to assess and comprehend the impact and function of artificial intelligence on advertising inside the e-commerce industry. The social media platform used to create the ads is the primary focus of the study. The survey also determines whether consumers are aware of the pattern of advertisements that the e-commerce platform uses to influence consumer behavior.*

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### **Introduction:**

Developing machines or systems that are capable of carrying out tasks that ordinarily call for human intelligence is the focus of the computer science field known as artificial intelligence (AI). Understanding natural language, identifying patterns, drawing lessons from past experiences, and making decisions are some examples of these tasks.

The two basic categories of artificial intelligence are narrow AI and general AI. Often referred to as weak AI, narrow AI is made to carry out particular tasks inside a constrained domain. Facial recognition software, recommendation engines used by streaming services or e-commerce platforms, and virtual assistants like Siri or Alexa are a few examples of narrow artificial intelligence.

Conversely, general artificial intelligence (AI), commonly referred to as strong AI or artificial general intelligence (AGI), describes AI systems that possess cognitive capacities comparable to those of humans and are capable of carrying out any intellectual job that a human can. The field of general artificial intelligence is still

primarily theoretical and the focus of continuous study and discussion.

Among the AI methods frequently employed in AI systems include robotics, computer vision, natural language processing (NLP), machine learning, and deep learning. These techniques enable AI systems to analyze large datasets, recognize patterns, make predictions, and interact with humans in natural language.

The first person to carry out significant research in the area he named machine intelligence was Alan Turing. In 1956, artificial intelligence was established as a field of study. AI winter was a period of disappointment and funding loss that followed several rounds of optimism in the industry. After deep learning outperformed all prior AI algorithms in 2012 and the transformer architecture in 2017, funding and interest significantly surged. With businesses, academic institutions, and research facilities primarily located in the United States leading the way in major advancements in artificial intelligence, this resulted in the AI boom of the early 2020s.

Job markets, healthcare, government, industry, and education are all

being impacted by the 21st century's expanding use of artificial intelligence, which is driving a societal and economic shift toward greater automation, data-driven decision-making, and the integration of AI systems into many facets of life and the economy. This sparks debates concerning legislative measures to guarantee the security and advantages of the technology by bringing up issues regarding the hazards, ethical ramifications, and long-term repercussions of AI.

The numerous subfields of AI study are focused on specific objectives and tool usage. Reasoning, knowledge representation, planning, learning, natural language processing, perception, and robotics support are among the conventional objectives of AI study. One of the long-term objectives of the area is general intelligence, or the capacity to execute any task that a person can perform on an at least equivalent level.

In order to accomplish these objectives, researchers in artificial intelligence have modified and combined a variety of approaches, such as formal logic, artificial neural networks, search and mathematical optimization, and approaches rooted in statistics, operations research, and economics. AI also incorporates ideas from neuroscience, psychology, linguistics, philosophy, and other disciplines.

Since many of these algorithms suffer from a "combinatorial explosion"—becoming exponentially slower as the problems get bigger—they are inadequate for handling complex reasoning problems. The methodical deduction that early AI research could simulate is rarely used, even by humans. They make quick, instinctive decisions to solve the majority of their issues. The problem of efficient and accurate reasoning remains unresolved.

AI systems can intelligently respond to queries and draw conclusions about information from the real world thanks to knowledge representation and knowledge

engineering. Content-based indexing and retrieval, scene interpretation, clinical decision support, knowledge discovery (extrapolating "interesting" and useful conclusions from massive databases), and other fields all make use of formal knowledge representations.

A body of information presented in a way that a software can use is called a knowledge base. The collection of items, relationships, ideas, and characteristics that are utilized by a specific field of study is known as an ontology. Objects, attributes, classifications, and relationships among objects; circumstances, occurrences, states, and time; causes and consequences; knowledge about knowledge (what we know about what other people know); default reasoning (things that people assume are true until they are told differently and will remain true even when other facts are changing); and numerous other facets and domains of knowledge must all be represented in knowledge bases.

#### **AI's benefits for Advertising:**

**Customized Advertising:** AI is capable of analyzing enormous volumes of data to comprehend the preferences and behavior of consumers. This makes it possible for advertisers to more accurately target their adverts, which raises the possibility that they will be seen by potential clients.

**Individualization:** AI systems are able to tailor advertisements according to user information, including demographics, browsing history, and previous interactions. Higher conversion rates are often the result of more engaging and relevant personalized advertisements.

**Improved Strategies:** By evaluating performance indicators in real-time, AI can continuously improve advertising campaigns. As a result, advertisers are able to better spend their money and increase the campaigns' return on investment (ROI).

**Automatic Material Development:** Ad creatives, copy, and even video content may be produced by AI-powered systems, saving advertisers time and money. These tools can create high-quality content for a variety of audience segments at a large scale.

**Predictive analytics:** Using market research and historical data, AI can predict future trends and customer behavior. This information can be used by advertisers to predict shifts in the market and modify their approaches appropriately.

#### **AI's drawbacks for Advertising:**

**Privacy issues:** Since AI-driven advertising frequently depends on gathering and evaluating user data, consumers may have privacy issues. Overzealous data collecting and targeting can cause negative reactions and harm a brand's reputation.

**Prejudice and Bias:** AI systems have the potential to unintentionally support prejudice and bias, particularly in targeted advertising. Unfair targeting or exclusion of particular demographic groups by biased algorithms may give rise to moral and legal dilemmas.

**Over-reliance on Technology:** Advertising that relies too much on AI may lose its ability to use human creativity and intuition. Even though AI can streamline procedures and increase productivity, it's crucial to strike a balance and include human judgment in advertising tactics.

**Computational Complexity:** It might be difficult to comprehend how judgments are made when using AI algorithms in advertising because they can be intricate and opaque. Both consumers and advertisers may grow suspicious of this lack of openness.

**Ad Forgery:** AI-driven advertising platforms are vulnerable to fraud and manipulation, including bot traffic and click fraud. To protect the integrity of their campaigns, advertisers must put strong safeguards in place to identify and stop ad fraud.

#### **Methodology:**

In order to understand consumers' intentions to shop online by seeing deepfake videos, a conceptual model was created. To test the conceptual model, 1,180 clients participated in a quantitative survey using a structured questionnaire. Partial least squares structural equation modeling was used to analyze the data.

After viewing AI-based deepfake films, the research's findings reveal the factors that influence consumers' intentions to shop online. These antecedents include perceived trust, personalization, information manipulation strategies, and MR. Customers' inclination to shop online is negatively impacted by perceived dishonesty, while cognitive load has no effect. It also clarifies the managers' manipulation strategies for creating AI-powered deepfake films.

**Practical implications:** Senior executives and managers in the retail and e-commerce sectors can better grasp the impact of AI-based deepfake films by using the unique model that emerged. Designers, marketing managers, and developers can benefit from knowing the antecedents of online shopping intention caused by deepfakes.

**Originality/value:** After watching AI-based deepfake films, using empirically proven approach, this work is a pioneer in investigating the impact of AI-based deepfakes on consumers' intentions to shop online.

#### **Research Problem:**

The purpose of this study is to investigate how consumer interaction with AI tools, including chatbots, recommendation engines, and customized advertising algorithms, affects the efficacy of marketing initiatives in the e-commerce industry. This study aims to give firms insights to optimize their marketing strategies in the digital marketplace by comprehending the interplay between AI-

driven client interactions and advertising outcomes.

**Research Objectives:**

1. To learn more about the impact of artificial intelligence in e-commerce advertising
2. To understand how consumers view e-commerce advertisements.
3. To find out how well-informed consumers are about AI's role in social media advertising

**Research Methodology:**

Analyzing artificial intelligence in e-commerce is the study's goal. Both primary and secondary data are used. This study used a questionnaire as its research tool. It was created with the study's impact in mind. Data is calculated using the basic percentage method. Convenience sampling is the method used to choose the study's sampling unit. Convenient research is the research design that was employed for the investigation. There are 25 responders in the study's sample.

**Primary Data:**

Primary data are those that are gathered from scratch and for the first time; as a result, they are unique in character inquiries and interviews. Primary data was gathered via questionnaires.

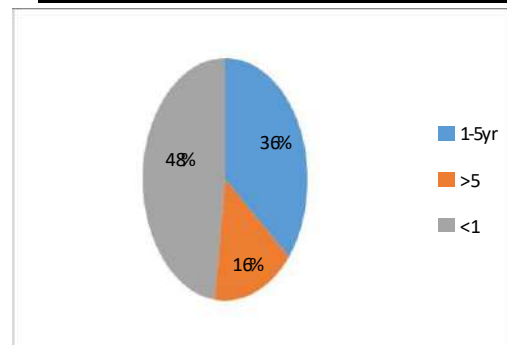
**Secondary Data:**

It is collected from the internal record of college such as library records trade journals various training programs previously conducted and its responds etc... It is also conducted from the officials of the pursued department in the factory. Secondary data provides a better view of problem study many magazines tools and other references were also mean important in this study

**Data Analysis and Interpretation:**

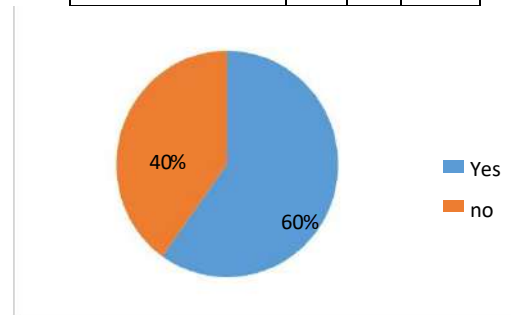
How long have you been an e-commerce user?

