# **Project Paper**

on

# "Practice of E-Banking Service-A study on Sonali Bank Limited"

## **Submitted To**

Controller of Examinations
National University, Bangladesh
Gazipur-1704

# **Supervised By**

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**Date of Submission:** 15<sup>th</sup> October 2023

Letter of Transmittal

15<sup>th</sup> October 2023

**Controller of Examinations** 

National University, Bangladesh

Gazipur-1704

Subject: Submission of Project Paper.

Dear Sir,

Here is the Project that I have prepared as a partial requirement of completion of my BBA program

my study on Practice of E-Banking Service-A study on Sonali Bank Limited. I have tried my

best prepare this to be as information and relevant as possible. To prepare this report I have

reviewed some books and downloaded some information from internet. I will be available for

further query and clarification regarding this report whenever necessary. In spite of my hard affords

of there are any mistake or short coming in this report I offer my apology for that.

I therefore, pray and hope that you would kindly accept my project paper and oblige thereby.

Rupa Rani Mridha

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I

**Student Declaration** 

I am Rupa Rani Mridha, Reg no- 17501002941 student of BBA program, Department of Business

Administration, Daffodil Institution of IT(DITT), proclaims that the Project Paper on Practice of E-

Banking Service-A study on Sonali Bank Limited shows the result of my own research works,

pursued under the supervision of Shakila Jahan Nipa, Assistant Professor, BBA Program Department

of Business Administration, Daffodil Institute of IT(DIIT).

I further certify that the submitted report is unique and no part or entire of this report has been

submitted to, in any structure in any other university or institution for any degree or some other

reason.

Rupa Rani Mridha

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II

**Supervisor's Certificate** 

This is to certify that, Rupa Rani Mridha is a student of Bachelor of Business Administration (BBA),

Batch- 18<sup>th</sup>, and Reg. No. 17501002941 Daffodil Institute of IT (DIIT), has been completed in the

practical project paper about the Analysis of Practice of E-Banking Service-A study on Sonali Bank

Limited successfully with excellence performance under my supervision.

I also declare that this paper is my original work and prepared for academic purpose for which is a

part of BBA program.

Shakila Jahan Nipa

**Assistant Professor** 

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At the very beginning. I would like express my gratitude to omnipotent and almighty, whose invisible guidance helped me to complete this report. The time was very limited foe getting the sufficient knowledge about Practice of **E-Banking Service-A study on Sonali Bank Limited**. I take the opportunity to express my deep sense of gratitude to my supervisor, **Shakila Jahan Nipa, Assistant Professor, BBA Program, Daffodil**Institute of IT (DIIT) greatly that inspired me in preparing this report successfully. Without his sincere direction and suggestions, it could have been extremely difficult for me to prepare the report.

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During the preparation of the report, I have come to the very supportive touch of different individuals and friends, who gave their ideas, time and guidance to amplify the report's contents. To be true myself I must say that without their help it would be very tough for me to prepare this report. I am indebted to them with all my respect and felling.

Finally, I would like to give my heartiest thanks to all of them again who have contributed through their comments, suggestions and valuable time to prepare this Project paper in a comprehensive manner.

## **Executive Summary**

Banks in Bangladesh play a significant role. In this modern life, people rely on banks to make daily financial transactions because its fast, secure, and safe. Sonali Bank Limited is one of the most reputed organizations in Bangladesh, Which runs very proficiently for many decades. Goes-back to fourteen-century banks only existed in Europe. Now, banks are everywhere. Banking is one of the crucial elements of a country's economy. SBL is one of the leading NCB (Nationalize Commercial Bank). They provide many types of services to customers. They have corporate banking facilities, Remittance, Special Small loans, NGO-Linkage Loan, Ancillary Services, Merchant Banking, A.T.M. Card, SMS Banking, Mobile Apps based services, et cetera. Sonali Bank Limited is working alongside the government to implement the Agenda of Digital Bangladesh by introducing various automation initiatives. This report is based-on, "Practice of E-Banking Service-A study on Sonali Bank Limited." E-banking is assistance offered to the customers, which saw the equities for accounts, checking the exchanges, downloading pleasing data, move of points of interest, paying outsiders, making advance applications, and so forth from an affirmed page of the bank. E-Banking has opened up another field of contention for banks. To works online, an individual needs the customer number and riddle key. E-Banking has begun during the 1980s yet sensibly another idea in Bangladesh. Customer fulfillment unequivocally identified with E-Banking. The bank has developed its apps for its customers, Known by Sonali e-Sheba. By using this, customers can open an account on their own. Recently they have launched their new service called Sonali e-Wallet. In sum, It is clear that banks are more focused on customer satisfaction and working on future demands by digitalizing their services. The banking industry expanded very wisely, and the competition is intensifying every day. It's a mandatory requirement for a bank to meet the customer demands and fulfill them in the shortest possible time.

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# Chapter:1

# Introduction

## 1.1 Introduction

In the present world money is circulated all over the globe. Globalization, technological advances and other factors money is circulating unimaginably .Financial Institutions mainly Banks play a Pivotal role in matching a depositor and lenders and channeling money and making the Economy more efficient. Although the history of Banking goes back to the 14th century in Europe but Banks are now everywhere. Banks in Bangladesh play a significant role compared to other financial Institutions.

The competition in the banking industry has intensified more than ever before. Global financial crisis, share market crash, recessions and other factors affected the banking industry. So banks should position themselves at a unique place in the minds of the customers by offering attractive offers such as higher interest rates or by offering superior service to the customers. Services include financial advice, flexible rates or dates of payment, portfolio management etc.

E- Banking is a service offered to the customers which includes viewing the balances on accounts, checking the transactions, downloading useful information, transfer of funds, paying third parties, making loan applications etc. from a secured website of the bank. E-Banking has opened up a new field of competition for banks. To operate online an individual needs the customer number and password. E- Banking has started in the 1980s but it is relatively a new concept in Bangladesh.

Customer satisfaction is positively related to E- Banking. It is believed that customers are the king of the market place today. The competition in the banking industry is intensifying and it is the bank's priority to satisfy its respective customer.

# 1.2 Rationale of the Study

Corporate governance is the way a corporation polices itself. In short, it is a method of governing the company like a sovereign state, instating its own customs, policies and laws to its employees from the highest to the lowest levels. Corporate governance is intended to increase the accountability of your company and to avoid massive disasters before they occur. Failed energy giant Enron, and its bankrupt employees and shareholders, is a prime argument for the importance of solid corporate governance. Well-executed corporate governance should be similar to a police department's internal affairs unit, weeding out and eliminating problems with extreme prejudice. A company can also hold meetings with internal members, such as shareholders and debt-holders – as well as suppliers, customers and community leaders, to address the request and needs of the affected parties.

It allows increased expertise to be brought to bear on strategic decision-making. The concept of corporate governance sounds simple and unambiguous, but when one attempt to define it perceptions behind available definitions (Fernando, A.C., 2012). However, corporate governance is considered as the most important topic to be discussed by financial entities and economic institutions because of two reasons Firstly, banks have an

overwhelmingly dominant position in developing-economy financial systems, and are extremely important engines of economic growth (King and Levine, 1993 a & b; Levine, 1997). Secondly, as financial markets are usually underdeveloped, banks in developing economies are typically the most important source of finance for the majority of firms (Levine, 2004).

Banking sector can play a vital role to magnify the overall social economic situation of the country. The number of scheduled banks operating in Bangladesh stand at 57 all of which are under the purview of the Bangladesh Bank. In the last ten years or so, there has been rapid growth in the banking sector with many new banks operating in the country for the first time. So, Banks must compete in the market place both with local institution as well as foreign ones. The management of the bank is responsible for taking decisions and formulating plans and policies for the future. Eventually they need to evaluate the system of internal controls and procedures to protect the rights and responsibilities of various shareholders. For this purpose Corporate Governance is important to the company's management. It also aids to accomplish the goal of the organization and manages the relationship among the stakeholders including the board of directors and the shareholders.

## 1.3 Background of the study:

This project report is originated as a partial fulfillment of the BBA program. This report is a mandatory requirement for completion of BBA, these research experience has helped me to match my theoretical knowledge with practical understanding. As an researcher of Sonali Bank I was provided with the topic "An analysis of the E- Banking services of Sonali Bank. This study will also be useful for researchers. Researcher can use this report in order to get idea. This study will also be helpful for further researcher.

# 1.4 Purpose of the Study:

- To evaluate E- Banking System of Sonali Bank Limited.
- To find out the customers demand from Sonali Bank's E- Banking service.
- To identify the satisfaction level.
- To identify the relationship between E- Banking and customer satisfaction.
- To find out the problems and give some necessary suggestions.

# 1.5 Methodology of the Study:

## **Data collection:**

Primary data was collected from the user of E bank services of Sonali bank, Motijheel branch by conducting a survey on their requirement. Secondary data was collected from various web site, previous work on Sonali Bank. Survey was conducted by using likert scale.

**Sampling method:** Random sampling method was used. Sample was collected from the customers who regularly or frequently visit the branch office to take services provided by bank.

**Sample size:** Sample size is 20. From these 20 customers 50% are male and 50% are female respondent.

### **Data analysis:**

Data was analyzed by using mean, mode and percentage. To complete the study I did not use any satirical software.

