

Practice of E-banking in commercial bank: An empirical study in Bangladesh

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ABSTRACT

Continuous technological development, particularly, information technology revolution of the decades of the 20th century has forced the banks to introduce the e-banking operation for their sustainable growth in expanded competitive environment. E-banking has made financial transactions easier for the participants and has introduced wide range of financial product and services. Electronic banking systems allow business parties or individual to pay directly or to debit accounts via telecommunication systems. The main focus of this research is present scenario, prospects & some drawbacks of e banking in banking sector of Bangladesh. The study is descriptive in nature and data were gathered through website of different bank, conversation with bankers and interview by structured questionnaires through snowball sampling technique with current customer of different bank. The result of this study shows that how e banking up surging in banking sector and makes our country with more state of art facilities. The study also highlights some constraints and steps of overcoming those constraints of e banking in banking sector of Bangladesh. The study was conducted in August 2012.

Key words: E banking, Bangladesh, Prospect, Banking sector and Service.

1. INTRODUCTION

Electronic banking is transforming the financial services industry through various impossible innovations of modern technology. E-banking uses particularly information technology to generate, collect and process information about bank operation and bank customers efficiently and effectively. In Bangladesh, multinational banks are operating for long besides our nationalized, private and specialized banks. However, much of the resulting research has concentrated on providing evidence of the association between consumers' usage patterns of ATMs and their demographic profiles (Hood, 1979; Murphy, 1983) and, more recently, consumer psychographic profiles (Stevens *et al.*, 1986). Besides, the banking services of nationalized, private, and multinationals are different by quality of their services. Multinational banks are offering better services than others. They offer better customer services, personal financial services, corporate facilities, trade services with the help of efficient operational department, credit department, information technology department and the most important department.

E-banking is considered to be a segment of e-business to the extent that banks are involved in the conduct of business transactions via electronic media; other non banking financial products and services (e.g. insurance), not to mention products and services from other sectors of business, may be sold electronically as well (Deutsche Bundes bank Monthly Report, December, 2000) E banking play vital role in the economic development of a country. Ali and Akter (2010) argued that a transitional period in the banking sector of Bangladesh has been passing through since shifting from the traditional banking system to the online banking system. These comments indicate that gradually electronic banking is gaining its importance in Bangladesh. Customers linking are necessary for the banking sector to elevate probability, business expansion and accomplishment. Now a day's banking sector is modernizing and expanding its hand in different financial events every day. At the same time

the banking process is becoming faster and easier. In order to survive in the competitive field of the banking sector commercial banks are looking for better service opportunities to provide their customer. This paper tries to highlight the present scenario, prospects & some constraints of e banking in banking sector of Bangladesh.

2. LITERATURE REVIEW

The way Bill Gates (2008) announced that “banking is essential, banks are not”. This quotation means that the traditional bank branch is going to vanish in order to be surrogated by electronic banking which continue to attract new users. The banking industry believed that by adopting new technology, they will be able to improve customer service level and tie to their customer closer to the bank. Pikkarainen, Karjaluoto, and Pahlila, (2004) defines internet banking as an „internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investment’. With the exception of cash withdrawal, internet banking gives customer access to almost any type of banking transaction at the click of a mouse (De Young, 2001). Mia, Rahman and Debnath (2007) observed that the latest development in financial services by banks is electronic banking, where banks have now put themselves in the World Wide Web to take advantage of the Internet’s power and access to cope with the accelerating pace of change of business environment.

Indeed the use of the internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fiercer competition (Flavián, Torres, & Guinalú, 2004; Gan, Clemes, Limsombunchai, & Weng, 2006). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004). Huda, Momen and Ahmed (2004) commented that the banking sector in Bangladesh is clearly recognizing the importance of information technology to their continued success.

As Karjaluoto et al. (2002) argued that ‘banking is no longer bound to time and geography. Customers over the world have relatively easy access to their accounts, 24 hours per day, and seven days a week’. The author further argued that, with internet banking services, the customers who felt that branch banking took too much time and effort are now able to make transactions at the click of their fingers.

There are other numerous advantages to banks offered by e banking such as mass customization to suit the likes of each user, innovation of new products and services, more effective marketing and communication at lower costs (Tuchilla, 2000).