Years	1-5	>5	<1	Total
No. of response	9	4	12	25



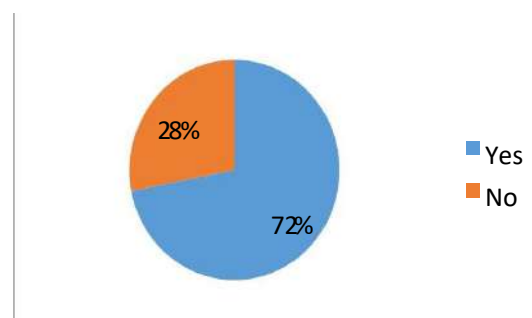
Do you regularly shop online?

	Yes	No	Total
No. of response	15	10	25



Have you ever bought something after seeing an advertisement on social media?

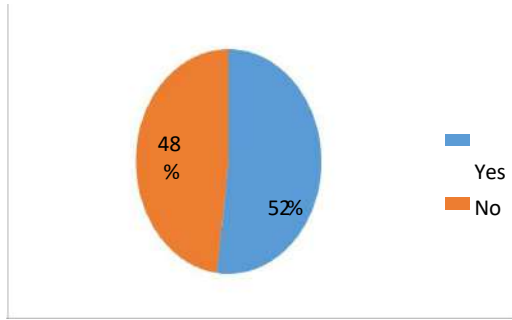
	Yes	No	Total
No. of response	18	7	25



Do you know what artificial intelligence technologies are?

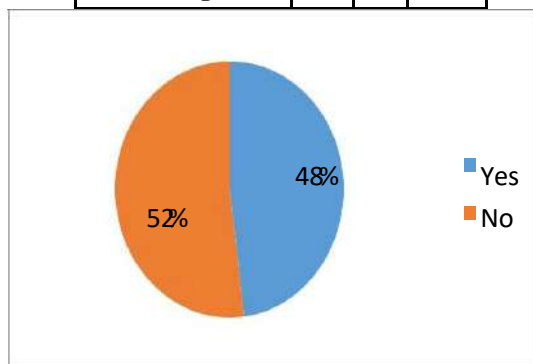
	Yes	No	Total
No. of response	13	12	25





Are you aware of the drawbacks of artificial intelligence?

	Yes	No	Total
<b>No. of response</b>	12	13	25



Do you also think that marketing have a big impact on raising customer satisfaction?

	Yes	No	Total
<b>No. of response</b>	20	4	25

**Findings:**

The following conclusions and findings may shed light on how artificial intelligence is affecting e-commerce in ads. According to the analysis, 36% of the respondents have been using e-commerce for one to five years, 16% have been using it for more than five years, and 48% have been using it for less than a year. Additionally, 60% of the respondents are regular online shoppers, and 72% of the respondents concur that they have purchased items based on recommendations they saw on social media while conducting a search. The percentage of respondents who are familiar with AI technologies is just 52%. Just 48%

of respondents are aware of the detrimental effects AI technologies have on data privacy, personal data theft, and other issues. Eighty percent of respondents concur that ads significantly increase consumer satisfaction by delivering the things that are most needed for their searches.

**Suggestions:**

- Users need to understand the privacy controls of the e-commerce platforms they utilize.
- The user's personal information should always be kept safe.
- Users should be well informed of the privacy violations of e-commerce platforms.

**Conclusion:**

In the next years, AI will even take over the organization's essential functions. Artificial intelligence (AI) has demonstrated methods for carrying out intricate tasks and activities similarly to those of humans. Although the application is more comprehensive, it is still not applicable to all activities. Although monotonous jobs can be completed by AI technology, humans still make the final decisions. As a result, it should be mentioned that social media ads and e-commerce platforms are directly connected and tailored to the needs and preferences of the users, whose data is derived from their posts on different browsing apps and e-commerce platforms.

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## A Study of Recent Trends in Event Management

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DOI - 10.5281/zenodo.15147392

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### Abstract:

*Event management is an ever-evolving field driven by technological advancements, shifting societal expectations, and the increasing need for businesses and organizations to create memorable and impactful experiences. This paper explores the most recent trends in event management, highlighting the role of technology, sustainability, hybrid events, personalized experiences, and the growing importance of data analytics. The paper also delves into the influence of social media and virtual reality on the industry, providing insights into how event planners can adapt to these emerging trends. This paper aims to analyze the evolution of event management in India, the factors driving its growth, key challenges faced by event organizers, and potential future trends. This paper identifies and examines the current trends that are reshaping the event management industry. The discussion includes the impact of digital tools, sustainability efforts, the rise of hybrid events, and the importance of experiential marketing. Additionally, it explores how the events landscape has been further transformed in response to global events such as the COVID-19 pandemic.*

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### Introduction:

Event management is an integral part of the Indian hospitality and service sectors. From traditional weddings to large corporate conferences, events are significant to personal, professional, and commercial life in India. The event management industry in India has seen rapid growth in the past two decades, supported by the country's increasing urbanization, rising disposable incomes, and the growing influence of social media and digital technologies. The Indian market is characterized by its diversity, which influences the types of events and the demand for various services. The event management industry is dynamic, continuously adapting to changing technologies, client needs, and broader social trends. Event managers are now tasked with creating highly immersive, engaging, and personalized experiences for their audiences. As globalization and digital transformation accelerate, event planners are facing both challenges and opportunities in

organizing events that cater to diverse audiences and are effective in achieving business and communication goals. Event management in India has evolved into a multi-billion-dollar industry, encompassing a wide range of services including conferences, exhibitions, weddings, concerts, and corporate events. This paper explores the growth, trends, challenges, and future of event management in India, with a focus on the role of technology, social media, and the country's diverse culture. The research aims to provide an in-depth understanding of the key drivers of the event management industry in India, the scope of its various sectors, and the challenges faced by event organizers.

### Objectives of Study:

- 1) To study concept and growth of event management
- 2) To analyse the evolution of event management in India, the factors driving its growth, key challenges

faced by event organizers, and potential future trends.

### Concept of Event Management:

Event management in India refers to the planning, organizing, and execution of various types of events. These events can range from weddings and religious celebrations to corporate events, festivals, and trade exhibitions. The event management industry is divided into several sub-sectors:

- **Weddings and Social Events:** Weddings in India are a multi-day affair involving complex planning, decoration, catering, entertainment, and guest management. With growing affluence, people are increasingly opting for elaborate, customized wedding celebrations.
- **Corporate Events:** Conferences, seminars, product launches, and team-building activities are critical for businesses in India. The corporate sector has become one of the biggest clients for event management companies.
- **Festivals and Cultural Events:** India's rich cultural heritage means that events like Diwali, Holi, Navratri, and regional festivals present enormous opportunities for event organizers.
- **Exhibitions and Trade Shows:** With India's growing economy and global presence, exhibitions and trade shows provide companies a platform to showcase products and innovations.
- **Entertainment and Sports Events:** Music festivals, theater performances, sports events, and concerts are gaining popularity, driven by both domestic and international audiences.

### Growth Drivers in the Indian Event Management Industry:

Several factors contribute to the growth of the event management industry in India:

1. **Economic Growth and Affluence:** The Indian economy has seen significant growth over the past few decades, resulting in higher disposable income and a growing demand for luxury events. People are now more willing to spend on personal and professional events, driving the demand for sophisticated event management services.
2. **Technological Advancements:** Technology plays a critical role in the evolution of event management in India. The use of event management software, social media for promotion, live streaming, and event apps has made organizing and attending events more efficient and engaging.
3. **Rising Popularity of Destination Weddings:** India's picturesque locations have become popular for weddings, particularly with the NRI (Non-Resident Indian) community, driving the demand for event managers specializing in destination weddings.
4. **Corporate Investments in Employee Engagement:** Corporates are increasingly investing in events such as seminars, conferences, and team-building activities to boost employee morale, which has boosted the event management industry.
5. **Social Media Influence:** Platforms like Instagram, Facebook, and YouTube have made it easier for events to gain attention. Social media influencers and digital marketing strategies are now integral to event promotion, leading to increased attendance and engagement.
6. **Government Support and Policy Initiatives:** The government of India has been actively promoting India as a hub for business and leisure tourism. Initiatives like the "Incredible India" campaign and the creation of "MICE" (Meetings, Incentives, Conferences, and Exhibitions) tourism are fostering growth in event management.

**Technological Advancements:****a) Event Technology Integration:**

The rapid advancement of technology has profoundly impacted the event management industry. Technologies such as mobile apps, augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) are being increasingly incorporated into events to enhance attendee engagement. Mobile apps, for example, are used to provide event schedules, networking opportunities, and real-time updates, allowing attendees to have a seamless experience.

