E-banking and customer perception – a conceptual study

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ABSTRACT
E-Banking (also known as On-line banking or Internet banking) refers to doing the financial transactions using the banks website from anywhere in the world. Just by having a computer/laptop with Internet connection the customer can do their financial transactions like transferring money from one account to another account, paying bills like EB Bill, telephone bill, mobile recharge, online purchase etc., Even though the e-banking offers lot of facilities to customers, still customers are facing some of the problems like security issues, loss of password, misuse of funds etc.. There were lot of studies conducted to identify the customer perception and satisfaction on e-banking services. The objective of this article is to identify the various empirical studies conducted on customer perception on e-banking by using the literature survey. The outcome of this literature survey is to analyze the areas in which the empirical studies are carried out on customer perception on e-banking and to identify the research gap where the research is not covered so far.

Methodology
The study is purely based on secondary data collected from various books, magazines, journals, online databases. Both the conceptual and empirical reviews are collected from different sources and consolidated and presented below.

Conceptual Reviews about e-banking
E-banking refers to electronic banking. It is like e-business in banking industry. E-banking is also called as "Virtual Banking" or "Online Banking", E-banking is a result of the growing expectations of bank’s customers

Popular services covered under E-Banking
- Automated Teller Machines,
- Credit Cards,
- Debit Cards,
- Smart Cards,
- Electronic Funds Transfer (EFT) System,
- Cheques Truncation Payment System,
- Mobile Banking,
- Internet Banking,
- Telephone Banking, etc.

History
The e-banking business model started back in the 1980’s, and it evolved through three main phases that can be summarized as follows:

The Eighties: The early beginning
Modern e-banking first appeared in New York in the early 1980’s, where it was offered by major banks in that city, such as Citibank and Chase Manhattan. The United Kingdom banks started to adopt the concept in 1983 where the Bank of Scotland was the first to introduce it. Back then it required a computer terminal, a monitor, and a telephone line. It was also offered through a numeric keypad on a telephone enabling sending messages to the bank. The early services were very basic ones such as viewing your bank statements and paying your bills online. It was not a full transaction banking service; however, it

1 www.wiki.answers.com

Introduction
According to Vivek Bhambri, the computerization of financial operations, connectivity through World Wide Web and the support of automated software’s has completely changed the basic concept of business and the way the business operations are being carried out. The banking sector is not an exception to it. It has also witnessed a tremendous change in the way the banking operations are carried out. Since 1990’s the whole concept of banking has been shifted to centralized databases, online transactions and ATM’s all over the world, which has made banking system technically strong and more customer oriented. Due to deregulation and liberalization in banking industry, Multinational companies have also entered into India who has provided the world class banking experience to customers. With universal banking concept banks are providing all banking products and service offerings under one roof. Both Private sector and Public sector banks are reengineering and automating their core banking processes.

Internet banking is changing the banking industry and is having the major effects on banking relationships. The rate of adoption and absorption of technology in banking industry in India is slowly improving and multiple delivery channels like ATMs, Tele Banking, Internet Banking. Any Branch banking are emerging and with them the need to present a single, view of banks relationships and obligations are arising which demands immediate attention this requires heavy reliance on technology. On the other hand, problems in the usage of these technologies are also evolving. Security of a customer's financial information is very important concept because, without which online banking could not operate. Financial institutions have set up various security processes to reduce the risk of unauthorized online access to a customer's records, but there is no consistency to the various approaches adopted.

Objectives of this study
• This study was conducted with an objective to identify the various empirical studies on Customer perception on e-banking.
• To identify the research gap so as to recommend the area for future research.
paved the way for the more comprehensive and sophisticated e-banking services that we see today.

**The Nineties: Modern Internet Banking**

In the 1990’s, the use of internet evolved when more people owned computers and were connected to the dial-up home internet. The first bank to offer the most comprehensive e-Banking services was the Stanford Federal Credit Union bank in 1994.

This technological evolution and the spread of home internet usage meant customers enjoyed 24/7 e-Banking services. On the other hand, many customers during the 1990’s didn’t trust the concept enough to make serious and substantial monetary transactions and did not think the internet banking is safe enough. This triggered a massive effort and investment by the offering banks to develop more security features for their online banking services and promoting them in the market.

