

# INTERNSHIP REPORT



## Measuring Satisfaction Level of ATM Booth User in Bangladesh

This Report is submitted to the Department of Marketing, Faculty of Post Graduate Studies, Hajee Mohammad Danesh Science and Technology University, Dinajpur for the Fulfillment of Degree of Master of Business Administration (MBA).

**(MBA Program-2012)**

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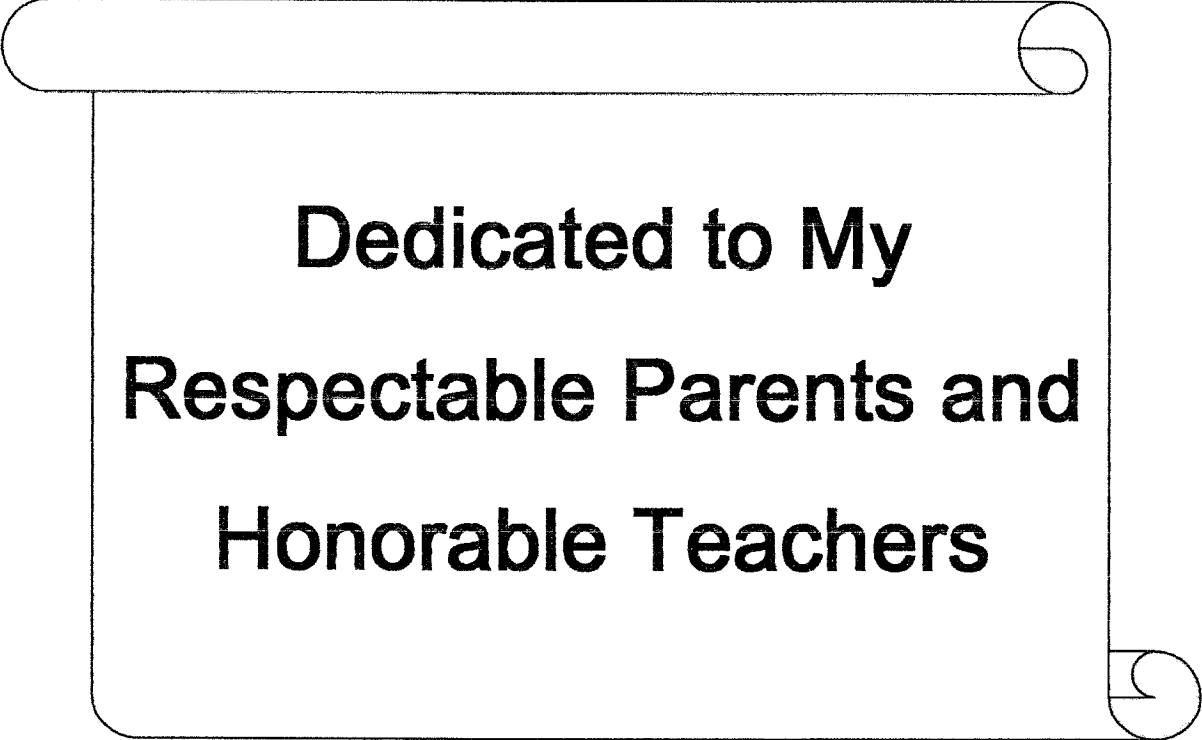
**HAJEE MOHAMMAD DANESH SCIENCE AND TECHNOLOGY UNIVERSITY**

**DINAJPUR, BANGLADESH**

*February, 2012*

**Title of the Report:**

**Measuring Satisfaction Level of ATM Booth User  
in Bangladesh**



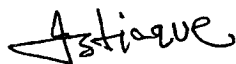
**Dedicated to My  
Respectable Parents and  
Honorable Teachers**

## ***Students Declaration***

*The discussing report is the terminal formalities of the internship program for the degree of Master of Business Administration (MBA) faculty of post graduate Studies at Hajee Mohammad Danesh Science and Technology University, Dinajpur which is compact professional progress rather than specialized. This report has prepared as per academic requirement after the successfully completion of 6 months internship.*

*It is my pleasure and great privilege to submit my report titled "Measuring satisfaction level of ATM booth user in Bangladesh". As the presenter of this report, I have tried my level best to get together as much information as possible to enrich the report. I believe that it was a fascinating experience and it has enriched both my knowledge and experience.*

*However, after all this, as a human being, I believe everyone is not beyond limitation. There might have problems regarding lack and limitation in some aspects and also some minor mistake such as syntax error or typing mistake or lack of information. Please pardon me for that mistake and clarify these of my further information on those matters.*



---

***Istiaque Ahmed***

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## Supervisor's Declaration

I hereby declare that the concerned report entitled "Measuring satisfaction level of ATM booth user in Bangladesh" is an original work made by Istiaque Ahmed, Student ID. 1005130, MBA 3<sup>rd</sup> batch, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200, completed his internship under my supervision and submitted for the partial fulfillment of the requirement of the degree of Master of Business Administration (MBA) at Hajee Mohammad Danesh Science & Technology University, Dinajpur.