AR and VR technologies allow for immersive experiences that transform traditional events. Attendees can now engage with event content in novel ways, such as virtually interacting with exhibits or products. These tools can also be used to create simulations or interactive elements that engage guests more deeply with a brand, product, or concept.

**b) Live Streaming & Hybrid Events:**

The growing trend of live streaming and hybrid events has gained significant traction, particularly in the wake of the COVID-19 pandemic. A hybrid event combines in-person and virtual components, allowing for a broader audience reach. Virtual platforms and streaming services have become integral to enabling participants from around the world to attend events without the limitations of geography.

Event organizers are now faced with the challenge of creating seamless hybrid experiences that maintain the level of engagement seen in traditional in-person events. Live streaming and virtual reality (VR) have proven essential in expanding event access, increasing flexibility, and enhancing interactivity for remote attendees.

**Sustainability in Event Management:****a) Eco-friendly Practices:**

With increasing global awareness about climate change, sustainability has

become a key concern in event planning. Event organizers are integrating green practices into their operations by minimizing waste, reducing energy consumption, and promoting eco-friendly materials. Venues are also prioritizing sustainability by adopting energy-efficient technologies and waste management solutions.

Furthermore, many large-scale events are focusing on reducing carbon footprints by promoting sustainable transportation options, reducing single-use plastics, and opting for digital rather than paper-based materials.

**b) Carbon Offsetting:**

Carbon offsetting is another popular trend within the industry. Organizers of major events are increasingly taking steps to compensate for the carbon emissions generated during an event by investing in projects that reduce emissions, such as renewable energy or reforestation initiatives.

**Personalization and Attendee Experience:****a) Customized Event Experiences:**

One of the most notable trends in event management is the increasing focus on personalized attendee experiences. Event planners are leveraging data to create customized experiences for attendees based on their preferences and behaviors. Personalization tools, such as personalized schedules, content, and interactions, ensure that attendees feel engaged and valued.

By using event-specific apps, planners can collect data on attendees' preferences and provide tailored recommendations for sessions, workshops, and networking opportunities. Personalized swag bags, concierge services, and immersive activities further enhance the attendee experience.

**b) Experiential Marketing:**

Experiential marketing focuses on creating memorable experiences that engage the senses of attendees. Event managers are incorporating experiential marketing strategies into events, offering interactive

and immersive brand experiences. This could include hands-on product demonstrations, interactive installations, or gamified experiences designed to build emotional connections with the audience.

### **The Role of Data Analytics in Event Management:**

Data analytics is increasingly being used to measure and improve event effectiveness. From tracking attendee behavior to assessing engagement levels, data analytics enables event managers to make data-driven decisions. Key performance indicators (KPIs) such as attendance rates, session popularity, social media engagement, and attendee satisfaction are all tracked using event management software and analytics tools.

Event managers can now use this data to optimize event content, tailor marketing strategies, and improve future events. Real-time feedback is invaluable for making on-the-spot adjustments, ensuring that attendees have a positive experience.

### **Social Media and Event Marketing:**

Social media platforms have become indispensable in promoting events and engaging attendees. Platforms like Instagram, Facebook, Twitter, and LinkedIn are used to share event details, generate excitement, and encourage interactions among attendees. Event organizers are increasingly using social media influencers and brand ambassadors to amplify their events' reach and build anticipation.

Additionally, user-generated content (UGC) is an essential part of event marketing. Encouraging attendees to post about their experiences not only boosts the event's online presence but also provides social proof of the event's value.

### **The Impact of Virtual Reality (VR) and Augmented Reality (AR):**

Virtual and augmented reality technologies have become increasingly integrated into event experiences. VR is used for virtual venue tours, interactive product demos, and immersive simulations. AR, on the other hand, is often used to enhance physical environments, offering interactive elements that overlay digital information on the real world.

These technologies allow event organizers to create novel and engaging experiences that captivate attendees and generate buzz on social media. Both VR and AR can bridge the gap between the physical and digital worlds, creating memorable experiences for attendees regardless of their physical location.

### **The Rise of Hybrid Events:**

Hybrid events, which combine both in-person and virtual elements, have become increasingly popular. The ability to reach a global audience while providing an in-person experience creates a powerful combination. These events provide flexibility, allowing participants to attend in-person or remotely, depending on their preferences and availability.

Hybrid events can also offer more accessibility for people with physical disabilities or those located far from the event's physical venue. Event organizers must carefully plan these events to ensure seamless integration between in-person and virtual experiences.

### **Challenges in the Indian Event Management Industry:**

Despite the growth, there are several challenges faced by event management professionals:

1. **Cultural and Regional Diversity:** India is a land of diverse cultures, languages, and traditions. Catering to these diverse preferences requires significant

adaptability from event organizers, especially when planning events in different regions.

2. **Lack of Standardization and Training:** While the event management industry is growing, there is still a lack of formal training programs, certification, and standardization. Many event organizers lack the necessary skills to plan and execute large-scale events effectively.
3. **Logistical Challenges:** India's infrastructure and transport systems, though improving, can be a challenge in terms of smooth event execution. Delays, transportation issues, and poor venue management often lead to disruptions.
4. **Budget Constraints:** Despite growth in disposable income, budget constraints for many events still exist, particularly for small-scale organizers. Cost management remains a major challenge, particularly when trying to balance quality with affordability.
5. **Regulatory and Compliance Issues:** Navigating local laws, permits, and regulations, especially in large cities, can be complex. Event managers need to be aware of the legalities regarding public gatherings, permits, and insurance.

#### **Future Trends in Event Management:**

As the industry continues to evolve, several emerging trends are likely to shape the future of event management in India:

1. **Sustainability and Green Events:** With growing awareness about environmental issues, the demand for eco-friendly and sustainable events is increasing. Event organizers are incorporating sustainable practices such as waste reduction, energy conservation, and the use of biodegradable materials.
2. **Hybrid Events:** The COVID-19 pandemic has accelerated the trend of hybrid events, where in-person and virtual participants can engage. This trend is likely to continue, with more

events adopting digital platforms to broaden their reach.

3. **Personalization and Customization:** Event attendees now expect more personalized experiences. From personalized invitations to custom food menus and entertainment, the demand for tailored experiences will increase.
4. **Increased Use of AI and Automation:** Artificial intelligence and automation are being integrated into event management processes. From virtual assistants to chatbots for customer service, these technologies will continue to transform the way events are managed.

#### **Conclusion:**

Event management is undergoing a significant transformation. The integration of new technologies, sustainability practices, and personalization strategies is reshaping how events are conceived, planned, and executed. Hybrid events, virtual reality, and social media engagement are changing the way businesses and organizations approach event planning, making it essential for event managers to stay current with the latest trends. Event management in India is experiencing rapid growth due to economic development, technological advancements, and a growing demand for sophisticated event services. While challenges such as regional diversity, infrastructure, and lack of standardization persist, the industry shows immense potential for growth. By embracing new trends, such as sustainability, hybrid events, and personalization, event managers in India can continue to stay relevant and meet the evolving demands of consumers.

As the event management industry continues to evolve, staying informed about these trends and adapting to technological advancements will be crucial for creating successful, memorable events. The future of event management lies in blending the physical with the digital, embracing sustainability, and delivering unique,

personalized experiences that leave lasting impressions.

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**Challenges of Female Teachers in Zilla Parishad Schools of Kolhapur District**

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**DOI - 10.5281/zenodo.15147407**

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**Abstract:**

*Education is responsible for overall development of human being as well as the any country. The female teachers are plays most important role in primary school because they are better able to understand and meet the needs of children in this age group. Female teachers can provide a sense of security for children in the primary school. The female teachers are said to be more patient with children. Female teachers are said to have a better understanding of child psychology and emotional needs. Female teachers are said to have better caring and nurturing skills. The female teacher is responsible for overall development of child in primary school. That's why the increase the number of female teachers in Zilha Parishadh school. But at the same time female teacher have face different challenges. There is need to overcome the challenges face by the female teacher working in Zilha Parishadh schools. The present study deals with the challenges face by the female teacher in zilha parishadh school of Kolhapur District. For this the data collected with the help of secondary data. The present study is descriptive in nature and has been conducted with an objective to know the challenges faced by the female teacher in Zilha Parishadh School.*

**Keywords:** *Female School Teacher, Challenges.*

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**Introduction:**

In India many years women is work as a labour but they are mostly found in the agriculture sector. Now a days women are entering in to the different private and public sector for job. The different sectors gives the opportunities to the women belongs to rural as well as urban areas. The gender is vast concept which spared over rural as well as urban area also. There is increase the percentage of women worker in India along with that there are different problems face by the women like gender discrimination, gender inequality, sexual harassment and many more so for that purpose gender equality is important at workplace. The Indian constitution gives the equal right to the women in the society. But still women face different problems in workplace and at home and affected on their daily life. Now a days female is top in the education field. The

female teacher face different problem in primary school. There is need to tackle this problem. There is need to improve the facilities in primary education system.

