Chapter 17
Overview of Electronic Payment System: A Special Reference to India

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ABSTRACT

The emergence of e-commerce has created new financial needs that in many cases cannot be effectively fulfilled by the traditional payment systems. The advent of the Electronic commerce has prompted the invention of several payment tools to facilitate the completion of business transactions over the Internet. There are different methods to pay electronically. Recognizing this, virtually all interested parties are exploring various types of electronic payment system and issues surrounding electronic payment system and digital currency. Broadly electronic payment systems can be classified into four categories: Online Credit Card Payment System, Online Electronic Cash System, Electronic Cheque System and Smart Cards based Electronic Payment System. Each payment system has its advantages and disadvantages for the customers and merchants. These payment systems have numbers of requirements: e.g. security, acceptability, convenience, cost, anonymity, control, and traceability. Therefore, instead of focusing on the technological specifications of various electronic payment systems, the researcher has distinguished electronic payment systems based on what is being transmitted over the network; and analyzed the difference of each electronic payment system by evaluating their requirements, characteristics and assessed the applicability of each system. To sustain in the competition more banks are following e-commerce and especially using e-payment mechanism. Though Indian economy is basically cash driven, still India is not far behind in adopting E-payment services in retail and banking sector.

INTRODUCTION

Financial system is the backbone of every economy. In order to handle staggering number of monetary transactions every economy requires a reliable financial system. By financial system it means banks and non-bank financial institutions which provide various types of financial services to the customers. In the payment system fund transfer service and financial clearing are the
two most important services than other services. Payment system improves financial intelligibility, stimulating business growth and helps in banking sector reform. Attitude of people towards a new payment system has been changing for the last two decades largely due to the following reasons:

1. **Increased either Volume or Value of Transaction:** As people are becoming more conscious regarding their financial matter, numbers as well as value of the transactions are increasing. This phenomenon is attributed to the rapid growth in financial market activity around the world and the payment generated by such activity.

2. **Technological Enhancement:** From last two decades there is an incredible technological improvement in banking and financial sector. It is due to the advancement of Information and Communication Technology and massive growth of Internet. As a result, financial institutions and consumers both have the ability and the resource to move funds much faster through the system, at a lower cost.

3. **Effect of Globalization:** With the effect of globalization more and more businesses have started to overcome geographical boundaries. As a result more financial transactions are flowing across the countries. The company that has the capability to streamline its payment mechanism is able to trim costs and thus achieve competitive advantage. This can be possible only in cross-nation payment.

Globalization and financial revolution have changed specially the developing countries in many aspects.[1] Opportunity of trade and investments have increased, consumers taste and preferences have changed, demands for foreign products and services have increased. Technological advancements make the world more and more borderless. Advancements in communication and information technology bundled with Internet have produced unprecedented opportunities in the global economy, where Internet connects digitally all countries and regions. Electronic money, which is an electronic replacement for cash, is a product of such digital convergence. It is storable, transferable and perhaps unforgettable. The purpose of this chapter is to provide a comprehensive idea of Electronic money and Electronic Payment System and its acceptance in India.

Since the late 1970’s and early 1980’s, a variety of schemes have been proposed to allow payment over the computer network. The idea of paying for goods and services electronically is not a new one. Aristotle (384 – 322 B.C.) said that – everything must be assessed by money; for this enables men always to exchange their services and so makes society possible.

The arrival of Internet has changed the whole world. It brings the whole universe into our palm. The growth of Electronic Commerce has been possible only due to the availability of World Wide Web (WWW) technology. Initially the focus of Electronic Commerce was to sell goods like computer peripherals and software, books, music CDs etc. to consumers. Around 1999, industries shifted their focus on the trade that the companies can do with each other. They tried to build online electronic market place using the benefits of Electronic Commerce. With this Business-to-Business (B2B) Electronic Commerce it becomes possible to bring together businesses such as car manufacturer with its ancillary suppliers or computer manufacturers with its dealers. B2B E-Commerce has larger potential than Business-to-Consumer (B2C), as per estimation B2B had reached $226 billion worldwide in 2000 and $2.7 trillion on 2004.

In both B2B and B2C sector, firstly, Internet was used as a means of searching of products and services, payment being carried out off-line by some conventional payment method i.e. cash or check.

In early 90’s, when the first edition of Electronic Payment System was released, a huge variety of various payment methods were available in the...
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