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MEASURING CUSTOMER SATISFACTION OF E-BANKING IN BANGLADESH

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Abstract: Due to incredible proliferation of information and communication technology (ICT) the concept of banking has been radically changed. Use of modern state of the art technology has also rapidly taken place in Bangladesh which reflects are e-banking products and services. Such developed environment in banking and the ever-increasing habits of the people to use mobile phone should be conductive of internet, online, and mobile banking here. Emergence of e-banking service is playing a fore front role for country's economic development boosting customer satisfaction. This research work is an attempt to find out the status of e-banking by measuring customer satisfaction and importance level on different dimension of e-products like ATM, Credit Card, Internet/Online, Tele banking, and SMS Banking. This research is a combination of exploratory and descriptive research as an effort was made to first gain some basic knowledge on e-banking through study of previous research on e-banking and general observation.

Keyword: *E- Banking, ATM, M- Banking, Internet banking, Online Banking.*

Introduction

During the last two decades, technological and communicational development enhances enormous change in the corporate world. Electronic business is an umbrella terms for every sector, which has displace the brick-and-mortar institution and paper based working system. Due to incredible proliferation of information and communication the concept of money has been radically changed also. The term e-business now gives a new name in banking industry, which is called E-Banking (Electronic Banking) which has

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dispelled the geographical bar among countries. Electronic banking is giving in popularity for a number of reasons, including convenience, cheaper, multifunctional services, trendy and hassle free. The products and services of e-banking now have shaken the decision of consumer while choosing a bank. Because consumers become concerned about their e-banking facilities for particulars banks rather than traditional branch based banking system.

Banks began to look at banking as a means to replace some of their traditional bank functions for two reasons. Firstly, branches were very expensive to set up and maintain due to the large overhead associated with them. Secondly e-banking product/services like ATM and electronic fund transfer were a source of differentiation for banks that utilized them. Being in a fiercely competitive industry, the ability of banks to differentiate themselves on the basis of price is limited. Technology has introduced new ways of delivering banking services to the customer. Hence, it is imperative for banks to align their strategies in response to changing customer's needs and developments in technology.

Electronic banking as a segment of electronic business, which, in turn, encompasses all types of business performed through electronic networks. Electronic channels are used for both business-to-business and business-to-customer transaction, such as ordering goods, delivering software or paying for such transactions. 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, not to mention products and services from other sectors of business, maybe sold electronically as well.

In others words, e-banking is not a banking product, rather, it describes the way of transactions conducted. Nowadays, in fact, banks are involved in e-business in a variety of ways, including co-operation with internet service providers, the issuing of e-money or the execution of payments. The ownership of fund transfer between financial institutions are recorded on computer systems connected of telephone lines. Customer identifications is accessed by code, such as a password or personal identification number instead of a signature on a check or other physical document.

Two fundamental aspects of electronic banking are the nature of the delivery channel through which activities are performed, and the means to gain access to those channels. Commonly delivery channels include "closed" and "open" networks. "Closed networks" have no such membership requirements. Currently, widely used access devices through which e-banking products and services can be provided to customers include point of sale terminals, automatic teller machines, telephones, and PCs.

Objectives of the study

The objectives of this study are as follows.

a) To understand the e-banking products;

b) To explore the extent of satisfaction of bank customers and relative importance;

c) To recommend some suggestions for perfect online banking in Bangladesh.

Methodology of the Study

For the purpose of measuring the extent of satisfaction and importance quantitative research, primary data were collected through a structured questionnaire which was administered personally to the bank customer. Convenient sampling technique has been used for choosing 100 respondents from different banks (HSBC, Standard Chartered Bank, BRAC Bank Ltd., Dutch Bangla Bank Ltd., Eastern Bank Ltd., and Dhaka Bank Ltd.). Four demographic variables of the respondent were measured age, gender, income and profession. The distribution illustrated that there was a greater proportion of male (68%) and were between the 31 to 40 years age group. Majority of respondents were service holders (59%)and their monthly income amounting BDT 40000 maximum. The questionnaire was developed by using a 5 point Likert scale, whereas 1= High Satisfactory, 2= Satisfactory, 3= Neutral, 4= less important, 5= unimportant to measure the importance of these factors. At the end of questionnaire, an open- ended question is attached to trace customer opinion. Questionnaire was pretested several times to ensure text formatting. Several sources were used for enhancing the insights of this paper, such as articles published in different journals, books, working papers and websites.

Literature Review

A.S.M.S., Azad (2001) mentioned e-banking or Internet banking or online banking are analogous and defined as the conduct of banking services and business using electronic delivery channels such as ATM, Tele-banking and PC banking.