Stewart (1999) claimed that the failure of the internet in retail banking is largely attributable due to the lack of trust consumers have in the electronic channels. Provision of infrastructural facilities is another factor that could lead to quicker diffusion of innovation. Hiltz, Johnson, & Turoff (1986), for instance, found that computer mediated communication is less personal and socioemotional than face to face exchanges. Tomiuk and Pinsoneault (2001) concurred that the lesser degree of ‘richness’ and ‘sound presence’ of banking environment will affect banks ability to create a trusting relationship between their customer and employees. On the other hand for those customers whose relationship is primarily based in efficiency services, e banking will be an attractive alternative. Interestingly as Doll, Raghunathan, Lim and Gupta (1995) also claimed that product information content on the web design and layout are also important factors that affect customer satisfaction. Ahmed and Islam (2008) observed that adopting e-banking services, banks in developing countries are faced with strategic options between the choice of delivery channels and the level of sophistication of customer services provided by these delivery channels. The relationship between banks and corporate customers is the most important factor in the success of new financial services (Easingwood & Storey 1993).

Routray (April 2008) mobile and wireless communication devices are becoming enablers for organizations to conduct business more effectively and efficiently. One of the most effective applications is mobile banking (m-banking). The increased flexibility and mobility feature of wireless ATM and its bandwidth on demand function is motivating a large number of carriers towards deployment of the WATM networks. Oghenerukeve, (December 2008), e banking provides alternatives for faster delivery of banking services to a wider range of customers. The increasing popularity of internet banking, have attracted the attention of both legitimate and illegitimate e banking practices.

Hua (2009) conducted an experiment to investigate how users' perception about online banking is affected by the perceived ease of use of website and the privacy policy provided by the online banking website. Nyangosi, Arora, Singh (2009) argued that banking through electronic channels has gained increasing popularity in recent years. This system, popularly known as 'e-banking', provides alternatives for faster delivery of banking services to a wide range of customers. The overall result indicates that customers in India and Kenya have developed positive attitudes and they attach much importance to the emergence of e-banking.

Wise and Ali (2009) argued that many banks in Bangladesh want to invest in ATMs to reduce branch cost since customers prefer to use them instead of a branch to transact business. Atiur Rahman (2010) who is the Governor of Bangladesh Bank argued that Bangladesh Bank has achieved a historic milestone in the trade and business arena, departing from conventional banking with the introduction of e-banking recently; a giant stride towards digital Bangladesh.

From the aforesaid literature review, it is evident that e banking can act as a complementary towards banking sector in Bangladesh. E banking is a lower-cost delivery channel and a way to increase sales. Internet banking services lies in the increased retention of highly valued customer segments. With the help of e banking the country can create opportunity as this will help both banker and customer.

3. OBJECTIVES

This research has taken into consideration to accomplish the following objectives:

- i) To give the present status of e banking in banking sector of Bangladesh.
- ii) To describe different types of e banking system.
- iii) To highlight prospects of e banking in Bangladesh.
- iv) To identify some constraints area of e banking.
- v) To take the necessary steps to overcome those constraints of e banking.

4. METHODOLOGY

The study is descriptive in nature. The data for this paper have been collected from both primary and secondary sources of information. Primary data have collected by a survey through preparing a questionnaire. For collecting data from the respondents', the study used snowballing sampling technique which is also known as a chain referral sampling type. Snowball sampling technique is used to discover and enlist "hidden populations," who may be difficult to locate. The survey was conducted among 200 customers' comment those have been using electronic banking system of following banks: Sonali Bank Ltd., BASIC Bank Ltd., Dutch Bangla Bank Ltd., Standard Chartered Bank Ltd., HSBC Ltd., Prime Bank Ltd., Uttara Bank Ltd. AB bank Ltd. (including male and female customers') are given in Table: 2 and table: 3. Primary data also collected through conversation with employees of different banks.

Secondary data were derived from various sources including the website of different bank, different annual reports of relevant institution, journals & articles of related topics, different books and materials from libraries, the hand notes of the various seminars. Observations through field study were obtained are being reported at the present scenario of the e banking in banking sector of Bangladesh. Time period of the study is up to August, 2012. The study did not use any sort of correlation or regression analysis as this study is mainly based on qualitative nature.

5. LIMITATION

There has no plethora research work in Bangladesh perspective particularly. The study covered a very limited number of organization and respondents as well. Some respondents were neither motivated nor interested in expressing their honest opinion. Banks are not interested to disclose their business secrets In addition to this, journals, periodicals and published data are not available on this issue. We put all effort to collect necessary data though we had time and budgetary constraints. Bank officers were found too busy and also reluctant to talk

without written permission from the competent authorities. More over while collecting data they didn't disclose much information/data due to secrecy of the organization.