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*Md. Jamal uddin*

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## Co-supervisor's Declaration

I hereby declare that *Istiaque Ahmed*, Student no. 1005130, MBA 3<sup>rd</sup> batch have submitted his internship report entitled "Measuring satisfaction level of ATM booth user in Bangladesh" after completing his internship program under my supervision. This report has been submitted in partial fulfillment of the requirement for the degree of Master of Business Administration (MBA) at Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200.



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*Abul kalam*

*Lecturer & Co-supervisor*

*Department of Marketing*

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## *Acknowledgement*

*For the very first of all I would like to express my gratefulness and harmony to the ALLMIGHTY ALLAH the supreme authority of the Universe, without Whom we would be nothing. Next I would like to express my kindness to my Beloved Parent whose continuous inspiration enrages me to make a right move in my life.*

*I am grateful towards some respected persons for their advice, suggestions, direction and cooperation which have enabled me to have an experienced in the dynamic environment.*

*First of all I would like to thank my honorable supervisor Md. Jamal uddin Assistant Professor Department of Marketing, without his help, suggestion and cooperation the total report will be valueless.*

*I would like to thank from the deep of my heart to those people who are related with making of this report and make it a success.*

*At last but not the least, the Hajee Mohammad Danesh Science and Technology University, Dinajpur for giving me an opportunity to complete my MBA degree and give me a scope to gather practical experience and enrich my knowledge.*

*May Allah bless all of them.*

---

*Istiaque Ahmed*

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## CHAPTER ONE

# Introduction

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## Chapter One: Introduction

### 1.1 Introduction:

There has been a great deal of debate over the history of ATM, including who the ATMs inventories. According to *Invention & Technology Magazine* (2000)<sup>1</sup> in the late 1930's, Luther George Simjian started building an earlier and not-so-successful version of an ATM, but he register related patents. Starting in 1939, Simjian registered 20 patents related to the device and persuaded what is now Citicorp to give it a trial.



But the patent was unsuccessful because after six months, the bank reported that there was little demand. Afterwards New York's First National City Bank (now Citibank) installed a Bank graph (ATM predecessor) in several branch lobbies in 1960<sup>2</sup>. The idea was for customers to pay utility bills and receipts without having to see a teller. A Barclays Bank branch near London takes the pride in installing first cash dispenser made by De La Rue Instruments in 1967. It uses paper vouchers from tellers. The machine is called the De La Rue Automated Cash System, or DACS. This was produced by NCR in Dundee. This instance of the invention is credited to John Shepherd-Barron, although George Simjian registered patents in New York, USA in the 1930s and Don Wetzel and two other engineers from Docutel registered a patent on June 4, 1973. Afterwards Barclays and a few other banks introduce a machine that encodes cash on plastic cards purchased from a teller in 1968. The problem is that the machine always eats the cards, and customers have to buy new cards if they want to make more transactions. First use of ATM magistrate cards started in 1969<sup>3</sup>. Docutel installs its Docuteller Machine at New York's Chemical Bank. the installation marks the first use of magnetically encoded plastic. Other manufacturers get into the game, but Docutel is the first to apply for a patent. Docutel is later credited by Smithsonian's National Museum for American History as being the ATM's inventor. Doland C. Wetzel is given the credit for developing the Docutel machine. Docutel introduces its Total Teller, the first true fully functioning bank ATM in 1971. After 1971, Proliferation begins to make the product more customers oriented. By 1973, 2000 ATMs- mostly form Docutel are

operating in the United States. They sell for about \$30000 each. Diebold begins work on the development of the TABS 600 with plans for an off-line prototype. Diebold's first TABS 500 machine, an off-line version, is installed at a bank in Atlanta in 1974. Diebold develops the TABS 550, an on-line and off-line version. The flexibility of the machine makes it unique and more marketable to banks. The TABS 600 also is developed.