**Review of Literature:**

Rashid, R., & Maharashi, S. K. (2015). studied titled on **“Problems of Female School Teachers in District Kulgam (J&K)”** The study conclude that, majority of working female teachers in district Kulgam are facing problems like personal, professional, familial. There is unwanted clerical works, paper checking, excess number of students in class, huge syllabus, duty in board exam, inadequate training, excess number of students in one classroom, lack of reference book, less support from headmaster and their colleagues etc. Because of these problem in education system female teachers face the



tension. 2) Amtul Waris, B. C. Viraktamath (2018) conducted study on the titled “**Gender gaps and Women Empowerment in India –Issues and Strategies**”. The researcher said that gender gaps is found in Health, Education and economic sector. In the health sector, most of the women die every year due to pregnancy and pregnancy-related health issues. There are about 60% girls are married before the age of 18 year and about 60% of married girls bear children before they are at 19 years in rural areas. In the Education sector, there is presence of gender disparity in literacy is found more rural than in urban areas. There are about 41% of women and 18% of men at the age of 15-49 won't attend the school. In the Economic sector, one third of women are agricultural worker and she get the 30% lower wages than men. The gender pay gap increase when education level increases.(3)

### **Challenges Faced by Women Teachers**

(2023) Educational blog says, Balance between teaching and their personal life very difficult for female teacher. There is demands of different extracurricular activities, lesson plan and grading is difficult to give time to their family as well as self-care also. some women teachers face the problem of discrimination at workplace. This impact on their job satisfaction.

### **Objectives:**

1. To study the challenges face by female teacher in Zilha Parishadh School.
2. To suggest the measures to tackle the problem face by the female teacher in Zilha Parishadh School.

### **Research Methodology:**

The study is followed by descriptive research design. The problems of female school teachers were identified with the help of the tool like observation and interview of respondents. The study is based on secondary data. The data is collected with help of research articles dissertation internet

resources. In the rural area female teacher play most important role in children education and their overall development.

### **Result:**

In the present study researcher gets the slight review of female teacher performance in the school regarding children education. Some female teacher who are living in the village where they are working in school. Female teacher is more concentrate on their class student. She take extra class for the student. The parents are very happy for their children performance. The researcher is observed that, female teacher is very cooperative than the male teacher. The children feels more comfortable to attend the female teacher class. The researcher observe that, the female teacher face health issues due maintain the take extra class and school work and their personal work at home. The researcher observed that, the female teacher face the various problems like, transport facilities, domestic violence in their home, health issues. The female teacher who are not living in the village where they are working, they report late in school and leave the school early because of lack of public transport system. The female teacher is not updated in technology like PowerPoint presentation. They are willing to learn this thing but they do not get time to learn. Some female teacher face the problem of domestic violence at their home but they do not complain anywhere. The family members allow to some female teacher to take their own decision like spending money but some female teachers family members do not allow spending their own money to anywhere. The study is conducted with the female primary teacher working in Zilha Parishadh schools of Kolhapur District. The major findings of the study is as follows,

1. The female teacher face the challenges related to their health. They are not taking care of their health due to

- overload of work in school and at home.
2. The female teacher should not have time to take her time-to-time breakfast, lunch and dinner. She don't have time to do simple exercise.
  3. The female teacher conduct the extra class in school for their educational development of school children.
  4. The study observed that, female teacher are very happy because all the villagers, staff members are cooperating to the female teacher.
  5. The researcher observed that some of the female teacher's husband and their family members do not support her to their household work and child care. That's why they complete the household work and came to the school.
  6. It is observed that some female members do not have right to spend their own money at their home.
  7. The female teachers face the problem of transfer facility.
  8. The studies observe that the female teacher working in primary school do not update with the technology. They get the training of technology but do not have to spend the time to continue to learn.
  9. It is observed that some time female teacher face the gender discrimination at workplace.

**Suggestion:**

1. The female teacher should take care of herself and balance their school work and home work with proper management.
2. The transfer facilities is developed in the rural area.
3. The nature of the family members of female teacher should supportive.
4. There is need conduct more hands-on practical training related to technology.
5. Ther is need to maintain the gender balance at School.

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## A Study on The Need of Sustainable Packaging for Sustainable Development

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**DOI - 10.5281/zenodo.15147426**

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### **Abstract:**

*Packaging materials play an important role in our lives because they are used on a regular basis in grocery shops, supermarkets, restaurants, pharmaceuticals, and other businesses. Packaging is essential for preserving items during handling, transportation, and storage. Similarly, it helps to maintain and extend product shelf life. These materials are used to package meats, poultry, shellfish, food & beverages, cosmetics, and pharmaceuticals. Several applications of packaging materials have been extensively addressed, but little has been said about their end-of-life and continued availability without negatively influencing the environment. This study discusses the need for sustainable packaging in light of rising demands and the environmental impact of packaging materials after use. This study also presents the types of packaging materials. Based on the findings of this study, sustainable packaging is made possible by using bio-based and recyclable materials.*

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**Key words: Sustainability, Biodegradable, Biopolymer, Packaging, Pharmaceutical, Products.**

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### **Introduction:**

Packaging materials add to the cost of the product because of the materials used and the manufacturing process involved. The environmental impact of such materials, whether during manufacture or after they have reached the end of their useful life, is of great concern, prompting a variety of studies in this area. As a result, the numerous materials used for packaging must be closely evaluated; the regions of use for each material, as well as the benefits and drawbacks of each packing material, are equally significant. Plastic, paper, glass, metal, and other materials are commonly used as packing materials. The selection of packaging materials will depend on the type of product that needs to be packaged. Another determining factor in the choosing of materials is environmental concern. To ensure the availability of packaging materials all year round without negatively affecting the environment, a sustainable approach needs to be investigated. These

The fast expansion of the internet and the approaches could be material recycling and reuse, the choice of materials, and the use of bio-based and biodegradable materials. Thus, the study focuses on the need for sustainable packaging.

### **Objective of the Study:**

The objective of this paper is to examine the need of sustainable packaging for sustainable development, to know the types of Sustainable packaging materials.

### **Review of Literature:**

Emas,R.(2015),Sustainable packaging indicates that the packaging materials have been sustainably sourced and produced, and once it has served its purpose, holds the potential for resource recovery through recycling practices or by possessing com potable properties. Furthermore, social and economic principles are addressed in order to comply with guidelines for sustainability

Coles, R.; Kirwan, M.J. (2011) It has been playing a pivotal role in the economy by enhancing product safety and shelf-life, and therefore its definition is expanded further beyond a simple denotation of a material to contain and preserve the product to that of a coordinated system designed to prepare and protect goods along the supply chain while ensuring efficiencies and optimised sales

### What is Sustainable Packaging?

Several kind of ecologically friendly material used to wrap, store, ship, or shelve goods is considered sustainable packaging. One type of sustainable packaging that is becoming more and more popular is compostable packaging. It exhibits the qualities and durability of conventional materials and protects food items in a manner comparable to that of conventional packaging, yet it completely decomposes in the ground into healthy organic compost.

### Need of Sustainable Packaging?

By using eco-friendly materials and designs, minimizing waste, lowering carbon footprints, and encouraging resource efficiency, sustainable packaging is essential for long-term sustainability and environmental protection.

### Environmental Influence of Traditional Packaging:

**Waste Generation:** Traditional packaging, especially plastics, contributes significantly to landfill waste and pollution.

**Resource Depletion:** The production of many packaging materials relies heavily on finite resources like fossil fuels, leading to depletion and environmental damage.

**Pollution:** Plastic packaging, if not properly disposed of, can pollute soil, water, and ecosystems, harming wildlife and human health.

**Carbon Footprint:** The production, transportation, and disposal of conventional

packaging contribute to greenhouse gas emissions, exacerbating climate change.

### Benefits of Sustainable Packaging:

#### Reduced Environmental Impact:

Sustainable packaging minimizes the environmental footprint of products by using recycled, renewable, and biodegradable materials.

**Resource Conservation:** Sustainable packaging promotes the efficient use of resources, reducing the demand for virgin materials and minimizing waste.

**Waste Reduction:** Sustainable packaging, such as reusable or compostable options, helps reduce the amount of waste sent to landfills and promotes a circular economy.

**Improved Brand Image:** Consumers increasingly value environmentally responsible brands, and sustainable packaging can enhance a company's reputation and attract eco-conscious customers.

**Cost Savings:** Efficient sustainable packaging designs can reduce material costs, transportation expenses, and waste disposal fees.

#### Innovation and Technological Advancement:

The push for sustainable packaging drives innovation in materials science and packaging technology, leading to new and better solutions.

### Types of Sustainable Packaging

**Materials:** Sustainable packaging materials encompass a range of eco-friendly options, including recyclable plastics (like PET and HDPE), compostable materials like PLA and cellulose, and innovative alternatives like mushroom packaging and paper, all aiming to decrease environmental impact.

Here's a more detailed look at some sustainable packaging materials:

**Recyclable Materials: PET (Polyethylene Terephthalate):**

A common plastic used for bottles and containers, PET is widely recyclable.