# 1.6 Limitations of the study:

To prepare a report on the topic like this in a short duration is not easy task. From the beginning to end, the study has been conducted with the intention of making it as a complete and truthful one. In preparing this report some problems and limitations have encountered which are as follows:

- In most cases, the bank is not willing to provide all the information because of confidentiality, so the data are not in organized way.
- Lack of opportunity to access to internal data.
- ➤ I had to use secondary data for preparing this report.
- ➤ Being very busy, the bank personnel could not pay enough time.
- ➤ Legal action related information was not available.
- > Time limitation was a major constraint to prepare the report.
- This study is so broad that analytical and comprehensive study is not possible.

# Chapter:2

# **Literature Review of Sonali Bank Limited**

### 2.1 Literature review

E-banking in today's scenario is a very dynamic concept. It is a kind of self service technology (Dixit & Datta,2010). Competition is the pushing force for the introduction of e-banking. (Ziqi Liao and Michael Tow Cheung, 2003) .E-banking is delivery of new and traditional banking products and services straight to customers using electronic, interactive communication channels using computers. At a fundamental point, E- banking means setting up of a web page by a bank to provide information about its products and services their features, advantages, disadvantages, prices, duration and other details. On the other hand, at an advanced level, it refers to providing facilities such as accessing accounts, transferring funds, and buying financial products or services online, Making payments et which is known as "transactional" E- banking (Sathye, 1999). E-banking includes the systems that enable financial institutions, customers, individuals or businesses whether small or big or medium scale to access accounts, carry out transactions or obtain information on financial products and services through a public or private network using Internet. (Vasanthakumari and Sheela rani, 2010)

E- Banking is the fastest growing service that banks can offer in order to gain and retain new customers (Moody, 2002).

The rise of E-Banking is also due to its number of benefits for both the provider and the customer as well. From the bank's perspective these are mainly related to cost savings (Sathye, 1999; Robinson, 2000) and E-Banking remains one of the cheapest and more efficient delivery channels (see Pikkarainen et al., 2004).

The conception of electronic banking has been defined in a number of ways (Daniel, 1999). According to Karjaluoto (2002) electronic banking is a construct that consists of several channels of distribution. Daniel (1999) has defined electronic banking as providing banking information, products and services by a bank to customers using a number of different delivery platforms that can be used with different terminal devices such as a personal computer, mobile phone, desktop software, telephone or digital television. Electronic banking is also frequently known as internet banking or e-banking or PC banking or Home banking or Phone Banking or tele banking.

Internet banking has changed the banking industry as well as banking relationships in a positive way. E-banking provides banking products using internet including e-mails, modems and various networks other networks like RBINET, NICNET, BRISKNET, RBINET, BANKNET. E-banking services includes ATM's, Electronic data interchange, MICR, Cash dispensers, Automated ledger posting system, Electronic clearing system, Tele banking, Anywhere Anytime Banking, Plastic money, E-cash, Smart cards etc and various processing systems such as Real time processing, Batch processing system, Desktop publishing etc.

However it is very complicated for banks as well as customers to decide a best and appropriate approach to E-banking. (Dixit & Datta, 2010)

## History Of E-banking In Bangladesh

Before E-banking In Bangladesh came into existence the dealings between customers and banks was on one on one basis. The bank branch was involved in dealing with customers, payments, clearing, loan applications, opening accounts etc. but the head office was involved in overall clearing, size of branch, training, sanctioning of loans, keeping track of accounts of customers and it does not deal directly with customers.

In the last 3 decades banking in Bangladesh has evolved through various phases. Due to Globalization and Liberalization a new environment was seen in banks in the whole of the world. Banks offered new services with latest technologies such as anywhere and anytime banking, Tele banking, Internet banking etc.

The entry of foreign banks has pushed Bangladeshi banks to follow the path of latest technologies so as meet threat of competition and to retain their customer base. The growing competition and increased expectations has led to increase in awareness among banks on and role of internet banking. E-banking has revolutionized banking industry and is a product of innovation.

There is a prototype change in different parameters of transformation. Many factors both internal and external are responsible for this shift. Competition from other bank group and other global factors are forcing Bangladeshi banks to make these changes in their functioning. E-banking services have replaced traditional services

To make a detailed perception plan for Computerization of banks and for extension of automation to other areas such as funds transfer, e-mail, BANKNET, SWIFT, ATMs, E - banking, etc.

A 'Working Group' on e-banking to examine different aspects of e-banking. This Group mainly focused on three major areas of E – banking

- (1) Technology and security issues,
- (2) Legal issues and
- (3) Regulatory and supervisory issues.

# 2.2 History of Sonali Bank Limited

Soon after independence of the country Sonali Bank emerged as the largest and leading Nationalized Commercial Bank by proclamation of the Banks' Nationalization Order 1972 (Presidential Order-26) liquidating the then National Bank of Pakistan, Premier Bank and Bank of Bhwalpur. As a fully state owned institution, the bank had been discharging its

nation building responsibilities by undertaking government entrusted different socio-

economic schemes as well as money market activities of its own volition, covering all

spheres of the economy. The bank has been converted to a Public Limited Company with

100% ownership of the government and started functioning as Sonali Bank Limited from

November 15 2007 taking over all assets, liabilities and business of Sonali Bank. After

corporatization, the management of the bank has been given required autonomy to make the

bank competitive & to run its business effectively. Sonali Bank Limited is governed by a

Board of Directors consisting of 11(Eleven) members. The Bank is headed by the Chief

Executive Officer & Managing Director, who is a well-known Banker and a reputed

professional. The corporate head quarter of the bank is located at Motijheel, Dhaka,

Bangladesh, the main commercial center of the capital.

2.3 Vision & Mission

**Vision:** Socially committed leading banking institution with global presence.

Mission: Dedicated to extend a whole range of quality products that support divergent

needs of people aiming at enriching their lives, creating value for the stakeholders and

contributing towards socio-economic development of the country.

**Slogan:** "Your trusted partner in innovating banking".

# 2.4 Corporate Profile

Name of the Company	Sonali Bank Limited
Chairman	Mr. Md. Ashraful Moqbul
CEO & Managing Director	Mr. Md. Obayed Ullah Al Masud
Company Secretary	Mr. Md. Hasanul Banna
Legal Status	Public Limited Company
Genesis	Emerged as Nationalized Commercial Bank in 1972, following the Bangladesh Bank (Nationalization) Order No. 1972(PO No.26 of 1972)
Date of Incorporation	03 June, 2007
Date of Vendor's Agreement	15 November, 2007
Registered Office	35-42, 44 Motijheel Commercial Area, Dhaka, Bangladesh
Authorized Capital	Tk. 6000.00 Crore
Paid-up Capital	Tk. 4130.00 Crore
Number of Employee	18,167
<b>Number of Branches</b>	12015
Phone-PABX	9550426-31, 33, 34, 9552924
FAX	88-02-9561410, 9552007
SWIFT	BSONBDDH
Website	www.sonalibank.com.bd
E-mail	itd@sonalibank.net.bd

# 2.5 Some Notable Features of the Bank

Capital Structure		
Authorized Capital	BDT 60,000.00 Million	
Paid-up Capital	BDT 41,300.00 Million	
Branches & Subsidiaries		
1. Total No of Branches	1215	
I. No of Rural Branches	745	
II. No of Urban Branches	487	
a. No of Foreign Branches	2	
b. No of Local Branches	1213	
2. No of Regional Offices	16	
3. No of Principal Offices	46	
4. no of G.M. Offices	11	
Subsidiaries	<ol> <li>Sonali Exchange Company         Incorporated (SECI) having 10 (Ten)         branches in USA.     </li> <li>Sonali Investment Limited (Merchant Banking) having 4 (Four) branches at Motijheel, Paltan, Uttara, Mirpur in Dhaka and 1 (One) branch in Khulna, Bangladesh</li> </ol>	
Associates	<ol> <li>Sonali Bank (UK) Limited having 2         (Two) branches in UK.</li> <li>Sonali Polaris FT Limited</li> </ol>	
Representative Office	1 (one) in Jeddah, KSA; 1 (one) in Riyadh, KSA and 1 (one) in Kuwait	
Correspondent	639	

# 2.6 Hierarchy of Sonali Bank Limited

## Management

The management of the bank is vested on a board of directors, subject to overall supervision and directions on policy matters by the board which is constituted in terms of Bangladesh bank (Nationalization) Order 1972 (Figure-.....). Board of directors, constituted by seven members has authority to organize, operate and manage its affairs on commercial consideration within the board policy of government. There are directors appointed by the government. Other members of the board including MD are also government appointed out of that at least three have the experience in the field of Finance, Banking, Trade, Commerce, Industry and Agriculture. The managing director is the Chief Executive of bank. He executes all the activities under the direction of board. All line and staff personnel of banks are own recruitment except member of board of Direction.

