CHAPTER - II
REVIEW OF LITERATURE

- Review of Literature
- Review of Bygone Studies
- Research Problem
- About the Problem
- Introduction
- Technology Acceptance Model
- The Research Framework
- Computer Self-Efficacy
- Perceived Usefulness (PU)
- Perceived Ease of Use
- Perceived Security
- Chapterization
- References
In order to reap the benefits of having loyal customers and gaining a competitive advantage online, companies need to develop a thorough understanding of the antecedents of loyalty on the World Wide Web (e-loyalty), such as business factors [Bhattacherjee 2001] or personal characteristics [Magi 2003]. In order to investigate the importance of e-loyalty, the identification of variables influencing repeat purchasing behavior and word-of-mouth recommendation is a crucial area of research [Srinivasan et al. 2002]. This holds especially true for those industries which already depend heavily on their reputations and long-lasting relationships in the offline world, as is the case with the financial sector. The widespread adoption of online banking services calls for research investigating those factors which are responsible for keeping customers loyal.

A model explaining the antecedents of loyalty in the online banking industry has to incorporate factors which take into account the characteristics of the industry as well as those of the medium. Therefore, we consider antecedents such as trust (being important online and offline) and the perceived quality of the Web site (being important only online). Besides being topics of scholarly research in the information systems domain, these issues have been long discussed in marketing. More than two decades have passed since the concept of relationship marketing was first mentioned in the marketing literature [Berry 1983]. Drivers such as intense competition, demanding customers and enablers such as the Internet are the reason why relationship marketing has increasingly attracted the attention of researchers and practitioners alike [Sheth and Parvatiyar 2002]. In relationship marketing research the concept of customer loyalty plays a central role [Christopher et al. 2004]. The preeminent importance of retaining customers is supported by
several studies [Chen et al. 2002], confirming the relevance of customers' loyalty to a firm's profitability. New forms of online communication offer a host of new and promising opportunities for customer retention on the World Wide Web, while at the same time intensifying competition [Vatanasombut et al. 2004]. In particular, this applies to company-controlled communication, giving companies the ability to customize information with regard to the individual needs of a particular customer and to optimize the customer's feedback opportunities [Kierzkowski et al. 1996]. At the same time, companies also face completely new challenges arising from customer-controlled.

**REVIEW OF BYGONE STUDIES**

The E-Banking Sector:

Online banking, which can be defined as the provision of information or services by a bank to its customers over the Internet [Daniel 1999], has been one of the major developments in the financial service sector in recent years. According to a survey conducted by Pew Internet and America Life, online banking has been the fastest growing Internet activity in the U.S. over the last five years. As of November 2004, a total of 53 million Americans (44% of all U.S. Internet users) use some form of online banking service [McGann 2005J.

In Germany the number of online accounts has increased almost tenfold between 1999 and 2004, with 40% of all accounts now being online [Association of German Banks 2004].

A short review of the literature on electronic banking briefly illustrates the major issues that researchers and practitioners have dealt with in recent years. Security turned out to be a major obstacle for many customers who were otherwise willing to switch to the online world [Martin 1998]. Besides assuring customers that their privacy is protected, Hamlet [2000] suggests that banks should not over-animate or clutter their Web sites with too much
advertising. In addition, care should be taken not to over-personalize the online-experience in order to avoid the impression that personal financial information is freely available. Bhattacherjee [2001] uses online banking customers to test his expectation-confirmation model of IS continuance. His results suggest that users' continuance intention is determined by their satisfaction and perceived usefulness of the application. Table 1 shows a number of research papers that empirically validate models in the context of e-banking. Tan and Teo [2000] found that attitudinal factors such as Internet experience, the relative advantage of online banking and perceived risk, and perceived behavioral control factors predict the intention to adopt Internet banking services. The survey by Karjaluoto et al. [2002] showed that prior experience with computers and technology as well as people’s attitudes toward computers influences both their attitude toward online banking and their actual behavior. Mukherjee and Nath [2003] found that communication had a moderate influence on trust, while opportunistic behavior had a significant negative effect and trust in general led to a higher level of commitment in online banking. Information sharing and distrust in the Internet were identified as the two major drawbacks for Thai Internet banking adoption by Rotchanakitumnuai and Speece [2004]. Based on a survey amongst Finnish banking customers, Pikkarainen et al. [2004] found perceived usefulness and information on online banking on the Web site to be the main drivers for the acceptance of online banking. A recent study by Lassar et al. [2005] showed that Internet related innovativeness is positively related to the adoption of online banking.

