



On line Banking Service: **Current Status in** Bangladesh





















Dutch-Bangla Bank Limited

Your Trusted Partner

Letter of Transmittal

25 December 2006

Month U.

M Sayeed Alam Senior Lecturer Department of Business Administration East West University 43, Mohakhali C/A Dhaka-1212.

Subject: Submission of report on project work (BUS-498)

Dear Sir

With due respect and honor, I am submitting my final project report on "Online Banking Status in Bangladesh" I have tried to incorporate all relevant methodologies and formats taught in the BBA program while preparing this project report.

I really have learned a lot and have gained valuable experience while doing my project on online banking.

I hope that my work will satisfy you.

Sincerely

Md. Ashif Haider ID: 2003-1-10-107

Department of Business Administration

East West University

Letter of Authorization

25 December 2006

Md. Ashif Haider
ID: 2003-1-10-107
Department of Business Administration
East West University
43, Mohakhali C/A, Dhaka-1212.



Subject: Authorization of Report on project work (BUS-498)

Dear Student,

I have assign you to conduct a project work (BUS-498) on "Online Banking current status in Bangladesh", as the final requirement of your Bachelor of Business Administration (BB) program. Conduct the research according to the guideline of administering a research based project work and report preparation.

You are required to follow all the report sequence, methodology and accurate data to fulfill the purpose of the project work.

Best wishes to you

M Sayeed Alam Senior Lecturer Department of business Administration East West University.

Table of Contents:

Contents:	Page No.
Letter of Transmittal	
o Abstract	01
o Acknowledgement	02
Executive Summery	03
0	
 5. Chapter - O1 (Introduction) 1.1 Online Banking 1.2 Origin of online banking 1.3 History of Online Banking 1.4 Problems Statement 1.5 Research Question 1.6 Hypothesis 1.7 Advantages of online banking 1.8 Disadvantages of online banking 	04
6. Chapter - 02 (Methodology)	08-19
7. Chapter - 03 (Taxonomy of online banking) o 2.1 Brick-to-click banks o 2.2 Virtual banks o 2.3 Electronic banking o 2.4 PC banking o 2.5 Internet banking o 2.6 Home Banking o 2.7 Automated Teller Machine (ATM) o 2.8 Tele Banking	20-26



8. Chapter - 04 (Security)	25 - 29
Online Banking Security.	
Security:	
Authentication:	
Certification:	
Non-repudiation:	
Confidentiality:	
Security resolve strategy:	
Firewalls and Routers	
• Password	
9. Chapter - 05 (Bangladesh: Money and Banking Sector Review)	29
10. Chapter - 06 (Banking System in Bangladesh)	31
11. Easters Bank Ltd	36
12. Dutch-Bangla Bank Limited	40
13. Bank Asia Limited	41
14. BRAC Bank	42
15. HSBC	46
16. Feasibility of E-payment tools	48
17. Key Challenges	52
18. Standard Chartered Bank	53
19. Chapter – 07 (Feasibility of e-payment tools)	47
19. Chapter - 08 (Summery of the finding & Conclusion)	50
20. Bibliography	53

Abstract

While prepares this report I try to be honest. I use all the real information and data to prepare this report. I provide accurate curve, graph, and table and picture to prepare this report.

I try to learn the things that I use in my report. I think it will help me to make my future. I know lots of things about "Online Banking" while I prepare this report.

If my report about "Online Banking" is acceptable to all the people in our society and also in our country, then I think that is my purpose to prepare this report will be fulfilled.

Acknowledgement:



In preparing this report I have got the assistance of some respectful individuals. Without the co-operation of them it would be not possible for me to prepare this project report.

Al first I want to thank and express my gratitude to my internal supervisor Mr. M Sayeed Alam, Senior Lecturer, East West University. Without his guidance and valuable suggestion it was very difficult for me to prepare this report.

Then I would like to thank the department chairman and the career-counseling center, East West University for allowing me to do the final Project.

I also want to thank Mr. Shafil Khan, Mr. Shakot, Md. Mizanur Rahman, Md. Abul Kamal for providing me the information about the online banking and the system. During my project I have enjoyed the company of them. My heartiest gratitude goes to everyone of EBL, BRAC BANK LIMITED, DBL, HSBC, STANSARD CHARTERED BANK for their friendly attitude.

Executive Summary

Today it is the area of science and technology. Almost all the sector of life is being influenced by it. Business and economic sector also have got the strong blow of it. As far as the present perspective is concerned; today people want faster service to cop up with the modern life and online banking gives the banking sector a spectacular fastness. Even a year back it was merely a luxury but soon the people realize its necessity. So online banking becomes the demand of the people. Now the people concentrate on improved, smart and fastness service from online banking sector. As online banking gives all facilities of security as well as faster money/fund transaction the demand for online banking is gradually increasing although in a country like Bangladesh. following description, documents and pictorial representation will help us to realize the necessity of on line banking and there by to implement in our banking sector as well.

CHAPTER - 01 Introduction

1.1 Online Banking

A system allowing individuals to perform banking activities at home, via the internet. Some online banks are traditional banks, which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enable customers to perform all routine transactions, such as account transfers. balance inquiries, bill payments, and stop-payment requests, and some even offer online loan and credit card applications. Account information can be accessed anytime, day or night and can be done from anywhere. A few online banks update information in real-time, while others do it daily. Once information has been entered, it doesn't need to be re-entered for similar subsequent checks, and future payments can be scheduled to occur automatically. Many banks allow for file transfer between their program and popular accounlin1.1 software parka yes. to simplify record keeping. Despite the advantages, there are a few drawbacks. It does take sonic time to set up and get used to an online account. Also, some banks only offer online banking in a limited area. In addition, when an account holder pays online, he/she may have to put in a check request as much as trio weeks before the payment is due, but the bank may withdraw the money from the account the day that request is received, meaning the person has lost up to two weeks of interest on that payment. Online-only banks have a few additional drawbacks: an account holder has to mail in deposits (other than direct deposits), and some services that traditional banks offer are difficult or impossible for online-only banks to offer, such as traveler's checks and cashier's checks.

1.2 Origin of online banking

The advent of the Internet and the popularity of personal computers presented both an opportunity and a challenge for the banking industry.

For years, financial institutions have used powerful computer networks to automate millions of daily transactions; today, often the only paper record is the customer's receipt at the point of sale. Now that its customers are connected to the Internet via personal computers, banks envision similar economic advantages by adapting those same internal electronic processes to home use. (01)

Banks view online banking as a powerful "value added" tool to attract and retain new customers while helping to eliminate costly paper handling and teller interactions in an increasingly competitive banking environment.

1.3 History of Online Banking

Thousands of years ago at the dawn of human civilization, agricultural society evolved from the plough. In the second half of the eighteenth century, with the advent of the steam engine the industrial revolution took place in Europe. Now at the dawn of the new millennium another revolution of entirely different kind is taking place across the globe a silent revolution, much more powerful and all pervasive – it is information technology revolution. No wonder that the present age is being called the information age. Online Banking is another born child of human brain, which is originated from the revolution of information technology.

Online banking began on **October 6, 1995**, when Presidential Savings Bank offered its customers an online alternative to traditional brick and mortar banking. (02)



1.4 Problems Statement

To determine the factors i.e. telecommunication infrastructure, legal frameworks, efficient manpower, authentication, confidentiality, encryption mechanism, public infrastructures, speed of data communication, electronic payment gateway system, centralized on-line banking, digital system, latest banking technologies, clearing system, check truncation system in banking, which are responsible to success of Online Banking system.

