

## **E-Commerce With Special Reference to E-Banking**

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**Abstract-** Electronic commerce involves a wide range of activities. The goal of electronic commerce is to improve the way in which business is conducted, through technology. This could be as simple as establishing a computer-mediated relationship between consumer and business, between business and supplier, or between supplier and manufacturer. It could involve automation of existing business systems, such as transaction or manufacturing processes. On the web, electronic commerce often means marketing, and online sales. Behind this though is a vast range of activities and technologies, powered by back-office systems. Electronic commerce is more than just sales. Initially, the Indian banking system was domestically oriented at the time of nationalization in 1969. National policy objectives where the guiding force and banks were primarily involved in mobilizing domestic savings, lending funds to specific sectors of the economy and raising resources for financing public deficits. Technology in Indian banking has evolved substantially from the days of back office automation today's online, centralized and integrated solutions. Once cannot think of ATM, Internet, mobile and phone banking or call centre services without the help of technology? However, the irony is that most of those products have more of technology and less of banking. Let us look of how banking has changed as a business over the last one decade. This paper begins with the definition of e-banking, Internet Banking, Mobile banking, ATMs, Debit card and Credit card and electronic fund transfer, anywhere banking and product and services. E-banking is a mix of services which include Internet banking, Mobile banking, ATM Kiosks, Fund Transfer System, Real Time Gross Settlement, Credit/Debit/Smart/Kisan Cards, Cash management services, and Data warehousing, Operational data for MIS and Customer Relationship Management. Latest innovations in technology like broadband transmission, internet access via mobiles (GSM) and Web TV will further provide impetus to digital revolution.

Further, banks are looking forward to scan the image of a cheque which can be zapped to another bank, into the depository and back to customer's bank. Banking transactions can be carried out 24 hours a day using these methods. In fact concept of anytime, anywhere banking is making it easy for customers to access their money more conveniently. It has been established that increasing the role of technology in a service organization can serve to reduce costs and often improve service reliability. New information technologies and emerging business forces have triggered a new wave of financial innovation - electronic banking (e-banking). This study utilizes an innovation model to analyze the impact of e-banking on the incumbent banks. The results indicate that the nature of e-banking innovation is disruptive, leading to drastic changes in both technological knowledge and business model. We further identify eight core capabilities that are necessary for the banks to cope with the change, each appearing to address either technical or business aspects of e-banking transformation. The findings have the potential to contribute to the understanding of impacts occurring in the change associated with e-banking and offer rich insights for the incumbent banks to exploit e-banking opportunities.

**Keywords-** E-banking, bricks-and-mortar banking, core capabilities, innovate.

### I. INTRODUCTION

The banking and financial industry (BFI) is transforming itself in unpredictable ways [1] powered in an important way by advances in information technology [2]. Since the 1980s, commercial banking has continuously innovated through technology-enhanced products and services, such as multi-function ATM, tele-banking, electronic transfers, and electronic cash cards. Over the past decade, the Internet has clearly played a critical role in providing online services and

giving rise to a completely new channel. In the Internet age, the extension of commercial banking to the cyberspace is an inevitable development. Both researchers and practitioners in the BFI have highlighted the need for banks to broaden their branch-based delivery channels by embracing electronic banking (e-banking).

E-banking creates unprecedented opportunities for the banks in the ways they organize financial product development, delivery, and marketing via the Internet. While it offers new opportunities to banks, it also poses many challenges such as the innovation of IT applications, the blurring of market boundaries, the breaching of industrial barriers, the entrance of new competitors, and the emergence of new business models. Now the speed and scale of the challenge are rapidly increasing with the pervasiveness of the Internet and the extension of information economy.

However, to successfully cope with the challenge of the e-banking innovation, the incumbent banks must understand the nature of the change and capability barriers that it presents [3]. Without this understanding, attempts to migrate to e-banking may be doomed to failure. Banks that are equipped with a good grasp of the e-banking phenomenon will be more able to make informed decisions on how to transform them into e-banks and to exploit the e-banking to survive in the new economy. Given the e-banking is a financial innovation the change may render the organizational capabilities of the traditional banks obsolete. From the resource-based view in such a context, the banks must constantly reconfigure, renew, or gain organizational capabilities and resources to meet the demands of the dynamic environment. Developing core capabilities can help the banks redeploy their resources and renew their competences to sustain competitive advantages and to achieve congruence with the shifting business environment.

Therefore, the purposes of this paper are to :

- (i) Evaluate the key differences in technological and business features between bricks-and mortar banking and e-banking.

- (ii) Explore the potential impacts occurring in the recent trends in E-banking

## II. CONCEPT

E-banking performs banking transactions electronically without visiting a brick-and-mortar institution. The following terms all refer to one form or another of electronic banking: personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone banking. PC banking and Internet or online banking is the most frequently used designations. It should be noted, however, that the terms used to describe the various types of electronic banking are often used interchangeably.