**HDPE (High-Density Polyethylene):**

Another common plastic, HDPE is used in various packaging applications and is also recyclable.

**Cardboard and Paper:** These materials are highly recyclable and are a good alternative to plastic for many packaging needs.

**Compostable Materials:**

**PLA (Polylactic Acid):** A bioplastic derived from plant starch, PLA is a compostable alternative to traditional plastics.

**Cellulose:** natural polymer found in plants, cellulose can be used to create compostable packaging materials.

**Mushroom Packaging:** This innovative material uses mycelium (the root structure of mushrooms) and agricultural waste to create a biodegradable and eco-friendly packaging solution.

**Other Sustainable Options:**

**Paper Packaging:** When sustainably sourced and processed, paper is a highly eco-friendly material for packaging.

**Recyclable Padded Mailers:**

These are designed to protect products during shipping and are made from recycled materials.

**Eco-Friendly Boxes:**

Boxes made from recycled cardboard or other sustainable materials.

**Glassine:** A type of paper made from wood pulp that is both recyclable and biodegradable.

**Bamboo:** Bamboo can be used as a sustainable alternative to traditional bubble wrap for packing and shipping.

**Conclusion:**

An essential remedy for the expanding issue of environmental contamination brought on by conventional packaging materials is sustainable packaging. Sustainable packaging can

drastically cut waste, greenhouse gas emissions, resource consumption, and biodiversity by using recyclable, compostable, biodegradable, and reusable materials. While the transition to sustainable packaging involves hurdles such as greater upfront costs, customer acceptability, and technical restrictions, the long-term environmental and economic benefits are significant. Effective policies, material innovation, and consumer education are critical for overcoming these hurdles and promoting the use of sustainable packaging techniques. Continued research and development are critical to improving the performance and viability of sustainable packaging, resulting in a more sustainable future.

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## Sustainable Business Practices in Commerce and Management: Challenges, Innovations, and Future Prospects

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DOI - 10.5281/zenodo.15147430

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### Abstract:

Sustainability has emerged as a critical concern in commerce and management, requiring businesses to adopt environmentally and socially responsible practices while maintaining economic viability. This research paper explores the challenges, innovations, and future prospects of sustainable business practices within the commercial and managerial landscape. It highlights key obstacles such as regulatory complexities, financial constraints, resistance to change, and the need for sustainable supply chain management. Additionally, the paper examines innovative strategies, including green finance, circular economy models, corporate social responsibility (CSR), and digital transformation, that enable businesses to integrate sustainability effectively. Furthermore, the study evaluates the long-term benefits of sustainability, such as enhanced brand reputation, competitive advantage, and stakeholder trust. By analyzing global trends, case studies, and policy implications, this paper provides insights into how businesses can transition towards a sustainable future. The findings contribute to the growing discourse on sustainability in commerce and management, offering practical recommendations for organizations striving to balance profitability with environmental and social responsibility.

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**Keywords:** Sustainable Business Practices, Commerce, Management, Challenges, Innovations, Future Prospects, CSR, Circular Economy, Green Finance.

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### Introduction:

Sustainable development has become a vital aspect of modern business practices, influencing decision-making in commerce and management. As environmental concerns, social responsibilities, and economic considerations continue to shape global markets, businesses must adopt sustainable strategies to remain competitive and relevant. Sustainable business practices involve integrating environmental, social, and governance (ESG) principles into corporate strategies, ensuring long-term value creation while minimizing negative impacts on society and the environment. The growing emphasis on sustainability stems from pressing global challenges such as climate change, resource depletion, pollution, and social inequalities. Regulatory

frameworks, consumer awareness, and corporate social responsibility (CSR) initiatives further drive the need for businesses to transition towards eco-friendly and ethical practices. However, businesses often face challenges in implementing sustainable strategies, including high initial costs, lack of technological infrastructure, resistance to change, and complex regulatory compliance.

Despite these challenges, innovations in sustainability are transforming the business landscape. Concepts such as green finance, circular economy models, digital transformation, and responsible supply chain management are enabling organizations to balance economic growth with environmental stewardship. Companies that adopt sustainable business models gain a competitive edge, enhance

brand reputation, and build stronger relationships with stakeholders.

This paper aims to explore the challenges, innovations, and future prospects of sustainable business practices in commerce and management. By analyzing case studies, industry trends, and policy implications, the study provides insights into how businesses can navigate sustainability challenges and leverage emerging opportunities. The findings contribute to the broader discourse on sustainable development, offering practical recommendations for organizations striving to align profitability with ethical and environmental responsibility.

### Objectives of the Study:

1. To identify key challenges businesses face in implementing sustainable practices.
2. To explore innovative strategies and solutions that organizations are adopting.
3. To assess the future prospects of sustainable business practices.

### Statement of the Problem:

Sustainable business practices are essential for long-term economic, social, and environmental well-being. However, businesses face significant **challenges** in implementing sustainability, including high costs, regulatory complexities, lack of awareness, and resistance to change. While **innovative strategies** such as green finance, circular economy models, and digital transformation offer solutions, their adoption remains inconsistent due to industry-specific barriers and resource constraints. Additionally, the **future prospects** of sustainability in commerce and management remain uncertain, requiring businesses to adapt to evolving policies, market trends, and technological advancements. This study aims to identify key challenges, explore innovative solutions, and assess future

opportunities for sustainable business practices.

### Significance of the Study:

This study is significant as it provides valuable insights into the **challenges, innovations, and future prospects** of sustainable business practices in commerce and management. By identifying key challenges, it helps businesses understand barriers to sustainability and develop strategies to overcome them. Exploring innovative solutions highlights best practices and emerging trends that organizations can adopt for long-term success. Assessing future prospects offers policymakers, industry leaders, and researchers a roadmap for integrating sustainability into business models. Ultimately, this study contributes to the promotion of responsible business practices, ensuring economic growth while addressing environmental and social concerns.

### Scope of the Study:

This study on "Sustainable Business Practices in Commerce and Management: Challenges, Innovations, and Future Prospects" will cover various dimensions of sustainable business practices within the context of commerce and management disciplines. The scope of the study includes:

#### 1. Analysis of Business Challenges:

Examining the barriers and limitations that businesses encounter when adopting sustainable practices, such as financial constraints, regulatory challenges, and organizational resistance. Identifying the external factors influencing sustainability, such as market demands, competition, and socio-political pressures.

#### 2. Exploration of Innovative Strategies:

Investigating the innovative approaches, technologies, and strategies that organizations are implementing to overcome sustainability challenges. Highlighting case

studies and examples of successful sustainability initiatives, including green technologies, corporate social responsibility (CSR), and sustainable supply chain management.

### 3. Assessment of Future Prospects:

Analysing the future trends and opportunities for businesses to integrate sustainability into their core practices. Discussing the evolving role of sustainability in strategic decision-making, consumer behaviour, and long-term business growth. Considering the influence of governmental policies, global environmental concerns, and technological advancements on future sustainable practices.

### Result of the Study:

The results of this study will provide valuable insights into how businesses in the commerce and management sectors are addressing sustainability challenges and implementing innovative solutions. Key findings will include:

#### 1. Identification of Key Challenges:

The study will reveal common challenges faced by businesses in adopting sustainable practices, such as high implementation costs, lack of adequate knowledge, regulatory compliance, and the need for organizational culture change. It will highlight the difficulty in balancing profitability with environmental and social goals.

#### 2. Innovative Solutions and Strategies:

The study will showcase a variety of innovative strategies that businesses have successfully implemented to overcome sustainability challenges. These may include the adoption of renewable energy sources, waste reduction techniques, sustainable sourcing, and eco-friendly product development. Case studies of companies that have successfully integrated sustainability into their core business models will be presented as models for other organizations to follow.

### 3. Future Prospects and Trends:

The study will predict future trends in sustainable business practices, such as the increasing role of technology (AI, IoT, blockchain) in sustainability management, the rise of conscious consumerism, and the potential impact of global environmental policies on business operations. It will provide recommendations on how businesses can align their sustainability practices with future market dynamics and regulatory expectations, ensuring long-term viability and competitiveness.

### Discussion of the study

#### 1. Challenges in Implementing Sustainable Practices:

The study identifies a range of challenges that businesses encounter when attempting to implement sustainable practices. These challenges stem from both internal and external factors:

**A. Financial Constraints:** One of the primary hurdles identified is the high initial investment required for sustainable practices, such as adopting green technologies, upgrading facilities, or sourcing sustainable materials. Smaller businesses, in particular, often struggle to allocate sufficient resources for these practices.

**B. Organizational Resistance:** Resistance to change within organizations is another significant challenge. Employees and stakeholders may be reluctant to embrace new practices, especially when the benefits of sustainability are not immediately apparent. This resistance can be mitigated through training, awareness programs, and leadership commitment.

**C. Regulatory Barriers:** Many businesses face difficulties in navigating complex and varying environmental regulations, which can differ significantly across regions and countries. Ensuring compliance with these regulations while



maintaining profitability often presents a significant challenge, especially for multinational companies.