1.6 Hypothesis

H₁: Customer feels secured for online banking

H₂: Customer wants more ATM facilities

H₃: Online Banking is costly

H₄: Customer is no happy or satisfied with online banking environment.

1.7 Advantages of online banking

- **Convenience:** Unlike our corner bank, online banking sites never close; they're available 24 hours a day, seven days a week, and they're only a mouse click away.
- **Ubiquity:** If we're out of state or even out of the country when a money problem arises, we can log on instantly to our online bank and take care of business.
- **Transaction speed:** Online bank sites generally execute and confirm transactions at or quicker than ATM processing speeds.
- **Efficiency:** We can access and manage all of our bank accounts, including IRAs, CDs, even securities, from one secure site.

• **Effectiveness:** Many online banking sites now offer sophisticated tools, including account <u>aggregation</u>, <u>stock quotes</u>, <u>rate alerts and portfolio managing programs</u> to help we manage all of our assets more effectively. Most are also compatible with money managing programs such as Quicken and Microsoft Money.

1.8 Disadvantages of online banking

- **Start-up may take time:** In order to register for bank's online program, have to provide ID and sign a form at a bank branch. If banks and it's spouse wish to view and manage our assets together online, one of them may have to sign a durable power of attorney before the bank will display all of their holdings together.s
- Learning curve: Banking sites can be difficult to navigate at first.

 Plan to invest some time and/or read the tutorials in order to become comfortable in our virtual lobby.
- **Bank site changes:** Even the largest banks periodically upgrade their online programs, adding new features in unfamiliar places. In some cases, we may have to re-enter account information.
- The trust thing: For many people, the biggest hurdle to online banking is learning to trust it. Did my transaction go through? Did I push the transfer button once or twice? Best bet: always print the transaction receipt and keep it with our bank records until it shows up on our personal site and/or our bank statement.



<u>CHAPTER - 02</u> Methodology

2.1 Research Design:

On the broad classification of research "Online Banking Service: Current Status in Bangladesh" falls into problem identification research. Again on the basis of research design it follows conclusive research design. From the specific aspect research design it follows the cross sectional design which falls under descriptive research. In the survey method we'll use In-Home, mall intercept and telephone assisted personal interview survey method which falls under personal interviewing among the four survey methods.

2.2 Sampling Design:

The target population of the research is the people who have the idea regarding online banking status and online banking service and have account in different public and private sector banks. Non-probability judgmental sampling technique was followed in selecting sampling technique in this research. A sample size of 20 was taken to conduct the research.

2.3 Scaling Techniques:

Non-comparative itemized rating and some comparative scaling technique was adopted in some of research question. Research question scale was designed to find out yes or no types answer for 13th question and mixture of other types of question were also been used which was essential to fulfill the purpose of the research. Complex and ambiguous question were avoided to prepare the questionnaire.

2.3 Questionnaire Development and Pre-testing

Primary data was collected using structured questionnaires from different respondents. Initially some screening questions were used to identify the intended responded who would be best fitted for the research. Initially seventeen questions were developed and pre-tested on five respondents. Finally 13th questions were selected to conduct the survey among the respondent.

2.4Model Development:

2.5.1 Data Collection

Data was collected through primary and secondary sources. Primary data was collected through surveys and observation. Survey questionnaires were administered through traditional in-home personal interview. Interview was carried by me. Data was collected from service holders, businessperson, teacher, bankers, Govt. service holders and students who have bank accounts. The model of the data collection for this descriptive research is single cross-sectional method. It took 20 days to collect primary data from different respondents. In case of secondary source, different websites, news paper articles, journals, previous research etc. were crosschecked and different problems with probable solutions were found.

2.5.1 Data Analysis

Survey was conducted on 20th respondents in Dhaka city who are the customer of different online banks having both traditional and online banking service. Preliminary checking of all questionnaires was made for completeness and interviewing quality. Then more through editing took place. Editing consists of screening questionnaire to identify illegible, incomplete, inconsistent responses.

2.5.2 Limitations

As it being an academic research the scope of the research was limited. Through the perspective of the research was whole Bangladesh, research was carried out only on Dhaka metropolitan city. Limitation was in the field of time, money, manpower for administrating the research. Sample size of the research was not big enough. The survey was conducted only on 20th respondents. Moreover respondents were not fully spontaneous and cooperative. (03)



Appendix-A

Questionnaire:	
	_
Dear Sir/Madam,	
I'm Md.Ashif Haider, student of East West University and doing my final project. That is why I need a research. Presently I am conducting a marketing research on the Online Banking. I'm trying to identify the perception of the people about Online Banking, the problems that they are facing from their perspective. I will need your cooperation and information support in this regard. I hereby declare that all the data will be kept confidential and will be used only for research purpose.	
Thank You, Research Team Management Course Code: BUS 498 Department of Business Administration East West University. Mohakhali C/A, Dhaka.	
Screening Question	_
1. Do you have any Bank Account?	
☐ Yes ☐ No	
2. Do your Bank offer online banking service?	
Yes No Neutral	

# Online Banking & Phone Banking & SMS Banking 2. Why you use Phone Banking? # Balance Inquiry & Payment & Account Status & Others 3. In your bank which service you use most? # IATM/ # Online/ # SMS # Others 4. Do they give 24 hours service # Strongly Disagree & Neutral & Agree & Strongly Agree 5. In your online banking is there any precondations, If yes please specify. # Yes # No # Others (*specify)	1. Which banking service do you prefer?	
# Balance Inquiry	் Online Banking ் Phone Banking ் SMS Banking	
3. In your bank which service you use most? # [ATM] # Online] # SMS] # Others 4. Do they give 24 hours service # Strongly # Disagree # Neutral # Agree # Strongly Agree 5. In your online banking is there any precondations, If yes please specify. # Strongly # Others (**pecify)	2. Why you use Phone Banking?	
4. Do they give 24 hours service Strongly Disagree P Neutral P Agree P Strongly Agree 5. In your online banking is there any precondations, If yes please specify. 6. Why you use SMS banking? P Balance Inquiry P Balance Transfer P Account Information P Others 7. Which Service Attract you in your Online Banking? P ATM P SMS P Phone Banking P Internet Banking P Others 8. Which Service in your online banking you are not happy, If yes please specify. 9 Yes No P ATM SMS P Phone P Others D Difficulty in use. 9. In your perception what is the negative site of the online banking. P Hacking P Password system P ATM Server Problems P Credit Card Laundering P Difficulty in use. 10. How much maximum extra amount of money you want to pay for online service per month? 11. Satisfied with the overall environment of the Bank service 12. Are you happy with round clock access to a (VISA/MASTER CARD/Q-CASH/E-CASH with in Bangladesh) or POS terminals at different shop Disagree 13. According to your perception the Online Banking have a good demand in the market (Bangladesh) P Disagree Neural Agree Strongly Disagree Neural Neural Agree Strongly Disagree Neural Neural Agree Strongly Disagree Neural Neural Agree Strongly Disagree Ne	\(\hat{\text{Balance Inquiry}} \) \(\hat{\text{Payment}} \) \(\hat{\text{Account Status}} \) \(\hat{\text{Others}} \)	
4. Do they give 24 hours service Strongly Disagree Strongly Disagree 5. In your online banking is there any precondations, If yes please specify. 9 Yes 9 No Pothers (specify) 6. Why you use SMS banking? Palance Inquiry Balance Transfer Account Information Pothers 7. Which Service Attract you in your Online Banking? ATM PSMS Phone Banking Internet Banking Others 8. Which Service in your online banking you are not happy, If yes please specify. 9 Yes No ATM SMS Phone Others Others Difficulty in use. 9. In your perception what is the negative site of the online banking. Password system ATM Server Problems Credit Card Laundering Password system ATM Server Problems Credit Card Laundering Poifficulty in use. 10. How much maximum extra amount of money you want to pay for online service per month? 1 2 3 4	3. In your bank which service you use most?	
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Strongly Disagree Neutral Agree Strongly	Disagree Agree	
	demand in the market (Bangladesh)	
	Strongly Disagrae Norted Agency Strongly	
Disagree Agree	Disagree Agree	