With the number of online banking consumers steadily increasing, the focus of attention shifts from enticing customers to the online world to retaining them. While the focus of the aforementioned papers lies on offline versus online, this paper deals with the problem of how to keep a customer online and loyal to a specific supplier. Therefore, we analyze which antecedents
might induce customers to stay with a particular online bank instead of switching suppliers. We will start discussing our model by referring to the concept of loyalty, which has been investigated extensively in the offline world.

Chakravarty. (1996) illustrated that Banking, being a customer-oriented services industry, the customer is the centre of attention and customer service has to be the distinguishing factor. The challenge for banks is to lower costs, increase efficiency, while improving the quality of their service, and increase customer satisfaction. Attention has now turned to improving the quality of service encounter, when customers enter the bank and come into face-to-face contact with bank staff.

Birch and Young (1997) analyzed the consumer side for e-banking and the results showed that consumers basically seek for transactional efficiency, choice for core and non-core banking products and access to competitive prices and returns.

Filotto et al. (1997) illustrated that the adoption rates of ATM were higher among young users. In addition, Barnett (1998) findings proved that younger consumers are more comfortable in using e-banking. Katz and Aspden (1997) findings explained that males were more likely to adopt e-banking than females. Mookerji (1998) explored that internet banking is fast becoming popular in India. Nevertheless, it is still in its evolutionary stage. They expect that a large sophisticated and highly competitive internet banking market will develop in future.

Girish V, Preetha S (1997) in his paper on “Technology in banks - A global perspective” he argued that technology in banks would help to increase the level of productivity and customer satisfaction. To meet the challenges posed by the entry of foreign banks, Indian banks will have to invest heavily
in technology to meet competition, reduce cost, improve customer service, improve productivity and offer new products/services.

Sathye (1997) reviewed the status of internet banking in Australia. The study found that only two of the 52 banks started internet banking services. He opined that education would be a crucial factor for expanding internet banking in Australia. If customers are convinced about the various advantages of internet banking they will start asking for this service from their banks, and will put pressure on the banks to go ahead with internet banking.

Daniel (1999) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. Electronic banking is commonly known as E-banking. E-banking defined as “the delivery of banking services through the open-access computer network directly to customers’ home or private address”. Joseph et al. (1999) examined the influence of internet on the delivery of banking services. They found six primary dimensions of e-banking service quality such as convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility and customization.

Mols (1999) acknowledged that the internet banking is an innovative distribution channel that offers less waiting time and a higher spatial convenience than traditional branch banking with significantly lower cost structure than traditional delivery channels. Internet banking reduces not only operational cost to the bank but also leads to higher levels of customer satisfaction and retention. As a result internet banking is very attractive to banks and consumers, who now have higher acceptance to new technology.
Jeevan (2000) observed that the internet banking enables banks to offer low cost and high value added financial services. US web-corporation argues that finally banks are finding that a comprehensive online banking strategy is indispensable for success in the increasingly competitive financial services market. Changes in technology, competition and lifestyles have changed the face of banking and banks in the present environment are looking for alternative ways to provide differentiated services.

Hasan (2002) found that online home banking has came out as a significant strategy for banks to attract and retain customers. About 75 percent of the Italian banks have adopted some form of internet banking during the period 1993-2000.

Simpson (2002) suggests that e-banking is driven largely by the prospects of operating costs minimization and operating revenues maximization. A comparison of online banking in developed and emerging markets reveal that in developed markets lower costs and higher revenues are more noticeable.
Karjaluoto (2002) electronic banking is a construct that consists of several distribution channels. DeYoung (2005) analyze the performance of Internet-only banks versus the brick and mortars in the US market and find strong evidence of general experience effects available to all start ups.

Vyas P (2004) in his paper entitled “Measurement of customer satisfaction on information technology adoption in banking services.” He concluded that there was effective implementation of e-banking services in case of private banks and foreign banks, whereas, nationalized banks were found to have lesser degree of computerization.

Mishra (2005) in his paper explained the advantages and the security concerns about internet banking. According to him, improved customer access, offering of more services, increased customer loyalty, attracting new customers are the primary drivers of internet banking. But in a survey conducted by the online banking association, member institutions rated security as the most important concern of online banking.

Shu, W. and Strassmann, P. A. (2005) in article on “Does information technology provide banks with profit?,” he Studied 12 banks operating in the US for the period of 1989-1997 and found that although IT has been one of the most marginal productive factors among all inputs, it cannot increase banks’ profits. On the other hand, there are some studies agreeing with the positive influence of IT spending to business value.