Joseph & Stone (2003) have said that the internet deals with a large number of varied financial transactions like customer payments, securities transactions applications for loans or insurance acquisitions. In recent years, internet banking usage has become one of the most important e-commerce environment (Wang, Y. et al., 2003). Sohail and Shanmugham (2003) pointed out that a bank's promotional efforts indeed facilities awareness of Internet banking adoption and its benefits. Technology has introduced new ways of delivery banking to the customer, such as ATMs and Internet

banking. Hence, Banks have found themselves of the forefront of technology adoption for the past three decades. Increasing labor costs in the 1960s placed pressure on labor intensive industries like banking to look forward automating some of their functions. Originally, banks offering an ATM service achieved an advantage over their competitors (O'Hanlon et al., 1993). There was scant understanding of the customers' needs or expectation of the role of ATMs large in bank's retail delivery system was vague (Violano et al., 1992). In the early market stage, ATM was a product based on a radical technological innovation, and did not representation a report to a customer need at that point in time. In the mid-1970s, features like cash balance inquiry, deposits and funds transfer permitted these customers to conduct the majority of their routine transactions without visiting a bank branch (O'Hanlon et al., 1993).

According to the Gartners Group's 1999 report, there has been rapid growth in online PC banking in the USA; from just over 10 million in 1999 to the projected 35 million by the year 2003 with a rapid shift in internet access (Barto, 1999). Consumer growth in some European courtiers such as Germany, Norway and Sweden has been similar (Bons, 1999; Slywotzky, 2001). In an attempt to solidify and expand customer relationships and stay ahead of the competitions, banks are turning to the next generation of personalized online services-Internet banking portals and mobile banking (Fonseca et al., 2001; Saatcioglu, 2001). Electronic customer relationship management (E-CRM) will thus the next paradigm shift. It will be a matter of fundamental change involving the re-engineering of process throughout the financial institution. It must not be a web solution or advisor solution or a call center solution or a wireless solution. Enterprise wide E-CRM must be all of the above. Beyond the ability to deploy across a multiple channel the solution must have consistency and collaboration across all channels.

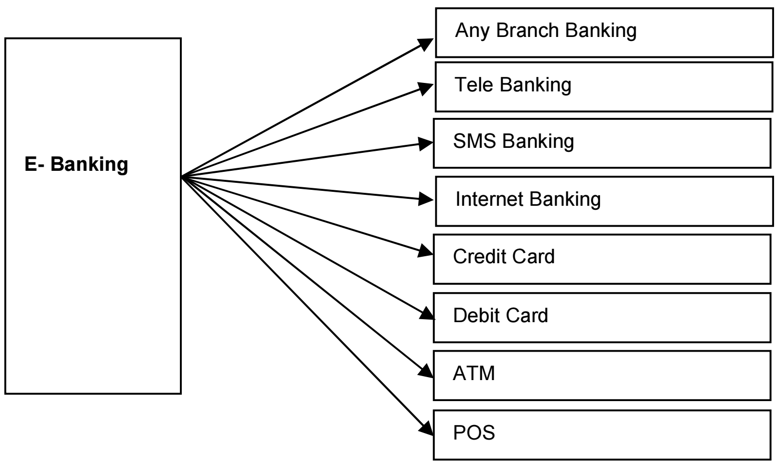
Rotchanakitumnuai & Speece, (2003) stated that though banks are very interested in Internet banking they are concerned with the risk connected with procedures for transactions over the Internet. Today, banks are already loosing enormous amounts through cheques and credit cards fraud. The security solutions of the future are therefore major concern for banks. If customers distrust the security it may create multiple problems. Banks will find it hard to launch Internet banking services if demand is low because of security doubts. Though the banks themselves believe that the security levels for bank transactions over the Internet are sufficient, they also believe that their customers distrust existing security solutions, primarily because they are software based.

Solomon (1997) claims that for client that for client interface and transport security is currently mainly ensured by the use of cryptographic instruments and by the set up of private financial network. Also, private networks are another solution to secure transactions. These networks can be used for corporate banking and retail banking.

Forms of e-Banking:

The article highlights to measure the differences between customers importance and satisfaction for multifunctional services of e-banking which was not identified by the previous researchers. In addition, it has tried to identify the required concentration for the sectors where customers have high importance level. The reason is that the most of the previous research was conducted based on e-banking practices, their opportunities, constraints as well as customer satisfaction.