Own View:	

	R	espondent profile:	
Name: Address: Department:		Work Place:	Gender: Male/ Female
Contact no: 🕿		Email:	

Thank You

Appendix-B

Statistical (SPSS) Output:

Frequency Table

Preferred Service

Table (1)

				_	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Online Banking	10	50.0	50.0	50.0
	SMS Banking	10	50.0	50.0	100.0
	Total	20	100.0	100.0	

Phone banking

Table (2)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Balance Inquiry	14	70.0	70.0	70.0
	Payment	06	30.0	30.0	100.0
	Account Status	0	00.0	00.0	
	Others	0	0	0	
	Total	20	100.0	100.0	

your bank which service you use most

Table (3)

		_			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	ATM	12	60.0	60.0	100.0
	Online	04	20.0	20.0	40.0
	SMS	2	10.0	10.0	20.0
	Others	2	10.0	10.0	10.0
	Total	20	100.0	100.0	

They give 24 hours Service

Table (4)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	15	75.0	75.0	75.0
	No	05	25.0	25	100.0
	Total	20	100.0	100.0	

Online banking is there any precondations

Table (5)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	10	50.0	50.0	50.0
	No	10	50.0	50.0	100.0
	Total	20	100.0	100.0	

you use SMS banking

Table (6)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Account info.	14	70.0	70.0	70.0
	Balance Transfer	06	30.0	30.0	100.0
	Balance Inquiry	0	00.0	00.0	
	Others	0	0	0	
	Total	20	100.0	100.0	

ATM booths are widely available

Table (7)

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	01	5.0	5.0	5.0
	No	19	95.0	95.0	100.0
	Total	20	100.0	100.0	

In your online banking you are not happy

Table (8)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	13	65.0	65.0	65.0
	No	07	35.0	35.0	100.0
	Total	20	100.0	100.0	



What is the negative site of the online banking

Table (9)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Server Problems	09	45.0	45.0	45.0
	Hacking	02	10.0	10.0	55.0
	Password System	01	05.0	05.0	60.0
	Difficult in use	08	40.0	40.0	100.0
	Total	20	100.0	100.0	

Extra Payment for online service

Table (10)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1500	02	10.0	10.0	10.0
	1000	02	10.0	10.0	20.0
	750	04	20.0	20.0	40.0
	300	12	60.0	60.0	100.0
	Total	20	100.0	100.0	

Satisfied with the overall environment

Table (11)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	S.disagree	02	10.0	10.0	10.0
	Disagree	02	10.0	10.0	20.0
	Natural	04	20.0	20.0	40.0
	Agree	12	60.0	60.0	100.0
	Total	20	100.0	100.0	

Happy with round clock access

Table (12)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	S.disagree	02	10.0	10.0	10.0
	Disagree	12	60.0	60.0	100.0
	Natural	04	20.0	20.0	40.0
	Agree	02	10.0	10.0	20.0
	Total	20	100.0	100.0	

Your perception the Online Banking has a good demand in the market

Table (13)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	S.disagree	02	10.0	10.0	10.0
	Disagree	02	10.0	10.0	20.0
	Natural	04	20.0	20.0	40.0
	Agree	12	60.0	60.0	100.0
	Total	20	100.0	100.0	

From **Table 1**, we can see that 50 percent of the respondents prefer SMS banking and other 50 percent prefer Online Banking. Total respondents are 20.

From **Table 2**, we can see that 70 percent use Phone banking for balance inquiry, and rest of 30 percent use it for payment. Here total respondents are 20.

From **Table 3**, we find that 60 percent of the respondents are mostly use the ATM service, 20 percent are use online service, 10 percent are use SMS service and 10 percent are use others. Here total respondents are 20.

From **Table 4**, we can see that 75 percent of the respondents are agree with the 24 hours service of the online banking and rest 25 percent are not think online bank give 24 hours service. Here total respondents are 20.

From **Table 5**, we can see 50 percent of the respondents are agree that there is some preconditions in the online banking but rest of the 50 percent are not agree with this. Here total respondents are 20.

From **Table 6**, we can see that 70 percent of the people are using SMS banking for account information, 30 percent of the are using SMS banking for Balance Transfer and they are not interested about balance inquiry and others service. Here total respondents are 20.

From **Table 7**, we can see that only 5 percent of the total respondents are agree with that ATM booths are available and rest of the 95 percent are not agree with this that ATM booths are available. Here total respondents are 20.

From **Table 8**, we can see that 65 percent of the total respondents are not happy with the online banking and rests of the 35 percent are happy with the online banking. Here total respondents are 20.

From **Table 9**, we can see that 45 percent of the people are agreeing with server problems is the negative site of the online banking, 10 percent are agree with hacking problems, 5 percent are agree with password system and 40 percent are agree with difficult in use. Here total respondents are 20.

From **Table 10**, we can see the respondents are willing to pay extra money for there online banking 10 percent are agree to pay 1500 tk. 10 percent are also agree to pay 1000 tk. 20 percent agree to pay 750 tk. And rest of the 60 percent are agree to pay 300 tk. Here total respondents are 20.

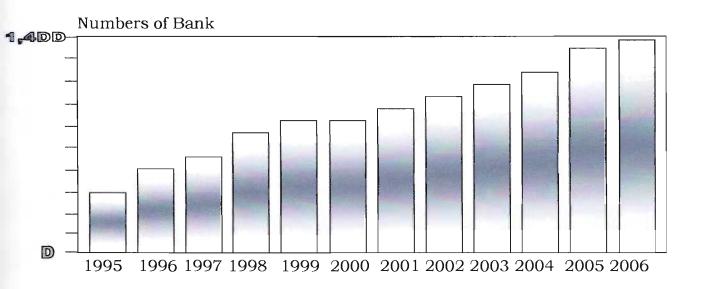
From **Table 11**, we can see 10 percent respondents are s.disagree about satisfied the overall environment, 10 percent are disagree, 20 percent are natural and 60 percent are agree with this and we can not find any respondents who are support the s.agree. Here total respondents are 20.

From **Table 12**, we can see 10 percent of the total respondents are s.disagree, 60 percent disagree, 20 percent are natural and 10 percent are agree with the round clock service. Here total respondents are 20.

From **Table 13,** we can see 10 percent of the total respondents are s.disagree, 10 percent are disagree, 20 are natural and 60 percent are agree with this. Here total respondents are 20.

CHAPTER-03

Taxonomy of online banking



IDC estimates that by 2003, 15,845 banks will offer online services mostly via the web, up from 1,150 in 1998. Nearly 6.6 million US households bank online in 1998, a number expected to increase to more than 32 million by 2003.

1 in 5 new online bank customers are likely to abandon setting up accounts due to time-consuming red tape and complicated deposit procedures, according to a survey published by *Frederick Schneider's Research*. Up to 80% of those who began to open up accounts online did not complete the process. Despite this, 80% of those who use online banking services prefer them to traditional banks, according to a survey that polled 444 respondents from an opt-in list, commissioned by e-funds and the Deluxe Corporation.