Kozak, S. (2005) in his article entitled “the role of information technology in the profit and cost efficiency improvements of the banking sector” he examines the impact of the progress in IT on the profit and cost efficiencies of the US banking sector during the period of 1992-2003. The research shows a positive correlation between the levels of implemented IT and both profitability and cost savings.
Nyangosi et al. (2009) collected customers’ opinions regarding the importance of e-Banking and the adoption levels of different e-Banking technologies in India and Kenya. The study highlighted the trends of e-banking indicators in both countries. The overall result indicates that customers in both countries have developed a positive attitude and they give much importance to the emergence of e-banking.

From the review of literature, we found that education is one of the crucial factors for expanding e-banking. Younger consumers and males are more comfortable in using e-banking. Convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility and customization were found to be primary dimensions of e-banking service quality. However, most of the studies are carried out in foreign countries. In light of the above findings, the present study is undertaken in Indian context to find out bankers perspectives on e-banking and comparative study of selected Public and Private sector Banks.

**RESEARCH PROBLEM**

Banks have transformed themselves and are offering services through internet. E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. Now a days commercial banks more concentrate on the E-banking services and there is competition in between them. The customer of commercial banks also attract towards e-banking services hence the research paper is titled as “A Critical Study of trends in E- Banking with Special References to Selected Public and Private Sector Banks.”
ABOUT THE PROBLEM

With the changing environment, banks implemented tele-banking, mobile banking and call centre services, ATM and others one after another. Due to rapid change in technology and the entry of private and foreign banks a number of new products and delivery channels have been introduced. Among the major initiatives Internet Banking has brought to the customers the much demanded convenience. The advent of internet banking offers banking firms a new frontier of opportunities and challenges. Despite these possibilities, there are various psychological and behavioral issues such as reluctance to change, trust in one’s bank, security concerns, preference of human interference and the like impede the growth of internet banking. In this regard a study has been undertaken in Internet banking services provided by the selected Public and Private sector Banks.

Introduction

Banks have been developing new instruments and services and improving processes, both to reduce costs of existing services and to offer new services. The pace of innovation has increased dramatically particularly with the advances in information processing and communications technologies. Consequently, internet banking has changed the nature of consumer interactions with banks, reducing the importance of physical branch locations which involve face-to-face interactions. Many services are available now through the internet. Internet banking provides a convenient, low-cost alternative to the traditional bank visit. Internet banking in this study is defined as an internet portal, through which customers can use different kinds of banking services ranging from providing information and bill payment to making investments. Indian banks and their customers enjoy an array of benefits through adoption of internet banking. The Internet and Mobile Association of India report (IAMAI2006) reveals that the costs of banking service through the Internet amount to a fraction of the costs through conventional methods.
Industry estimates assume teller cost at Re 1/- per transaction, ATM transaction costs at Re 0.45, phone banking at Re 0.35, debit cards at Re 0.20 and Internet banking at Re 0.10 per transaction.

On the whole, one can easily conclude that Internet banking increases operational efficiencies and reduces costs, besides giving a platform for offering value added services to the customer, thereby fulfilling all the essential prerequisites for a flourishing banking industry. In anticipation of efficiency in operating costs, banks seek the diffusion of internet banking. However, banks cannot expect instant returns, unless the Internet population itself reaches a critical mass.

On the customers’ side also there are many advantages. First, there is twenty four hour access. And second, banks can be accessed from anywhere in the world at one’s own convenience. Additionally there is time savings, convenience, increased access to information on their bank accounts and effective management of personal finances.

Although the advantages of internet banking seem to pull consumers towards its usage, the evidence for consumers’ reluctance to use internet banking calls for a scholarly inquiry into the underlying factors influencing individual consumers’ decision to adopt internet banking. Human beings, being creatures of habit will probably view anything that is new with caution and suspicion. The same applies to internet banking. People are cautious and often reluctant to depart from traditional ways of banking to internet banking. Crores of rupees have been spent on building Internet banking systems in India but reports show that potential users may not use the systems in spite of their availability.

This, points out the need for research to identify the factors that determine acceptance of Internet banking by the users. In India; comparatively
less number of studies have been conducted on the current status of internet banking and internet banking adoption compared to other countries. Thus, there is a lot of scope for the research to present new ideas concerning internet banking in India which may be useful to the Indian banking industry.