6. FINDING & ANALYSIS

6.1 Present scenario of E banking in Bangladesh

Electronic Banking is transforming the financial services industry through various impossible innovations. The quantity of cross-border trading and other financial activities is increasing geometrically make possible by technology. It has been made possible by technology, particularly information technology to generate, collect and process information about bank operation and bank customers efficiently and effectively.

There are currently 53 Banks working together in Bangladesh. The competition is going up day by day, especially between the private commercial banks. They are trying to exposure themselves as the better one to their customers by proving new banking services, developing the existing services and so on. E-Banking is known to Bangladesh since 1990. Electronic Banking has got tremendous importance in banking sector and banking customers too.

Currently in Bangladesh, there are 4 state owned Banks have 34% branches, 5 specialized banks have 1311 branches, 30 local private commercial banks have branches all across the country.

6.2 Various Form of E-banking system in banking sector

6.2.1. PC banking: PC banking refers to use of personal computer in banking activities while under PC home banking customers use their personal computers at home or locations outside bank branches to access accounts for transactions by subscribing to and dialing into the banks' Internet proprietary software system using password. Basically, PC banking may be categorized into two types such as online banking and Internet banking.

(a) Online banking: At present, 29 scheduled banks offer any branch banking facilities through their respective bank online network that provides facilities like transaction through any branch under the respective bank online network; payment against pay order or pay order encashment, demand draft encashment, opening or redemption of FDR from any branch of the same bank; remote fund transfer, cash withdrawal, cash deposit, account statement, clearing and balance enquiry within branches of the same bank; and L/C opening, loan repayment facility to and from any branch of respective bank under its own online network.

(b) Internet banking: German banks have been offering the Internet banking since the mid-nineties, although the only product they were offering at the time was information. Only 7 out of 48 banks are providing some banking services via internet that include account balance enquiry, fund transfer among accounts of the same customer, opening or modifying term deposit account, cheque book or pay order request, exchange rate or interest rate enquiry, bills payment, account summary, account details, account activity, standing instructions, loan repayment, loan information, statement request, cheque status enquiry, stop payment cheque, refill prepaid card, password change, L/C application, bank guarantee application, lost card (debit/credit) reporting, pay credit card dues, view credit card statement, or check balance.

6.2.2. Mobile banking: The standard package of activities that mobile banking covers are: mini-statements and checking of account history; alerts on account activity or passing of set thresholds; monitoring of term deposits; access to loan statements; access to card statements; mutual funds/equity statements; insurance policy management; pension plan management; status on cheque, stop payment on cheque; ordering check books; balance checking in the account; recent transactions; due date of payment; PIN provision, change of PIN and reminder over the internet; blocking of (lost/stolen) cards; domestic and international fund transfers; micro-payment handling; mobile recharging; commercial payment processing; bill payment processing; peer to peer payments; withdrawal at banking agent; and deposit at banking agent. Despite huge prospects, only a few banks adopted mobile banking in Bangladesh during the last year.

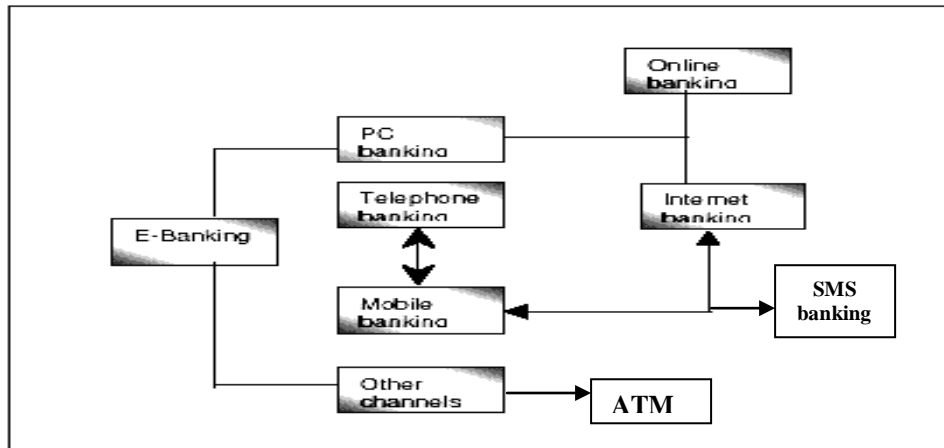


Figure: Form of E-banking System

6.2.3. Tele banking: Tele banking service is provided by phone. Only four banks so far provide a few options of tele banking services such as detail account information, balance inquiry, information about products or services, ATM card activation, cheque book related service, bills payment, credit card service and so on. Funds transfer between current, savings and credit card account, stock exchange transactions etc are still inaccessible through tele banking in Bangladesh.