(04)



3.1 Brick-to-click banks

Today, most large national banks, many regional banks and even smaller banks and credit unions offer some form of online banking, variously known as PC banking, home banking, electronic banking or Internet banking. Those that do are sometimes referred to as "brick-to-click" banks, both to distinguish them from brick-and-mortar banks that have yet to offer online banking, as well as from online or "virtual" banks that have no physical branches or tellers whatsoever.

The challenge for the banking industry has been to design this new service channel in such a way that its customers will readily learn to use and trust it. After all, banks have spent generations earning our trust; they aren't about to risk that on a Web site that is frustrating, confusing or less than secure.

Most of the large banks now offer fully secure, fully functional online banking for free or for a small fee. Some smaller banks offer limited access or functionality; for instance, you may be able to view your account balance and history but not initiate transactions online. As more banks succeed online and more customers use their sites, fully functional online banking likely will become as commonplace as automated teller machines.

3.2 Virtual banks

If we don't mind foregoing the teller window, lobby cookie and kindly bank president, a "virtual" or a-bank may save we very real money. Virtual banks are banks without bricks; from the customer's perspective, they exist entirely on the Internet, where they offer pretty much the same range of services and adhere to the same federal regulations as our corner bank.

Virtual banks pass the money they save on overhead like buildings and tellers along to our in the form of higher yields, lower fees and more generous account thresholds.

The major disadvantage of virtual banks revolves around ATMs. Because they have no ATM machines, virtual banks typically charge the same surcharge that our brick-and-mortar bank would if we used another bank's automated teller. Likewise, many virtual banks won't accept deposits via ATM; we'll have to either deposit the check by mail or transfer money from another account.

- **3.3 Electronic banking** is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The following terms all refer to one form or another of electronic banking: personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone banking. PC banking and Internet or online banking are the most frequently used designations. It should be noted, however, that the terms used to describe the various types of electronic banking are often used interchangeably.
- **3.4 PC** banking is a form of online banking that enables customers to execute bank transactions from a PC via a modem. In most PC banking ventures, the bank offers the customer a proprietary financial software program that allows the customer to perform financial transactions from his or her home computer. The customer then dials into the bank with his or her modem, downloads data, and runs the programs that are resident on the customer's computer. Currently, many banks offer PC banking systems that allow customers to obtain account balances and credit card statements, pay bills, and transfer funds between accounts.
- 3.5 Internet banking, sometimes called online banking, is an outgrowth of PC banking. Internet banking uses the Internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposit. An Internet banking customer accesses his or her accounts from a browser software that runs Internet banking programs resident on the bank's World Wide Web server, not on the user's PC. Net Banker defines a "true Internet bank" as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web. Internet banks are also known as virtual, cyber, net, interactive, or web banks.

Although Internet banks offer many of the same services as do traditional brick-and-mortar Banks, analysts view Internet banking as a means of retaining increasingly sophisticated customers, of developing a new; customer base, and of capturing a greater share of depositor assets. A typical Internet bank site specifies the types of transactions offered and provides information about account security.

3.6 Home Banking

Home banking frees customers of visiting branches and most transactions will be automated to enable them to check their account activities transfer fund and

Electronic Banking Services for Windows (EBSW)

Electronic Banking Service for Windows (EBSW) provides a full range of reporting capabilities, and a comprehensive range of transaction initiation options.

The customers will be able to process all payments as well as initiate L/Cs and amendments, through EBSW. They will be able to view the balances of all accounts, whether with Standard Chartered or with any other banks using SWIFT. Additionally, transactions may be approved by remote authorization even if the approver is out of station.



3.7 Automated Teller Machine (ATM)

Automated Teller Machine (ATM), a new concept in modern banking, has already been introduced to facilitate subscribers' 24-hour cash access through a plastic card. The network of ATM installations will be adequately extended to enable customers to non-branch banking beyond banking.



3.8 Tele Banking

Tele Banking allows customers to get access into their respective banking information 24 hours a day. Subscribers can update themselves by making a phone call. They can transfer any amount of deposit to other accounts irrespective of location either from home or office.

SWIFT

SWIFT is a bank owned non-profit co-operative based in Belgium servicing the financial community worldwide. It ensures secure messaging having a global reach of 6,495 Banks and Financial Institutions in 178 countries, 24 hours a day. SWIFT global network carries an average 4 million message daily and estimated average value of payment messages is USD 2 trillion.

SWIFT is a highly secured messaging network enables Banks to send and receive Fund Transfer, LIC related and other free format messages to and from any banks active in the network.

Having SWIFT facility, Bank will be able to serve its customers more profitable by providing L/C, Payment and other messages efficiently and with utmost security. Especially it will be of great help for our clients dealing with Imports, Exports and Remittances etc.

CHAPTER - 04

Security

On line Banking security

Inevitably we will have to depend to a large extent on the experts who have and continue to devise sophisticated methods. The key components of three methods, which will help maintain a high level of public confidence in an open network environment, include:

- 1. Security
- 2. Authentication
- 3. Certification
- 4. Non-repudiation
- 5. Privacy

3.1 Security:

Although the publicly accessible internet is generally less secure than the direct dial-in access system, both types of connections are vulnerable to interception and alteration.

3.2 Authentication:

Authentication is a process that provides confidence to the message receiver on the identity to the sender and the integrity of the message itself. In a digital environment, authentication is achieved through the use of a digital digital signature, which is analogous to a handwritten signature. This piece of data asserts that a named person wrote or otherwise agreed to the document to which the signature is attached. Authentication is usually implemented through the use of Encryption technology. Encryption is the transformation of data into an unreadable form. The purpose of encryption is to provide secrecy by keeping the information hidden.



3.3 Certification:

A trusted third party is a necessary part of the internet banking process. A certificate authority is a trusted third party that verifies identities in cyberspace. Certificates issued by certifying authorities are issued to deter and detect an entry from impersonating another using a fake key.

3.4 Non-repudiation:

Non-repudiation is the undeniable proof of participation by both the sender and receiver is a transaction. It is one of the reasons public key encryption was developed.

3.5 Confidentiality:

Confidentiality deals with protecting the contents of message or data transmitted over the internet from unauthorized people. Like: you want to protect your credit card information when you want to purchase something over the internet.

3.6.1 Security resolve strategy:

With Internet banking, as with traditional banking methods, security is a primary concern. At Capital Crossing Bank, we have taken many precautions to see that your information is transmitted safely and securely. Recent methods in Internet banking system security are used to increase and monitor the integrity and security of the system.

The security of Capital Crossing Bank's online banking application is addressed at three levels. The level is the security of customer information as it is sent from the customer's PC to the Web server. The second area concerns the security of the environment in which the Internet banking server and customer information database resides. Finally, security measures are in place that are designed to prevent unauthorized users from attempting to log into the online banking section of the Web site.

The following section explains the components cryptography and firewalls of Capital Crossing Bank's security architecture, and will provide some helpful ways to protect your password.

Capital Crossing Bank's Security Architecture Cryptography

Capital Crossing Bank uses the latest technologies for protecting confidential information as it crosses the World Wide Web (WWW). These technologies include the use of:

- **Digital Certificates** which are a block of data that associates a public key with a particular user, in this instance Capital Crossing Bank's Internet Banking Server. The contents of these certificates are digitally signed in such a method that a standard browser can verify that the certificate has not been tampered with or altered.
- **Digital Signature** In this process, signer signs the message and sign can be verified by anyone that it really comes from signer, so signer can not forget later and nobody can modify the message while in transit.