The first IBM-compatible Diebold machine is installed at a bank in Indianapolis in 1978. Gradually with the popularity of ATM services this sector has developed dramatically (<http://inventors.about> and [www.atmmarketplace.com](http://www.atmmarketplace.com)). Although the 1st Cash Dispenser machine in Bangladesh was installed by Agrani Bank at Press-club branch but the modern use of ATM started in Bangladesh by Standard Chartered Bank in the early 90's<sup>4</sup>. HSBC installed ATMs in 1997

The changing business environment offers challenges and opportunities to the organizations. The changing customers' perception of quality poses unique challenge. Excellence in quality has become an imperative for organizational sustainability. The developments of technologies have enabled organizations to provide superior services for customers' satisfaction. The number of bank customers preferring to use self-service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are their technology-based service options to remain competitive. The ATM is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests, and other financial enquiries. Researchers have stated that users' satisfaction is an essential determinant of success of the technology-based delivery channels.

**ATM** means neither "avoids traveling with money" nor "any time money," but certainly implies both. Slim ATM cards are fast replacing confounding withdrawal forms as a convenient way of getting your money from banks. In a way, they are rewriting the rules of financial transaction. A smart person no longer needs to carry a wallet-full of paper money on his person. All he needs to do is fish out an ATM (automated teller machine) card, insert it in the slot, punch in a few details and go home with hard cash.

**Automated teller machines (ATMs)** were the first well-known machines to provide electronic access to customers. With advent of Automatic Teller Machines (ATM), banks are able to serve customers outside the banking hall. ATM is designed to perform the most important function of bank. It is operated by plastic card with its special features. The plastic card is replacing cheque, personal attendance of the customer, banking hour's restrictions and paper based verification. ATMs have made hard cash just seconds away all throughout the day at every corner of the globe. ATMs allow you to do a number of banking functions – such as withdrawing cash from one's account, making balance inquiries and transferring money from one account to another – using a plastic, magnetic-strip card and personal identification number issued by the financial institution.

The Present study is helpful to measure the satisfaction level of ATM booth user in Bangladesh. It also measure the various problem faced by ATM booth user and provide some important suggestion to improve the quality of ATM service.

## **1.2 Importance of the study:**

Since practical orientation is an integral part of the MBA degree requirement, I was deputed by the Department of Marketing, Hajee Mohammad Danesh Science And Technology University- Bangladesh to measure the satisfaction level of ATM booth user in bangladesh.

Use of ATM has become extremely popular among customers as convenient mode of transactions. The technological innovation has transformed the banking business. Banks are aggressively adopting this mode. The advantages of using ATM have given new impetus in dimensions of service quality and banks are offering new choices to customers.

The findings of the study will provide information to use in analyzing the current ATM situation . As the use of ATM services is increasing day-by-day, on the part of the bank, it is important to have an idea about what the ATM users are thinking about various features of ATM, what are their problem areas, what are their recommendations, how do they measure the service of various banks etc? The bank's marketing department also needs to have idea about the results of such types of study to determine appropriate marketing strategy. Thus the findings of the study will be very useful to them and it will also help the ATM section to identify their positive and negative features and the customer recommendation. The bank management can take actions on the basis of customer recommendations to improve the services.

### **1.3 Objectives of the Study:**

Commercial bank is a growing sector now days. In the process of conducting its own activities to achieve its own goals, i.e. making profit, a commercial bank provides various ancillary facilities. Automated Teller Machine (ATM) is such an ancillary facility. ATM is a part of the electronic financial transactions systems. In Bangladesh, different banks are now offering ATM cards to their valued customers. Different studies have been conducted to have an idea about customer satisfaction about various banking products. But as day-by-day the use of ATM is increasing, it is important to make a study to gain insight about the level of customer satisfaction with respect to various aspects of ATM card and to identify the problem areas and proposed recommendation leading to improvement. The objectives of the study are as follows:-

- To measure the satisfaction level of ATM booth user in Bangladesh.
- To analyze the availability of ATM booth in consumer perception.
- To identify the problem faced by ATM booth user in Bangladesh.
- Provide some suggestion to improve the service of ATM.

### **1.4 Methodology of the study:**

Methodology is an indispensable and integrated part of any research. Careful consideration by a researcher is needed before conducting a study. In this section include the detailed description of methods and procedures of data collection. The secondary data have been collected mainly from various website, monthly bulletins, newspaper and other literature available in the field. To know the problems of ATM structured questionnaires have been used to collect the data from customers using ATM services. To analyze the data, various statistical techniques such as average, std. deviation and normal distribution have been used. I have presented findings through using different table and charts which are presented sequentially. Analysis has been made on the basis of the objectives mentioned before in the context of “**measuring satisfaction level of ATM booth user in Bangladesh.**”

#### **Sources of Data collection:**

Both primary and secondary data are collected to full fill the research objectives. This report solely deals with satisfaction of ATM booth user in Bangladesh.

### **Primary data sources:**

The primary data are those which are collected for the first time and that are original in nature. 150 respondents are selected to collect primary data. To collect primary data a structured questionnaire was designed in the light of objectives of the study. Face to face conversation with the ATM card user was interviewed to get answers of the questionnaires.