#### **D. Lack of Awareness and Expertise:**

The lack of expertise and knowledge about sustainable practices, especially among smaller enterprises, is another challenge. Many businesses are unsure about how to integrate sustainability into their core business models or do not have access to the necessary technical know-how. Despite these challenges, businesses that manage to overcome these barriers can create long-term value, both for themselves and society. However, addressing these challenges requires a multi-faceted approach, including investment in training, technology, and stakeholder engagement.

#### **2. Innovative Strategies and Solutions:**

In response to the challenges, businesses have adopted a wide array of innovative strategies and solutions to foster sustainability. The study highlights several key areas where innovation is making a significant impact:

##### **A. Adoption of Green Technologies:**

Many businesses are embracing renewable energy sources, such as solar and wind power, to reduce their carbon footprint. The transition to energy-efficient systems and processes is an innovative strategy that also reduces operational costs over time.

**B. Circular Economy Practices:** Some companies have shifted towards circular economy models, focusing on reducing waste and reusing materials. This includes redesigning products for longevity, recycling waste products, and reusing materials within the supply chain.

**C. Sustainable Supply Chain Management:** Businesses are increasingly adopting sustainable sourcing practices by selecting suppliers who adhere to environmental and social responsibility standards. This not only reduces environmental impact but also improves the ethical reputation of businesses.

##### **D. Eco-friendly Product Development:**

Innovation is also occurring in product development, with businesses focusing on creating environmentally friendly products that are biodegradable, reusable, or made from sustainable materials. This is aligned with growing consumer demand for products that are socially responsible and environmentally conscious.

##### **E. Digital Transformation:**

Technology plays a crucial role in enabling businesses to track and manage sustainability efforts. AI, IoT, and blockchain technologies are being used to monitor resource consumption, optimize operations, and improve transparency within supply chains, helping businesses reduce their environmental impact while enhancing efficiency. These innovative solutions show that, despite the challenges, there are many opportunities for businesses to align their strategies with sustainability objectives. By incorporating sustainability into business models, companies can not only mitigate environmental risks but also unlock new markets and opportunities for growth.

#### **3. Future Prospects of Sustainable Business Practices:**

The study also examines the future of sustainable business practices, highlighting promising trends and opportunities for businesses in the coming years:

**A. Technological Advancements:** As technology continues to evolve, businesses will have access to more advanced tools and solutions to enhance their sustainability efforts. Emerging technologies such as artificial intelligence, machine learning, and blockchain are expected to play an integral role in improving the efficiency and transparency of sustainable practices.

**B. Consumer Trends:** The growing awareness among consumers about environmental and social issues is expected to drive businesses to adopt more sustainable practices. The shift towards conscious

consumerism, where consumers prefer products and services that align with their values, will likely influence businesses to enhance their sustainability credentials.

**C. Government Policies and Regulations:** The role of governments in promoting sustainability cannot be overstated. Governments around the world are expected to introduce stricter environmental regulations, provide incentives for sustainable practices, and encourage businesses to adopt green technologies. This will likely create both challenges and opportunities for companies, depending on how they respond to these evolving policies.

**D. Sustainability as a Competitive Advantage:** Businesses that adopt sustainable practices are likely to gain a competitive edge in the market. As sustainability becomes increasingly important to consumers, investors, and employees, organizations that demonstrate a commitment to social responsibility and environmental stewardship will build stronger brands and attract loyal customers.

**E. Collaborative Efforts and Partnerships:** The future of sustainability in business will also see an increase in collaborations between companies, governments, and non-governmental organizations (NGOs). By working together, businesses can share knowledge, resources, and best practices to drive global sustainability efforts.

### Conclusion:

While businesses face significant challenges in implementing sustainable practices, innovative strategies and emerging trends offer promising solutions. Financial constraints, regulatory barriers, and resistance to change can hinder sustainability efforts, but advancements in technology, consumer demand for ethical products, and supportive government policies are driving businesses toward

greener models. By adopting sustainable technologies, improving supply chains, and embracing eco-friendly product development, companies can not only mitigate environmental risks but also gain a competitive edge. The future of sustainable business lies in collaboration, innovation, and a long-term commitment to environmental and social responsibility.

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## Teaching Business Communication for Sustainability in the Corporate World

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**DOI - 10.5281/zenodo.15147438**

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### **Abstract:**

*Sustainability is now a critical aspect of business, and effective communication is essential for driving sustainable initiatives. This paper explores how business communication education can integrate sustainability principles, preparing students to navigate corporate challenges. It examines teaching strategies like case studies and hands-on projects while showcasing real-world examples of how communication shapes corporate sustainability efforts. Key challenges such as cultural diversity and ethical dilemmas are also discussed, along with innovative teaching approaches to address them. By incorporating sustainability into business communication courses, this study highlights the need to equip future professionals with the skills to communicate ethically, transparently, and effectively in a rapidly evolving corporate landscape.*

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**Keywords:** *Sustainability, Business Communication, Corporate Social Responsibility (CSR), Pedagogy, Sustainable Development Goals (SDGs), Ethical Leadership, Stakeholder Engagement, Corporate Ethics, Cross-Cultural Communication.*

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### **Introduction:**

In today's business world, sustainability is no longer just an option—it is a necessity. Companies are increasingly expected to operate responsibly, considering their environmental, social, and governance (ESG) impact. This shift has made sustainability a key factor in decision-making across industries, influencing everything from corporate operations and marketing strategies to stakeholder relationships. However, for sustainability initiatives to be truly effective, they must be communicated clearly and convincingly. This is where sustainability business communication plays a crucial role.

Sustainability business communication refers to the strategies and methods companies use to share their commitment to ESG principles with stakeholders. It involves transparent reporting, persuasive messaging, and ethical communication practices that align business

goals with sustainable development objectives. Whether through sustainability reports, social media campaigns, or corporate storytelling, businesses must effectively convey their efforts to build trust and credibility. Given the growing importance of this skill, business communication education must adapt to equip students with the knowledge and tools needed to navigate sustainability challenges. This paper explores the intersection of sustainability and business communication, highlighting the importance of integrating sustainability-focused learning into business curricula to prepare future professionals for the evolving corporate landscape.

### **The Importance of Business Communication in Sustainability:**

#### **Communicating Sustainability Goals:**

Corporate sustainability initiatives often aim to achieve the triple bottom line: economic, social, and environmental

benefits. Clear and effective communication is essential for articulating these goals to stakeholders, including employees, customers, investors, and the broader community. For example, companies like Patagonia use transparent communication to showcase their environmental efforts, reinforcing their brand identity. By effectively communicating their commitment to sustainability, companies can influence stakeholder perceptions and behavior.

Transparent and ethical communication fosters trust and credibility. Businesses must communicate their sustainability progress, challenges, and achievements honestly to avoid greenwashing accusations. For instance, Unilever's Sustainable Living Plan emphasizes clear communication of their sustainability targets and outcomes, earning consumer trust. Such practices also help build long-term relationships with stakeholders who value corporate accountability.

### **Incorporating Sustainability in Business Communication Education:**

A well-designed business communication curriculum must integrate sustainability principles to prepare students for the evolving corporate landscape. One of the most effective ways to achieve this is through case studies that showcase real-world examples of sustainability communication. By analyzing companies like Tesla, which emphasizes renewable energy in its reports, or Microsoft, which actively communicates its carbon-neutral goals, students can gain insights into how organizations use communication strategies to align with sustainable business practices. These case studies provide practical lessons on transparency, stakeholder engagement, and the role of communication in corporate sustainability efforts.

Developing strong writing skills is another crucial aspect of a sustainability-focused curriculum. Students should be trained to draft sustainability reports, press releases, and corporate social responsibility (CSR) statements that align with international frameworks such as the Global Reporting Initiative (GRI) standards. Learning to craft clear, persuasive, and ethical messages will enable them to effectively communicate an organization's sustainability efforts to stakeholders. Similarly, oral communication training is essential, as students must be prepared to present sustainability initiatives to investors, policymakers, and consumers. By practicing concise and impactful presentations, they can develop the confidence to communicate complex sustainability concepts effectively.

Innovative pedagogical strategies further enhance sustainability education in business communication. Experiential learning, such as working on sustainability campaigns for local businesses, allows students to apply their communication skills in real-world settings. Role-playing exercises can also be beneficial, simulating corporate scenarios where students take on the roles of company spokespersons addressing environmental compliance issues or sustainability-related controversies. These exercises help them develop crisis communication skills and understand the challenges businesses face when navigating sustainability concerns.

Additionally, collaborative learning fosters teamwork in multicultural settings, mirroring the global business environment. By working with peers from diverse backgrounds, students can refine their adaptability and intercultural communication skills, preparing them to effectively communicate sustainability goals in an increasingly interconnected world.

**Challenges in Teaching Business Communication for Sustainability:**

Teaching business communication for sustainability comes with several challenges, particularly in navigating cultural diversity, ethical dilemmas, and the need for cross-disciplinary knowledge. In a globalized business environment, companies interact with diverse stakeholders, each with unique cultural expectations and communication styles. A sustainability message that resonates in one region may not be effective in another. For example, businesses operating in Asia might emphasize long-term community benefits, while European audiences may focus on corporate transparency and regulatory compliance. Educators must train students to recognize these cultural nuances and tailor their communication strategies accordingly, ensuring inclusivity and effectiveness in sustainability messaging.

