



## Changing Perception of The Society Towards Electronic Payment System and The Scourge Of Online Hackers: Two Dimensions of E-Commerce

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### **Abstract:**

*Currency is an essential factor or well-known parameter to calculate the growth of economy of every country. We can say that currency is blood of economy. And therefore, just as the body needs to have adequate blood flow to stay healthy, similarly, the purchasing power of currency needs to increase to keep the economy healthy. Our Indian economy purely based on Cash based economy, fortunately from last two decade it has seen tremendous changes in use of Electronic payment system in India. With the growth and improvement in new technologies, government also invest to develop the online payment platform for secured digital payment system and boost for cashless transaction system. There are different channels introduced to use of cashless transactions. Just as a coin has two sides, even the most sophisticated and innovative online payment systems have their pros and cons. To know the better understanding of different modes of frequently used Electronic payment system, the researcher will have a briefly overview on digital payment systems with its drawbacks. Through this research paper, researcher steers to identify the consumers' perception toward cashless transactions, also identify the level of awareness of the consumers regarding the computer technology with its security issues.*

**Keywords:** *E-Commerce, Cashless Transactions, Consumer Perception, Digital Payment, Digital Wallets, Purchasing Power ,Kinds of Awareness, Cashless Economy, Electronic payment system, security issues*

### **Introduction:**

The present era is filled with modern technology. It can be seen that this modern technology is being extensively used in the development of e-commerce. In India, after demonetization People seem to prefer the online payment system instead of cash transaction. There are various factors, which influences the society towards cashless transaction. One of the most significant factors is dealing with money carries enormous risks, at the same, the Indian government has taken initiatives towards cashless transactions. And other factor includes the efforts of Indian banks which promote and help their customers towards cashless transactions by offering mobile

banking Services and net banking facilities. Digital payments are easy and convenient to use for any user who is competent with technology. As well as there is no need to Carry Physical Cash, all Payment can done through mobile phone or Credit Card or debit card or UPI apps and E- Wallets to made digital payments easier and more convenient.

When we observed the overall journey of Electronic payment system, it's observed that, digital payment system has highly stimulating particularly after the demonetization in India. In the year 2016 When the Indian Government withdraw the currency note of 500 and 1000 rupees from the market. There are different shades

behind the practice of demonetization in India. one of them is taking various steps for efficient utilization of Cashless payment platforms, which help to Reduce corruption, Money Laundering and black money from the Indian economic system. In this Complex and interrelated world various electronic payment mode play dynamic role for sustainable growth in the society, most of the people frequently uses the credit card, debit card, UPI platforms like Phone pay, Paytm, Bhim Pay app, Google pay etc. Credit cards and debit card popularly known as plastic money which is slowly replacing the traditional paper currency around the World. As well as Online transaction can be attributed to style statement or it is anything else that is in trend in the Daily business life. The “Digital India” campaign run by Indian Govt. to ensure and motivate the online transaction and E-Business. The basic aimed of this campaign is to connect the rural areas with high-speed internet networks. It positively affects the increasing use of Digital payment which highly empowered the nation and growing the economy. E-Commerce or Digital payment system is growing rapidly on a global scale but, still most of the people uses physical cash due to security issues and risk. Basically this risk associated with the transaction or personal information which is leading to financial losses. Breaking of privacy is not acceptable as well as poor security measurement is a critical obstacles of the success and growth of E-commerce.

According to Mahor, N. (2017) that whether it is cash or a cashless transactions, but its observed that individuals are influenced by information technology, willingness to pay, social influence, and comfort zone of payments. And as per their observation it's understood that Customer frequently recharge their mobile phones or TV, ticket booking done with the help of mobile wallets and mobile payment mode. Apart from all these facilities people can get

various discounts and extra services like cash-back, 24x7 access and other facilities and offers like buy one get one free etc. we can say that all these factors strongly influence to change the perception of consumer toward Digital payment system or Cashless transactions.

#### **Objective of Study:**

1. To understand the Changing perception of the society towards cashless transaction and their view about the various attributes of digital payments.
2. To study the overall modes of digital payment.
3. To study the level of awareness of customer about security issues of digital Payment Modes.