### **Secondary data sources:**

The secondary data are those which have already been collected by someone else and which have already been passed through the statistical process. The necessary qualitative and quantitative information have been collected from various sources. Secondary data were collected from---Previous research work, Available books, periodical publications, Journals, Official websites etc.

### **Process of data collection:**

At first I have made a questionnaire as per the direction of my supervisor about measuring satisfaction level of ATM booth user in Bangladesh. The interviews performed in a conversational manner and the respondents will answer in their own words. I have visited Dinajpur, Rangpur and Nilphamary district to collect data from 150 respondents and almost all the respondents respond smoothly.

### **Analysis of Data:**

A five point likert scale (5 = highly satisfied, 4 = satisfied, 3 = neither satisfied nor dissatisfied, 2 = dissatisfied and 1 = highly dissatisfied) has been used. For analysis of mean, standard deviation, percentage SPSS 11.5 and Excel software has been used. To entry data, coding option has been used at the initial stage. Both parametric and non-parametric statistical tools were used to derive a meaningful conclusion from the empirical data. In addition, basic statistical techniques of different measures of central tendency have been used in analyzing the data.

## **1.5 Limitations of the Study:**

In undertaking the study a number of problems were faced. Thus the study has several limitations. The limitations are:

- (i) The survey conducted for the study is one type of exploratory research. So it does not provide conclusive evidence. Subsequent research will be required to provide conclusive evidence.
- (ii) In this study because of acute time shortage and organizational restriction, non-probability-sampling technique (convenience sampling) has been used. So it is inappropriate to project the results of the survey beyond the specific sample.
- (iii) In this study detailed classification of respondents could not be done. Each respondent might have been classified on the basis of their “Age”, “Educational Background”; “Experience”; “Nature of profession”; “Types of Business”; “Sex”; “Status”; etc.
- (iv) The budget was a constraint as a result of which the sample was limited to 150.



## **Chapter Two:**

### **Overview of the Study**

#### **2.1 Credit Card Concept**

Today banks have become a part and parcel of our life. There was a time dweller of the city alone could enjoy their servicing. Now banks offer access for common people. Since the banking activities were started in different periods in different countries. There was no unanimous view regarding the origin of the word "Bank". The word Bank is said to have derived from the French word " Banco " or " Bancus " or " Banc " or "Banque" which means a bench. In fact, the early Jews in Lombardy transacted their banking business by sitting on benches. Another common- held view is that the word "bank" might be originated from the German word "Back" which means a joint stock fund.

The 'Credit card', though a new phenomenon in the business and transaction arena which had already won the hearts of millions across the globe, has set its foot in this part of the world with its magical power and becoming a way of life here by offering its handy feature and usefulness. In the advent of Information Technology and globalization, now shoppers need not worry about money, all they need is willingness and a credit card to buy anything they want at any places across the 'Global Village'. Worldwide access, acceptability and popularity as well as credit cards have risen to such an extent that it is now posing a threat to the theory of old 'hard-cash' possession of currencies amid growing sense of insecurity worldwide. The forward March of 'plastic money', the other name of the credit card, is so rapid that the whole concept of the monetary system needs immediate review as it has put a question mark in the very existence of paper money.

#### **2.2 A brief history of Credit Card**

The card facility was first introduced in the United States in the beginning of the 20th century. Western Union, a US money transfer company, started issuing an embossed metal plate to its preferred customers in 1914. The cardholder had to pay an annual subscription to join the club. This was the beginning of the charge card.

In the 1920s, a shopper's plate - a "buy now, pay later" system - was introduced in the USA. It could only be used in the shops which issued it. In 1950, Diners Club and American Express launched their charge cards in the USA, the first "plastic money"<sup>6</sup>. In 1951, Diners Club issued

the first credit card to 200 customers who could use it at 27 restaurants in New York. However, it was only until the establishment of standards for the magnetic strip in 1970 that the credit card became part of the information age. 1958 American Express Bank, like Dinner Club, started card on travel and entertainment. By 1959 the system evolved in great magnitude. A cardholder was allowed to pay off the full amount at the end of the month or to spread payment to suit his or her requirements. The customer's monthly payment included a finance charge on the unpaid balance. In 1960 Bank of America introduced its own card, the Bank America card and offered a license to other banks in 1966 that brought this system into the world arena<sup>7</sup>. A good number of banks across the world bought the license and marketed credit cards.

