SUMMARY, POLICY RECOMMENDATIONS AND IMPLICATIONS OF THE RESEARCH FINDINGS

This chapter summarizes the major findings of the thesis and discusses policy recommendations for e-banking adoption in India and Kenya. It also discusses some limitations of the research methodology and the possibility of generalizing the finding. It concludes with some suggestions for further avenues of research.

8.1 Summary

Information and communication technologies have changed the working of the banking industry in the last few years. The transformation is expected to quicken their pace in the coming years. The trend towards electronic delivery of products and services is dramatically changing in the financial service industry, where the shift is partly as a result of consumer demand but also a ruthless competitive environment. As a result, e-banking which can be termed as a mysterious and dynamic ground, has emerged fast as a medium of providing banking services differently from traditional mortar and brick banks. This is a fresh wave engulfing all areas and need to be explored extensively if the bankers wish to succeed in the modern competitive and ever dynamic financial arena. It is a promising and a powerful medium of which it’s blooming is due. In recent years, e-banking has emerged and it is almost taking the lager portion in the banking transformation process. With its introduction, customers are enjoying anywhere banking, reduction in use of cash, telephone banking, P.C. banking, internet banking, mobile banking, home or office banking etc. E-banking includes familiar and relatively mature electronically based products in developing markets, such as telephone banking, credit cards, ATMs, and direct deposit and others. It also includes electronically bill payment and products mostly in developing stage, including stored-value cards (for example, smart card/smart money) and internet-based stored value products.

The new concept of e-banking has broken the barriers of branch banking. Customers whether individuals or corporate, no longer have to go to the bank to do their business, it can be done from home and office 24 hours a day 365 days a year using PC or the telephone and through the systems of internet banking. Banking organizations have
been delivering e-banking services to consumers and business remotely for years. Electronic funds transfer, including small payments and corporate cash management systems, as well as publicly accessible automated machines for currency withdrawal and retail account management are global fixtures. However, the increased worldwide acceptance of internet as a delivery channel for banking products and services provides new business opportunities for banks as well as service benefit for their customers.

The review of literature indicated that, most of the research work in the field undertaken till now has been done in western countries like USA, Europe and fast developing countries. It was also revealed that, hardly any comprehensive study has been conducted in India and Kenya to examine the perception of bankers as well as customers towards electronic banking. Though e-banking technologies including internet and the web have a global reach, the infrastructure, economic and psychological differences occur amongst the countries which are unique to each one of them. The empirical studies reviewed considered the reasons for the success or failure of bankers in wooing the ‘e’ technologies, the perception of the customers, and their attitude towards electronic banking technologies. Further it was found that the widely accepted various parameters could be used to study the perception of both bankers and customers which include: age, education, type of bank size, income etc. Perception towards e-banking: A comparative study of India and Kenya is a study that examines the perspectives of customers as well as bankers towards the use of electronic devices by financial institutions to provide banking services. It focuses on some vital aspects like challenges experienced by customers and bankers, value attribution to e-banking adaptation and some factors attracting them to adopt and use e-banking systems. It also analyzed the current status and trends of e-banking indicators in both India and Kenya.

8.2 Database and Research Methodology

The objectives of the study required the study of both customers and bankers in order to make a comparative study between India and Kenya. In the present study, database of both primary and secondary sources have been used. The data and information regarding the growth and indicators of e-banking in India and Kenya was collected from secondary source which included periodicals, published annual reports of
respective countries’ central banks, and other reports. The data for bankers’ and customers’ perception towards e-banking was collected using well structured and pre-tested questionnaires from both India and Kenya. The sample sizes for bankers’ questionnaire was 225 respondents (150 from India and 75 from Kenya) and 375 respondents (250 and 125 from India and Kenya respectively). Bankers’ universe comprised senior managers, heads of department, Accountants and other senior executives of different branches of banks. For customers the universe comprised the customers who were e-banking savvy and who had started using at least one e-channel for example, ATM, Tele-banking and others. The analysis was done using statistical techniques like weighted average score, chi-square, one way ANOVA, Cross-tabulation and percentages.

8.3 Summary of Major Goals and Findings

The main objectives of the study were to provide an in-depth evaluation and analysis of perceptions held by customers as well as bankers towards electronic banking from an India and Kenyan dimensions. The major findings are summarized below according to the initial research objectives.