**The 2000’s: The growth and acceptance**

The first bank to reach three million online banking customers was the Bank of America in 2001. Throughout the 2000’s on-line banking started to grow and become more acceptable by customers. It covered most of the banking services range. We also had our first “on-line only” banking firms that offered better interest rates and more features to their clients taking advantage of the cost savings achieved by the “Digital Firm” business model.

**Advantages of E-banking**

E-banking offers benefits to both the bankers and customers.

**Benefits to the bankers**
- The operating cost per unit services is lower for the banks.
- There is very low incidence of errors, so the man power is not wasted in checking for errors

**Benefits to the Customers**
- It offers convenience to customers as they are not required to go to the bank's premises.
- The customer can obtain funds at any time from ATM machines.
- The credit cards and debit cards enables the Customers to obtain discounts from retail outlets

**Issues in E-Banking**

Security is the leading issue for e-banking. In addition to the financial damages, the damage to a bank’s reputation as the result of a breach can be far more destructive to its ability to attract and retain customers. While the criminal element (hackers) are scapegoat, the core problem is that the banks are exposing to the Internet legacy systems designed for a small number of users in a discrete location, which were not engineered to include the core capabilities to maintain security in an open environment.

**Empirical Reviews**

James Essinger (1992) has drawn conclusions regarding customer attitude towards banking and technology, from various research studies. The worth mentioning conclusions are Customers want to put money aside as saving wherever they are able to do so while remaining financially comfortable, about half of the customers would rather visit their branch as rarely as possible, about one in two customers say that they never met the branch manager of their branch. The study also concluded that there is great willingness on the part of customer to use remotely delivered banking services, especially ATM services and electronic funds transfer at point of sale (EFTPOS) services. Telephone delivered services are also increasingly popular. The average consumer has little or no inherent interest in technology which devices the service, but is only interested to its results for him or her. Demographic factors have influence over people’s spending and saving habit. Banks seek to maximize the appeal of their products and services and particularly appeal of innovative electronic banking services, to consumers must, therefore pay considerable attention to be targeting their marketing at selected classifications of consumers. Consumers are increasingly choosing their banks by recommendation from family and acquaintances. Banks should therefore, devote effort to converting consumers into brand advocates, who will not only use the brand themselves, but recommend it to the family and acquaintances. Despite the high and growing level of competition of banks, they are surprisingly extensive opportunities for banks to seek to create loyalty, even lifetime loyalty for consumers.

According to Sandra Boss, et.al., (2000) the first and most obvious step the banks should take is to see to it that the basic problems fueling dissatisfaction have been addressed. Most of the customers said that they couldn't always gain access to their online banking service; and they found it difficult to get customer support. Banks must learn to aggregate their customers’ different on-line financial-services relationships. The purpose of this aggregation is to develop a picture of the consumer’s entire balance sheet. Any institution that gains such a view can provide superior convenience and advice. Lacking technological command of the customer relationship, banks are at risk of losing it. In building an on-line business, a bank's on-line customer base is a huge asset, for it will be harder for competitors to pick off the bank's current customers than for the banks to get them on-line. Banks must also move swiftly to acquire new on-line customers. Despite significant increases in revenue from on-line relationships, credit card companies and brokerage firms have spent so much money building their on-line customer base that some would question whether they will ever profit from these efforts. They have concluded that banks will have to reinvent their role and the way they deliver value—leveraging new technology as well as their existing assets—to remain their customers' financial institution of choice.

Jack Fields, (2001) pointed out that online banking presents a real mix of opportunities and obstacles for financial service providers. Customers of financial products are intelligent and tech savvy and are 50 percent more likely to stay with their bank than customers using traditional services. Unfortunately, many financial institutions do not have adequate technological infrastructures to reap the rewards of this channel. Jack rightly stated that online channels are said to be the most un-integrated of all channels and can easily pose more problems than they resolve. Over the last few years, most banks took a laissez-faire approach to online banking initiatives. Now they acknowledge the need to invest heavily on technology.