On the other hand, in 1967 four California banks changed their name from the California Bankcard Association to Western State Bankcard Association (WSBA). WSBA opened its license to other financial institutions. Its bankcard product was known as Master Charge. Numerous financial institutions became Master Charge members to compete with Bank America card. In 1977 Bank America card was renamed as Visa USA/Visa International and in 1979 master Charge changed its name to Master Card maintaining the lofty standard to meet up the customers' expanded needs.

Let's start at the beginning. A credit card is a thin plastic card, usually 3-1/8 inches by 2-1/8 inches in size, that contains identification information such as a signature or picture, and authorizes the person named on it to charge purchases or services to his account—charges for which he will be billed periodically. Today, the information on the card is read by automated teller machines (ATMs), store readers, and bank Internet computers.

### **2.3 What is Credit card?**

Credit card is a plastic card bearing an account number assigned to a card holder with a credit limit that can be used to purchase goods and services and to obtain cash disbursements on credit, for which a card holder is subsequently billed by an issuer for repayment of credit extended at once or on an installment basis (Minimum amount).

Physically, Credit card is a layered piece of hard plastic with holograms and security features. It also carries a strip of magnetic tape on the back, which is loaded with electronic data, including the cardholder details. The strip is read electronically by specialized machines called Point of Sale (POS) Terminals at merchants or Automatic Teller Machines (ATM) in bank premises or elsewhere. It is developed on the technology of microchips and cryptography, which have bred a new generation of the payment system. It is only today that the revolution in information

technology has fully hit the area of retail payments. The card is rectangular, looking rather like the familiar phone card. Its distinguishing feature is that it acts as cash, may be a large account being only a small piece of documented plastic. This is why it is popularly called 'Plastic Money'.

## **2.4 Why it's important?**

A credit card is a great financial tool. It can be more convenient to use and carry than cash, and they offer valuable consumer protections. Paper money and coin are risky and burdensome to carrying. One can avoid the toll of finger-counting changes in this system. Dollars, Pounds or Taka can be plundered, lost or stolen. However, there is no such fear for card. The cardholder is given a code number called PIN (Personal Identification Number) without which the card cannot be used at sales or services points where the PIN is required. Only the owner of the card will be entitled to use it. In case the card is stolen or lost the clients' bank will issue a fresh card.

## **2.5 Criteria to be a Credit cardholder**

A person has to fulfill some criteria to be a cardholder. Every bank has its own array of criteria by which the qualification of an applicant is assessed. The criteria may range over such factors as income range, social status, place of living, education, designation, etc. It's quite natural that if the selection criteria for members are more flexible than their clients would be more. On the other hand, if the selection criterion is more conditional and harsher than its operation would be limited.

## **2.6 Criteria for approving Credit cards**

Every extension of credit carries some level of risk. There is no absolute guarantee that the cardholder will handle relationship according to the terms and condition of the credit agreement which he signed at the time of Card issue. Sometimes they lose their job, spend more than they make, or borrow more than they can repay. Before approve any type credit limit, the bank Credit department must attempt to estimate credit risk. Banks use two basic methods for determining creditworthiness-or assessing the bank's risk level. These are as follows:

(I) Judgmental System or Judgmental Method

(ii) Matrix System or Credit Scoring Method

### **General Eligibility:**

- A. **Profession:** Private service in banks, insurance, any other recognized financial institutions, multinationals, big corporate houses, pharmaceutical companies, large trading houses, IT companies, Travel Agencies, Government service, Service in autonomous bodies, corporation, etc., self employed, doctors, engineers, teachers, qualified accountants and lawyers, etc., Others acceptable to the bank.
- B. **Businessman:** Known source of income acceptable to the bank/ Trade license.
- C. **Others:** Acceptable to the bank (with known/ established identity).
- D. **Age:** Selected by bank rule.
- E. **Tin:** Taxpayers Identification Number.
- F. **Salary:** Selected by bank rule.
- G. **Education-** Minimum graduation/ or any other qualification acceptable to the bank.

### **2.7 Criteria for not approving Credit cards**

- Students who do not have regular jobs.
- Borrowers who have classified loans.
- Minors, Lunatics, Bankrupts, Defaulter and the insolvent are not eligible for become cardholder.

### **2.8 Objectives of the Credit Cards**

Bank has started the credit card services due to expand the retail banking service of the bank. Which is mainly the consumer based personal banking service. Therefore, they have set certain objectives like–

- Generate Revenue
- Create Brand Image
- Increase line of credit
- Reduce the risk
- Increase security
- Provide status

## **2.9 Credit card types**

There are basically three types of credit cards:

- **Bank Cards**, issued by banks (for example, Visa, Master card and Discover Card)
- **Travel and Entertainment (T&E) cards**, such as American Express and Diners Club.

**House cards** that are good only in one chain of stores (sears in the biggest one of these, followed by the oil companies, phone companies and local department stores, T&E cards and national house cards have the same terms and conditions wherever you apply.