To ensure authenticity, receiver can verify the signature and understand that the message really comes from sender.

- Public/Private Key Cryptography uses two different numbers where anything encrypted with one, must be decrypted with the other. Only one is made known to the public while the other is kept secret. Anything encrypted with the public key may only be decrypted using the private key. This is used to make information secret from all others except the intended recipient. If something is first encrypted with the private key, it can only be made readable with the public key. In this way the person decrypting the message can verify the sender.
- **Private Key Cryptography** which is slightly ditTerent than Public/Private Key. Private Key uses the same key for encryption and decryption. Thus, anyone knowing the key can both send and receive messages. The advantage is that these algorithms are much more efficient.

- **Cryptographic Hashing** which doesn't encrypt a message at all? Instead, it is a method for verifying that the contents of a message have not been modified since the hash was calculated.
- **IP Level Security** IPsec is designed to secure communication across LAN, WAN and Internet. In the age of information. Technology many attacks like IP spoofing and various forms of eavesdropping and packet sniffing may occur. Through these sorts of attacks can get authentication and read transmission like logon information and database content.

3.7 Firewalls and Routers

While there are important security issues associated with electronic transactions, strict internal procedures are also in place within Capital Crossing Bank, controlling every aspect of bank administration from training employees to confirming customer transactions to preventing service interruptions.

The Bank is protected by a system of filtering routers and firewal(s. Filtering routers verify the source and destination of each transaction. Firewalls shield the bank's customer service network from outside sources. Through these systems, internal accounts are protected fi-om outside access, and the structure of the Bank's internal networks is invisible to outside observers.

3.8 Password

Another important security measure and most important in the online banking is password. It is the key element to securitized the online banking system. Our transaction are protected by our individual password. Every individual customer have his or her own password. Without this password a person can not access his or her account. The risk of the password is that, anyone who get the password of a person's account, he can access that person's accounts easily. So password should be secret.

(05)

CHAPTER - 05

Bangladesh: Money and Banking Sector Review

Bangladesh: Money and Banking sector review

4.1 MONETARY & CREDIT POLICY:

The monetary and credit policy for the financial year that ended in June,2000 was formulated with the objective of full utilization of domestic resources and rapid economic growth through priorities for agriculture, industry, export, and expansion and strengthening of the private sector, at the same time keeping inflation within tolerable limits. A modem expansionary monetary and credit policy was adopted in order to make good the losses to agriculture, industry, and infrastructure by the devastating floods of 1998. After the flood the economy remained sluggish in the first quarter of 1999-2000 and the private sector demand for credit shrank. In view of this, the Annual Development Programme (ADP) was expanded and development activities in the private sector were geared up. As a result, the public sector absorbed credit at an accelerated rate. Though credit to the private sector picked up towards the end of the year, the overall annual growth was smaller than programmed, although gross domestic credit expanded

4.2 THE SPECIAL CASE OF OFFSHORE INTERNET BANKING

Offshore banking centers are "offshore" to the extent that they deliver financial and corporate services to non-residents of the banking center's jurisdiction. As a document by the Offshore Group of Banking Supervisors argues:

The term "Offshore" is interpreted by some as meaning that the location in which services are provided is itself "Offshore"; for example, an island in the Caribbean or the Pacific. In fact the term should be used to describe the actions of the citizens of individual countries who wish to enjoy financial services outside their own jurisdiction in centers that offer certain freedoms otherwise not available to them. From this perspective, the "Offshore" activity relates to the behavior of the customer, not that of the institution delivering the financial or business services. In short, "offshore" can refer to financial services being offered to a customer whose home jurisdiction is unable or unwilling to provide them. In this sense, offshore Internet banks are "offshore" not only because their Internet servers may deliver banking and financial services across an international border without the necessity of physical travel by the customer seeking available products, but because their servers can

be located in jurisdictions with more stringent confidentiality provisions than their "onshore" counterparts. In a sense, the customer's PC becomes equivalent to a branch office of a foreign financial service provider. Increased confidentiality, coupled with problems of determining the jurisdiction of Internet transactions, and the difficulty of tracking such transactions, combine to make Internet offshore banks a serious new challenge to established oversight mechanisms. Currently available banking services in the Internet "offshore" domain include

- Incorporation
- Currency Exchange
- Trading of Stocks and Bonds, Portfolio Management
- Letters of Credit, Loans
- Numbered Accounts
- Insurance Products
- Establishment and maintenance of trust agreements.

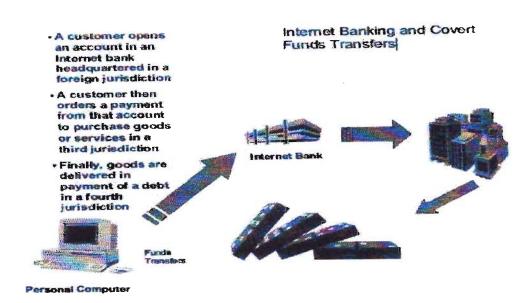


Figure 4.1. An Example of Concealed Funds Transfers using Cyberpayments and an Internet Bank

Example of Online Payment System

Source: Banking Journals

CHAPTER - 06



Banking System in Bangladesh

5.1 History of Banking

The Jews in Jerusalem introduced a kind of banking in the form of money lending before the birth of Christ. The word 'bank' was probably derived from the word 'bench' as during ancient time Jews used to do money -lending business sitting on long benches.

First modern banking was introduced in 1668 in Stockholm as 'Savings Pis Bank' which opened up a new era of banking activities throughout the European Mainland.

In the South Asian region, early banking system was introduced by the Afgan traders popularly known as Kabuliwallas. Muslim businessmen from Kabul, Afganistan came to India and started money lending business in exchange of interest sometime in 1312 A.D. They were known as 'Kabuliawallas'.

5.2 Number and Types of Banks

The number of banks in all now stands at 49 in Bangladesh. Out of the 49 banks, four are Nationalized Commercial Banks (NCBs), 28 local private commercial banks, 12 foreign banks and the rest five are Development Financial Institutions (DFIs).

Sonali Bank is the largest among the NCBs while Pubali is leading in the private ones. Among the 12 foreign banks, Standard Chartered has become the largest in the country. Besides the scheduled banks, Samabai (Cooperative) Bank, Ansar-VDP Bank, Karmasansthan (Employment) Bank and Grameen bank are functioning in the financial sector. The number of total branches of all scheduled banks is 6,038 as of June 2000. Of the branches, 39.95 per cent (2,412) are located in the urban areas and 60.05 per cent (3,626) in the rural areas. Of the branches NCBs hold 3,616, private commercial banks 1,214, foreign banks 31 and specialised banks 1,177.

Bangladesh Bank **(BB)** regulates and supervises the activities of all banks. The BB is now carrying out a reform programme to ensure quality services by the banks.

5.3 Bangladesh Bank

Bangladesh Bank (BB) has been working as the central bank since the country's independence. Its prime jobs include issuing of currency, maintaining foreign exchange reserve and providing transaction facilities of all public monetary matters. BB is also responsible for planning the government's monetary policy and implementing it thereby.



5.4.1 Eastern Bank Limited (EBL)

Eastern Bank Limited, a private commercial bank, has offered several Internet based application for banking functions to its clients including individuals, small and medium businesses, and corporate account holders. However, EBL charges additional fees for using their Internet banking facilities. Currently EBL is offering the following list of ebanking facilities: [Eastern Bank Limited, www.ebl-bd.com information accessed on AUG. 25, 2006].