Ethical dilemmas further complicate sustainability communication, as businesses must balance profitability with responsible practices. Many companies face scrutiny over issues like greenwashing, where misleading claims about sustainability efforts can damage trust. Teaching students how to navigate these ethical challenges is essential for developing integrity in professional communication. Role-playing exercises, such as responding to greenwashing allegations or crafting ethical corporate responses to sustainability concerns, help students build decision-making skills in complex scenarios. Additionally, sustainability is inherently interdisciplinary, requiring an understanding of environmental science, economics, and corporate social responsibility. Business communication courses must integrate insights from these fields to provide a comprehensive education. Inviting sustainability experts as guest lecturers or incorporating case studies from various industries can enrich students' learning

experiences and broaden their understanding of sustainability in a corporate context.

**Examples of Effective Business Communication for Sustainability:**

Several companies serve as strong examples of how effective communication can enhance sustainability efforts. Coca-Cola, for instance, publishes detailed sustainability reports outlining its water conservation efforts and recycling initiatives. By studying these reports, students can learn how businesses translate complex data into clear, actionable messages that engage stakeholders. Similarly, IKEA's "People & Planet Positive" campaign demonstrates how corporate messaging aligns with sustainability commitments. The campaign highlights IKEA's use of renewable energy and sustainable sourcing, showcasing how businesses can build credibility through transparent communication. Starbucks also exemplifies ethical sustainability communication by emphasizing its fair trade practices on social media. The company's digital campaigns educate consumers on responsible sourcing while reinforcing brand values, illustrating the power of authenticity in sustainability messaging.

**Innovative Teaching Tools for Sustainability Communication:**

To enhance the teaching of sustainability communication, educators are increasingly integrating technology and interactive learning methods. Simulation platforms like Mursion allow students to practice real-world corporate communication scenarios, improving their ability to respond effectively to sustainability challenges. Additionally, training students in data visualization tools like Tableau or Power BI equips them with the skills to create compelling sustainability reports and dashboards, making complex information more accessible to diverse

audiences. By incorporating these interactive tools, business communication courses can create a dynamic learning environment that prepares students for the evolving demands of sustainability-focused corporate communication.

### Conclusion:

Teaching business communication for sustainability is crucial in preparing students for the modern corporate world, where ethical and transparent communication is fundamental to business success. As companies increasingly adopt sustainable practices, professionals must be equipped with the skills to communicate these efforts effectively to diverse stakeholders. By integrating sustainability principles into the curriculum, educators can help students understand the complexities of corporate responsibility, stakeholder engagement, and ethical decision-making. This ensures that future business leaders can navigate sustainability challenges while maintaining credibility and trust.

Innovative teaching strategies, such as experiential learning, technology integration, and interdisciplinary collaboration, play a vital role in enhancing sustainability education. By using real-world case studies, data visualization tools, and role-playing exercises, students can develop practical skills that translate into effective corporate communication. The combination of communication expertise and sustainability knowledge fosters a new generation of professionals who can drive meaningful change in the corporate world. Ultimately, equipping students with these competencies not only strengthens their career prospects but also contributes to the broader goal of building a more sustainable and responsible business environment.

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## छत्रपती शिवाजी महाराजांचे आर्थिक धोरण

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DOI - 10.5281/zenodo.15147448

### सारांश:

महाराष्ट्र हा ऐतिहासिक साधनसामग्रीच्या बाबतीत समृद्ध वारसा लाभलेला प्रदेश आहे, ज्याचा आपल्याला अभिमान आहे. ध्येयनिष्ठ आणि तळमळीच्या दोन-तीन पिढ्यांच्या अभ्यासकांनी या ऐतिहासिक साधनसामग्रीचे नव्याने आवाहन केले आहे. छत्रपती शिवाजी महाराजांचा इतिहास सर्वानाच माहित आहे; परंतु एवढे मोठे साम्राज्य सांभाळताना त्यांना त्यांच्या साम्राज्याचे आर्थिक नियोजन करावे लागत असे. शिवाजी महाराजांनी आपल्या साम्राज्याचे आर्थिक नियोजन कसे केले होते? महाराजांनी कोणत्या गोष्टींवर खर्च करण्याचे धोरण स्वीकारले होते? या विषयांवर आजवर फारशी चर्चा झालेली दिसत नाही. वास्तविक, एवढे मोठे साम्राज्य सांभाळताना त्यांनी साम्राज्य विस्ताराबरोबरच आपली अर्थनीती काय ठेवली होती, हे शोधून काढणे सध्याच्या काळात दिशादर्शक ठरेल. थोडक्यात, शिवकाळाचा विविध अंगांनी अभ्यास करणे गरजेचे आहे.

### प्रस्तावना :

महाराष्ट्र हा ऐतिहासिक साधनसामग्रीच्या बाबतीत समृद्ध वारसा लाभलेला प्रदेश आहे, ज्याचा आपल्याला अभिमान आहे. ध्येयनिष्ठ आणि तळमळीच्या दोन-तीन पिढ्यांच्या अभ्यासकांनी या ऐतिहासिक साधनसामग्रीचे नव्याने आवाहन केले आहे. छत्रपती शिवाजी महाराजांचा इतिहास सर्वानाच माहित आहे; परंतु एवढे मोठे साम्राज्य सांभाळताना त्यांना त्यांच्या साम्राज्याचे आर्थिक नियोजन करावे लागत असे. शिवाजी महाराजांनी आपल्या साम्राज्याचे आर्थिक नियोजन कसे केले होते? महाराजांनी कोणत्या गोष्टींवर खर्च करण्याचे धोरण स्वीकारले होते? या विषयांवर आजवर फारशी चर्चा झालेली दिसत नाही. वास्तविक, एवढे मोठे साम्राज्य सांभाळताना त्यांनी साम्राज्य विस्ताराबरोबरच आपली अर्थनीती काय ठेवली होती, हे शोधून काढणे सध्याच्या काळात दिशादर्शक ठरेल. थोडक्यात, शिवकाळाचा विविध अंगांनी अभ्यास करणे गरजेचे आहे.

छत्रपती शिवाजी महाराजांनी अनेक युद्धे लढविली, तरी राष्ट्रीय संपत्तीचे नुकसान कमीत कमी राखले. त्यांच्या धोरणांमधून राष्ट्रीय संपत्तीबद्दल त्यांची जागरूकता दिसून येते. रयतेच्या कल्याणासाठी त्यांनी अनेक योजना राबवल्या आणि नवनवीन प्रदेश वसविले, ज्यामुळे प्रजेला विविध सुविधा उपलब्ध झाल्या. महाराजांच्या मते, प्रजेच्या आयुष्यात शांतता असली पाहिजे, तरच राष्ट्राभरणी होते, व्यापाराला प्रोत्साहन मिळते आणि अर्थव्यवस्थेचे चक्र गतिमान होते. त्यामुळे, साम्राज्य विस्ताराबरोबरच त्यांनी अर्थनीतीचा विस्तार देखील केला. त्यांच्या या विविध अंगांनी अर्थनीतीचा अभ्यास करणे आजच्या काळात अत्यंत महत्त्वाचे आहे.

### शिवकाळ:

छत्रपती शिवाजी महाराजांनी सतराव्या शतकात मराठी साम्राज्याची स्थापना करून महाराष्ट्राचा मानदंड निर्माण केला. हे साम्राज्य महाराष्ट्र

आणि कर्नाटकाच्या काही भागांपुरते मर्यादित असले, तरी मराठी भाषिक आणि संस्कृतीचा प्रदेश याहून बराच मोठा होता. या प्रदेशांवर जरी परकीय सत्ता असल्या, तरी तेथील मराठी संस्कृती टिकून होती. शिवाजी महाराजांनी १६५६ मध्ये जावळी जिंकून स्वराज्याच्या विस्तार कार्याला प्रारंभ केला. १६५६ ते १६८० या २४ वर्षांच्या कालखंडात त्यांनी महाराष्ट्र काबीज केला आणि कर्नाटकावर दिग्विजय मोहीम करून मराठी राज्याचा ध्वज दक्षिणेत फडकवला. शिवाजी महाराजांची राजकीय कारकीर्द आणि कामगिरी सर्वांना ज्ञात आहे.

