



Current And Future Scenario Of E –Payment System In India

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Abstract

The electronic payment system is an online based system. The emergence of e-commerce has created new financial needs that in many cases cannot be effectively fulfilled by the traditional payment systems. Recognizing this, virtually all interested parties are exploring various types in four categories: Online Credit Card Payment System, Online Electronic Cash System, Electronic Cheque System and Smart Cards based Electronic Payment System. This system is managed by the Reserve Bank of India (RBI). It is doing its best to encourage alternative methods of payment which will bring security and efficiency to the payment system. In the future, the Electronic Payment Industry has an extensive potential for growth considering the growth of the Internet.

Keywords: credit cards, RBI, smart cards, electronic cheques

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Introduction

E payment is a subset of an e-commerce transaction to include electronic payment for buying and selling goods or services offered through the internet. Generally, we think of electronic payments as referring to online transactions on the internet, but there are actually many forms of electronic payments. As technology is developing, the range of devices and processes to transact electronically continues to increase while the percentage of cash and cheque transactions continues to decrease.

So in other words, an electronic payment system is needed for compensation for information of goods and services provided through the internet such as access to copyrighted materials, database searches or consumption of system resources—or as a convenient form of payment for external goods and services—such as merchandise and services provided outside the internet. It helps to automate sales activities, extends the potential number of customers and may reduce the amount of paper work.

OBJECTIVE OF STUDY

1. To make the comparison between traditional and electronic payment systems.
2. To study the modes of e-payment systems.

3. To know about current and future scenario of e payment system.

LITERATURE REVIEW

5. **Rachna (2013)** describes that electronic payment system is the basis of on line payments and it make electronic payment at any time through the internet directly to manage the e -business environment. The risk to the on line payments are theft of payments data personal data and fraudulent rejection on the part of customer.
6. **AASTHAGUPTA(2013)** describes that RBI played a significant role in developing the payment system in the nation through its establishment .ATM also provide better alternative to traditional payment system .RBI also enhance the payment system by introducing MICR,RTGS ,Card based clearing etc.
7. **SINGH SUMANJIT (2009)** highlighted that as payment is an integral part of mercantile process, electronic payment system is an integral part of e-commerce. The emergence of e-commerce has created new financial needs that in many cases cannot be effectively fulfilled by traditional payment systems.
8. **KARAMJIT KAUR (2015)** describes that spread of e-payment usage vary unevenly between countries partly due to difference in factors such as quality of regulatory framework and readiness of telecommunication infrastructure. E-payment system is secure .there should be no threat to the user credit number smart card; payment can be carryout without involvement of third party. It makes e payment at any time through the internet directly to the transfer settlement and form e business environment.

RESEARCH METHODOLOGY

To examine the objective of study, secondary data is collected from different websites and journals. Various websites are visited for collecting the data.

CONVENTIONAL VS. ELECTRONIC PAYMENT SYSTEM PROCESS

To get into the depth of electronic payment process, it is better to understand the processing of conventional or traditional payment system. A conventional process of payment and settlement involves a buyer-to-seller transfer of cash or payment information (i.e., cheque and credit cards). The actual settlement of payment takes place in the financial processing network. A cash payment requires a buyer's withdrawals form his/her bank account, a transfer of cash to the seller, and the seller's deposit of payment to his/her account. Non- cash payment mechanisms are settled by adjusting i.e. crediting and debiting the appropriate accounts between banks based on payment information conveyed via cheque or credit cards.



1. Process of Conventional/Traditional Payment System

Cash moves from the buyers' bank to sellers' bank through face-to-face exchange in the market. If a buyer uses a non-cash method of payment, payment information instead of cash flows from the buyer to the seller, and ultimate payments are settled between affected banks, who notationally adjust accounts based on payment information.

2. Process of Electronic Payment System

Electronic payment systems have been in operations since 1960s. After the development of conventional payment system, EFT (Electronic Fund Transfer) based payment system came into existence. It was first electronic based payment system, which does not depend on a central processing intermediary. An electronic fund transfer is a financial application of EDI (Electronic Data Interchange), which sends credit card numbers or electronic cheques via secured private networks between banks and major corporations. To use EFT to clear payments and settle accounts, an online payment service will need to add capabilities to process orders, accounts and receipts. But a landmark came in this direction with the development of digital currency. The nature of digital currency or electronic money mirrors that of paper money as a means of payment. As such, digital currency payment systems have the same advantages as paper currency payment, namely anonymity and convenience. As in other electronic payment systems (i.e. EFT based and intermediary based) here too security during the transaction and storage is a concern, although from the different perspective, for digital currency systems double spending, counterfeiting, and storage become critical issues whereas eavesdropping and the issue of liability (when charges are made without authorizations) is important for the notational funds transfer.