There is a growing body of research focusing on examining the determinants of computer technology acceptance and utilization among users (Moore and Benbasat, 1991; Saleh, 2003; Randolph, 2001). Several competing theoretical approaches have been used to investigate the determinants of acceptance and use of information technology (Venkatesh et al, 2003). Important lines of study in this area focus on the determinants of individual acceptance of new technologies by using actual behaviour itself (Davis, 1989; Taylor and Todd, 1995). These various theories explain technology acceptance and adoption. In acceptance studies, researchers focus on the attitudinal explanations of the use of a specific technology or service. The studies rely largely on the following five concepts: perceived user friendliness, perceived usefulness, attitudes towards use, intention to use and actual use.

Adoption research is grounded in three models from social psychology, namely, the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980), the Theory of Planned Behaviour (TPB) (Ajzen, 1991) and Technology Acceptance Model (TAM). Of the three theories, TAM has emerged as the most powerful and parsimonious theory to represent the antecedents of technology usage through belief in two factors that is, perceived usefulness and perceived ease of use of an information system (Davis, 1989). TAM has received empirical support in information technology research from many research studies regardless of the country concerned (Guriting and Nelson, 2006; Wang et al.2003; Ramayah and Ling, 2002; and Venkatesh and Morris, 2000). Given below is a brief description of the Technology Acceptance Model.
Technology Acceptance Model

The TAM is an adaptation of Theory of Reasoned Action (TRA) specifically tailored for modeling user acceptance of new information technology (software information systems within organizations) (Davis, 1989). While TRA suggests that social behaviour is motivated by an individual’s attitude towards carrying out that behaviour, it does not specify what specific beliefs would be important in a particular situation. TAM posits that the actual usage of technology can be predicted by user’s behavioural intention and his/her attitude towards use, which in turn are influenced by the technology’s perceived ease of use and perceived usefulness. TAM adopts the well-established causal chain as follows:

Beliefs > Attitude > Intention > Behaviour

Davis (1989) used the Theory of Reasoned Action (TRA) and developed the Technology Acceptance Model (TAM). Based on certain beliefs, a person forms an attitude about certain objects, on the basis of which he forms an intention as to how he should behave with respect to that object. The intention to behave is the sole determinant of actual behaviour. Davis adapted the TRA by developing two key beliefs, perceived ease of use (PEOU) and perceived usefulness (PU) to determine individual’s acceptance of a technology, more specifically information system usage. The first of these beliefs perceived usefulness is defined as the ‘degree to which a person believes that using a particular system would be beneficial or enhance his/her job performance’ (Davis, 1989). The second, perceived ease of use is defined as ‘the degree to which a person believes that using a particular system would be free of effort’ (Davis, 1989). A diagram of the model is presented in Figure one.
The Research Framework

Considering the uniqueness of internet banking and its users, and the simplicity of the Technology Acceptance Model, an extended TAM is used as a theoretical framework to examine the effects of Computer self-efficacy on users’ acceptance of internet banking through attitude towards internet banking, where attitude is influenced by three beliefs namely, Perceived usefulness, Perceived ease of use and Perceived security.

The research model tested is shown in Figure two. It includes the individual difference variable ‘Computer self-efficacy’ and three belief variables (Perceived usefulness, Perceived ease of use and Perceived Security)
Computer Self-Efficacy

One important factor that influences the adoption of internet banking is the computer and internet proficiency of the consumer. Consumers need to be familiar with computers in general, and should be, to some extent, proficient in the use of web browsers, to engage in computer-mediated communications and transactions. Having proficiency in these areas will increase a consumer’s likelihood of adopting internet banking. Self-efficacy has been examined by many researchers (Compeau and Higgins, 1995; Compeau et al, 1999; Hong et al, 2001; Agarwal et al, 2000; Johnson and Marakas, 2000; Chau, 2001). Prior research has suggested a positive relationship between experience with computing technology and a variety of outcomes such as an affect towards computers and computer usage (Leym and Gordon, 1989; Harrison and Rainer, 1992; Agarwal and Prasad, 1999). This confirms the critical role that computer self-efficacy plays in understanding individual responses to information technology. Self-efficacy, in this study has been further extended to the use of internet and is measured as a skill level of consumers in using computers and internet.