#### **Popular Modes of Electronic payment System:**

##### **1. Electronic Fund Transfer (EFT):**

EFT or Electronic Fund Transfer is the a very authentic and secured mode of the transfer of money from one account to another through electronic/ online platform. In EFT Fund can transfer using a computer or an ATM from one bank account to another bank account. The Bank account can belong either same financial institution or to different financial institution. Its provide an alternative means for playing for goods and services. Its classified as NEFT, RTGS and IMPS.

- **NEFT** (National Electronic Fund Transfer): NEFT is a nation-wide money transfer system. It allows the customer with the facility to electronically transfer fund from there bank account to any other account of same bank or another bank. Fund to be transferred to via NEFT require a transferring bank under this system there is a registration process of account holder is compulsory as well as addition of beneficiary is the mandatory process.

- **RTGS** (real time gross settlement) this is the real time fund transfer system. using this method we can transfer the amount from one account to another on a real time and gross basis it is instant clearing method. the main features of the RTGS payment gateway is maintain by Reserve Bank of India in this system of digital payment the amount is instantly debited from the bank account of the person and credited to the beneficiary account instantly. we can transfer from this facility, maximum two lakh and more amount.
- **IMPS** it is known as Immediate payment service this system is introduced by National payment corporation of India. It is also known as pilot mobile payment project. this method of payment offers instant electronic transfer using mobile phone which provide immediate confirmation. but registration is mandatory for this system.

## **2. Paperless Bill or E-Bill:**

It is a service which is provided for a convenient of receiving weaving and paying the bills through online modes and which is completely free of cost basically its used to paid for medical expenses electricity bill house rent mobile recharge etc.

## **3. Electronic or Digital Cash:**

A digital form of cash is known as a digital cash or e-cash it is also called as a e currency e money or digital money or cyber currency it is most commonly used mode of payment in commerce system in this types of electronic payment unit tokens at transmitted from the customer to the merchant over the internet. A blind signature method is used for functioning of digital cash in this method the cash is provided to the customer without returning the details of the user when the note is generated by software the actual number 8 mark or blended with acids of random number this random number are sent to the bank which

then digital signed the note for a specific amount of money

## **4. Electronic Cheque Or Digital Cheque:**

It is a mode of credit payment that allows the customer to pay to the merchant online to use this check a customer needs to have an account with a third party server each checks are similar to paper checks the messages sent to the receiver of the check and the end of check is presented to the bank to get the funds net check which is developed by information science institute is one of the good example of e check.

## **5. Smart Card:**

Smart card is a small electronic device which can also known as a stored value card. It is about the size of a credit card which consists of digital memory and an embedded integrated circuits the embedded integrated chief is the Smart Card store information related to customer that is utilize to authenticate the data and ensure the security of confidential details it also so the amount of money that the card possesses and reduce as per use.

## **6. Mobile Wallet:**

It is a digital solution for carrying money it enables the user to safely store their details like a credit cards debit cards a loyalty cards Bank information and even drivers license on a mobile device using a dedicated app a person can use it's smartphone tablets or smartwatch to pay for items instead of a tradition credit card.

## **The most common and damaging forms of security and threats in E-Commerce:**

It is the gray side of e-commerce that there are a number of the most common and damaging forms of security and threats in e-commerce which includes malicious code, phishing and identity theft, denial of services attack, unwanted programs hacking and cyber vandalism spoofing and spam websites etc.

**Malicious Code:**

When we use The E-Commerce facilities there is a risk of malicious codes entering in our personal computer through the network easily. There are different types of malicious code like virus which include - file infecting virus, boot sector virus, macro virus, script virus, polymorphic virus, encrypted virus etc, it's also include the Trojan horse boards and worms. some specific malicious code as follows:-

**1. Virus-** virus is a very harmful type of malicious code. it's mainly affect the executable files like star.com, executive.drv and. dll files. this virus are activated by copying themselves into the other executable files. When the user open that infected files, then this viruses can be easily spread out in other system by emails or through file transfer system. Therefore it is called as file infecting viruses.

**2. Boot sector viruses:-** this virus does not infect the files in hard disc, but its directly damage the hard disc itself. As well as this virus is easily transfer through physical media like floppy disc, pen-drive.

**3. Macro viruses :-**this virus are infect only some specific application for which it was created such as Microsoft word, Excel or PowerPoint once the user open the particular application the virus copies itself rapidly to the files ,excel sheet or templates of that MS-application.