MODES OF ELECTRONIC PAYMENT SYSTEM

Electronic payment system can be broadly divided into four general types:

4. Online Credit Card Payment System: It seeks to extend the functionality of existing credit cards for use as online shopping payment tools. This payment system has been widely accepted by consumers and merchants throughout the world, and by far the most popular methods of payments especially in the retail markets. This form of payment system has several advantages, which were never available through the traditional modes of payment. Some of the most important are: privacy, integrity, compatibility, good transaction efficiency, acceptability, convenience, mobility, low financial risk and anonymity. Added



to all these, to avoid the complexity associated with the digital cash or electronic-cheques, consumers and vendors are also looking at credit card payments on the internet as one of possible time-tested alternative. But, this payment system has raised several problems before the consumers and merchants.

5. Electroniccheque payment system: Electronic cheques address the electronic needs of millions of businesses, which today exchange traditional paper cheques with the other vendors, consumers and government. The e-cheque method was deliberately created to work in much the same way as conventional paper cheque. An account holder will issue an electronic document that contains the name of the financial institution; the payer's account number, the name of payee and amount of cheque. Most of the information is in uncoded form. Like a paper cheques e- cheques also bear the digital equivalent of signature: a computed number that authenticates the cheque from the owner of the account. Digital chequing payment system seeks to extend the functionality of existing chequing accounts for use as online shopping payment tools.
6. Electronic Cash Payment System: Electronic cash is a new concept in online payment system because it combines computerized convenience with security and privacy that improve on paper cash. Its versatility opens up a host of new markets and applications. E-cash is an electronic or digital form of value storage and value exchange that have limited convertibility into other forms of value and require intermediaries to convert. E-cash presents some characteristics like monetary value, storability and irretrievability and security. All these characteristics make it more attractive payment system over the Internet. Added to these, this payment system offers numerous advantages like authority, privacy, good acceptability, low transactions cost, convenience and good anonymity.
- 4.Smart card based electronic payment systems :Smart card are receiving renewed attention as a mode of online payment. They are essentially credit card sized plastic cards with the memory chips and in some cases, with microprocessors embedded in them so as to serve as storage devices for much greater information than credit cards with inbuilt transaction processing capability. This card also contains some kinds of an encrypted key that is compared to a secret key contained on the user's processor. Some smart cards have provision to allow users to enter a personal identification number (PIN) code.

CURRENT SCENARIO OF E-PAYMENT SYSTEM

The payment system initiatives taken by Reserve bank of India have resulted in deeper acceptance and penetration of non cash payments modes. An analysis of



payment system in India reveals that growth of electronic payments has been impressive.

- India has several payment systems, ranging from paper –based systems to the electronic fund transfer systems that offer real –time settlement. These payments are managed by multiple entities and are regulated by the Reserve bank of India.
- Based upon the application they could be classified into Systemically Important Payment Systems (SIPS) and Retail Payment System (RPS).
- RBI’s thrust on technology in payment systems have resulted in visible improvements in the settlement processes in the SIPS ,where over 70% transactions are handled electronically.
- Retail payment systems include cheques clearing systems, electronic clearing systems and the card –based systems.
- Increased acceptance of electronic payment systems resulted in the growth of retail electronic clearing
- Board for Regulation and supervision of payment and Settlement Systems (BPSS) was constituted to prescribe policies relating to the regulation and supervision of all payment and settlement systems, set standards for existing and future systems.
- To assist BPSS, RBI constituted a Department of Payment and Settlement Services.

FUTURE OF ELECTRONIC PAYMENT SYSTEM

There are a wide variety of payment systems available to a consumer today. However there arises a need to provide a single universal payment system that provides the advantages of all the existing payment system. In an effort towards this direction, an organization called Joint Electronic Payment Initiative has been formed. The objective of this group is to define a set of protocols and interfaces that can support the use of a wide variety of payment methods for network commerce. Credit Card Payments have adopted SET as a standard for payment transactions. However, no protocol is currently available for electronic check payment. Financial Service Technology Consortium (FSTC) is working towards bringing in a standard for electronic checks. FSML has been introduced to develop secure financial documents like checks. However, it is yet to be accepted as an industry wide standard. Electronic Cash products like Ecash that do not make use of banking infrastructure are finding it difficult to push into the market. However smart card systems like Mondex are not popular in the market because of not being backed up by major banking institutions. Electronic



Payment Industry has an extensive potential for growth considering the growth of internet.

Conclusion

Technology has inarguably made our lives easier. It has cut across distance, space and even time. One of the technological innovations in banking, finance and commerce is the Electronic Payments. Electronic Payments (e- payments) refers to the technological breakthrough that enables us to perform financial transactions electronically, thus avoiding long lines and other hassles. Payment system are backbone of the financial infrastructure of the nation and enhance globalisation. There is need to create payment system that are efficient reliable and affordable.

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