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## E-Banking in India; Driving Forces and Emerging Challenges

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**Dr. Kailasbabu Vithaldas Hosmani**

Associate Professor

Shri Shivalingeshwar Govt. First Grade College, Madanhipparga

Tq: Aland Dist: Kalaburagi- Karnataka

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### Abstract

Banking is the lifeblood of the economy and today's generation cannot succeed in traditional banking; hence they are now moving towards electronic banking. E-banking, also known as electronic banking, has become very popular with the introduction of information technology and has brought advanced development in the banking sector. Huge computer networks have contributed greatly to the restructuring of banking institutions and the banking sector. Electronic banking has improved the performance and usefulness of services. It is a simple and effective computer-based aid that makes it easier to manage bank accounts and perform online activities. It also presents various challenges to administrators and managers. This is a concept-based paper. The objective of this paper is to analyze the dynamics and emerging challenges of electronic banking.

**Key words;** Banking Electronic, Internet, Information, Online.

### Introduction:

Electronic banking is the use of technology to provide banking services to customers at their homes or workplaces. According to Daniel, electronic banking is the process by which banks provide information and services to customers through various delivery platforms that can be accessed from a variety of devices, such as desktop or mobile computers with software, digital televisions, and mobile phones. The term "electronic banking" refers to a combination of services such as cash services, internet and mobile banking, ATMs, remittance systems, real-time gross settlement (payment and allocation systems), credit/debit/smart/kisan cards, data warehousing, operational interpretation of MIS, and customer relationship management. Electronic-based banking, which includes a variety of financial transactions that can be performed from anywhere, is often referred to as cyberbanking, home banking, and virtual banking. When we examine the definitions of electronic banking given in the literature, we find that the term is a high level concept that refers to a variety of financial services delivered through electronic media such as the internet, television, personal computers, and telephones. Therefore, RTGS, NEFT, ECS, credit and debit cards, ATMs, telebanking, internet banking, mobile banking and cheque payment all come under the term "electronic banking".

Technology is the driving force behind digital transformation in the banking sector. It provides the foundational infrastructure, tools, and solutions required to modernize operations, optimize processes, and unlock new revenue streams.

**Optimized Operational Efficiency**

Digital transformation enables banks to automate manual processes, reduce paperwork, and streamline operations, resulting in cost savings and productivity gains. In addition, it creates new opportunities for banks to increase efficiency, for example, by delivering accurate interactions at scale, building stronger customer relationships to prevent customer churn, and identifying personalized cross-sell and up-sell opportunities. One area where banks particularly benefit from increased efficiency is mortgage lending. Data shows that specialized mortgage software can make underwriting decisions 81% faster and 90% more accurate.

**Improved Customer Experience**

Every day, banks receive a ton of data that helps them develop a comprehensive 360-degree view of their customers, develop a customer-centric business architecture, and identify new opportunities to improve service. This data provides enterprise-wide insights, enabling financial institutions to create customized services and intelligent capabilities to deliver the right customer experience across all channels. Banks recognize the value of customer satisfaction and are investing in solutions that increase efficiency, better serve their customers, and reduce costs. As a result, 46% of banking executives say their organization's customer experience budget will increase over the next 12 months.

**Improved personalization**

Today's banking customers expect faster, more personalized service. Digital transformation allows banks to connect information from different sources to better understand customer needs, goals, and life events. Leveraging all this data, banks can deliver highly personalized, omnichannel experiences that meet customer expectations. This can increase customer lifetime value, boost revenue by 5-15%, and reduce customer acquisition costs by up to 50%.

**Advanced security measures**

As digitalization increases, cybersecurity has become a top system. With the average cost of a data breach in the financial sector being \$5.9 million, investing in robust security solutions such as encryption, multi-factor authentication, and real-time monitoring is essential to protect against cyber threats and data breaches. Technology is the foundation for banking success. Technology is the driving force behind digital transformation in banking. It provides the fundamental infrastructure, tools and solutions needed to modernize operations, optimize processes and develop new revenue streams. This allows banks to reinvent and rethink their business models, product offerings and service delivery channels to meet the demands of today's digitally savvy customers. Online Services Without strong technological capabilities, banks will struggle to keep up with rapidly changing customer demands, market trends and competitive pressures.