Different forms of E- Banking



a) Any Branch Banking

Any branch banking is a service where an account is accessible from any branch of a particular bank. In Bangladesh the term is widely popularized as online banking. Most of the foreign and private banks operating business in Bangladesh have started providing this facility to its customers.

b) Tele Banking

Tele Banking can be considered as a form of remote or virtual banking which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialing a touchtone telephone or mobile communication unit, which is

concerned to an automated system of the bank by utilizing automated voice response (AVR) technology. The facility available included checking account balance, a recent transactions, get current interest rates on checking, savings, money market, and Certificates of Deposit. Benefits from Customer's point of view: increased convenience, expanded access, significant time saving. Benefits from bank's point of view the costs of delivering telephone based service are substantially lower than those of branch based services.

c) SMS Banking

SMS banking allows to do some banking enquiries on mobile phone. Customers do not need to go your branch to do the following transaction: Balance enquiry, Transaction enquiry, Statement request, Payment of utility bills.

d) Internet Banking

Internet Banking is a term used for performing transactions, payments etc. over the internet through a bank's secure website. This can be very useful, especially for banking outside bank hours (which tend to be very short) and banking from anywhere where internet access is available. In most cases a web browser such as Internet Explorer or Netscape Navigator is utilized and any normal Internet connection is suitable. No special software or hardware is usually needed.

e) Credit Card

Credit is a method of selling goods or services without the buyer having cash in hand. A credit card is only an automatic way of offering credit to a customer. The inventor of the first issued credit card was John Biggins of the Flatbush National Bank of Brooklyn in New York. The most popular brand names in credit cards are Master Card, Visa Card, American Express Card, and Diners Club Credit Card.

f) Debit Card

Instead of getting credit for purchasing and receiving a monthly bill, like a credit card, a check/debit card deducts money from checking or savings account. Quicker than making a trip to the bank, safer than carrying cash and easier than writing checks.

g) ATM

An automatic teller machine or automated teller machine (ATM) is an electronic device which allows a bank's customers to make cash withdrawals and check their account balances at any time without the need for a human teller. Many ATMs also allow people to deposit cash or cheques, transfer money between their bank accounts or even buy postage stamps. These machines can now be found at most supermarkets, convenience stores and travel centers.

h) POS

Point-of- sale transfers let one pay for purchases with a debit card, which also may be a ATM card. The process is similar to using a credit card, with some important exceptions. While the process is fast and easy, a debit card purchase transfer money fairly quickly-from one's bank account to the stores account. So it is important that one have funds in one account to cover the purchase. This means one need to keep accurate records of the dates and amounts of one debit card purchases and ATM withdrawals in addition to any checks one writes.

i) Call center

This center is a streamlined customer interface and offers a range of banking services through its call center agents. Customers will not get improved service delivery at a reduced cost and in an exciting manner. Service offered at call center are: Account related services (Balance inquiry, Transaction inquiry, Duplicate Statement, ATM/Debit card hot listing, Loan Outstanding), Product Information(Debit accounts, Personal Loans, Savings/Current Account, Debit Card, Rates/Tariff inquiry, Exchange Rate, Lending rates, Deposit rates, Tariffs), and others services.

Findings & Analysis

Here we have taken five attributes of e-banking which have different dimensions to consider for measuring customer's perception and importance level.

Table 1: ATM, Q-cash

Dimensions	Importance Mean Score	Satisfaction Mean Score	Difference	tValue
Number of ATM booth	4.40	2.58	1.86	5.91
Security of ATM booth for withdrawing money	4.39	3.24	1.15	1.10
Multifunctional service like: cash withdrawal, Payment of utility bills, balance enquiry, transaction statements	4.07	1.96	2.11	2.16
Quick service	4.32	3.47	0.85	9.64

Significant at 5% level

From table 1 we can ascertain that all of these dimensions importance level is higher than satisfaction level. Results show that both satisfaction and importance levels have significant differences in third facet. On the other hand, lower significant difference exists in the dimension of quick services of ATM.

Table 2: Credit Card, Visa Card, Debit Card

Dimensions	Importance Mean Score	Satisfaction Mean Score	Difference	tValue
Accepted in wide range of merchants: like hospitals shopping malls, hotels etc.	3.91	2.71	1.2	0.14
Global Exposure by using these card	3.75	2.46	1.29	3.35
Reasonableness of service charges	4.14	2.67	1.47	3.04

Significant at 5% level

The satisfaction and importance scores are arranged in table 2 on credit card, visa card, and debit card where there are only three facets. Consumers have lower satisfaction about the service charges of using these cards. In addition significant difference have also found here. Banks have to look after about the acceptance of using these cards locally and globally.