5.4.2 EBL with new ICT Infrastructure features:

Aseptically ERI was not in a well-connected situation. Data Communication was limited to secluded oil-ices in a very limited fashion. EBL now is a different scenario. EBL 110 is now connected with the branches all around Bangladesh. Here is a breakdown of what the data communication infrastructure looks like today:

- High Speed DDN and Radio Link connectivity between Branches and the Head Office.
- Local Area Network (LAN) providing data network connectivity at the Head Office and the Branches.
- Metropolitan Area Network (MAN) connecting the DHK branches

with HO, CTG branches with Agrabad and SYL branches with Chauhatta.

- Wide Area Network (WAN) enabling the data network circle between Head Office and the Branches.
- Solid foundation over data and network security implementation. http://www.ebl-bd.com/it_biz2.htm

5.4.3 Internet Banking:

EIBI. Internet banking application addresses the needs of small, individual and corporate account holders of the bank. This application provides a comprehensive range of banking services that enable the customer to meet most of their banking requirements over the Net.

5.4.4 Account Summary

The customer will be able to view the list of Current, Savings, Term Deposit and loan accounts held and the Current Balances in each account in the account currency and the customer's preferred currency

5.4.5 Account Details

The customer can choose a particular account (Savings, Current account, Term Deposit or loan account) and see the account details depending on the type of the account. The details show different balances (collected, uncollected, available etc) and information relating to interest and charges.

5.4.6 Float Inquiry

The customer can view the details of uncollected balances, with day-wise break-up.

5.4.7 Account Activity

The customer can see transaction activity in a given account for a date range supported by the host.

5.4.8 Statement downloads in ASCII format

The user can download his account statement for his current accounts. Savings accounts and loans accounts http://iwww.ebl-bd.com/it aoi.htm

5.4.9 Fund Transfers and Payments:

The customer can choose to transfer funds by selecting different mode of transfers. Funds can be transferred between accounts of the corporate. to a third party account or to other banks using prevalent payment systems. The user will be allowed to select source and destination accounts depending upon his rights on the accounts for that corporate. Incase of external transfers, the user will be allowed to select the source account and specify the beneficiary details plus any additional payment details. If required, EBI, INTERNET BANKING APPLICATION can also support future dated transfers.

• Change Password

If customer can voluntarily change the Internet password using this function* In addition, the user is forced to change the password by the system as per the password policy defined by the bank.

http://www.ebl.com/it_ios.htm

(06)



5.5.1 Dutch-Bangla Bank Limited

DBBL- a Bangladesh European private joint venture scheduled commercial bank. Dutch- Bangla Bank offers following rang of e-banking facilities: [Dutch-Bangla Bank Limited, http://www.dbbl.com.bd/ accesses on December 2, 2006]

- (a) **Account Summary**: The Customer will be able to view the list of Current, Saving, Term Deposit and Loan accounts with the current balance.
- (b) **Account Details**: The Customer can choose a particular account and see the account details including unclear fund, limit, interest accrued etc.
- (c) **Account Activity**. The customer can see or print his transaction activity in a given account for a particular period.
- (d) **Transfer Funds**: The customer can transfer funds from one of his accounts to another of his accounts within the bank.
- (e) **Third Party Transfer**. The customer can transfer funds from one of his accounts to another customer's account within the bank.
- (f) **Pay Bills**: The customer can pay his utility bill (like Electricity, WASA, GAS, Telephone, Mobile, ISP etc.)
- (g) **Standing Instructions**: The customer can setup, modify or delete standing instructions for transferring fund from one of his account to another account (his account or 3rd party).
- (h) *Open/Modify Term Deposit*: The customer can open a term deposit by transferring funds from one of his current or savings accounts with the bank. He can also modify the TD and redeem / part-redeem it.
- (i) **Loan** Repayments: The customer can make payment of the loan installment from his CASA account.

- (j) **Statement Request**: The customer can make a request for account statement for a required period. The bank will manually service this request.
- (k) **Cheque Book Request**: The customer can make a request for a Cheque book.
- (l) **Cheque Status Inquiry**: The customer can choose an account and enter the Cheque number for which the status should be viewed.
- (m) **Stop Payment Cheque**: The customer can mark his Cheque leaf as stop payment.
- (n) *Interest Rate Inquiry*: The customer can query on the interest rates on CASA & Term Deposit Products.
- (o) **Foreign Exchange Rate Inquiry**: The customer can query on the Foreign Exchange (FX) Rates using this function.
- (p) **Refill Pre-Paid Card**: The customer can buy a refill number for his pre-paid mobile phone or ISP link.
- (q) **Change Password**: The customer can change his Internet Banking Password using this function.

Extra Features for Corporate Customer

- (a) **Letter of Credit**: The customer can initiate the LC application through Internet Banking.
- (b) **Bank Guarantee**: The customer can initiate the Bank Guarantee through Internet Banking.
- (c) *Limits Query*: The customer can view his Loan Limits and Limits Utilization through Internet Banking.

Dutch-Bangla Bank provides a comprehensive user manual on using Internet banking freely downloadable (07)





5.6.1 Bank Asia Limited

Bank Asia Limited is another private commercial bank that is offering Internet banking in Bangladesh. Their clients can get access to real time account information through the Internet. Gradually Bank Asia increases its product list. Every year we launch 2 products. Since establish, our product list is so healthy and includes most features. Whenever, we launch a product, we look deeply in its technical issue. Its mean, how the product will be techno based and support online features. Considering these criteria, we have produced six products

Service to be introduced:

- Credit Cards
- Priority Banking

Products:

- Realtime Online Banking
- Any Branch Banking
- Internet Banking
- SMS Banking
- ATM Service
- Loan Syndication
- Corporate Banking
- Locker Facilities

Special Feature:

- SMS Banking
- Corporate Banking
- Mobile Banking
 - Internet Banking

https://www.bankasia.net/jorbits/pages/start.jsp accessed on August06, 2007



BRAC BANK

5.7.1 Banking Service

Brac Bank offers different kinds and types of banking service. They offer online banking, phone banking, and Internet banking and now days they also offer SMS banking. They provide different kinds of debit cards and credit card. For shopping they offer different debit cards. With that card the consumer only can shop.

They also offer phone banking. With BRAC Bank 24 hours Phone Banking, your accounts are just a call away. Enjoy the convenience of banking anytime, anywhere simply by pressing a few buttons on your phone.

You can check you account information, last balance, check related service etc.

They also introduce SMS banking. With the help of SMS banking you can check your last transaction, Balance information. If you want to activated you SMS service then call 01711439067 or SMS +3939. You will also get a SMS alert for high volume transactions in your account. With then help of SMS banking you can check your account anywhere and anytime.

They provide different kinds of debit cards and credit card. For shopping they offer different debit cards. With that card the consumer only can shop.

They also offer phone banking. With BRAC Bank 24 hours Phone Banking, your accounts are just a call away. Enjoy the convenience of banking anytime, anywhere simply by pressing a few buttons on your phone.

You can check you account information, last balance, check related service etc.

They also introduce SMS banking. With the help of SMS banking you can check your last transaction, Balance information. If you want to activated you SMS service then call 01711439067 or SMS +3939. You will also get a SMS alert for high volume transactions in your account. With then help of SMS banking you can check your account anywhere and anytime.



Phone Banking

With BRAC Bank 24 hours Phone Banking, your accounts are just a call away. Enjoy the convenience of banking anytime, anywhere simply by pressing a few buttons on your phone.