**Cloud :**

Cloud computing provides powerful on-demand resources to integrate software solutions across multiple locations and is becoming an essential part of digital banking infrastructure. Leveraging cloud technology, banks can rapidly introduce new services, ensure continuous delivery and break down silos across the business ecosystem. How different software components interact. The technology enables banks to integrate with external applications and provide new digital services and capabilities to their customers.

**APIs** act as secure gateways, enabling seamless data exchange between banks, fintechs, and other third parties.

**Artificial Intelligence:** Artificial intelligence (AI) and machine learning (ML) are revolutionizing the banking industry, opening the door to greater innovation and new operating models. Implementing AI tools in companies can unlock new value worth \$200 billion to \$340 billion annually, or 9% to 15% of operating profits.

### **Challenges In Internet Banking**

The challenges associated to e-banking exist in Indian scenario are discussed below:

**1. Security risks:** Security issues and other related aspects have become one of the major concerns for the banking industry (Prema C, 2011). Many of our customers have opposed the introduction of electronic banking facilities due to security concerns (Kuisma T, Laukkanen T, Hiltunen M). According to the IMAI Report (2006), 43% of Internet users still do not accept the use of internet banking in India due to security risks. Therefore, one of the most important challenges for banks is to convince consumers of this aspect and increase the use of online banking even more.

**2. Privacy/Confidentiality Risk:** The risk of leaking undisclosed or confidential information and fear of identity theft are among the main reasons why consumers do not opt for electronic banking services. Many consumers believe that using Internet banking services will put their personal information at risk. According to a survey (Andrews S and Shen A., 2000), consumers fear privacy as banks may violate confidentiality by using consumers' information for marketing and other follow-up purposes without the consumer's consent.

**3.Trust Issue:** For most customers, trust is the biggest obstacle to electronic banking. Customers don't trust online banking, so they often use traditional banking. They believe that online banking involves risks that lead to a variety of fraud and fraudulent activities (Ingle A and Pardishi R, 2012). When using online banking services, consumers are constantly questioning or questioning about whether the transaction was successfully completed until they receive a confirmation message.

**4. Customer Understanding:** In India, consumer knowledge and understanding of electronic banking is still very low. Banks are unable to provide comprehensive information on how to use online banking, benefits and possibilities. Therefore, one of the most perceived obstacles in the expansion of e-banking is the lack of awareness of new technologies among customers. (Karimzadeh M and Alam D, 2012).

**5. Low Internet penetration in India:** Online banking channels have been changing over the years. The use of e-banking in India has increased from 1% in 2006 to 7% in 2011, and in North America, 60% of major banking transactions took place through online channels in 2011 (Infosys Report, 2012 ). Therefore, the understanding and availability of the Internet remains one of the major conflicts inherent in the Indian situation. According to a 2006 IMAI report, approximately 22% of internet users don't know how to transfer money online. Therefore, the biggest challenge is to deal with internet customers and become familiar with the internet.

**6. Infrastructure defects:** Internet banking requires continuous support of efficient infrastructure to achieve effective implementation and wider geographical coverage. The expansion of electronic banking to

semi-urban and rural areas is hampered by poor infrastructure such as inadequate equipment, power connectivity, poor satellites, internet and broadband connectivity.

**7. Operating Conditions:** India is a multicultural and multilingual country (National Conference Proceedings, 2014). However, displaying instructions and policies in different languages is a tedious task, which complicates how to operate online banking. However, although technology has found a solution to this problem, illiterate people are still not covered by this solution and ATMs cannot guarantee the same performance for all users, resulting in huge losses.