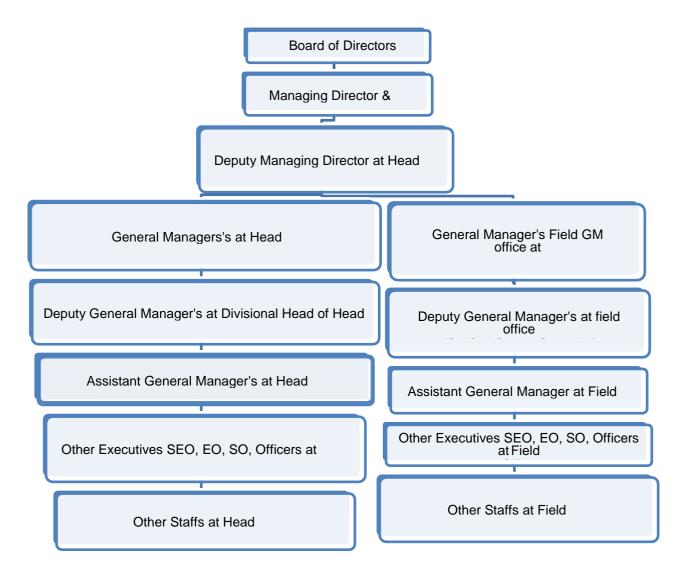


Fig: Organogram of Sonali Bank Limited

## **Organizational Structure**

Sonali Bank is the largest nationalized commercial bank of Bangladesh. It has 1187 branches throughout the country. It has also two overseas branches. The Head Office of the bank is located at the Motijheel commercial are, Dhaka. The Divisions are headed by the DGMs and the departments are by AGMs. There are also many sections under every department in the Head Office. A DGM is the chief of the Principal office and an AGM usually runs a regional office. Principal offices are the local points of the bank's administrative zone in the districts. The regional offices are under control and supervision of principal offices. The offices are situated at thana level within the districts. The corporate branches are nearly equivalent to the GM office and usually headed by the DGMs. They provide all the banking services such as general banking, loans & advances etc. Functional hierarchy of Sonali bank is given below:



Fig: Organizational Structure

### 2.7 Services of Sonali Bank Limited:

## **Principal Activity of the Bank:**

The principal activities of the bank are

- 2.7.1 To facilitate and handle all kinds of commercial banking services to its customers authorized by Bangladesh Bank.
  - 2.7.2 To perform Government Treasury functions and also act as an agent of Bangladesh Bank.
- 2.7.3 To export and import trade of Bangladesh with other countries under various agreements.
- 2.7.4 International banking.

## **Subsidiary:**

A subsidiary company named Sonali Exchange co. Inc. was incorporated on 4 April, 1994 under laws of the state of New York, Department of State, licensed on 17 October, 1994 by the State of New York Banking Department and commenced operation as an International Money Remitter from 12 December, 1994.

### **Associate:**

On 4 November, 1998 Sonali Bank notified the financial Service Authority of the UK of its intention to voluntarily surrender the banking license for Sonali Bank UK branch with effect from June 30, 1990. Sonali Bank UK branch had extinguished all its retail deposits by 30 June, 1999 and is not permitted to accept any further deposits from the date. Bur a representative was there till 7 December, 2001. A subsidiary money remitting company under the name of Sonali Trade and Finance (UK) Limited has been incorporated under the UK company act of 1985. The company has been allowed to start its function as a bank from 7 December, 2001 (the operation activities was started on 10 December, 2001) by the Financial Service Authority of UK changing its name as Sonali Bank (U.K.) Ltd. 51% share capital of the newly renamed company is held by the Peoples' Republic of Bangladesh and remaining 49% by Sonali Bank.

### **Account Section:**

This is a very much crucial section for each business concern. As such this is a crucial department for a commercial bank. Records of all the transactions of every department are maintained here. Accounts section verifies all financial accounts and contents of transactions. Every working day all the accounts are balanced and reconciled to remove and discrepancy. The overall activities of accounts section are as follows:

- \* Record all transactions in the cash book.
- \* Record all transactions in general and subsidiary ledger.
- Prepare daily fund function, weekly position, periodic statement of affairs etc.
- Prepare necessary statements for reporting purpose.
- ❖ Make salary statement and pay salary.
- ❖ Pay all expenditures on behalf of the branch.
- ❖ Branch to branch fund remittance and support for account treatment.
- **&** Budgeting for branch.
- Make charges for different types of duties.

# **Ancillary Services**

Sonali Bank Limited offers multiple special services with its network of branches throughout the country in addition to its normal banking operations.

### **Collection:**

Gas bills

**4** Electricity bills

**4** Telephone bills

♣ Water/sewerage bills

Municipal holding tax

Passport fees,

visa fees and

♣ travel tax

♣ Customs & excise duties

♣ Source tax & VAT

**♣** Jakat fund

♣ Hajj deposit

Land development tax

## **Payment:**

♣ Pension of employees of Government and other corporate bodies

**♣** Bangladesh Bank employees pension

♣ Army pension British pension

♣ Students' stipend/scholarship

♣ Govt. & Non-Govt. teachers' salary

♣ Food procurement bill on behalf of the Govt.

### **Social Services:**

✓ Old age allowances

✓ Widows, divorcees and destitute women allowances

✓ Freedom fighters' allowances

✓ Rehabilitation allowances for acid survival women

✓ Maternal allowances for poor women

✓ Disability allowances

### **Sale & Encashment/Purchase:**

Savings Certificates

**↓** ICB Unit Certificates

**♣** Prize Bonds

**↓** US Dollar Premium & Investment Bond

**↓** Lottery tickets of different Semi-Govt. and Autonomous Bodies

Sanchaypatra

♣ Public Service Commission's application form

**↓** Judicial Service Commission's application form

**♣** Exchange of soiled/torn notes

## **Misc. Services:**

- ♣ Bank a/c information of tax payee client according to demand of NBR
- **↓** Local Governance Support Project
- **♣** Enlist of Non Government Insurance Company

### **Other Activities**

# **Memorandum of Understanding (MOU):**

A memorandum of understanding has been signed by the bank with Bangladesh Bank on 30.06.2004. The memorandum embodies some specific conditions to be fulfilled regarding monitoring and supervision of loans and advances including recovery of classified loans.

# **Risk Management:**

Like any other business, risks are also inherent in banking business. But the risks are complex and multi-dimensional. Although remarkable progress has been made in the field of risk management in international areas, no structural policy/development in this matter has yet been made in the banking sector. In this perspective, Bangladesh Bank has identified 5 (five) core areas relating to banking operations and issued necessary guidelines in 5 areas:

- 2.7.4.1 Credit risks
- 2.7.4.2 Asset and liability/balance sheet risks
  - 2.7.4.3 Foreign exchange risks
- 2.7.4.4 Money laundering risks and
- 2.7.4.5 Internal control and compliance risks.

### **Personnel:**

The total manpower of the bank as on 30.06.2008 was 23754 of which 12227 were officers and 11527 were staffs.

## **Training:**

Sonali Bank staff college, Dhaka along with three institutes at Chattagram, Rajshahi, Khulna and one training center at Bogura have been conducting training programs covering total banking activities in order to impart training to all categories of officers and staff of Sonali Bank.

## Library:

Sonali Bank central library is replete with a huge collection of books on diverse and multifarious discipline. The library has also been enriched with the most recently published books on Banking, Management, Accounting, agriculture, Industrial Finance, Economics, Computer, and on many other disciplines and its collection is increasing every year.

## **Customer Service:**

To ensure qualified customer service Sonali Bank has started in addition to computerization corporate client service and one stop service. To facilitate the foreign exchange activities Sonali Bank has launched SWIFT (Society for Worldwide Interbank Finance and Telecommunication) system in its 12 branches. The bank has launched Website, Reuter service, Internet service, and Ready cash service. The bank has taken a plan to launch shared ATM system in various important places.

### **Products of Sonali Bank Ltd**

- **♣** Export credit (Pre-shipment & Post shipment)
- ♣ Facilitating supplier's credit
- ♣ LCs (Letters of Credit) Guarantees in foreign currency
  - Bid bond
  - Performance guarantee
  - Advance payment guarantee
- Bill purchasing/discounting
- ♣ Remittance, collection, purchases and sales of foreign currency & traveler's cheques
- ♣ NRAT (Non-Resident Account in Taka)
- ♣ NFCD A/C (Non-Resident Foreign currency Deposit)
- **♣** RFCD A/C (Resident Foreign Currency Deposit)
- **♣** Forward contracts
- Correspondent banking relations

The products and services are provided through a well-established large network of authorized branches all over the country.

# **Types of Account:**

Accounts department is the most important functional area of this branch. The following types of accounts are maintained in this bank:

- 1. Fixed deposits A/C
- 2. Short term deposits A/C
- 3. Deposit pension scheme (DPS) A/C
- 4. Sonali Bank special deposit & pension scheme A/C
- 5. Savings deposits A/C
- 6. Current deposits A/C Call deposits A/C
- and
- 7. Sundry deposit Accounts.

#### **Remittance:**

The system of transmitting or sending money from one branch to another branch of the same bank or from one bank to another bank within a country or outside the country is known as remittance. It is one of the important functional areas of a bank. A bank can earn handsome fees as commission from the dealings of money remittance. During my internship program I have gathered practical experience about how money is remitted from one branch to another branch of a bank or from one bank to another bank.

## **Types of Remittance:**

### Remittance can be of two types:

- A) Inland Remittance
- B) Foreign Remittance

## A) Inland Remittance:

When money is remitted within a country through proper banking channel, it is termed as inland remittance. Sonali Bank, Rajshahi medical college hospital Branch deals a lot of inland remittance at every working day.

### a. Modes of Inland Remittance:

### 1) Demand Draft (DD):

DD is the most widely used instrument of remitting fund. It is order to pay money drawn by one branch of a bank upon another branch of same bank for a particular amount of money that is payable to order and demand.

### 2) Mail Transfer (MT):

MT is another widely used instrument of remitting fund from one branch of a bank to another branch of the same bank. It is not used to remit fund from one bank to another. MT is nearly same as DD.

## 3) Telegraphic Transfer (TT):

TT is the fastest means of remitting fund between two branches of the same bank. Fund cannot be remitted from one bank to another bank through TT.

### **B) Foreign Remittance:**

The procedure to transfer money from one country to another country through bank or other govt. authorized agencies is called foreign remittance. The Sonali Bank, Mirpur Shilpa Elaka Branch, Dhaka does not provide foreign remittance facility to its customer directly.