## **2.10 Credit card Issuance Criteria**

The card is always issued after a careful evaluation of the potential customers' credit worthiness and submission of documentation as detailed below.

### **Income Criteria**

People who have a minimum gross income of taka (amount selected by bank rule) per month are eligible for credit card respectfully. The sanction of these cards will be assessed and determined by the credit card department.

### **Employment Status**

The prospective cardholders are requested to have (months selected by bank rule) of continuous employment with the current organization. Furthermore, she/he must have at least a combined work experience of (year selected by bank rule).

### **Credit worthiness**

The Bank Credit Card department will evaluate a prospective applicant's eligibility and credit worthiness considering of his/her income, personal and employment details, debt/burden ratio, accuracy of financial and personal information provided and the individual's moral and financial ability to repay the dues.

Once the marketing officer receives all documents stated in the checklist, the marketing officer will forward the application to the card credit unit for credit appraisal of the applicant.

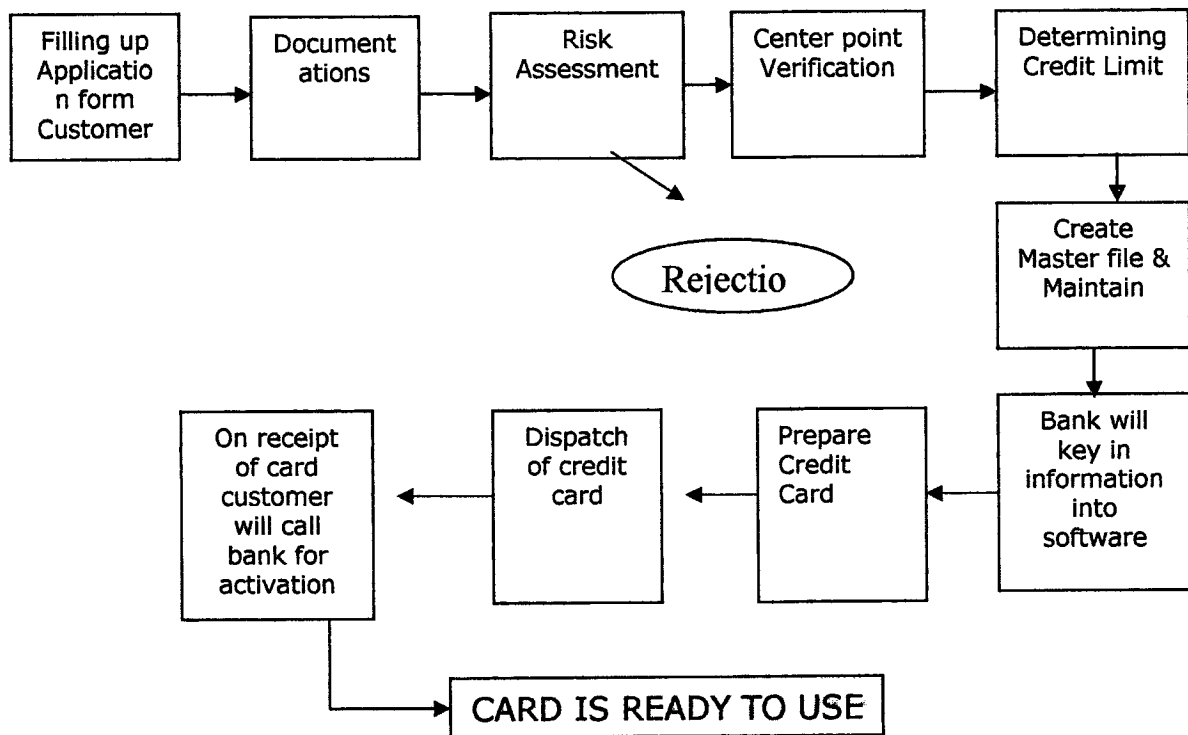
### **Verification**

Once the applications are passed in the initial screening by the officer, credit department, the same will be sent for verification. A comprehensive verification by the visit to applicant's

office/residence and check back with an employer will be conducted to ensure factual correctness of information provided by the applicant, e.g. applicant's employment details, income, address, etc. Verification may be waived, exceptionally, where the Bank knows an applicant and an Officer of the Bank can certify the correctness of the details. Waiving of verification will be considered only when the concerned Branch Manager recommends the same.