Electronic banking is an activity that is not new to banks or their customers. Banks are providing their services to customers electronically for years through software programs [4]. These software programs allowed the user's personal computer to dial up the bank directly. In the past however, banks have been very reluctant to provide their customers with banking via the Internet due to security concerns. Today, banks seem to be jumping on the bandwagon of Internet banking. Why is there a sudden increase of bank interests in the Internet? The first major reason is because of the improved security and encryption methods developed on the Internet. The second reason is that banks did not want to lose a potential market share to banks that are quick to offer their services on the Internet. Many of the banks like ICICI, HDFC, IndusInd, IDBI, Citibank, Global Trust Bank (GTB), Bank of Punjab and UTI were offering E-banking services. Based on the above statistics and the analysis comments that India had a high growth potential for e-banking the players focused on increasing and improving their E-banking services. As a part of this, the banks began to collaborate with functions online, an umbrella term for the process y which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The following terms all refer to one form or another of electronic banking: personal computer (PC)

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ultimate vision could be for a truly global and virtual marketplace requiring completely new institutional and legal structures and having a similarly profound impact on economic life to the medieval trade fairs which emerged in Europe in the 12th century. Electronically-based payment systems have been in operation since the 1960s and have been expanding rapidly as well as growing in complexity [5]. However, in most of the major industrialized countries, an inverse relationship exists between the volume and the number of transactions handled electronically. Typically, of business payments around 85-90% or more of monetary value will be processed electronically, while less than 5-10% of the total number of payment transactions will be handled in this way. This has been due to four related factors:

- i. proprietary closed networks were developed by banks to handle large and increasingly internationally based payments systems;
- ii. large value payments are increasingly associated with foreign exchange and global securities transactions, thereby becoming divorced from underlying world trade;
- iii. large value payment systems were not designed nor are they cost-effective for small value payments; and
- iv. Paper-based non-automated payment systems remain an established part of accepted business practice for varying institutional reasons, thereby remaining ingrained in the economic system.

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 are also expanding rapidly. The Internet is estimated to already have in excess of 40 million users, and according to figures published by NSFnet, the network has seen more than a doubling of users over the 12 months to January 1995. The Internet and other global on-line networks are creating new commercial opportunities for networked commerce. However, to date development has been limited by the lack of a

payment infrastructure. In the past 9 months, a number of initiatives have been made public for developing secure payment systems on the Internet. This paper examines these recent developments which could permit the creation of a new cost-effective global payment system for low value payments.

The paper suggests that the creation of an Internet electronic payment system will provide opportunities for the creation of completely new sets of global and national trading relationships. The Internet offers the possibility of an 'open systems' payment and settlement system which operates in parallel to existing, more traditional bank-based networks, and which is particularly suited to meet the currently unsatisfied requirements for processing low value payments electronically. However, the institutional framework to exploit these opportunities does not yet exist. Regulatory and policy issues will need to be addressed in order that full advantage can be taken of the new types of commerce which could emerge.

### III. CONCLUDING REMARKS

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. At the same time there is increasing pressure to move from existing paper-based

payment systems to electronic transfer. Microsoft's chairman, Bill Gates, is not alone in believing that the convergence of money, commerce and personal computers represents one of the great new markets of modern times. New and unforeseen opportunities can be expected to arise once a secure and cost effective 'mass' market electronic system for making low value payments is successfully established. Serious efforts to establish such a system on the Internet are still less than 15 months old. However, the coming 12 months should witness some interesting developments as small entrepreneurs, such as DigiCash and First Virtual, battle it out with the credit card companies and, to a lesser extent, with the commercial banks to establish new standards for electronic payments. 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. This will require new institutional structures to be formed as well as changes to existing outdated legal and commercial systems. The changes brought about by electronic commerce may be similar in scope to those experienced when the medieval trade fairs were established in Europe in the 11th century. The comparison is particularly apt, since that period saw the emergence of many of the banking institutional structures and payment instruments which remain in use today. This study initially proposes an innovation model and employed inductive methods: comparative analysis and secondary data analysis to analyze the impact of e-banking. The results suggest that the e-banking is a disruptive innovation for the incumbent banks. It leads to massive changes in the areas of both technological knowledge and business model. To cope with the change, banks must seriously rethink about how to reinvent the ways they serve their customers.

To assist the banks migrate to e-banking environment, we further identified eight core capabilities for exploiting e-banking. These capabilities fall into two distinct groups that must be balanced. One group relates to the capabilities to utilize the emerging IT, while the second group is associated with the capabilities for the reconfiguration of the existing business model. Banks are able to properly exploit e-banking only if they renew their technical and business capabilities. There are two implications for the incumbent banks. On the one hand, banks need to develop uniquely innovative services and Products through the secure technical platform and transactional process. On the other hand, they need to establish innovative business model that changes they way banks operate and how they interact with their stakeholders.

This study sees the right core capabilities as a blueprint for sustaining a bank's ability to exploit e-banking. They are particularly appropriate for the incumbent banks with established resources and will help them to cope with the e-banking change. In practice, they can be utilized as a diagnostic tool for practitioners to assess and analyze what aspects of their existing banking operations are most problematic.

Practitioners can compare the current level of each element in their banking systems with the expected levels to understand their relative effectiveness and take the necessary corrective actions to successfully make the e-banking transformation.

#### IV. REFERENCES

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