# 2.8 Duties Performed in the General Banking:

General banking is the one of the most important department of every banking transaction. During the internship period I learn most this section. I did my work in the following section under general banking Division.

- 1. Account opening.
- 2. Account closing.
- 3. Cheque Issue.

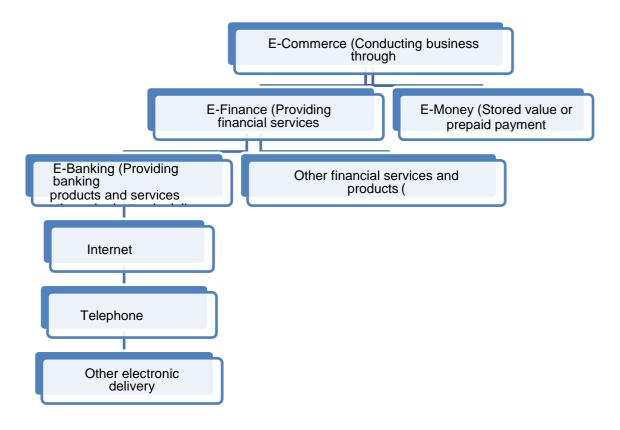
- 4. Local Remittance.
- 5. Clearing House Section.
- 6. Dispatch section.

# Chapter:3

# **Theoretical Framework of E- Banking**

# 3.1 What is Electronic Banking?

The study basically concentrates on the colossal revolution of E-banking and the Challenges thereof. E-Banking has revolutionized to days banking by making it very fast, easy and far reaching. The expectations are growing at very fast speed on the E-Banking services. With the result, it is demanding more attention for study from various people around the globe. Huge volume of research has been done and is still going on different issues of E-banking. The research has helped the customers, the bankers, and other dependent institutions in understanding various aspects of E-banking. E-Banking has over-performed all the obsolete banking practices and the threat of security measures has also been growing with it. Researchers are trying to find out the ways to cover up this risk in the E-Banking and make it more sophisticated for everyone. The present research study has been done in this context only. There were huge amount of issues related to E-Banking available on the internet. But our study has emphasized on threats and the preventive measures to accept the challenging situations. Due, to the presence of time constraint, the study is based upon limited papers on the same issue.



### 3.2 Internet:

The internet is the network of networks. It is a global system of interconnected computer networks that uses the standard internet protocol suite (Transmission Control Protocol/Internet Protocol) or (TCP/IP). The internet consists of billions of public, private, academic, business and government networks ranging from a local to a global scope. These networks are linked by a broad range of electronic, wireless and optical networking technologies. The internet has become a necessity in every field. The importance of internet has reached to a new level as it carries inter-linked Hypertext documents of the World Wide Web and a wide range of important information resources and sources. The internet not only has helped many professionals in their respective fields by disseminating and sharing information but has also reshaped the traditional communications of telephone, music, television etc. E-mail or electronic mail has helped business and individuals communicate in a much cheaper way. Instant messaging has made communications much easier than e-mails. Users can exchange messages using their Personal Computers, laptops, PDA, Tabs, mobile phones etc in real time. The website technology has allowed users to read news, books or other information which is accessible via a network. A web page is a document usually written in plain text. However a web page is interspersed with formatting instructions of Hypertext Mark Up Language (HTML) or (XHTML). The pages of a website can be accessed from a simple Uniform Resource Locator called the web address. The website Technology has allowed blogging and web feeds. Social Networking has increased human interactions more than ever before. The internet has also users who are located in distant places to talk via the VOIP or Voice over Internet Protocol. Millions of users of the internet talk or chat with each other using the internet technologies. The internet has helped doctors to carry out distant operation via teleconferencing or using instructions on a robot through the internet to carry out a operation surgery on a patient on the other side of the world. E-COMMERCE and online shopping has enabled the formations of new business. Any one can trade using the website of an e-commerce website by sitting at home. Businesses of many types use the internet to reach their customers most effectively. Both (B2B) Business to Business transactions and (B2C) Business –To-Customer transactions are carried out using the internet. Financial Institutions also use the internet for various purposes for updated news, selling financial products to their clients and to provide financial Services. The increasing use of Internet by people has convinced banks to come up with the idea of E- Banking or E- Banking.

## **E- Banking:**

E- Banking basically includes all types of banking activities performed through electronic networks. In recent times E- Banking is used as a delivery channel of banking services to both Business-to-Business (B2B) and Business-To-Customer (B2C) Transactions.

## 3.3 A Brief Idea about E- Banking

E- Banking activities includes the payments of bills and invoices, transfer of funds from one account to another, application of a loan, payment of loan installments, sending funds to third parties. These activities are carried out via emails and internet based activities. E-Banking is an electronic connection between a particular bank and its customers. It can be used to prepare, manage and control financial transactions. E- Banking is simply a pathway of carrying out the transactions through the networks and not a banking product or a banking service.

# The History of E- Banking

The idea of E- Banking came with the rise of users of the internet and with the development of the World Wide Web. The programmers have been working on data bases of banking transactions long ago and an idea of E- Banking transactions had evolved at that time in the early 1980's. New technologies and the advancement of computer devices created an opportunity to start a new trend of online shopping. Online Shopping or shopping from the website using the internet promoted the use of credit cards. To facilitate online shopping date ware housing or date storage facilities were used. During the development of the Automatic Teller Machines or ATMs the development of the databases of banking transactions were also used. In the 1980's the financial organizations and banking institutions mainly in Europe and the United States of America carried out researches and programming experiments on "Home Banking". At that point of time Home Banking was carried out using the telephones and fax machines. This was done because the internet was not widely spread and many people were not aware of such facilities. The wide spread of the internet and the advancement of programming technologies created new opportunities for banks.

The first E- Banking service was introduced in the United Kingdom by the Nottingham Building Society (NBS). The E- Banking Facility that was introduced is believed to have been derived from a system which is known as "Prestel". The E- Banking facility introduced by the NBS was not very impressive and had drawbacks. The main drawback was it restricted the number of transactions and functions that account holders could execute. In the year 1994 the first E- Banking service was introduced in the United States. A financial Institution named Stanford Federal Credit Union had developed this service of E-Banking. There are many negative sides of E- Banking .These include a hacking , phishing , pharming, spoofing , sniffing and other unethical acts which makes E- Banking facilities risky for both the users and the banks . Although E- Banking has negative sides but we should also consider the positive sides. E- Banking has created a revolution and it has a significant role to play in enhancing the banking sector.

# 3.4 Products and Services of E- Banking:

The products and services of E- Banking ranges from wholesale to retail products for corporate and individual customers. The different types of products and services are designed to satisfy different groups of customers.

# Wholesale products and Services include:

- ➤ Wire Transfer
- ➤ Automated Clearinghouse Transaction
- ➤ Bill Presentation and payment
- Cash Management

### **Retail Products and Services Include:**

- ✓ Fund Transfer
- ✓ Downloading Transaction Information Facility
- ✓ Investment
- ✓ Presentation of Bill and Payment
- ✓ Loan Application from the web
- ✓ Balance Inquiry

# 3.5 Types of E- Banking

### **Informational**

This is the most fundamental level of banking. This type of E- Banking does not allow its customers to view or maintain their accounts. It also does not allow its customer and the bank to communicate with each other. Rather it provides valuable information of its products and services. This is used for marketing purposes only and can be provided either by the bank or it can be outsourced to a third party. Appropriate controlling is required to prevent unauthorized alterations to the bank's server or website.

### Communicative

At this particular level the E- Banking allows interactions between the bank's systems and the customers to an extent. It is limited to basic interactions such as inquiry of accounts, loan applications, or updates of certain files (such as contact information). The risk is high at this level as the servers may have a path to the bank's internal networks. To prevent any unauthorized attempt to access to the bank's internal internet appropriate controls are required.

## **Transactional**

This is the most popular type of E- Banking and allows all the benefits of traditional manual banking. This can allow its users to fully control their accounts. This includes deposits, payments, withdrawals, transfer of funds etc. However very strong controlling is required as the risks associated with unethical practices are the highest at this level. Proper security measures are required to make E- Banking facilities useful and convenient in the market place.

## 3.6 The Risk Management of E- Banking

With the rise of internet and new technologies new threats have arisen. New challenges are created for the banks senior management. The different types of risk of E- Banking are as follows:

### **Credit Risk**

E- Banking allows its users to apply for credit from anywhere around the world. There is a risk to earnings or capital from a customer who has failed to meet his/her financial obligations. It is difficult for banks to identify the identity of a customer. The bank will also find difficult to verify the collateral against a particular loan. An individual can also represent himself/herself as someone else and apply for a loan.

#### **Interest Rate Risk**

One of the risks of E- Banking is the risk to earnings or capital arising from movements in interest rates. E- Banking can attract a large pool of deposits and loans. The internet can allow customers to compare interest rates of different banks from the websites. This puts a pressure on the interest rates. Often the bank needs to react with the changes of interest rates in the market place. The interest rates can change due to the changes in maturities of different investments, due the changing rate among different yields. The differences between the timing of rate changes and the timing of the different cash flows can also affect the interest risk.

# **Liquidity Risk**

Sometimes banks face a difficulty of failing to meet its obligations. E- Banking increases asset and deposit volatility. Some customers simply maintain their deposit accounts solely on the basis of favorable interest rates, and they often bring cash out and deposit in other banks if a more favorable rate is offered. In order to avoid such circumstances proper asset / liability and loan management systems should be used.