## 2.11 Flow Chart Showing Credit Card Issuing Activities

### Pre-Issuance Activities



### Post Issuance Activities

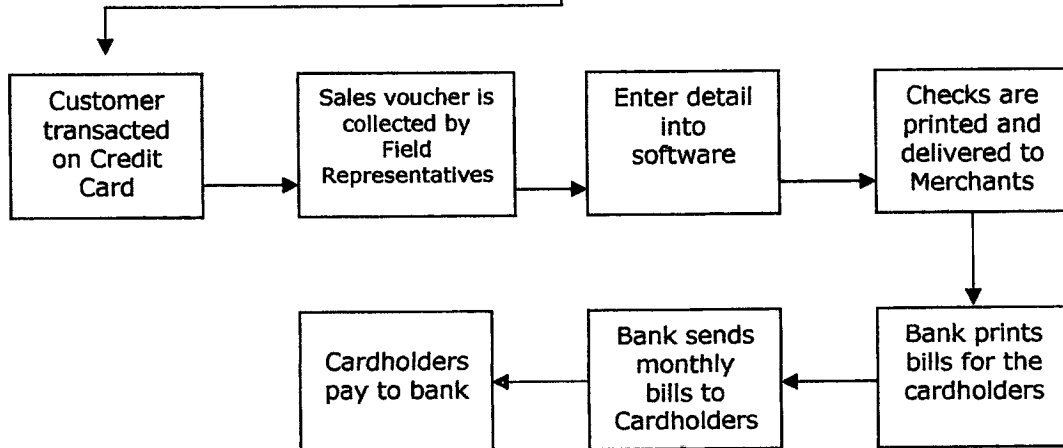


Figure: 1 Credit card issuing activities

## **2.12 Authentication**

There are three basic methods for determining whether your credit card will pay for what you're charging.

- ❑ Merchants with few transactions each month do **voice authentication** using a touch-tone phone.
- ❑ **Electronic data capture (EDC)** magstripe-card swipe terminals are becoming more common-so is swiping your own card at the checkout.
- ❑ **Virtual terminals on the Internet.**

This is how it works. After you or the cashier swipes your credit card through a reader, the EDC software at the point-of-sale (POS) terminal dials a stored telephone number via a modem to call an acquirer. An acquirer is an organization that collects credit-authentication requests from merchants and provides the merchants with a payment guarantee.

When the acquirer company gets the credit-card authentication request, it checks the transaction for validity and the record on the magstripe for.

- ❑ **Merchant ID**
- ❑ **Valid card number**
- ❑ **Expiration date**
- ❑ **Credit-Card limit**
- ❑ **Card usage**

Single dial-up transactions are processed at 1,200 to 2,400 bits per second (bps), while direct Internet attachment uses much higher speeds via this protocol. In this system, the cardholder enters a **personal identification number (PIN)** using a keypad.

## **2.13 Personal identification number**

The PIN is not on the card- it is encrypted (hidden in code) in a database. (For example, before you get cash at an ATM, the ATM encrypts the PIN and sends it to the database to see if there is a match.) The PIN can be either in the bank's computers in an encrypted form (as a cipher) or encrypted on the card itself. The transformation used in this type of cryptography is called one-

way. This means that it's easy to compute a cipher given the bank's key and the customer's PIN, but not computationally feasible to obtain the plain text PIN from the cipher, even if the key is known. This feature was designed to protect the cardholder from being impersonated by someone who has access to the bank's computer files.

Likewise, the communications between the ATM and the bank's central computer are encrypted to prevent would be thieves from tapping into phone lines, recoding the signals sent to the ATM to authorize the dispensing of cash and then feeding the same signals to the ATM to trick it into unauthorized dispensing of cash.

If this isn't enough protection to ease your mind, there are now cards that utilize even more security measures than your conventional credit card: Smart Cards.

## **2.14 Smart card**

The "Smart" credit card is an innovative application that involves all aspects of cryptography (secret codes), not just the authentication. A Smart Card has a microprocessor built into the card itself. Cryptography is essential to the functioning of these cards in several ways.

- The user must corroborate his identity to the card each time a transaction is made, in much the same way that a pin is used with an ATM.
- The card and the card reader execute a sequence of encrypted sine/countersign-like exchanges to verify that each is dealing with a legitimate counterpart.
- Once this has been established, the transaction itself is carried out in an encrypted form to prevent anyone, including the cardholder or the merchant whose card reader is involved, from "eavesdropping" on the exchange and later impersonating either party to defraud the system.

This elaborate protocol is conducted in such a way that it is invisible to the user, except for the necessity of entering a PIN to begin the transaction.

Smart cards first saw general use in France in 1984<sup>8</sup>. They are now hot commodities that are expected to replace the simple plastic cards most of us use now. Visa and MasterCard are leading the way in the United States with their Smart Card technologies.