Perceived Usefulness (PU)

Davis (1989) asserts that the decision to use new technology is determined by the extent to which a person believes that it is cost-effective in providing goods or services compared to the current method. PU is defined as the degree to which a person believes that using a particular technology will enhance his performance. The PU is also an important variable from TAM (Araujo and Araujo, 2003; Noteberg et al.2003; Gefen et al., 2003; Matheison, 1991; Malhotra and Galleta, 1999). PU has been confirmed as an important variable that influences user technology acceptance and therefore has received a great deal of attention from previous researchers.
Perceived Ease of Use

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort. According to TAM, the PEOU is one of the main variables influencing the use of technology. Extensive research over the past years provides evidence of the significant effect of perceived ease of use on usage, either directly or indirectly through its effect on perceived usefulness (Agarwal and Prasad, 1999; Davis et al, 1989; Hu et al, 1999; Jackson et al, 1997; Venkatesh, 1999, 2000; Venkatesh and Davis, 1996, 2000; Venkatesh and Morris, 2000). IT’s that are easy to use will be less threatening to the individual (Moon and Kim, 2001). This implies that perceived ease of use is expected to have a positive influence on users in their interaction with internet banking systems. Therefore the more the consumer perceives internet banking as easy to use, the more he or she is likely to adopt it.

Perceived Security

Perceived security is a major reservation consumers have about internet banking. Concerns about cyber crime, transaction security and errors in transactions can limit adoption of electronic technologies (Gingrade, 1998; Simms, 1999). Security is the state of being free from dangers like theft or losing money and information (Gefen et al, 2003). Consumer concerns about security and privacy have been noted by many experts (Miyazaki and Fernandez, 2001; Gefen et al., 2003; Nissenbaum, 2004). One particular survey by Chung and Paynter (2002) identified consumer fear regarding transaction security as an inhibitor to the adoption of internet banking. Security has also been identified as a key consumer concern in other internet banking adoption studies (Black et al., 2002; Siu and Mou, 2005). Hain et al (2003) observed that non- internet banking consumers were more concerned about security and privacy issues than internet banking consumers.
Security has been identified as one of the biggest barriers for the uptake of internet banking (Sathye, 1999). Cooper (1997) and Daniel (1999) identified that an important factor affecting the acceptance and adoption of an innovation is the level of security and risk associated with it. Even in countries where internet banking has long been established, one of the most important factors slowing its progress is the consumers’ concern for security of financial transactions over the internet. Security failure at a particular bank could not only cause large losses for that bank, but could spawn a general lack of reliability in internet banking transactions. Awamleh and Fernandes (2005) revealed that security of internet banking transactions has a significant impact on customer satisfaction in internet banking. Security of internet banking transactions was significant for those using internet banking for more than two years. O’Connell (1996) and Daniel (1999) discovered that security concern is an important factor which affects acceptance and adoption of a new technology or an innovation. The hypotheses for the research model are presented in table one.

CHAPTERISATION

In light of the above findings, the present study is undertaken in Indian context to find out recent trends in e-banking and comparative study of selected Public and Private sector Banks. The Study has been divided in the following chapters along with the details:

CHAPTER - I : Defines About Introduction includes Concept, E-Banking, Difference between Traditional Banking and E-Banking, Aspects of E-Banking, Significance of E-Banking, Impediments of E-Banking, Corrective Measures, Innovative Banking, Limitations of the study.

CHAPTER - II : Review of Literature is about Review of Literature, Review of Bygone Studies, Research Problem, Statement of Problem, Introduction, Technology Acceptance Model, The Research Framework, Computer Self-
Efficacy, Perceived Usefulness (PU), Perceived Ease of Use, Perceived Security, Chapterization.


Chapter - IV : Profile and E-Banking Services of PNB shows Introduction, Financial Inclusion, Small & Medium Enterprises, E-Banking Initiatives, Recent Awards, Different Schemes of PNB, E-Banking Services in PNB, References.


Chapter - VI: Profile and E-Banking Services of HDFC throws light on HDFC Profile, Progress Of HDFC Bank, E-Banking In HDFC, Individual, Benefits of An HDFC Individual Deposit, Housing Finance Sector, Transactional, Banking Services of HDFC Bank, Features and Benefits, Customised Investment Solutions, Investment Options, Wealth Management Program, E-Broking, Relationship Pricing, Annual Service Charge Waiver, E-Banking in HDFC, Registration for Net Banking of HDFC.

Chapter - VII : Profile and E-Banking Services of ICICI expresses about Bank Profile, History of ICICI Bank, Products & Services Offered by Bank, E-Banking Services in ICICI, Terms and Conditions of Net Banking, Comparison of ICICI and HDFC E-Banking Services.

Chapter – IX: Conclusion, Observation And Recommendation express about summary and conclusion of the research study, Suggestions and Recommendations of the Study, Limitations, Contribution of the Study, Further Scope of the Study.
REFERENCES