6.2.4. Automated Teller Machine (ATM): An ATM is simply a data terminal with two input and four output devices. Like any other data terminal, the ATM has to connect to, and communicate through a host processor. Now only DBBL (Dutch Bangla Bank Limited) has more than hundred of ATMs in Bangladesh.

6.2.5. SMS Banking: SMS allows you to do some banking inquiries on your mobile from anywhere under the mobile network coverage in a country. SMS Banking is developed to provide transactions related to client's car number via SMS using cell phones. Bangladesh needs to develop SMS banking as most of the area of Bangladesh is already covered by mobile network. Recently a number of commercial banks of Bangladesh have become the member of Belgium based Society for Worldwide Interbank Financial Telecommunication (SWIFT). For international payment settlement 33 percent of banks

are using now SWIFT. With the activation of the **SWIFT** system banks enjoy instant, low-cost, speedy and reliable connectivity for L/C transmission, fund transfers, message communication and worldwide financial activities. Earlier only foreign banks of this country were availing this facility (Rahman, A, 2001).

In our country different banks are offering electronic banking services in different ways, some are offering ATM (Automatic Teller Machine) services, some are tele-banking and some are electronic fund transfer, debit card, credit card etc. The following table shows the different electronic banking services in our country (Raihan, A, 2001).

Table-1 Electronic Banking Services in Bangladesh [% of Banks] from year 2007 to 2012.

Product	2007	2008	2009	2010	2011	2012
Tele banking	32	35	39	43	45	47
Online Banking	25	27	30	33	35	40
Electronic fund transfer	30	32	36	39	45	48
Automated teller Machine (ATM)	40	46	52	59	65	69
Debit card	40	45	51	58	62	69
Credit card	24	27	30	32	38	40
Internet banking	45	51	56	60	65	67

Above the table shows that different e banking systems which provide different service increase day by day in banking sector of our country.

7. THE FEATURES OF E BANKING

1. Available booths.
2. 24 hours cash withdrawal facility.
3. Quick cash withdrawal facility without having queue.
4. Account activities enquiry in any moment.
5. Statement request through ATM/Debit/Credit card.
6. Transfer Own funds to other account number in same bank.
7. Present balance inquiry.
8. Deposit or mail cash or cheque (cross cheque) through mechanical inquiry.
9. Changing personal identity number (PIN).
10. Slips of bills of every transaction.
11. Mini statement which contains 8-10 previous transaction records.
12. Capability of paying utilities bill.
13. Withdrawal money using Visa Card, MasterCard, Maestro and other banks debit cards.

8. STRUCTURE OF E-BANKING

E-banking is a good general term referring to various computer-based technologies for delivering bank services. Electronic banking system can be divided into 2 categories by the functional categories:

1. **Bank-office electronic banking:** This banking provides information management services and quick cash fund transfer facilities.
2. **Electronic Financial instruments:** This banking provides customers all prescribed banking facilities in any remote areas or outlets.

User's response: Field Survey-

Table: 2 Respondents' of Different Banks who have been using e banking system

Serial No	Name of the Banks	Male respondents	Female respondents
1	Standard Chartered Bank Ltd.	15	10
2	Dutch Bangla Bank Ltd.	27	16
3	Sonali Bank Ltd.	09	05
4	Prime Bank Ltd.	11	22
5	HSBC Ltd.	10	4
6	Uttara Bank Ltd.	17	15
7	Basic Bank Ltd.	15	03
8	AB Bank Ltd.	13	08

(Source: Customer opinion on the basis of field survey)

Out of two hundred customers' who have been using e banking system, following results have been gathered from the questionnaire through using snowball sampling technique.