Objectives 1: To study and compare the growth of electronic banking in India and Kenya

- The result revealed that in Kenya, the number of ATM Machines increased to 1,510 in June 2008 from 94 ATMs all over the country in June 2000, which can be translated as 1506.4% growth. Also from the Indian perspective, the banking industry has experienced an extraordinary increase in ATM machines across the country since March 2000, with 1,102ATMs all over the country to 34,789 ATMs in March 2008, which can be translated as 3056.9%. The compound Growth rate for the entire period in Kenya was 43.9% and in India 50.4% which indicates that the rate of e-banking growth in India is high than Kenya. This observations leads to the acceptance of the alternative hypothesis $H1 = Growth of e-banking in India is higher than Kenya$
The result indicated that Plastic banking is becoming vital in financial dealings. The number of Credit cards in Kenya increased from 16,531 in June 2000 to 107,653 in June 2008 which indicated a compound growth of 30.0% over the entire period. Also, in India the number of Credit cards increased from 3,734,000 in March 2000 to 27,547,000 in March 2008 which was compounded as 29.2% growth rate over the entire period.

The number of debit cards too has been increasing in the two countries under study. The Kenya industry show a compound growth rate of 42.5% and 97.2% from the Indian perspective over the period since 2000 to 2008.

Transaction through Retail EFTs increased from 311,000 in 2002 to 3,774,000 in 2007 indicating a compound growth of 49.6%. The Indian industry also experienced an impressive growth with a compound growth of 133.2% from 40,000 transactions in 2002 to 13,315,000 in 2008.

The transactions moved through ECS in Kenya, has been increasing from June 2000 (14,114) to 24,166 thousand by June 2008 (70.9%) whereas in India ECS transactions increased by 1349.2% from 14,178 in March 2000 to 205,477 in March 2008. The compound growth rate of the entire period of study in Kenya was 11.8% and in India 49.2%.

Transactions moved through Kenya’s RTGS officially known as Kenya Electronic payment and settlement system (KEPSS) has been increasing since its launch in July 2005. In 20008 (232,516), the industry recorded 93.4% increase from June 2006 (120,249). Similarly in India, RTGS came into operation in March 2004 and trend in transactions has been upward. In March 2008, the industry recorded 1081.5% increase from March 2006. The growth of the entire period was compounded in the Kenyan perspective to be 37.8% and India 528.8%.

Objective 2: To study the perception of customers towards e-banking

The result revealed that majority of the respondents were young with the age of 21 to 35 from both India (62.4) and Kenya (70.4), well educated and savings bank accounts. Also, customers of private banks were majority (60 percent from Kenya) and Public sector bank customers dominated the Indian respondents.
The need for e-banking was favored by majority of respondents from Kenya (87 percent) and India (82.8 percent). This clearly indicates that the idea of banks introducing e-banking is conceived magnificently by many customers in order to change their style of modern financial dealings.

From the perspectives of various e-channels adopted by customers, it was indicated that ATM is mostly adopted both from India and Kenya, since, 87.2 percent from Kenya and 94.8 percent from India said that they are using ATM for their daily financial needs and dealings. The second mostly adopted technology from both India and Kenya was internet banking, with 67.2 and 33.6 percent of respondents respectively.

The Kenyan Customers indicated that TV/Radio (64.8%) and print media were the main source of awareness. The Indian perspective shows that customer’s friends (77.2%) and print media (71.6) was the main source of e-banking awareness. Family members and bank officials for both countries was not reported as an important source for e-banking awareness.

Customers indicated that they are aware of various e-channels adopted by their banks. Majority of respondents from Kenya (92.0%), reported that their banks have installed ATMs, 58.0% indicated that their banks provide Debit card facility while SMS was reported by few respondents showing that the service might have taken root with only Telco Companies which started providing financial serves through Mobile phones. Respondents from India that their banks have adopted ATM banking, Debit Cards and Internet banking.

Majority of Kenyan and Indian customers, 87.2% and 94.8% respectively indicated that they have adopted ATM technology in getting banking services from banks. The second most adopted technology was internet banking, with 67.2% response from India and 33.6% from Kenya.

Bank customers from India (28.8%) and Kenya (31.2%) reported that they have less than one year of using e-technologies

The first preference was given to ATM banking from both countries (W.A.S 2.58 from Kenya and 2.32 from India) the second preference was given to cell phone banking (W.A.S,0.464) by Kenyan customers and to internet banking (1.072) by
Indian customers. The Kenya case might be due to the introduction of one of the powerful mobile phone financial service called M-Pesa which means mteja pesa (Client money). This service was launched in March 2007 to serve the majority of un-banked Kenyans.