**8. Technological Illiteracy:** Mobile banking is difficult to use as the technical rules and regulations are incomprehensible to many low-income users. Consumers generally purchase mobile phones with budget in mind, but these mobile phones may come with features that are not useful for mobile banking, resulting in limited e-banking performance.

**9. Employee Training:** In private banks, employee training is easy as they have young, active and computer savvy employees. On the other hand, in public banks, employee training is a complicated task as the percentage of computer savvy among the existing staff is relatively low. Despite these facts, they have been able to achieve success after more than a decade of successful efforts.

**10. Customer Education:** Private banks have been providing their customers access to electronic banking services since early on. However, it is very difficult for the old public banks to convince their customers of the benefits of this program. It is a difficult task to officially inform customers about electronic banking. In this situation, banks have decided to offer financial incentives such as free debit cards, free online banking, and regular and timely email notification of monthly bank statements to customers to entice customers to these emerging banking services.

**11. Limited Business:** Another challenge of electronic banking is that not all banking transactions can be performed online or through other electronic media. For some services such as deposits and withdrawals, you need to visit the bank in person. It has been observed that some banks have automated their methods and customers (front-end), but many banks still follow traditional processes (back-end). This limits their customers to some extent due to lack of knowledge and technological hurdles. **12. Technology Cost:** The initial investment cost is high in terms of the cost of PCs and other equipment required to perform electronic banking transactions. The cost of maintaining all these devices like modems, routers and the entire IT setup is also high. At the same time

### **Conclusion:**

E-banking is becoming increasingly popular in India. Various factors such as falling internet and mobile costs, falling PC and phone prices, availability of broadband through cable and digital subscriber lines will undoubtedly contribute to the growth of e-banking in India. Analysis shows that RTGS, ECS and NEFT are the emerging payment systems for high value transactions, retail payments and one-to-one transfers in India. Among card-based payment methods, debit cards are more popular than credit cards. Both internet banking and mobile banking are gaining in popularity, however, with the rapid penetration of mobile phones in India, there is much more potential to provide banking services through mobile phones rather than the internet. ATMs are becoming more prevalent in India, especially in rural areas, and customers from all walks of life are starting to use them as a means of banking transactions. However, they

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are plagued by nefarious activities like phishing and identity theft, which makes some customers still hesitant to use electronic channels for banking transactions.

Legal and cross-border hazards can be avoided by using proper customer identification devices, information verification procedures, regularly checking compliance with various laws, learning the laws (related) of different countries, and assisting customers in cross-border transactions. Information related technologies have been crucial in the development of the banking sector. The adoption of computerization by the banking industry has made banking in India reachable to everyone. Not only did information technology make life easier, it also provided many comforts that rely on efficient access to banking transactions, but there is none of the IT skills needed.

**Reference:**

1. Singh, B. and Malhotra, P. (2014). Adoption of Internet Banking: An Empirical Investigation of Indian Banking Sector. *The Journal of Internet Banking and Commerce*.
2. Chavan, J. (2013). Internet Banking- Benefits and Challenges in an Emerging Economy. *International Journal of Research in Business Management*. 1(1), 19-26.
3. Lal, R. and Saluja, R. (2012). E-Banking: The Indian Scenario. *Asia Pacific Journal of Marketing and Management Review*, 1(4).
4. Chauhan and Choudhary (2015). Internet Banking Challenges and Opportunities in Indian Context. *Apeejay Journal of Management Sciences and Technology*.
5. Trivedi and Patel (2013). Problem faced by customers while using E-banking facilities in India. *International Journal of Scientific Research*, II(III).
6. Gupta, P. and Mishra, C. M. (2012). E-banking- New emerging trends in Indian banking industry. *Research Journal of Economics and Business Studies*, 1(10), 1-3.
7. Sharma, G. (2016). Study of Internet Banking Scenario in India. *International Journal of Emerging Research in Management and Technology*, 5(5).
8. Sharath A. M. (2019). The Challenges and Opportunities of E-Banking in Republic of India. *Journal of Emerging Technologies and Innovative Research*, 6(6), 994-1002.