Adhivarahan (2001) - have written an article which attempted to have a bird’s eye view of the provisions of the Act and the Pros and cons of the provisions of the act with particular reference to the activities of the banks. The study concludes that number of incidents of e-fraud and on-line breaches is the highest in India. Therefore cyber crimes in banking sector have to be treated with more care. For this purpose, a statutory body similar to ‘Internet fraud center’ should be formed in India.

According to K.N.C Nair (2003), in his article titled “E-Banking: Growing big”, since banking is highly information-intensive, it is only logical to use IT as an effective enabler and facilitator for meeting the requirement of banks and their customers. With the changing lifestyle of customers, they need
new products and convenient delivery channels, which can be provided only by enabling technology. Successful implementation of any IT absorption program needs the active participation of the staff. The new generation banks had the advantage of selecting its personnel who are computer savvy. The traditional banks have been finding it a major challenge to change the mindset of their staff and train and empower them in the new technology-driven work environment. The biggest hurdle in popularizing e-banking is the security perception among the customers. This needs to be addressed by establishing highly secure system of architecture for the net based services. So, security is important aspect to be considered in NET banking.

Abou-Robieh, Moutaz, (2005) conducted a study of e-banking security perceptions and customer satisfaction issues. The purpose of the study was to analyze the comfort levels and attitude of users towards online banking and online banking alternatives and to determine if a correlation exists between these factors and demographic characteristics of the respondents. He conducted the study with 100 sample responses received via the Internet, at various banking institutions in Sarasota, Florida, and those individuals at Argosy University/Sarasota. The correlation was analyzed using the Pearson product moment. The findings established that there was a correlation between respondents' attitudes towards ebanking and their comfort level and feeling of security with regard totheir age, level of education, and annual salary. The study concluded that respondents who were older, had lower levels of education, and lower annual salaries were not as comfortable and more insecure carrying out financial transactions over the Internet. But the respondents who were younger, with higher levels of education, and higher annual salaries as they showed greater comfort with the idea of online banking transactions. Hence, strategies are recommended for banks to attract customers towards online banking transactions.

Dr. Narasaiah.P, Sudarsana murthy.D (2006), in their article titled “E-Banking – Challenges ahead”, stated that banks in India have entered domain of information technology and computer networking not only for improving the quality of services rendered to the customers, but also for better marketing of their products. Technology today has become a strategic and integral part of banking driving banks to acquire and implement world class systems that enable them to provide products and services at competitive cost with better risk management practices. There is tremendous scope for Indian banks to enlarge their electronic banking services which in turn enhance their image. It is most essential to remove the hindrance of security reluctance to change the lack of awareness among customers.

Rathnakar.G., Dr. P.Veeraiyah (2006), in their article titled ‘changing scenario in banking sector in India’, stated that banks today face a world of competition and opportunities. Traditionally banks and financial institutions have reached their customers through the use of branch networks. Due to rapid growth of internet, demand on time as limited resources, rising branch real estate expenses, changing human resources and information technology infrastructure fierce competition banks have changed their traditional channels and started providing services to bank customers like any where banking, tele-banking, internet banking, web banking, e-banking, ecommerce, e-business etc.

Carlos Flavia’n and Miguel Guina’s, (2006) analyzed how consumers’ perceptions of their traditional bank influence their decision to adopt the services offered by the same bank on the internet. They highlighted that the use of the internet by the financial sector, known as e-banking, is increasing the number of users; however, there are a few competitors which have achieved relevant turnover rates. They have conducted a study that suggests the influence of two of the most important factors for e-banking adoption: consumer trust and socio demographic traits. They considered that what the consumer perceives in the traditional branch office may influence the decision to adopt the online services offered by the same bank. This innovative approach enables them to confirm that greater trustworthiness perceived by a consumer in the branch office is positively related to higher levels of adoption of the online services offered by the same bank on the internet. Likewise, they noticed that sex, income and age are related to the likelihood of e-banking adoption.

Dr. Vijayakumar et.al., (2007), in his study identified that Indian banking industry today is also in the midst of IT revolutions. E-banking in India in its present form is huge success. People have started realizing the importance of e-banking. The entry of new banks resulted in paradigm shift in ways of banking in India. He concluded that the arrival of foreign banks and Private banks with their superior state-of-the-art technology based services pushed Indian banks also to follow suit by going in far latest technologies so as to meet the threat of competition and retain their customer base.