- When surveying the specific services through ATM it was revealed that, withdrawing cash and checking balance was mostly used while requesting cheques book was reported by few respondents.
- Customers using internet banking in India reported that they mostly use bank websites to know bank products and check account balance. While they rarely use it is requesting cheques books.
- Majority of Customers from both countries reported that SMS banking is a useful and need to be adopted.
- Indian and Kenya customers reported that they use mobile phone to check their balance with banks and pay bills
- The nature of fast services was considered most important factor in adoption of e-banking from the dimensions of both India (WAS, 1.524) and Kenya (WAS, 1.808). This shows that customers from both countries believe that e-banking services are faster than traditional banking services. When Indian customers considered prestige (WAS, 1.452) as the factor which motivates them in adopting e-banking, the Kenyan customers considered non-limitation of time (WAS, 1.688) as their second in rank of important aspects on e-banking. The cost and easy of use was perceived least important in e-banking adoption from both India and Kenya.
- Security concerns was perceived to be most hindering customers from adopting e-banking in India (WAS1.224) and Kenya (WAS 0.752). Banks ‘limitation in adopting few services was also another barrier to adoption process by bank customers from both countries. Privacy was perceived as less affecting adoption process in Kenya (WAS.0.208) while high charges by banks were affecting Indian customers.

**Objective 3: To study the perception of bankers towards e-banking**

- Demographic analysis show that majority of bank respondents from both countries(36% Kenya and 63.3% India) belonged to Public sector banks and had 5-
10 years of experience which indicates that they are young in age. Further, majority were managers and head of departments from both India and Kenya, with graduations (53.3% Kenya) and post graduation (53.3% India).

- It was revealed that, a large number of respondents from India and Kenya favored e-banking introduction. This can be clearly be indicated by 45.3% from Kenya and 46% from India. Also, 37.3% from Kenya, and 43.3% from India revealed their interest in e-banking introduction by saying that e-banking is vital.

- Banks have adopted various technologies, but ATM technology was indicated the most adopted technology by Kenyan banks (98.7%). It was followed by m-banking, EFTs and internet banking each with 96 percent of the Kenyan respondents. From India, ATM still was mostly adopted (96.7%) followed by debit cards (91.3%) and EFTs (90.7%). Tele-banking is poorly adopted by both Kenyan and Indian bankers.

- The study revealed that the promotional channels of e-banking service adopted by banks in Kenya include advertisement print media (97.3%), T.V and Radio advertisement (90.0%) and online advertisements. Bank officials were considered least promoting e-banking services. This might be because of their time limitation in bank offices which hinder them from promoting their services or the old fear of loosing their jobs due to application of new technology in banks. From the Indian bankers’ perspective, opinions are same as Kenya as 88% of the respondents indicate to be using print media to promote e-banking services. 82% of the Indian respondents revealed that they use TV and radio while 74.0% use online advertisement.

- When asked about the services provided through ATM banking, 97.3% of Kenyan and 98.0% from Indian respondents reported that they provide cash withdrawal facility using ATM installed and 88.0% and 90% from Kenya and India respectively indicated that they provide balance enquiry facility through ATM machines.

- The Indian respondents identified major obstacles of e-banking. In this case, security concerns and lack of awareness and technical knowledge (WAS, 1.11 each) were considered the most discouraging factor in the spread of e-banking in India. The initial high cost of adopting e-banking was also an issue to Indian bankers also. The Kenya bankers too were identified to consider improper infrastructure (WAS, 1.45) as the most discouraging factors hindering the adoption of e-banking. Security and lack
of awareness, WAS, 1.33 and 1.12 respectively was considered vital challenges facing e-banking.

- The Indian respondents perceive that the attribution of e-banking (WAS, 1.63) is the most important factor in the adoption of e-banking, followed by fast nature of services (WAS, 1.59.) While the Kenyan customers believe that fast services (WAS, 1.8) and prestige (WAS, 1.61) are the most important factors when adopting e-banking. Bankers from both countries under study indicated that risk avoidance is the least important aspect taken into consideration when implementing e-banking.

- Convenience to customers, non-complexity of ATM banking and demand by customers were reported most important factor which influence Indian and Kenyan banks in ATM technology adoption.

**Objective 4: To analyze and compare the challenges facing e-banking business in both countries**

- Customers from both India and Kenya favored security issues (1.224 and 0.752 respectively), few services provided by banks (WAS, 0.996 and 0.712) and none awareness of customers (WAS, 0.908 and 0.616) as the major hindrances to e-banking development in their respective countries. Privacy was considered the least factor hindering e-banking in Kenya (W.A.S, 0.208 and High fees charged by bankers was considered the least factor hindering the spread of e-banking technology in India

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8.4 Policy recommendations and Implications

Objective 5: To make suggestions for improve the future of e-banking in the two countries.

The result of a careful analysis on trends, growth, customer and banker’s perception towards e-banking in this study, indicated clearly that the idea of transforming the banking products and services into technology oriented was imperative and cannot be avoided by either banks or clients. E-banking need and challenges facing adaptation were true feeling of both bankers and customers. In this context necessary steps are needed to put different electronic delivery channels on track to meet the urgent need of the banking industry. The study will be useful to financial dealing institutions since it will provide the perspectives of e-banking from both corporate sector and customers. This will help them to plan properly how and when to roll out new technology-based channels. Also, it will be useful to customers as it provides interesting information on the new system of banking and how diverse their financial institutions are modernizing banking services to fit their dynamic and stylish demands. This research will provide guidelines to regulators in India and Kenya so as to know the areas and issues of concern in the emergence of e-banking and will form a basis for the framework of policy and implementation.