- Account detail
- Balance inquiry
- Product Information
- · Check related services

5.7.2 EZee Account

'Banking That Sets You Free' BRAC Bank offers you EZee Account a non-check interest bearing account for small savers who are in frequent need of transaction. You don't need to write a check or stand in a long queue to draw your own money from BRAC Bank. You can get an ATM card to operate your account round the clock.

Features

- 24 hour access to ATMs and POS
- Interest on daily balance
- No minimum balance
- No ledger fees

5.7.3 ATM Debit Card Features



- Draw money up to BDT 20,000 per day
- Check balance statements of your ATM and POS transactions
- Get a Mini Statement
- Change PIN number
- Get FAST CASH
- Use it in BRAC Bank POS outlets to pay
- 24 hour hotline available to resolve queries and problem
- Suggestion booth to place your opinion

5.7.4 Aarong

What is BRAC Bank Aarong ATM Card? It's a co-branded ATM Card with special cash back feature.

How is it different from other cards? Unlike other ATM cards, the holder of this card can enjoy 5% cash back facility while shopping at any Aarong outlet and the discount shall be automatically credited to customer's account with BRAC Bank.



Facilities

- 24-hour access to ATM's across Bangladesh
- Access to countrywide designated POS (Point of Sales)

5.7.5 **ALICO**

What is BRAC Bank ALICO ATM Card? It's a co-branded ATM Card with Life Insurance coverage.

How is it different from other cards? Unlike other ATM cards, the holder of this card can enjoy a special life insurance facility.



Facilities

- · 24-hour access to ATM's across Bangladesh
- · Access to countrywide designated POS (Point of Sales)

5.7.6 **DIA Gold**

What is BRAC Bank DIA Gold ATM Card? It's a co-branded ATM Card with special cash back and cash discount feature.

How is it different from other cards? Unlike other ATM cards, the holder of this card can enjoy 10% cash back facility while buying diamond products and 8% cash discount on the making charge of purchased gold items at any DIA GOLD outlet.



(09)



The HSBC Group, one of the world's largest banking and financial services organizations, had its beginnings in Asia more than 130 years ago. The Group has some 9,500 offices in 79 countries and territories in Europe, the Asia-Pacific region, the Americas, the Middle East and Africa.

5.8.1 HSBC Bank In Bangladesh

HSBC bank is another foreign owned bank that offers limited e-banking facilities only to its corporate clients. HSBCnet which is HSBC's Global Internet Banking Channel where corporate clients can check balances, download statements and make payments within HSBC accounts.

[HSBC Bangladesh, http://www.bd.hsbc.com/bd/corp/business.htm accessed on January, 2006]

5.8.2 ATM Card

With our ATM cards, you can access and carry out most of your personal banking transactions 24-hours a day, 365 days a year.

With an ATM card, we can perform a wide range of transactions through our Automatic Teller Machines (ATM) at any time that is convenient to you, day or night.

5.8.3 Tele banking

Tele banking is our 24-hour automated telephone banking service. With this fast, convenient and secure service, our banking is just a phone call away.

By using our Phone banking service, we can

- Check the balances on our primary and linked accounts;
- Transfer money between our accounts;
- Hear details of our last five transactions.
- Order statements;
- Order cheque books;
- Pay bills to pre-designated third parties in local currency;
- Enquire about time deposit interest rates;
- •Open or renew a time deposit;
- Report about stolen or lost ATM card;
- Enquire about foreign exchange rate;

It is very easy to use. If we have Phone banking number (PBN) and Personal Identification number (PIN), just call at 8620346 and we can control our account at the touch of a button.

5.8.6 ELECTRONIC Banking

Access your account from your PC 24-hours a day, 365 days a year from anywhere the world with Hexagon, our global electronic banking system.

5.8.7 Payment and Collection

Country wide payments

Most corporate treasurers cannot afford to spend time worrying about routine payments. HSBC in Bangladesh has the technology to put you in

better control of routine operations and has been successfully handling payment requirement throughout the nation for its corporate clients. We provide you with benefits, which include:

- Reduction in payment time.
- Availability of payment details through hexagon.
- Easy reconciliation of payments/receipts through Hexagon statement.
- Centralization of control of payments.
- Network coverage of almost 200 locations nation-wide.

(10)



Standard Chartered Bank

5.9.1 Personal Banking:

Standard Chartered offers premium retail banking services to individual customers with a large variety of deposit and loan products. Our Consumer Banking business continuously meets the challenges of developing new products and services to match the specific requirements of customers. In Bangladesh Standard Chartered offers 24-hour service through its Moneylink ATM network and Phonelink. Phone banking to enhance customer convenience. Standard Chartered has pioneered off site Moneylink ATMs in Dhaka and Chittagong and is in the process of building a network of off-site Moneylink ATMs in Bangladesh. Our aim is to offer excellent service on a '4-Dour basis.

http://www.standardchartered.com/bd/cb/cbhome.htm, retrieved in 22nd AUG 2006.

5.9.2 Services

Tele Banking Service

Standard Chartered Bank is the first bank in the country to offer automated 24-hour Phone banking service. Our phone banking services include balance enquiry, fund transfer, change of TIN, chequebook request. statement request, foreign currency exchange rate etc., which are available through telephones from the comfort of home, office or car.

Other services available during the working hours include account opening information, remittance query. Stop payment instruction, request for draft, renewal of fixed deposit, change of address etc.

Phone link service is offered to all customers free of charge.

http://www.standardchartered.com/bd/cb/servcie/svc_phone.html



Master Card

Standard Chartered Bank launched Money link ATM in 1994, the first bank to offer this service in Bangladesh. Money link ATM set-vice is free charge. offering the following features:

- Cash Withdrawal & deposit
- Cheque deposit
- Cheque book request

- Change of PIN
- Printing of mini-statement
- Payment of utility bills.



5.9.3 Online services

Web Bank is the Internet banking site for Standard Chartered's Corporate and Institutional Customers. It combines convenience and security in one comprehensive and easy to use platform. Web Bank users have access to Cash Management, Securities Services and Continuous Linked Settlement Solutions as well as Trade. Lending and FX information that leverages on Standard Chartered's extensive international network. For more information on Web Bank, or to register, please contact your Relationship Manager today.

Standard Chartered's best-in-class **Internet Banking Services** ranked #1 for **Overall** Satisfaction in the East & Partners' survey of Asian Corporate Transaction and e-Banking Markets.

5.9.4

Internet Security: Their role in ensuring that their data is safe.

1. Standard Chartered will never send us emails embedded with hyperlinks to Web Bank. Standard Chartered will never email or call us asking to disclose our login user ID and password. If we ever receive any such emails or calls, supposedly from Standard Chartered, please call their local Standard Chartered customer service representative before we do anything else. Never reveal our

login user ID and password to anyone.

2. In logging on to Standard Chartered's websites, we should always personally enter the relevant Standard Chartered domain name in our

web browser and not accept links or redirections from emails or other websites.