Table: 3 Customers' Response who have been using e-banking system (% of Respondents who expressed "Yes" comment)

Comment	Male (%)	Female (%)
i) E-banking services is relatively good than manual system	80%	72%
ii) E-banking provides good Customer service	75%	68%
iii) Just in time services in Banking can be provided	59%	51%
iv) Feel safe by using e banking	60%	52%
v) Bank Personnel behave properly	51%	43%
vi) Dealing officer is well conversant about their respective Desk work	52%	49%
vii) Technologically improved but quality of banking services worsen off	49%	42%
viii) Better E-business environment	68%	60%
ix) Have sufficient knowledge about all e banking services	71%	59%

(Source: Compiled on the basis of Customers' response)

From the aforesaid findings it is observed that impact of e banking has a mixed result. Here most of the customers' support that it provides good customer services. This supports our null hypothesis. Because our null hypothesis was E banking is a bless of banking sector in Bangladesh & also it provide better service to the customer. But the problem lies that customers' thought that technologically improved but quality of banking services are worsen off. In case of other opinion survey most of the customers' are providing "yes" results which also indicate that null hypothesis is correct. Here if the percentage of response is above 50%, than we think that the comment is going to be positive. However, in the survey there is a question regarding dealing officials of the commercial banks whether they are well conversant about their desk work? The reply indicates that 52% and 49% customers (Male & Female) thoughts that dealing officers of the banks are not as well as conversant about their desk work. This finding also shows that maximum customer has sufficient knowledge about e banking services. Finally we can say that e-business especially with the help of on line banking can develop economy of Bangladesh in a far better way as customer relationship management increases.

9. PROSPECT OF E BANKING IN BANGLADESH

Bangladesh has been connected with the information super highway on the 20th of May, 2006. It is a landmark of ICT sector of Bangladesh. The cable network covering some around 786 miles across the country from Bay of Bengal will provide a fiber optic link with a data transfer capacity of 10 gigabits per second basing on the ICT facilities our e-banking is established. Electronic Banking allows banks to expand their markets for traditional deposit taking and credit extension activities and to offer new products and services or strengthen their competitive position in officering existing payment service. In addition, e-banking could reduce operation costs for banks. More broadly, the continued development of e-banking and electronic money may contribute to improving the efficiency of the banking and payment system and to reduce the cost of retail transactions nationally and internationally. The development in information technology has contributed positively to e-banking through several channels. Banks have been increasing their own size and financial strength and expanding the scope of their products lines to meet the growing of online real time financial services through e-banking. The overall computer density in the banking sector is 1.64. For foreign commercial banks (FCBs) the computer density is 45.34, where as for NCBs the ratio is only 0.41. The specialized bank scenario is almost same as the NCBs, 0.43. On the other hand, private commercial banks have comparatively higher ratio, 4.94. As a whole 81.81 percent bank does not have any local area network (LAN), 30 percent have WAN (Wide Area Network) but for some banks many branches are outside of WAN connectivity. At present, all foreign banks of our country are using online banking system; they are invested a lot for their automation banking services. They are the pioneer of implementing electronic banking systems in Bangladesh, but now most of the private banks of our country are using electronic banking systems. In our country different banks are offering electronic banking services in different ways, some are offering ATM (Automatic Teller Machine) services, some are tele-banking and some are electronic fund transfer.

Recently, the government's emphasis on building a digital Bangladesh, setting up ICT park, raising allocation for developing ICT infrastructure, waiving taxes on computer peripherals and other measures including the automation program of banking sector led by the Bangladesh Bank and competition among the scheduled banks in improving customer services have accelerated the prospects of e-banking in Bangladesh.

10. ADVANTAGES OF E-BANKING IN BANGLADESH

Now a days E banking become a bless of banking sector in Bangladesh. E-banking can play a significant role in uplifting the entire banking services and thus effect positively in country's economy. It has various types of advantages in banking sector which given below:

Short term advantages

- i) Reduce extra time
- ii) Increase productivity and efficiency
- iii) Duplication and wastage
- iv) Cut down maintenance, and shortage cost
- v) Curtail security cost

Long-term advantages

- i) Create new opportunities of jobs for jobless
- ii) Participate in the country's economic health
- iii) Proper planning and monitoring
- iv) Proper use resources.