### १. शेती

सतराव्या शतकातील समाज आणि अर्थव्यवस्थेचा केंद्रबिंदू म्हणजे खेडेगाव. शेती हा प्रमुख व्यवसाय असल्यामुळे बहुतांश लोक त्यावर अवलंबून होते, आणि त्यामुळे शिवकाळात खेड्यांना अग्रस्थान होते. त्या वेळी खेड्यांमध्ये वतनदार, पाटील, कुलकर्णी, शेते, महाजन, देशमुख, देशपांडे, बलुतेदार आणि आलुतेदार असे विविध घटक कार्यरत होते. शेती हा प्रमुख व्यवसाय असल्यामुळे तो कालांतराने फलदायी ठरणारा होता. आज पेरले आणि उद्या उगवले असे होत नसल्यामुळे उत्पादनाची वाट पाहावी लागत असे. लागवड आणि प्रत्यक्ष उत्पादन यामधील कालावधी मोठा असल्यामुळे शेतकरी सावकाराकडून कर्ज घेत असत. शिवकाळात अशा गरजू शेतकऱ्यांना सरकारी खजिन्यातून मदत दिली जाई. शिवाजी महाराजांच्या अर्थनीतीचे मुख्य तत्त्व होते: "शेतकरी सुखी तर राजा सुखी; शेतकरी गरीब तर राजा गरीब." त्या काळात शेती पावसाच्या पाण्यावर अवलंबून होती, त्यामुळे दुष्काळाच्या झळा शेतकरी आणि साम्राज्याला बसत असत. शेतकऱ्यांना आर्थिक सहाय्य देणे, पडीक जमीन लागवडीखाली आणणे, अर्थव्यवस्थेला मदत करणाऱ्या पिकांची लागवड करणे, जमिनीवर सारा आकारणी करणे, पिकांच्या प्रकारानुसार सारा निश्चित करणे, शेतकऱ्यांना शेतसाऱ्याच्या थकबाकीत सूट देणे, पाणीपुरवठ्याची साधने उपलब्ध करून देणे इत्यादी

उपाययोजना करून छत्रपती शिवाजी महाराजांनी आपली अर्थनीती समृद्ध केली होती.

### २. उपव्यवसाय

शिवकालीन खेड्यांचे प्रमुख ध्येय स्वावलंबन असल्याने शिवकाळात खेड्यात विविध व्यवसाय निर्माण झाले शेती हा प्रमुख व्यवसाय असल्याने त्याच्या विकासासाठी लागणारे बरेचसे उपव्यवसाय खेड्यामध्ये सुरू होते यामध्ये सोनार लोहार तांबट सुतार कुंभार तेली मांग धनगर इत्यादी उपव्यवसायिक कच्चा समावेश होत असे व्यवसायातील उत्पादने ही प्रामुख्याने खेड्यातील गरजा पूर्ण करण्यासाठी वापरली जात पण कसबी कारागीर आपल्या वस्तू शेजारच्या बाजारपेठांमध्ये नेऊन विकत असत.

### ३. व्यवसाय

छत्रपती शिवाजी महाराजांनी स्वराज्याच्या सर्वांगीण विकासासाठी व्यापार वृद्धीला प्राधान्य दिले होते. त्यांना ठाऊक होते की व्यापाराच्या वाढीशिवाय राज्याची भरभराट शक्य नाही. त्यामुळे त्यांनी व्यापाऱ्यांना अनेक सवलती दिल्या, तसेच कायदा आणि सुरक्षिततेसाठी राज्यव्यवस्था निर्माण करून व्यापार वाढीस हातभार लावला. रस्त्यांवर पानपोई आणि धर्मशाळा सुरू केल्या, ज्यामुळे व्यापाऱ्यांना प्रवासात सुविधा मिळाल्या. राज्याच्या संपन्नतेसाठी व्यापार आवश्यक असल्याचे महाराजांनी ओळखले होते.

### ४. उद्योग

शिवकालीन काळात कोकण प्रदेश हे मराठा साम्राज्याच्या व्यापार आणि उद्योगाचे महत्त्वाचे केंद्र होते. छत्रपती शिवाजी महाराजांनी तळ कोकण ते उत्तर कोकणपर्यंत अनेक व्यापारी बंदरे आणि गावे आपल्या ताब्यात घेतली. चौर, भिवंडी, राजापूर, दाभोळ, कल्याण, वेंगुर्ले आणि पेन ही ठिकाणे त्या काळात भरभराटीस आली होती. विशेषतः, चौर आणि दाभोळची तुलना सुरत आणि गोवा यांच्याशी केली जाते, ज्यामुळे त्यांच्या व्यापारी आणि औद्योगिक महत्त्वाची जाणीव होते. शिवाजी महाराजांच्या ताब्यात



असलेली दाभोळ आणि चौल ही प्रमुख व्यापारी केंद्रे मुंबईच्या व्यापाऱ्यांसाठी अत्यंत आवश्यक होती.

कोकण हा मराठा साम्राज्याचा कणा मानला जात असे, आणि मीठ उत्पादन हा या प्रदेशातील प्रमुख व्यवसाय होता. कुलाबा आणि रत्नागिरी येथे शेतकरी शेती व्यवसाय सांभाळून मीठ उत्पादन करित असत, ज्यामुळे उत्तम प्रतीचे आणि कमी किमतीचे मीठ तयार केले जात असे. परंतु, परकीय व्यापाऱ्यांनी या व्यवसायावर नजर ठेवून त्यांच्या मिठाच्या किमती कमी केल्याने मराठा सत्तेतील मिठाच्या व्यवसायाला हानी पोहोचली. या परिस्थितीचा विचार करून, शिवाजी महाराजांनी परकीय मिठावर जकात आकारून स्वदेशी मिठाला संरक्षण दिले. त्यामुळे स्थानिक मिठाच्या किमती वाढल्या आणि शेतकऱ्यांना योग्य मोबदला मिळू लागला.

### शिवकालीन आर्थिक धोरण :

शिवकाळात शेती हेच लोकांच्या उपजिविकेचे प्रमुख साधन असल्याने शिवाजी महाराजांनी कर प्रणाली अत्यंत दूरदर्शी विचार करून राबविली. स्वराज्याच्या महसुलात वाढ झालीच पाहिजे, पण शेतकऱ्यावर मात्र अन्याय होता कामा नये, याची महाराजांनी दक्षता घेतली. पडीक जमीन लागवडीखाली आणली, तसेच शेतकऱ्यांना शून्य दराने कर्ज, बी-बियाणे आणि अवजारे देण्यासारख्या सोयी उपलब्ध करून दिल्या. इनामपट्टी, पीक वरील कर्ज आणि इतर कर देखील आकारले जात होते. छत्रपती शिवाजी महाराज रयतेला आपल्या मुलाप्रमाणे सांभाळत असत थोडक्यात, शिवकालीन कालखंडातील सर्वच कर हे पूर्वगामी स्वरूपाचे होते. प्रत्येक व्यक्तीच्या व व्यवसायाच्या उत्पादन क्षमतेनुसार कर आकारला जात असे. याचा अर्थ असा की शिवकालीन कर व्यवस्था सर्वसामान्यांशी निगडित होती आणि ती लवचिक स्वरूपाची होती. साम्राज्याची आर्थिक स्थिती पाहूनच महाराज कर आकारत

असत. शिवरायांच्या कर प्रणालीमधून त्यांच्या विविध दूरदर्शी गुणधर्मांचे दर्शन घडते.

शिवकालीन कालखंडात शिवाजी महाराजांचे प्रशासन चार विभागात विभागले होते – प्रांतिक, मध्यवर्ती, प्रशासकीय आणि लष्करी. महाराजमध्यवर्ती आणि लष्करी तसेच डोंगरी किल्ल्यांवर अधिक खर्च करत असत. त्यांनी अनेक युद्धे कमी खर्चात जिंकली, मात्र आरमारावर मोठा खर्च केला. आरमार व किल्ल्यांच्या विकासासाठी ते जास्तीत जास्त निधी खर्च करत असत. यासाठी शेती व व्यापाराच्या मदतीने शेतीला पाणीपुरवठा, बी-बियाणे, पडीक जमीन लागवडीखाली आणणे यासारख्या उपाययोजना राबविल्या, ज्यामुळे हा व्यवसाय भरभराटीस आला. एवढेच नव्हे, तर मीठ उत्पादन व व्यापारासाठी व्यापाऱ्यांना संरक्षण दिले.

### समारोप:

छत्रपती शिवाजी महाराजांचे आर्थिक धोरण दूरदर्शी आणि सुयोग्य नियोजनावर आधारित होते. त्यांच्या प्रशासनाने शेती, व्यापार, उद्योग आणि उपव्यवसायांना चालना देऊन स्वराज्याची आर्थिक घडी भक्कम केली. शेतकऱ्यांच्या कल्याणासाठी त्यांनी कर प्रणाली सुधारली आणि पडीक जमिनी लागवडीखाली आणण्यासाठी उपाययोजना केल्या. व्यापाराच्या वाढीसाठी मार्ग आणि बंदरांचा विकास केला, तर लष्करी बळकटीसाठी आरमार आणि किल्ल्यांवर विशेष भर दिला. त्यांच्या धोरणांमुळे स्वराज्याचे आर्थिक स्वावलंबन वाढले आणि जनतेला स्थैर्य व सुरक्षितता मिळाली. शिवाजी महाराजांचे अर्थनीतीविषयक दृष्टिकोन आजही मार्गदर्शक ठरू शकतात.

## **JOURNAL INDEXING**



**Publisher : Dr.Pravin Talekar  
Secretary,  
Young Researcher Association,  
Kolhapur (Maharashtra)**