8.5 Limitation of the Thesis

- The present study is based on a survey conducted with the help of a questionnaire. Any study based on a survey through a pre-designed questionnaire, suffers from the basic limitation of possibility of difference between what is recorded and what is the truth no matter how careful the questionnaire has been designed and field investigation has been undertaken. This is because the respondents may not deliberately report their true responses and even if they want to do so, there are bound to differ owing to the well-known problems of filters in communication process.

- The age of the customers responded was a problem while collecting the data, because majority of customer responded contacted with more than 45 years did not possess sufficient knowledge of e-banking. However, in Kenya the case was different because mobile banking is widely in use as one channel of providing banking services to rural
clients. This enables the aged people to have a simple knowledge to transact e-banking through their phones.

- The study was restricted to computer savvy and those who have started using e-banking. As well known, a huge mass of customers and bankers are not familiar with e-banking. So the majority of respondents who does not use e-banking were excluded from the sample. It was decided that, since e-banking is a new field, its knowledge might be limited and a myth to non-users. Hence, only perceptions of users were sought.

- Differentiating different electronic channels was a predicament to many respondents. For example, many thought that internet banking is synonymous to e-banking. Also, some thought that telephone banking is same as mobile phone banking and mobile banking. This misunderstanding lead to some doubt on the responses they gave.

- The study sample excluded customers without bank accounts. This was necessary with the view in mind that, customers with account numbers might have experienced the conventional banking so that they can give a clear understanding in terms of perceived importance of e-banking.

- One limitation of the study is that the nature of the study may not provide a clear picture since the set up of banking system in India and Kenya is little bit different. Reasons being India has 28 public banks in comparison to 3 public banks in Kenya. This seems incomparable. Also Kenya has a total of 46 banks, when India has more than 190 banks including rural regional banks.

- The data collection was done irrespective of gender characteristic which is the major psychological impact as the feeling of good saving capacity and financial dealing decision and mental set up is different amongst the male and female.

8.6 Perspective for further research

A doctoral thesis can seldom cover all relevant aspects of a topic. Moreover, new issues may emerge during the course of the research. This thesis is no exception and so several areas remain, that warrant further investigation. Electronic banking is becoming the talk of the day in financial institutions offering and those with intentions to offer digital financial services. Regular and intensive research is necessary to bring out open...
assumptions to various concerned parties to work on. Researches and developments at academic and industry level in the area of e-banking are not plenty in many parts of the world, especially in developing countries like India and Kenya. The area of e-banking and its effects on financial services industry and business as a whole, taxation issues in the dynamic electronic world, cross-border and risk management issues offers a wide scope of research.

First, more country cases and comparative studies on e-banking adoption need to be conducted. This study will provide a wide range of awareness to the parties involved from the customer, banker to regulatory and supervisory authorities to be aware of imperative areas of concern. The comparative studies will be useful to provide the insights from other developed or emerging market in respect to e-banking adoption and related antecedents.

Second, the impact of e-banking adoption on profitability on a comparative basis of different countries should be done since this thesis did not touch profitability impact as it concentrated on opinions to adoption. This study assumed that e-banking in India and Kenya is in its nascent stages in which measuring profitability impact will be unviable. Since majority financial institutions are turning to implementation of information technology, measuring its impact on profitability will help investments in unproductive portfolios.

Third, a comprehensive study comparing individual channels of e-banking like internet banking, ATM banking and mobile phone banking, will be important also to find out the extent of adoption and its contribution in whole business of e-banking. This is a concern because some financial institutions are investing in some other technologies which are impractical. For example, Internet banking in rural areas will have no use to the critical mass since many villages do not have proper electrification and other supportive infrastructure. Also, nowadays mobile phones are popular even in villages have attracted financial services like in Kenyan M-pesa case. Therefore, the future holds vacant space or gap for investigation.

Fourth, drivers of adoption and retention should be explored with the view to provide useful information to bankers. This will in such away help banks to provide better quality and to technology leveraged products and services for the sake of customer
satisfaction. Also reasons behind non-adoption of e-banking from both user and non-user perspective should be sought to provide a clear understanding of customers demands.

Finally, this thesis recommends that Legal requirements also should be sought through feasibility studies which may unveil the legal gaps between the existing laws and regulatory guidelines and the need for more. On the basis of them proper policies may come into force to enable smooth handling of e-banking business and protect innocent customers.