- 3. Before we type in your login information (login user ID/password), you should check that a secure channel has been established. We can do this by checking that the Web Bank address starts with the letters "https://" and that an unbroken key or closed padlock can be seen in the bottom of our screen. We can also view a copy of the Web Bank server authentication certificate by clicking on the key or padlock at the bottom of our browser.
- 4. If we have any doubts about a website, claiming to represent Standard Chartered, please call our local Standard Chartered customer service representative.
- 5. We have been issued with a login user ID and a password so that we can securely use the online service(s) provided by Standard Chartered. We must not divulge our login information or password to any party, verbally or in writing, or use them in connection with any other system, especially any other Internet connected system.
- 6. Our password should be kept confidential at all times, and not be divulged to anyone, including anyone claiming to be from Standard Chartered. It should be memorized and should not, under any circumstances, be written down or stored on our computer's hard disk, a diskette, or any other insecure device. We should change your password regularly.
 - 7. When selecting or changing our password, it must meet the following criteria (12)

<u>CHAPTER – 07</u> Feasibility of e-payment tools

6.1 Feasibility of e-payment tools

Although e-commence has no national boundaries by its virtue, domestic use of ecommerce is the key drivers for both promotion of ecommerce and increasing GDP through trade. The following viability matrix examines the feasibility of common e-payment methods in the current context of Bangladesh:

E-payment Tools Payment against delivery is the most basic method of e-payment. The customer orders online and pays upon reception of the goods. The payment is collected either by the company delivering the goods, (i.e. payment), or directly by the seller. The cost for buyer and seller, however, is fairly high. Behit and/or credit cards are another method of e-payment. Upon purchasing the goods the customer enters his card details, usually the card number, expiry date and Card Security Code (CSC) number. Several layers of security are

Debit and/or credit cards are another method of e-payment. Upon purchasing the goods the customer enters his card details, usually the card number, expiry date and Card Security Code (CSC) number. Several layers of security are usually installed on concerned websites to ensure security of the information. This information needs to pass through Online Payment Gateway, which is a system that verifies the information with concern Bank. The system informs the customer that the operation has been successful. The customer then receives a digital invoice showing the payment details. The payment is made directly from the customer's card account to the seller's bank account. Banks or other financial institutions usually issue credit and debit cards.

Viability

This Payment system **does not match** with definition of e-payment, as it does not use any form of digital technology for payment. But this is the most viable option in the context of Bangladesh as this procedure is quite easy to put in place without installing any technical requirement, and secure for both the buyer and the seller.

In Bangladesh there are two different types of credit cards available:

- 1. International Credit card
- 2. Local Credit card.

Use of International credit is beyond the reach of general citizens.

Use of Local Credit card is increasing in metropolitan areas in a promising velocity. However, absence of Online payment gateway has made this option unfeasible.

In Bank transfer once the customer has ordered goods online, she/he receives bank coordinates by email. Upon reception, the customer transfers the required amount to the company bank account and the delivery is initiated. Both buyer and seller are required to hold a bank account, preferably with e-banking access. For the consumer, this method bears the risk of non-delivery, but it is very secure for the seller. Sellers often free-of-charge propose money-back guarantees, offered through third parties, to reduce the risk for the buyer and make this payment method more attractive.

Bank Transfer is another option that can be implemented with affordable technological upgrade and monetary policy reform. Currently a couple of multinational bank and a pair of domestic bank is giving its customers e-access to its customer. However, bank transfer using online media is limited to within the accounts of same bank.

E-billing is a recently developed e-payment method, where e-bills are sent to the buyer's e-mail account and e-banking account. The customer then pays the bill through using her/his e-banking account. E-bills facilitate regular payments, such as telephone or utilities.

This payment method is in use in Bangladesh. Utility bills like mobile phone companies sending their bills to the customer which can be paid through ATM or using ebanking of the relevant banks. Some government utilities can also be paid using this method.

P2P Payment through a third party provider, such as Pay Pal or Pay box, is another widely proposed and viable option. Pay Pal, for instance, is a webbased application ensuring a secure transfer funds of between member accounts, using bank transfers or a credit card. Once the merchant has installed an appropriate platform on a website, Pay Pal will take care of the entire payment process through the Internet. Both buyer and seller have to be Pay Pal members and have Pay Pal accounts.

While Pay Pal emerge as a secured and trusted payment method, its viability baskets with its requirement for credit card for opening account with them for buyers.

A **card based virtual wallet**, also referred as Smart Card, substitutes banknotes or coins to facilitate the payment of small values, such as transport tickets, parking fees and tolls. The value is stored in a

This option could be a viable alternative to credit card. Some private sector companies are underway in launching this product. However, use smart

microprocessor chip implanted in a plastic card. It is a general and flexible type of payment complementing the traditional means such as cash, check or credit cards.

card over the internet is further constrained by the Online Payment Gateway.

Mobile payment (m-payment) is defined as a payment made through the use of a mobile telephone. The amount is debited to the monthly phone invoice or from the pre-paid card. This new payment method came into sight in 2002 and is usually used for micro-payments. The access for m-payment can be done through a voice access, short message services (SMS), or wireless application protocol (WAP). To secure payment, the authentication is done through the personal identification number (PIN). The customer enters the correct PIN only once, and the payment is accepted. M-payment services are put in place by the mobile service providers, and often in cooperation with banks. The use of m-payment is increasing faster than that of other methods of payment because of the growth mobile telephone penetration in developed and developing countries

Several Private sector mobile phone companies are accepting payment in a limited scale in Bangladesh using mobile payment. The products or services that can be paid through this method are limited to value added services of mobile phone companies like ring tone download, news and information service, logo, cartoon etc.

Source: 1. & 2 (11)

Key challenges

- Immediate implementation of Online Payment Gateway for Local credit card by the central bank in collaboration with commercial banks.
- Formations of monetary policy allowing inter bank account transfer using electronic media.
- Introduction of micro payment prepaid card, local smart card for instance, ordering online and home delivery of goods by private sector initiative. This is card based payment system should be followed by introduction of Online Payment Gateway for using over the net.
- Partnership among mobile phone operators and financial institutions to implement mobile-payment methods for micro payments.

<u>CHAPTER - 08</u> Summery of the finding & Conclusion



Findings:

With my little experience in my final project (Online Banking Service: Current Status in Bangladesh) in comparison with vast and complex banking system it is very difficult for me to recommend. I observed and find something regarding the aspects of their banking. On the basis of my observation and finding I would like to recommend the following recommendations -

- People want more secure online banking.
- In the tele banking they don't happy.
- People wants more ATM booths.
- In Bangladesh, everybody are not aware about online banking.
- Most of the people are not happy with the charge for their online banking service.
- Some customers are also found some difficulties when they use ATM or other online service.
- Some are not happy with the online server and some are afraid of Credit Card Laundering.
- In my research I found in 100% of population 50% don't have any online bank account.
- Some are not know how to use this banking,
- And on the other hand some people want more service in online banking with different features.

- The bank should try to arrange more training programs for their officials. Quality training will help the official to enrich them with more recent knowledge.
- Bank can introduce more advance MIS system to mobilize its day to day activities. It will help the employee to do their works more quickly and maintaining their quality of work.

Conclusion

Internet Banking makes the Bank as close as in the home of the customer. Because online banking system allowing individuals to perform banking activities at home, via internet online banking through enable customers to perform all routine transactions, such as account transforms, balance inquiries,, bill payment and stoppayment requests and some even offer online loan and credit card application. Online Banking eliminates the difference between day and night. As through online banking a customer can get all the banking service at 24 hours a day and seven days in a weak. Online banking make as be with our bank at everywhere. If a person is out of state or even out of the country when a money problem arises, he can log on instantly in his online bank and take card of business. Many online banking sites now offer sophisticated tools, including account aggregation, stock gusts, rate alerts and portfolio managing programs to help we manage all of our assets more effectively. Online banking in Bangladesh is not standardized as in developed country. One people are also less aware about online banking. People want more secure online banking. ATM booths are not sufficient to serve the people properly in our country. Most of the people in our country are not happy with the charge for their online banking service. So online services must have to be user-friendly. Many people in our country do not know how to use this system and other people want more service from this sector. So make internet banking and online banking popular in our country. The banks who provide internet banking have to make people aware of it and have to come up with a new innovative service.

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