Table 3: Internet Banking, Online Banking

Dimensions	Importance Mean Score	Satisfaction Mean Score	Difference	tValue
Trust and security level of transaction	4.23	2.80	1.43	2.24
Efficiency and correctness of financial transaction report	4.20	2.74	1.46	.915
Efficiency and quality of multi reporting	3.78	2.78	1.00	3.56
User friendly of system	3.56	3.74	0.22	.008
Up to date technology is used	4.67	2.56	2.11	5.78
Quality of electronic fund transaction services	4.35	2.89	1.66	.09
Service skills of trained human resources	4.56	2.97	1.59	.006
Adequate physical resources (Computer hardware and software)	3.67	3.56	0.11	1.26
Flexibility of use internet in our country	4.35	4.15	0.20	1.74
Cost of internet surfing	3.78	3.56	.22	4.67
Internet speed	4.35	2.45	1.90	0.89
Handle English	3.79	3.26	0.53	0.007
Convenient and easier operation	4.28	3.56	0.72	2.34

Significant at 5% level

Table 3 illustrates the other two products of e-banking i.e. online and internet. In case of confidentially and reliability customer importance is higher rather than their satisfaction. On the other hand, employees expertise plays an important role to build up trust in customers' mind and the significant difference is also moderately high there. It is necessary to make convenient and easier operation of e-banking services for the all classes in society.

Table 4: Tele-Banking

Dimensions	Importance Mean Score	Satisfaction Mean Score	Difference	tValue
Telecommunication infrastructure	4.67	3.86	0.80	0.006
Hassle free operation system	4.56	2.97	1.59	1.87
Timeliness	4.56	3.87	0.78	2.96

Significant at 5% level

For building the customer relationship management, tele-banking play a vital role. In acceleration of telecom companies, the preference of tele-banking increasing day by day. That is why in table 4, significant differences are lower in telecommunication infrastructure and timeliness. However it has not been measured a hassle free operation system by the customers. So employees have to identify customers need and deliver proper solution.

Table 5: SMS Banking

Dimensions	Importance Mean Score	Satisfaction Mean Score	Difference	tValue
Goodwill of bank matters for using this service	3.45	2.45	1.00	0.026
SMS rate of mobile	4.15	3.96	.19	0.02
Telecommunication's network	4.12	2.73	1.39	0.008
Growing importance of strategic alliance of telecom company and banks	3.08	4.56	1.48	1.78
Technological setup	4.13	2.45	1.68	1.09

Significant at 5% level

One of the pillars to enhance relationship marketing with customers is SMS banking. In table 5 researchers have taken five facets for measuring perception level of SMS banking services. From customer view point satisfaction level is higher than importance in dimensions on growing importance of strategic alliance of telecom company and banks. However technological backup is poor for using this service. Beside this, rate of SMS now in hand of customers which observe by lower significant differences.

Recommendations

To provide the best e-banking services in Bangladesh, both the bankers and government should pay an attention to the following functions.

1. Technological development is essential for making e-banking product and services familiar to customers. With the proliferation of e-commerce, customers can buy their products online. So a legal framework for payment is badly needed.
2. Government should increase its investment in these sectors and develop the technology based institutions for providing proper services to the nations.
3. Banks should give concentration to its promotional activities to attract customers to involve e-banking services rather than conventional branch-based banking.
4. All Banks in Bangladesh should required ATM booths all over the country and should start to deposit money by ATM. Only a few number of banks ATM booth is giving this service.
5. Customers should authenticate themselves to digital certificate which is obtained from certificate authority.
6. Every transaction should have some desirable properties like: authenticity, confidentiality, unforgivable, integrity and not reusable.
7. From the survey it identified that initial cost of online banking is high for customers, so it should make convenient for them.
8. Banks should give concentration to build local market for local software developer.
9. In this information age, it needs to apply telecom services range from narrow band voice services o broadband services.
10. The role of government to provide legal framework for electronic commerce. The domestic & international trade should be allowed to expand their horizon; and basic rights such as privacy, intellectual property, prevention of fund and customer protection can be taken care of.
11. Electronic banking can play a pivotal role for the restructuring of our thorny banking sector.

Conclusion

The rapid advancement of technology and the current world order demands fit for the survival struggle. Banks wishing to stay in the business effectively uses online banking system. Banks must realize that they have no right to rule the transaction process aspects, with strict protection our socio-political sector. It has been already found that local banks (NCBs & PCBs) are not doing well as compared to the banks of foreign origin. More foreign banks will come with new technology. It is revealed that only handful of branches of the HSBC, Standard Chartered bank, Eastern Bank Ltd, BRAC Bank Ltd, Dutch-Bangla Bank Ltd, Prime Bank Limited, Islami Bank Bangladesh Limited and Dhaka Bank Ltd earns more profit, than that of a government owned banks. Bankers & its stockholders should decide to invest more in modern software, network infrastructure and human resources development in order to participate in upcoming global challenges.

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