**4. Trojan horse-** It is malicious code that appears to be friendly but popularly used by hackers by a back door to infect system of the user.it is the program that perform the desire task but at the same time also perform an expected or undesirable task.

**5. Bots-** it is the short form of robot it is the malicious code that can be secretly installed in a computer is attached to the internet. After installation the bots. the command sent by the attackers to the user computer. and in this type of malicious code, the infected computer becomes a zombies and

its control by the attacker or the hacker or the external third party which is called **Hot herder**. Its basically perform malicious activities like sending spam mails, stealing information and storing the network traffic analysis.

**6. Worms-** It is a malicious code that replicate itself.

- **Phishing:** phishing it's done by the culprits to perform an unauthorized access or to perform a fraudulent act. It is nothing but the stealing of someone's personal information and data, such as username, password, credit card information etc. Nowadays with the development of e-commerce and network technology the occurrence of fishing event has been increased day by day.
- **Hacking:** Hacking is the process of illegally gaining the access of a computer or network. It illegally violate the privacy and also harms the computer files ,web page and software. the people who involve in the hacking process are known as the hackers. The main purpose of hackers is to alter the computer hardware and software to achieve a goal which is different from that of the owners actual object.
- **Black hat hackers-**this types of hackers have no constructive purpose for hacking they only do it for personal gains and profit.
- **Grey hat hackers-**they are the hackers who are hacking just for fun. they generally work individually because their purpose of hacking is to check the security level of a Website.
- **White hat hackers-** they are the professional hackers which are hired by the companies to hack their own website in order to check their level of security. this hackers can be individual or in the group and are paid for doing so they find the

exploitation level of the server and report it to the company to get a remedy against it and achieve higher level of protection.

- **Cyber Vandalism:** Cyber vandalism is the electronic defacing of an existing websites page. The electronic equivalent of destroying the property Cyber vandalism occurs whenever someone replace a regular content with his or her own content from original website. In some cases vandals replacing the business content with pornographic material and other offensive content.
- **Skimming:** it is basically the credit card fraud. In which the account attack overs typically involve the criminal hijacking of an existing credit cards account. A practice by which a perpetrator obtains enough personal information about a victim to change the accounts billing address. The perpetrator then subsequently send a fake report about the card lost or stolen in order to obtain a new credit card and make a fraudulent purchase with it.
- **Spoofing:** Spoofing a website is also known as pharming. It means Hackers generally want to hide their real identity and therefore they use a fake Emails ID to misrepresent themselves or masquerades at someone else. Spoofing take place when the wavelength is redirected to a website other than the intended one. Basically there are two type of spoofing.
- **IP spoofing:** in this type of spoofing to hide the identities. a crackers masquerades at as a trusted host he or she can spoof a browser website or some time get the access to a network.
- **DNS spoofing-**it is the method of spoofing, the information about the

illegitimate name server is sent to the DNS server however the DNA server think that the name server is legitimate. DNS spoofing can do various types of redirection such as reboot the mails or send user to a website that is different from the original website.

#### E-Commerce security tools:

After studying all the hacking ideas and forms, it is very important to the users of E-Commerce to use The E-Commerce security tools, which helps them to secure and enjoy their online payment system. Basically the following tools are reliable and useful for the peoples who use the e-commerce-

- Install a proper antivirus software and use it frequently
- Always Install the required software from a sealed package or from a secure and authorized website.
- Always use a safe or government approved platform for payment procedures.as well as adopt multi factor authentication technology for bulk payment.
- Use stronger password and change it frequently.  
Always Scan all removable media including CD and Pen-drive before copying or running the program from them. Follow careful downloading practices
- Use a firewall which provide guarantee the highest level of e-commerce security by enhancing your security protocols.

#### Conclusion:

In India, Society positively adapted a cashless payment system. Majority of the customer have believed that use of digital/cashless payment modes saves their time and other related expenses. This Research work finds that cashless payment



modes are easy and convenient to use anytime and anywhere. Most of customer fear security issues and problem but after getting some technical knowledge, they believe that cashless payment modes are secure. In this paper found that the technological infrastructure and technological literacy is still significant to maximize the user of digital payment system. As per the current scenario with the increasing use of digital payments system, its substituted the physical cash transactions. Though there are few limitations, when it comes to the privacy and security concern but it depends on how the user, banks and other agencies handle it carefully.

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