### **Price Risk**

One of the risks to earnings or capital arising from changes in the value of traded portfolios of financial instruments is price risk. This is a risk which arises from activities such as dealing, position taking in interest rate, foreign exchange, equity and commodity markets. Banks are vulnerable to price risks if they create or expand the current deposit brokering, loan sales or securitization programs. All of these activities can create price risks for the banks if they carry out E- Banking activities.

# **Foreign Exchange Risks**

This risk which arises when the assets of one currency are funded by liabilities in another currency. Social, political an Economic development can intensify foreign exchange risks. Customers of different countries can take speculative positions using the E- Banking. The lower costs of transactions allow them to get involved in such activities. Sometimes banks have higher holding transactions and investments in foreign currencies. This increases the foreign exchange risks.

### 3.7 Present Status of e-Banking

E-banking at per international standard is yet to develop in Bangladesh. At present, several private commercial banks (PCBs) and foreign commercial banks (FCBs) offer limited services of tele-banking, internet banking, and online banking facilities working within the branches of individual bank in a closed network environment. As a part of stepping towards e-banking, the FCBs have played the pioneering role with adoption of modern technology in retail banking during the early 1990s whereas the state-owned commercial banks (SCBs) and PCBs came forward with such services in a limited scale during the late 1990s. Moreover, the banking industry as a whole, except for the four specialized banks (SBs), rushed to offer technology based banking services during the middle of the current decade. The existing form of e-banking that satisfies customer demand in banking activities electronically throughout the world are PC banking or PC home banking that include online banking, internet banking, mobile banking, and tele-banking.

## PC banking or PC home banking

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

### **Online banking**

Transactions in online banking are performed within closed network for which the customer use specialized software provided by the respective bank. International standard online banking facilities are expanding in Bangladesh. At present, 29 scheduled banks offer any branch banking facilities through their respective bank online network that provides facilities like transaction through any branch under the respective bank online network; payment against pay order or pay order encashment, demand draft encashment, opening or redemption of FDR from any branch of the same bank; remote fund transfer, cash withdrawal, cash deposit, account statement, clearing and balance enquiry within branches of the same bank; and L/C opening, loan repayment facility to and from any branch of respective bank under its own online network. Inter-bank transactions or transaction between inter bank branches are yet to expand. Under the modernization program of the National Payment and Settlement System, Bangladesh Automated Clearing House (which includes Bangladesh Automated Cheque Processing System and Bangladesh Electronic Fund Transfer Network) is scheduled to come into effect from September 2009 followed by implementation of online banking at per international standard in near future.

## **Internet banking**

Internet banking refers to the use of internet as a remote delivery channel for banking services which permits the customer to conduct transactions from any terminal with access to the internet. It is the WWW through which banks can reach their customers directly with no intermediaries. Internet banking in true sense is still absent in Bangladesh. Only 7 out of 48 banks are providing some banking services via internet that include account balance enquiry, fund transfer among accounts of the same customer, opening or modifying term deposit account, cheque book or pay order request, exchange rate or interest rate enquiry, bills payment, account summary, account details, account activity, standing instructions, loan repayment, loan information, statement request, ,cheque status enquiry, stop payment cheque, refill prepaid card, password change, L/C application, bank guarantee application, lost card (debit/credit) reporting, pay credit card dues, view credit card statement, or check balance. The core banking activities like fund transfer to third party, cross border transactions and so on are still uncovered by internet banking offered by the scheduled banks in Bangladesh.

### Mobile banking

Mobile banking (also known as M-banking or SMS banking) is a term used for performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone. Mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device. The standard package of activities that mobile banking covers are: mini-statements and checking of account history; alerts on account activity or passing of set thresholds; monitoring of term deposits;

access to loan statements; access to card statements; mutual funds/equity statements; insurance policy management; pension plan management; status on cheque, stop payment on cheque; ordering check books; balance checking in the account; recent transactions; due date of payment (functionality for stop, change and deleting of payments); PIN provision, change of PIN and reminder over the internet; blocking of (lost/stolen) cards; domestic and international fund transfers; micro-payment handling; mobile recharging; commercial payment processing; bill payment processing; peer to peer payments; withdrawal at banking agent;3 and deposit at banking agent. Despite huge prospects, only a few banks adopted mobile banking in Bangladesh during the last year.

### Tele banking

Tele banking refers to the services provided through phone that requires the customers to dial a particular telephone number to have access to an account which provides several options of services. Despite huge potential, tele banking services have not been widened enough in daily banking activities in Bangladesh. Only four banks so far provide a few options of tele-banking services such as detail account information, balance inquiry, information about products or services, ATM card activation, cheque book related service, bills payment, credit card service and so on. Funds transfer between current, savings and credit card account, stock exchange transactions etc are still inaccessible through telebanking in Bangladesh.

# 3.8 Prospects of e-Banking

E-banking is now a global phenomenon. Apart from the developed countries, the developing countries are experiencing strong growth in e-banking. The Bank of Thailand has created an industry payment body to involve other stakeholders, in particular from commercial banks which take leading responsibility for the development of e-payment system and technologies. Internet banking in Korea has increased at a rapid pace. Korea is also leading in online brokerage and mobile banking. In Southeast Asia, internet banking is also developing rapidly in Thailand, Malaysia, and Singapore and to a lesser extent in Philippines (Mia et. al. 2007). In Nepal, ATMs are the most popular electronic delivery channel for banking services but only a few customers are using internet banking facilities. Among others, Nepal's commercial banks have adopted Credit card, tele-banking, and SMS-banking.

### **Remittance (Electronic Way)**

Today's fast changing electronic banking channels have massively improved the flow of remittance across the world. In Bangladesh, Banks have grown up relations with many international financial agencies, or intermediaries to master the inflow of remittance into the country from the expatriates working in foreign countries. A few such operators working in Bangladesh are: Western Union Money Transfer, Money Gram, XPress Money.

### **Call Center**

Call center is a streamlined customer interface and offers a range of banking services through its call center agents. Customers are now getting improved services at a reduced cost in an exciting manner. Available services at call center are:

#### **Account related services**

Balance inquiry, transaction inquiry, duplicate statement, cheque book request, ATM/Debit card hot listing, and loan outstanding etc.

### **Product Information**

Deposit accounts, Personal loan, Savings and current accounts, Debit card, Rates and tariff Inquiry, exchange rates, lending rates, deposit rates, tariff etc.

### **Other Services**

Complaints handling, account opening procedure, Bank Information, change request etc.

### 3.9 Status of Computerization and Electronic Banking System in Bangladesh

There are a total of 49 scheduled public and private banks in the country. Here there are four state owned commercial banks (Nationalized Commercial Banks- NCBs) have 3496 branches, five specialized banks (DFIs) have 1311 branches, 30 local private commercial banks (Private Commercial Banks-PCBs) have branches of the scheduled banks in the country. The banking system of our country, depending on computerization can be classified into three categories: (i.) Completely computerized (ii.) Partially computerized (iii) Not computerized. Standard Chartered Grindlays Bank Ltd., City Bank NA, American Express Bank, HSBC etc are completely computerized banks in our country. All privates and state owned banks are partially computerized and not computerized.

The overall computer density in the banking sector is 1.64. For foreign commercial banks (FCBs) the computer density is 45.34, where as for NCBs the ratio is only 0.41. The specialized bank scenario is almost same as the NCBs, 0.43. On the other hand, private commercial banks have comparatively higher ratio, 4.94. As a whole 81.81 percent bank does not have any local area network (LAN), 30 percent have WAN (Wide Area Network) but for some banks many branches are outside of WAN connectivity. At present, all of the foreign banks of our country are using online banking system, they are invested a lot for their automation banking services. For this reason, they are increasing market share every year. They are the pioneer of implementing electronic banking systems in Bangladesh, but now most of the private banks of our country are using electronic banking systems.

Recently a number of commercial banks of Bangladesh have become the member of Belgium based Society for Worldwide Interbank Financial Telecommunication (SWIFT). For international payment settlement 33 percent of banks are using now SWIFT. With the

activation of the SWIFT system banks enjoy instant, low-cost, speedy and reliable connectivity for L/C transmission, fund transfers, message communication and worldwide financial activities. Earlier only foreign banks of this country were availing this facility.

# 3.10 Basic Components of Electronic Banking

An electronic banking system requires the following four components—

- **♣** Banking system software
- Communication Network
- Delivery Channel
- **♣** Switching system

## 1. Banking system software:

By using computer software package, banks can deal with the transaction of cash deposit, withdrawals, bill payment, bill collection, salary and settlement of provident funds, making accounting reports and statements etc. it does not require any use of papers to prepare journals, ledgers, vouchers or notes.

### 2. Communication network:

It is an important issue in an online banking. In some cases dial-up telephone and in other cases radio link is used for communication network.

### 3. Delivery channel:

These channels are used in corporate and retail banking, as well as to the individual or family oriented banking. Modern banks and financial institutions are providing facilities like balance reporting, accounts keeping, domestic and international payments, trade financing, monitoring, netting, cash withdrawals and factoring and other sorts of services related to these by using banksys, uroclear, swift etc.

### 4. Switching system:

To sort the transactions data in due places, e-banking network and various communication tools in bank host computer requires the use of switching system. It helps to prepare various reports and monitor the implementation of those.

## 3.11 Types of Electronic Banking

Electronic banking system provides customer services by means of various techniques or products. Types of services offered are different for each single product. In the following table, the basic types of electronic banking products are presented—-

### **Automated Teller Machine (ATM)**

Among the electronic fund transfer services, ATM is the most widely used and popular. With this automated computing machine, clients can deposit or withdraw any time of 24 hours a day. With the help of this machine fund can be transferred from one account to another and loan can be repaid. This automated machine can be established at the bank's lobby, at the clients business avenues, apartment complex, busy commercial areas, shopping centers, factories etc. through ATM service, bank can render its retail services to the clients door. Thus clients can save their time and the transactions seem to be easy to them. On the other hand, banks earn their profit by providing services at lower cost.