Syed Shah Alam, April, (2009), pointed out that since the new millennium, Internet banking has experienced explosive growth in many countries and transformed traditional banking practice. This has changed the way of services provided by the banking sectors to their customers. By offering Internet banking services, traditional financial institutions seek to lower operating costs, improve customer banking services, retain customer, reduce their branch networks, and downsize the number of their service staff. This study was conducted to identify the adoption of Internet banking services by Corporate Customers in Malaysia and aims to gain a deeper understanding of the factors influencing the adoption of Internet banking services by Malaysian, particularly in Klang Valley customers. The factors considered in this study are the awareness of the services and its benefits; the ease of use; the safety and security of transacting over the Internet; the cost of using Internet banking; the reluctance to change from current traditional banking, and; the access to computer or Internet. The result of the study suggested that banks should make their customer more aware of their new products or services, in this, Internet banking, to encourage higher adoption rate. They can do so by having seminars, exhibitions or giving free-trial periods to allow customers to evaluate their new inventions. Besides that, education and Publicity through mass media will also prove to be effective.

According to Jannatul Mawa Nupur (2010), E-banking growth depends on many factors, such as success of internet access, new online banking features, household growth of internet usage, legal and regulatory framework. The research was conducted to recognize the impact of variables of e-banking on customer pleasure in Bangladesh. From the statistical analysis it is observed that there is a relation between customer satisfaction in e-banking and reliability, responsiveness, assurance, empathy, and tangibles as such null hypothesis is accepted and alternative hypothesis is rejected. A number of Private commercial banks are operating their activities in Bangladesh. Many banks can perform their activities by e-banking system. By stepping into new and aggressive strategy of
e-banking, it can make a difference in Bangladesh banking sector.

Neha Dixit, (2010), conducted a study to gain an understanding of the acceptance of online banking in an Indian market where the 70% population reside in rural areas and 30% population reside in urban area of the country. This study explore acceptance of online banking in India from the point of view adult of customer above the age of 35 and investigate how adult customers perceive electronic banking services? As well as also depicts that what are the acceptance factors in spite of security and privacy concern between Indian customers? And what should be guidance provides by banks to customers that they can increase their willingness to adopt online banking? The answers of these questions are found through a simple survey for a random sample. In conclusion and recommendations are given based on the survey findings. The purpose of this study is to investigate the acceptance of online banking among those customers who are the more than 35 age group. Specifically, the study postulated the affect of security and privacy issue in the acceptance of online banking in India. Along with the questions regarding possible acceptance factors of e-banking services we ask them whether they are willing to adopt online banking or not. Our results show that security and privacy, trust, innovativeness, familiarity and awareness have positive influence on the acceptance of e-banking services in India.

Dr. Asma Mobarek, carried out a study to evaluate e-banking as a strategy and related methods adopted by selected commercial banks in Botswana to improve the customer satisfaction, which plays a major part in the service industry. This research 4 banks which are providing ebanking services to their customers. The usual E-banking services provided by banks are account management; bill payment and presentment; new account opening; consumer wire transfers; investment/brokerage services; loan application and approval; account aggregation; cash management ; small business loan applications, approvals, or advances; commercial wire transfers; business-to-business payments; employee benefits/pension administration etc. An analysis of customers’ perception towards e-banking services, the quality of e-banking services provided by the banks and the constraints in achieving customer satisfaction are included in the study. They focused particularly on four delivery channels namely: Automated Teller Machine (ATM), internet banking, tele-banking and manual banking. The study recommended the possible and practical additional measures the banks should take in order to achieve maximum customer satisfaction.

Conclusion

The above reviews indicate that e-banking is used as best strategy for the banks to develop their businesses and to offer the best services to their customers. There are lot of studies conducted to identify the use of e-banking for banks and its applicability in different parts of the world. There is also scope for doing these kinds of studies in different parts of India in both public and private sector banks. A comparative study to compare the e-banking services offered by public and private sector banks can also be undertaken. This conceptual study listed various empirical and conceptual studies on e-banking and identified the research areas in which there are scope for conducting future research.

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