Advantage in case of job creation

According to Bangladesh Bureau of Statistics, the number of unemployed people in Bangladesh in 1990 - 2001 was 1.0 million. Among them 0.2 million are male and 0.8 million female, at the rate of unemployment was 1.1 which was extended 1.9. The issue of computers eliminating jobs of people was quite emotional and painfully real. But it has two sides that automation will eliminate certain types of job like record keeper and also created jobs like administrator, system analyst, programmer, operator etc. and helped to reduce unemployment problem.

Advantage in contribution to GDP

Banks with a national economy, work towards building national capital, increasing national savings and mobilizing investments in trade and industry.

11. BENEFITS OF E-BANKING FROM THREE POINTS OF VIEW

a) Benefits from the banks' point of view

From the banks' view point, the first benefits for the banks offering e-banking services was better branding and better responsiveness to the market. The other benefits were possible to measure in monetary terms. The main goal of every company was to maximize profits for its owners and banks were not any exception. Automated e-banking services offered a perfect opportunity for maximizing profits.

b) Benefits from the customers' point of view

The main benefit from the bank customers' point of view was significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main benefits of e-banking were as follows: Increased comfort and timesaving-transactions made 24 h a day, without requiring the physical interaction with the bank. Quick and continuous access to information. Corporations had easier access to information as, they checked on multiple accounts at the click of a button. Better cash management. E-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments is available on Internet sites of banks. Private customers looked for slightly different kind of benefits from e-banking.

Reduced costs: This was in terms of the cost of availing and using the various banking products and services.
Convenience: All the banking transactions performed from the comfort of the home or office or from the place a customer wants to.

Speed: The response of the medium was very fast; therefore customers actually waited till the last minute before concluding a fund transfer.

Fund's management: Customers downloaded their history of different accounts and do a "what-if" analysis on their own PC before affecting any transaction on the web.

c) Benefits from the economical' point of view

E-banking served so many benefits not only to the bank itself, but also to the society as a whole.

E-banking made finance economically possible:

- (i) Lower operational costs of banks
- (ii) Automated process
- (iii) Accelerated credit decisions
- (iv) Lowered minimum loan size to be profitable.

Potentially lower margins:

- (i) Lower cost of entry
- (ii) Expanded financing reach
- (iii) Increased transparency.

Expand reached through self-service:

- (i) Lower transaction cost
- (ii) Make some corporate services economically feasible for society
- (iii) Make anytime access to accounts and loan information possible.

12. CONSTRAINTS OF ELECTRIC BANKING IN BANGLADESH

Emergence and growth of Electric Banking of a country depends on the following factors:

1. Availability and growth of telecommunication instructors.
2. ICT operation in electric banking sectors.
3. Culture of using electric banking.
4. Legal and regularity framework
5. The users of electric banking are in urban areas.
6. Infrastructure of villages is not suitable for electronic banking.

In many cases people have some complaints also. The common types of problems they face are:

1. ATM's fall short of money.
2. Slow bandwidth of internet may delay the transfer rate. Banks may delay to provide PIN number whenever client loses his Credit or Debit card.
3. Power failure in the outlets
4. Charges are higher for the card.
5. Password fraud.
6. Risk of debit or credit card forgery
7. Traditional habits of common people

13. RECOMMENDATIONS TO OVERCOME ABOVE CONSTRAINTS OF E-BANKING IN BANKING SECTOR OF BANGLADESH

Since 1992 the e-banking is going on all over the country but it is still many theoretical and technical hurdles. Some recommendations are listed below to overcome and improve the current situations:

1. E-banking services should try to mobilize more deposit schemes through better marketing and innovative measures.
2. E-banking system should be more flexible.
3. E banking should develop their communication among branches.
4. The decision making process should be faster
5. SME section of banking should be more flexible.
6. Need to establish more ATM booths with sufficient fund.
7. E-banking service should be according to the customer expectation and satisfaction.
8. E-banking service should be resolve the entire problems very quickly that the customer face in online transaction.

14. CONCLUSION

Modern electronic banking concept in the banking services is new for Bangladeshi people. Most of our bank has not any marketing or sales forces to execute the raw and cold business of electronic banking for their own organization. People are not also conscious about the advantages of the technology. Some multinational banks are already introduced their marketing activities over their targeted customers for specialized products like electronic products which is found very effective. The multinationals are coming up towards people with variety of highly technical products, which can solve the people's problem and can able to modernize their lifestyle. The growth of electronic banking users increasing is a significant manner. However, last 10 years it has got tremendous importance over the bank customer and hopefully it will increase day by day after nurture the product by the professional bankers.

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