### **Objectives of ATM**

### ATM has some objectives that make it popular:

- ➤ Reducing internal operational expenses and increasing profit by increasing the market share are the main objectives of establishing ATM program. As ATM is an automated system, so there is no need to engage any employee to provide deposit and withdrawal services. As a result, periodic cost cutting can be possible.
- > Create market in the domestic and foreign countries for their banks and to sustain in the competition.
- ➤ To provide highly efficient services in this modern age of connectedness.
- ➤ To ensure the computational accuracy of the bank.

### How does a customer operate ATM?

Banks supply plastic cards to their clients. Each card has its distinct number, client's name, and signature of the client with magnetic stripe. Each client has a PIN (Personal Identification Number). During transaction, client put the card into the card input/ reader. Then ATM instructs its client to input the PIN. PIN is to be input into the machine within a specified time limit (Usually 30 to 90 seconds). If the client fails to input in due time or the PIN is wrong, the machine will take the card inside of it and the card cannot be retrieved at that time. Then clients have to go physically to the bank and get their cards if the authority is satisfied with the cause of failure.

If the PIN is correct, the machine asks the client about the type of the service. If the clients want to withdraw cash, then it asks the amount. The amount needs to be input with the numerical keyboard. After typing the amount, client will press the "Enter key" and within few seconds receive the cash, along with the card and transaction receipt and the machine became prepared for the next transaction. Clients are required to change their transaction types before the enter key. Because once the key is pressed, there is no other alternative to change the transaction mode.

### **Components of ATM:**

An ATM mainly consists of two parts like input devices and output devices.

a) Input devices: the components of input devices of an ATM are as follows:

Card reader: The card reader captures the account information stored on the magnetic stripe on the back of an ATM/debit or credit card. The host processor uses this information to route the transaction to the cardholder's bank.

**Keypad:** The keypad lets the cardholder tell the bank what kind of transaction is required (cash withdrawal, Balance inquiry etc.) and for what amount. Also, the bank requires the cardholders Personal Identification Number (PIN) for verification. Federal law requires that the PIN block be sent to the host processor encrypted form.

### b) Output devices:

An ATM has following four output components:

**Speaker:** The speaker provides the cardholder with auditory feedback when a key is pressed.

**Display Screen:** The display screen prompts the cardholder through each step of the transaction process. Leased line machines commonly use a monochrome or color CRT (Cathode Ray Tube) display. Dial-up machines commonly use a monochrome or color LCD.

**Receipt printer:** The receipt printer provides the cardholder with a paper receipt of the transaction.

**Cash dispenser:** The heart of an ATM is the safe and cash-dispensing mechanism. The entire bottom portion of most small ATMs is a safe that contains the cash.

#### **Debit Card**

Debit card is one of the systems of electronic fund transfer. It is called cash card or asset card. Usually, in debit card, funds are directly debited to the clients deposit accounts. Debit cards can be explained in the following ways-

Debit card is one of type of special plastic card issued by the banks or financial institutions to the depositors, which hold magnetic coded number. The transactions can be operated as required on the basis of the recognition of the magnetic coded number by the machine. The holder of the debit card can easily operate Automated Terminal Based payment. Money can be withdrawn from deposit account and fund can be easily transferred in electronic way with this card.

### **Credit Card**

Credit card is a popular process in retail electronic banking. Generally, if the clients have creditworthiness or have enough money in the deposit account, then the bank provides this plastic cash to the clients. In spite of having debit balance in the deposit account, a client can use this card. Generally, in a credit card, the loan account of a client is debited to reimburse the transactions conducted through the credit card. This card is used for payment of product or service or for withdrawing cash from some specific instructions.

#### **Check Truncation**

Check truncation is a process of service where, financial institutions do not return the rejected and un-honored checks to clients. Financial institutions keep these checks with the monthly statements and provide rejected checks along with monthly statements to the clients.

Financial institutions keep rejected checks till 90 days. If the client finds any inconsistency or difference between the statement provided by the financial institutions and his/her own record, and then he/she can adjust the accounts by communicating with the institution within the "preservation period".

### **Home Banking**

Through developed electronic fund transfer system, banks can offer its financial services to the doors of customers. Banks at first launch telephone bill payments (TBP) process so that clients can enjoy banking while staying at home. TBP is a fund transfer service by which clients communicate with the financial institutions by phone and authorize them to collect their (clients') bills, because of which financial institutions debit their client's account and transfer the funds to the client directed payee account.

# Chapter: 4

## **Analysis of E-Banking Practices of Sonali Bank Limited**

## 4.1 Digitalization status of Sonali Bank Limited

#### **Branch Computerization:**

1215 inland branches are now computerized.

### **Foreign Remittance:**

Bank's own in-house software "Remittance Management System" (RMS+), having, among others, the feature of paying foreign remittance instantly over the counter is being implemented at all branches. This web based software provides digital services to the expatriates through its unique advantage of sending confirmation message to the mobile phone of the remitter/beneficiary.

#### ATM:

Sonali Bank Limited is a member of Q-Cash Consortium, National Payment Switch Bangladesh (NPSB) and VISA. Customers can enjoy round the clock cash withdrawal facility from 75 own ATM(s) and around 6500+ shared ATM booths across the country. Sonali Bank recently launched Credit Card.

### **Online and SMS Banking:**

At present 1215 branches of Sonali Banks are included in the Online Any Branch Banking (ABB) network. SMS Banking service is runnig in 1213+ branches. 1215 branches are now in automation network within 1213 branches at home. Total number of CBS running branch is 1213 and all CBS branches support sms banking The bank is seriously working on connecting all branches in the Real-time Online Banking network gradually. Branches having ABB facility are also rendering SMS banking services.

## 4.2 Retail Automated Clearing House (ACH) Service

The Automated Clearing House is the electronic network which transfers and clears funds between banking institutions on behalf of merchants and their customers.

ACH is integrated process of service by which payments of different financial institutions are cleared and exchanged in electronic way. ACH is a computer based integrated system and it is the distribution place of paperless transactions. Electronic payments are the substitutes of papers and are recorded in machine-readable from in magnetic tape and one account is debited and another is credited. The participants of ACH system are the members of Automated Clearing House Association. ACH exchanges electronic transactions within a specific geographical area.

Each transaction takes approximately 48 hours to clear, and we strongly suggest that merchants wait five days from the initial transaction date before shipping any goods. This

leaves two days to debit the consumer's account, two days to deposit the funds into the merchant's account, and one day for the bank to post the transaction.

#### What is ACH?

Funds transfer system governed by the Rules of the National Automated Clearing House Association, which provides for the inter-bank clearing of electronic entries for participating financial institutions.

### **Wholesale Electronic Banking**

Wholesale electronic banking is such banking systems where banking activities are performed through inter- bank networks.

Generally, the following activities are performed in wholesale banking –

### **Cash Management**

Recently banks and corporations are becoming conscious about cash management to ensure available funds in response to the increase in money market rate. Cash management means.

- 4.2.1 Raise the speeding up of collection of cheques and bills payable,
- 4.2.2Careful control of the cash disbursement,
- 4.2.3 Monitoring of cash flows,
- 4.2.4Investment of the idle money.
- 4.2.5The Cash Management Department ensures that funds in transit move safely and on time and maintains an optimum cash position. (The bursar staff processes student receivables, which will be discussed in greater detail in subsequent sections of this chapter.) The primary duties of the Cash Management Department include:
- 4.2.6Monitoring daily banking activity;
- 4.2.7 Managing Automated Clearing House (ACH) transactions and wire transfer activity;
- 4.2.8Reconciling credit card transactions;
- 4.2.9Managing relationships with banks, credit card companies and check guarantee services;
- 4.2.10 Processing positive pay files that contain a listing of all checks that have been presented to the bank for payment;
- 4.2.11 Maintaining unclaimed property files;
- 4.2.12 Verifying daily manual deposits;
- 4.2.13 Tracking vouchers and providing backup to Accounts Payable;
- 4.2.14 Processing vendor payment and student refund checks;
- 4.2.15 Processing manual credit card refunds;
- 4.2.16 Reviewing and approving mileage and travel reimbursement requests; and
- 4.2.17 Maintaining an inventory of system wide depository bags and deposit tickets.

#### WIRE TRANSFER

Wire transfer is one of the most commonly used methods for transferring money from one person to another. In order to make a wire transfer, a person needs to visit a bank or the cash office. Wire transfer can be made from one bank account to another. In order to make a wire transfer an individual needs to visit a bank and provide detailed order of making the wire transfer. Banks require IBAN and BIC codes for knowing exactly where they need to send

the money. Wife transfer is a process in which funds are transferred from sender to receiver quickly and in due time. This type of transfer would be done within or outside of the country.

Wire Transfer activities of electronic banking system include the following 4 stages

- 1) Payment ordering parties: The person here decides to transfer fund to the recipient account
- 2) Payment ordering mechanism: In this stage, the sender instructs his bank to transfer funds to the specific receiver's accounts with the help of wire transfer.
- (3) Payment processing and delivery: In this stage, bank transfers fund from one account to another through fed wire, Bank wire, Chips, and SWIFT.
- (4) Payment advising: After transferring funds, banks in this stage send messages to the recipient. Banks use the following 4 networks to send messages of fund transfer.
  - a. Fed wire (The Federal Reserve Communication system)
  - b. Bank wire
  - c. Chips (The Clearing House Interbrain Payment Service)
  - d. SWIFT (The Society for Worldwide Inter-bank Financial Tele Communication).

## **4.3 Corporate Clearing House**

By clearing house, financial institutions clear and exchange their electronic payments. At present, in developed countries more than half a million people are using ACH system in paying their salary. Moreover, others are using ACH to serve other purposes. For example, large insurance companies collect their insurance premiums by using the debit entry of depository transfer check. Cash concentration strategy through ACH is very popular and widely used service. Corporations are going for ACH service after considering Financial the facilities (cost reduction, receipt of funds within one day, etc.) of the collection of insurance premium and cash concentration strategy.

## **4.4 Other Types of Electronic Banking**

The terms 'PC banking', 'online banking', 'Internet banking', 'Telephone banking' or 'mobile banking' refer to a number of ways in which customers can access their banks without having to be physically present at the bank branch.

E-banking may be understood as term that covers all these ways of banking business electronically (Leow, Hock Bee 1999).

#### **Tele-banking**

Tele-banking service is provided by phone. To access an account it is required to dial a particular telephone number and there are several options of services. Options included-

- Checking account balance
- Funds transfer between current, savings and credit card accounts
- Bill payments
- Stock exchange transaction
- Receive statement via fax
- Loan payment information (<a href="http://www.csboak.com/telebank.htm">http://www.csboak.com/telebank.htm</a>)

### **PC Banking**

The increasing awareness of the importance of literacy of computer has resulted in increasing use of personal computers through the entire world. Furthermore, incredible plummet of cost of microprocessor has accelerated the use of computer. The term 'PC banking' is used for banking business transacted from a customer's PC. Using the PC banking or home banking now customers can use their personal computers at home or at their office to access their accounts for transactions by subscribing to and dialing into the banks' Intranet proprietary software system using password.

## **Types of PC Banking**

Basically, there are two types of PC banking.

The first type is online banking, in which bank transactions are conducted within closed networks. The customer needs specialized software provided by his bank. The second type is Internet banking, which German banks have been offering since the mid-nineties, although the only product they were offering at the time was information. Unlike closed networks, Internet banking permits the customer to conduct transactions from any terminal with access to the Internet.

## **Internet Banking**

Internet banking would free both bankers and customers of the need for proprietary software to carry on with their online banking transactions. Customer behavior is changing rapidly. Now the financial service is characterized by individuality, independence of time and place and flexibility.

These facts represent huge challenges for the financial service providers. So the Internet is now considered to be a 'strategic weapon' for them to satisfy the ever-changing customers' demand and innovative business needs.

Adequate legal framework and maximum security are the two essential factors for Internet banking. The comprehensive security infrastructure includes layers of security from the network to the browser, including sophisticated encryption that protects customers' from intrusion when they access the bank over the public network. Actually mobile banking is a variation of Internet banking. Mobile banking is a good example of how the lines between the various forms of e-banking are becoming gradually blurred. Due to the new transmission technologies such as WAP (Wireless Application Protocol), portable terminal like mobile phones, personal digital assistant (PDA) or small hand-held PCs are providing bank customers with access to the Internet and thus paving the way to Internet banking (Islam, Monirul, March 06, 2005).

It assures immense flexibility and makes the financial services independent of time and place. However, the use of mobile banking is still in a nascent state. The slower transmission speed of the WAP standard and the limited amount of information available are just two of the factors inhibiting the use of those terminals.

#### 4.5 Advantage of E-Banking

- 4.5.1Swift transaction
- 4.5.2Digital service
- 4.5.3 More security rather than traditional banking service
- 4.5.4Less time consuming for the transactions
- 4.5.5Twenty four hours service
- 4.5.6Less risky to carry cash.

## 4.6 Risks in Electronic Banking

With the burgeoning of transactional banking websites, regulatory agencies are increasingly worried about the risks associated with e banking. The Basel Committee report on banking supervision (1998) states that the agency "recognizes that along with the benefits, electronic banking and electronic money activities carry risks for banking organizations, and these risks must be balanced against the benefits". Following is a review of some of the risks that are inherent in e banking.

**Operational Security Risk:** External and internal security issues pose perhaps the greatest threat to the growth of e banking. Banks also face the threat of viruses that can be placed in the bank network, or a scenario where a hacker obtains confidential information and then cyber-exhorts the bank with an offer to sell the information back to the bank.

**Legal Risk:** legal risks can arise due to violations of laws, rules, and regulations. In the world of electronic commerce, where technology and business arc in a state of constant flux, there is considerable ambiguity and uncertainty regarding legal rights. Banks involved in electronic payments, such as stored value cards, must determine whether such transactions impact reserve Requirements. Yet other risks of cross-border regulatory compliance arise as the Internet blurs national boundaries for commerce and payments.

**Reputation Risk:** Any problems with either security or legal issues can significantly impact the reputation of the bank. This is especially important in the banking industry where public confidence is long touted as paramount. Reputation risk can range from problems of customer dissatisfaction with online services to security breaches and fraud. For instance, identity misrepresentation, or "spoofing", where bank customer's arc directed toward a false site, can lead to an irreparable loss of trust between the customers and the bank.

**Traditional banking risks:** Finally, the traditional banking risks such as interest rate risk, credit risk, or liquidity risk can be exacerbated for a bank that has a significant online lending and/or transactions presence. In May 2001, the Basel Committee has identified 14 risk management principles for electronic banking to help banking institutions expand their existing risk oversight policies and processes to cover their e-banking activities, (Basel Committee report on banking supervision, 2001, publications no. 82).

## **4.7 Frequency**

Bangladesh is deploying diversified planning in its each sector especially in financial institutions providing financial services to the customer like banks. The financial services provided by banks are crucial for the economic growth, employment and also in attraction of foreign currency to the national economy. The country owned a well-developed domestic banking system. The following is frequency distribution of banking sector as per description

## **4.7.1** Frequency Distribution

Table – I

Banks	Frequency		
Government	9		
Privatized	4		
Private	23		
Foreign	7		
Development Financial Institutions	7		
Non-members	4		
SME	2		
Total	56		

The research includes 9 public sectors, 4 privatized, 23 private, 7 foreign, 7 development institutions, 4 non-members bank, 2 small and medium enterprises having the following ranks of e-channels.

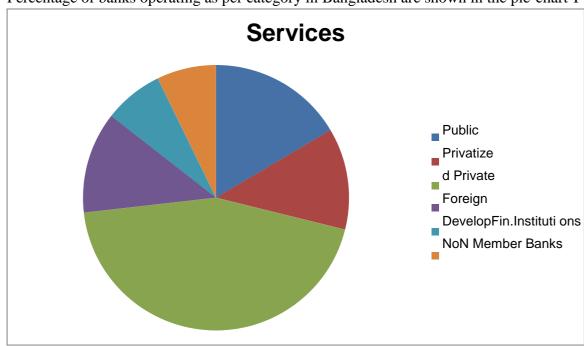
## 4.7.2 E-Transaction Level offered by Banks

Table – II

Factors	Utilization Level		
(i) ATMs	1		
(ii) Credit Cards	2		
(iii) Internet-Banking	3		
(iv) Mobile-Banking	4		

Source: Survey of Banks operating in Bangladesh

### **4.7.3** Pie Chart - I



Percentage of banks operating as per category in Bangladesh are shown in the pie-chart-I

Pie-Chart - I

### 4.7.4 Results of e-Channels in Banking

Table – III

Services=>	ATM	Visa Cards	Web sites	M-Banking	E- Banking
Bank					
Public	56%	0%	88.80%	0%	60%
Privatized	100%	100%	100%	25%	100%
Private	65%	35%	95%	25%	70%
Non Member	25%	0%	75%	0%	75%
Bank					
SME	0%	0%	100%	0%	100%

Results shows privatized banks are performing excellent in e-banking and utilizing the information technology in the right way.

Therefore, they are ready to participate in digital competition. In leading technological excellence, "Brac Bank initiated Bikash Mobile Banking". It provides services using information and communication technology to facilitate its customer based upon any where any time methodology.

"Sonali Bank Limited offers ATM, Bill Payments, Virtual Banking and Mobil Banking. It offers convenient options of making bill payments to different organization like IBBL, DBBL. So, its e-banking services valuable time its pay bills facility.

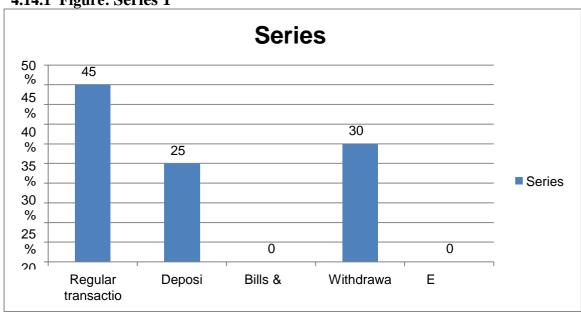
## 4.8 Level of satisfaction

- 4.8.1 E- Banking services are satisfactory to you?
- 4.8.2 By analyzing the above questions, I find the following things:

## **Category A:**

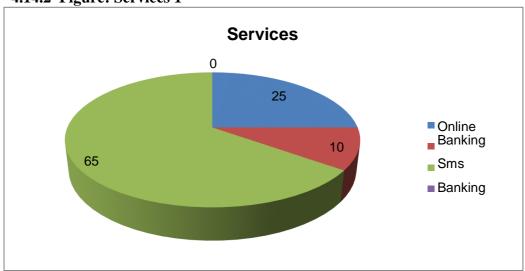
1. 45% respondents said they use E-banking services for regular transaction. 25% said they use service for the purpose of deposit and rest 30% use e banking services for the purpose of withdrawal

4.14.1 Figure: Series 1



2. 65% respondents' marked ATM service is the most users friendly to them. 25% thinks online banking is the most used friendly and 10% filled sms banking.

4.14.2 Figure: Services 1

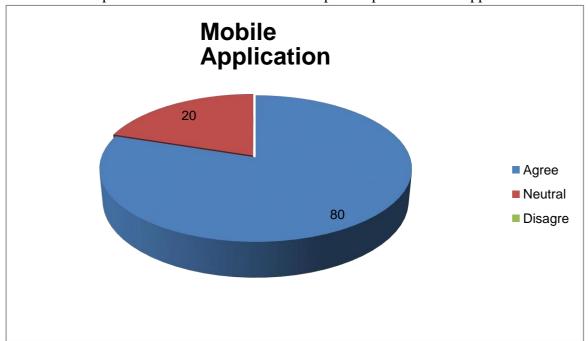


3. 40% use e-banking services 1-3 times per week. 25% respondents use 4-6 times a week. 25% use every day and rest 10% use 7-9 times per week.

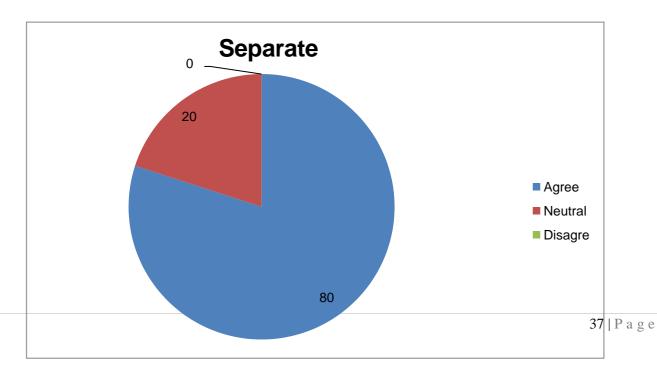
# 4.14.3 Figure: Mobile Application

# **Category B:**

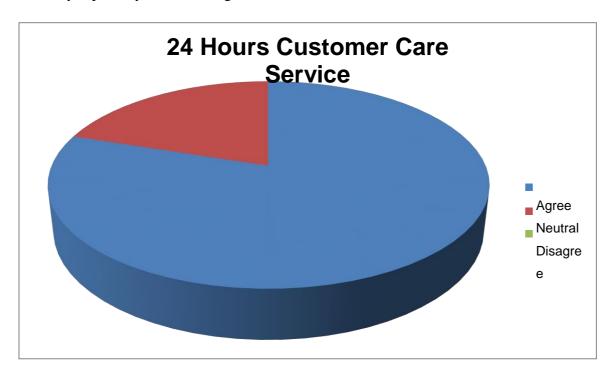
4.15 80% respondents want bank should develop smartphone mobile application.



4.16 80% respondents want bank should keep separate computers for online banking users.

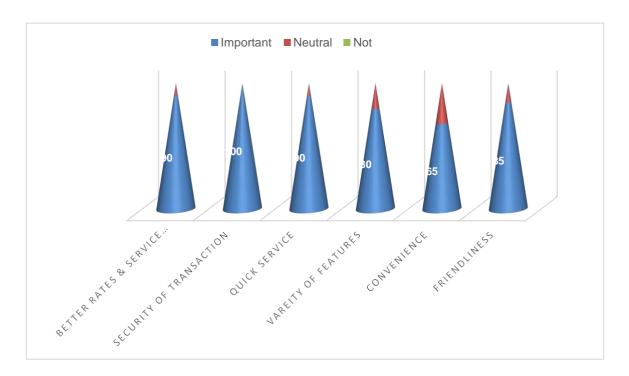


4.17 80% user thinks that bank should open a 24 hours instant customer care support facility especially for e banking user.



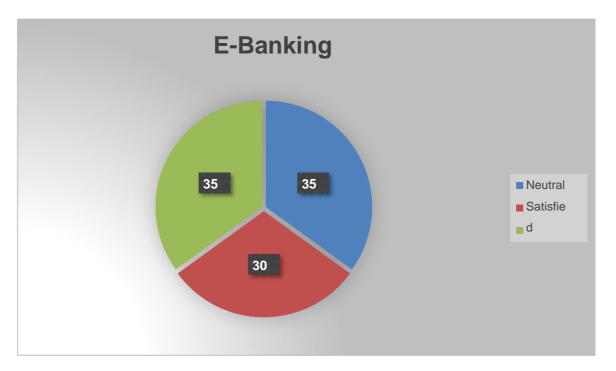
# **Category C:**

- 4.17.1 90% wants better rates and low service charges for using e banking services. 10% respondents find no problem with existing rates and charges.
- 4.17.2 There is no doubt that all the respondents marked that they want perfect security.
  - 4.17.3 90% respondents want to get services very quickly.
  - 4.17.4 80% people want variety of features.
- 4.17.565% wants convenience of services. 30% respondent s are neutral at this question.
  - 4.17.6 85% people want user friendly services.



# **Category D:**

30% people are satisfied with existing e-banking services. 35% respondents are neutral at this question. But the rest 35% are dissatisfied with the services provided by Sonali Bank Corporate branch.



All customers have been positively affected by the new practice of online banking. Most of the traditional tasks are now fully automated, providing greater comfort and ease. All the services available from local banks can be located on one website. For instance, you can easily access your account on the web. Besides simply accessing the account, you can also request bank statements online.

# Chapter: 5

## Findings, Recommendation and Conclusion

## **5.1 Findings:**

## Sonali Bank Limited faces few problems with ATM

- 1. Transaction Limit
- 2. Booths are Not Available in all places
- 3. Booths are in open place
- 4. Not available to restaurants and shopping center
- 5. ATM booths are not always UP
- 6. No Bangla Interface for mass people
- 7. No voice commanding option for blind people.
- 8. ATM's fall short of money.

## **Problems relating to Branch Computerization**

- ♣ Server fails for long time
- ♣ 2. New software named CBS (core Banking Software) is now running for few months. So if someone needs the statement or any data related to transaction more than 4 moths then the previous software named Baxibank is needed.
- **♣** Electronic token system is not in used.
- Computers are not up to date.

# **Problems relating to SMS and Online Banking**

- **♣** SMS banking is not or rarely used.
- **♣** SMS service is not available
- **♣** Online Banking may have the risk of password fraudulent.
- Online security is not as much powerful as the size of bank

# Problems relating to Q cash network

- 1. This service is not available
- 2. Only designed braches deal with Q cash cards.
- 3. Most of Customers of SBL don't know about this service because of poor publicity.

#### 5.2 Recommendation:

- ♣ Bank should establish more ATM booths
- **♣** ATM booths should have enough money
- ♣ Bangla interface should be introduced as soon as possible.
- ♣ Branch office should not be connected with local broadband service. In this case I suggest that the branches should use BTCL internet service.
- ♣ SMS banking needs more development. Revival of this service is the demand of time.
- ♣ Head office should think about to develop smartphone mobile application for providing better services.
- **♣** E-banking services should try to mobilize more deposit schemes through better marketing and innovative measures.
- **♣** E-banking system should be more flexible.
- ♣ All the statement relating to transaction should provide in the CBS software.
- ♣ E-banking service should be according to the customer expectation and satisfaction.
- ♣ E-banking service should be resolve the entire problems very quickly that the customer face in online transaction.
- ♣ Marketing and sales force should be developed to attract customer.

### 5.3 Conclusion

The study clearly indicates that those who use E-banking features of Sonali Bank are not very satisfied with the service. If the bank plans to expand the customer base of E-banking they should focus more on speed, user friendliness, and safety and convenience, quick response factors of E-banking. Proper web-hosting is required for this reason. Customers should also be made aware of unethical practices like sniffing, spoofing, phishing, pharming and other malicious software which can be used by hackers. Attention should also be given in the encryption of the information which is exchanged between the users and the bank. So the study is very beneficial for both Sonali bank and Bangladesh to get insights about E-banking relations with customer satisfaction

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# **Appendix**

# **Appendix-1: Questionary**

Do you have a bank account in SBL?

- Yes
- No

What gender do you identify as?

- Male
- Female
- Other

How long have you been with SBL?

- Less than 1 year
- 1 to 3 years
- More than 3 years

Do you believe in the technological excellence of SBL?

- Yes
- No

What is the average waiting time in the bank?

- Less than 5 minutes
- 5 to 15 minutes
- More than 15 minutes

Do you have SMS banking or a Debit/Credit card attached to your account?

- Yes
- No

Do you believe that SBL can satisfy your future needs?

- Yes
- No

How would you rate the ATM services provided by SBL compared to other banks?

- Excellent
- Good
- Fair
- Poor
- Very Poor

How would you rate the overall banking experience with SBL?

- Excellent
- Good
- Fair
- Poor
- Very Poor

How would you rate the overall quality of your relationship with the bank?

- Excellent
- Good
- Fair
- Poor
- Very Poor

How would you rate the ease of doing regular banking with SBL?

- Very Easy
- Fair
- Moderate
- Complicated
- Very Complicated

How would you rate the customer service of SBL?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

How would you rate the bank security of SBL?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

How would you rate the interaction with employees of SBL?

- Very Dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very Satisfied

Please select at least one aspect of customer service you wish SBL would improve?

- Service
- Performance
- Security
- Cost
- Personalization ad Customization