The chips in these cards are capable of many kinds of transactions. For example, you could make purchases from your credit account, debit account or from a stored account value that's reloadable. The enhanced memory and processing capacity of the Smart Card is many times that



of traditional magnetic –stripe cards and accommodate several different applications on a single card. It can also hold identification information, keep track of your participation in an affinity (Loyalty) program or provide access to your office. This means on more shuffling through cards in your wallet to find the right one-the Smart Card will be the only one you need!

Experts say that internationally accepted Smart Cards would be increasingly available for the next several years. Many parts of the world have already used them, but their reach is limited. The Smart Card will eventually be available to anyone who wants one, but for now, it's only available to those participating in special programs. Your financial institution will contact you directly regarding new chip-enhanced services when they're available in your area. (If you're able to participate in one of these programs, you will receive your Smart Card from your bank or credit union, Credit-Card issuer or bank-card association).

## **2.15 Online safety**

Although the numbers are increasing, consumers are still not using their credit cards on the internet nearly as much as e-tailers (electronic retailers) would like. That's why many cyber-merchants continue to offer a toll-free order number so that shoppers have the choice of calling their order in. Cyber shopping may be convenient- and some people do all of their shopping online- but Credit-Card fraud is always a threat, both on the internet and out in the real world. Hackers have found ways to steal Credit-Card numbers from web sites. To illustrate the importance of tight security, a network TV report, tipped off about loose security on an Internet web-hosting site, could gain access to about 1,500 customer records, which included everything from credit-card numbers and payment records to comments about particular customers.

These are the kinds of stories that deflate customer confidence. Some e-tailers blame consumer reluctance on the inability in cyberspace to make the kind of personal contact that a shopper gets when he looks into the eyes of a store merchant. Experts say that this kind of comfort level will be boosted when online payment methods and security measures are standardized – much as they are in the retail and mail order industries.

While Internet companies have taken responsibility for security breaches and resulting losses to Credit-Card users, there remains the growing problem of people who use stolen credit cards to make purchases on the Internet. And while unfair or fraudulent practices by credit card companies are not commonplace, they do happen. The good news is that law- in case of Credit

Card fraud online or off, protects consumers; you are only liable for a maximum of \$50 of the amount stolen.

And fortunately, the Federal Trade Commission (FTC) and the media are watching closely. The FTC recently ordered Trans Union credit –reporting bureau to stop selling “sensitive” consumer data, on 160 million Americans, to junk-mail producers. The FTC charged that Trans Union violated the **Fair Credit Reporting Act** by selling consumer information to target marketers that lack any of the allowable purposes listed under the Act. Trans Union denies that it sells information that could affect customer’s credit rating or breach customer confidentiality; it appealed against the FTC’s ruling, but lost.

When you write to these companies, include your complete name, name variations and mailing address, social security number and signature and state clearly that you want your name removed from their mailing lists. You can write or call either of these major reporting bureaus, and they will contract the other major bureaus with your request:

- ❑ **Experian Consumer Opt Out**, 701 Experian Parkway, Allen, Texas, 75013, 1-800-353-0809
- ❑ **Equifax Inc. Options**, P.O. Box 740123, Atlanta, Georgia, 30374-0123; 1-800-556-4711

There are a lot of simple steps you can take a protect yourself and your credit card- starting with making sure you sign it as soon as it arrives in the mail.

## **2.16 Other method of protection**

These tips are important and universal:

- **Sign your Card-** as soon as you receive it! (Obviously, this is only as effective as the clerk who’s checking it)
- **When you use your card at an ATM,** enter your PIN in such a way that no one can easily memorize your keystrokes.
- **Don’t leave your receipt behind at the ATM.** Your PIN and account number from a discarded receipt could make you vulnerable to credit card fraud. Also don’t throw out your credit card statement, receipts or carbons without first shredding them!
- **Never give your credit-card number over the telephone unless you initiated the call.**

- **Ignore any Credit-Card offer that requires you to spend money up front or fails to disclose the identity of the card issuer.**
- **Make certain you get your card back after you make a purchase** (one habit to observe is to leave your wallet open in your hand until you have the card back). Also make sure that you personally rip up any voided or cancelled sales slips.
- **Always keep a list of your credit cards, credit-card number and toll-free numbers in case your card is stolen or lost.**
- **Check your monthly statement to make certain all charges are own, and immediately notify the card issuer of any errors or unauthorized charges.**

## **2.17 Credit Recovery**

Credit recovery section tries to recover the default credit in the following stages:

**Stage –1:** in the first stage authorized person of credit recovery section communicate the defaulter cardholder over telephone and give reminder that last date of payment is over and immediately paid the credit.

**Stage –2:** in this stage authorized person of credit recovery section communicates the defaulter cardholder over letter to recover the credit.

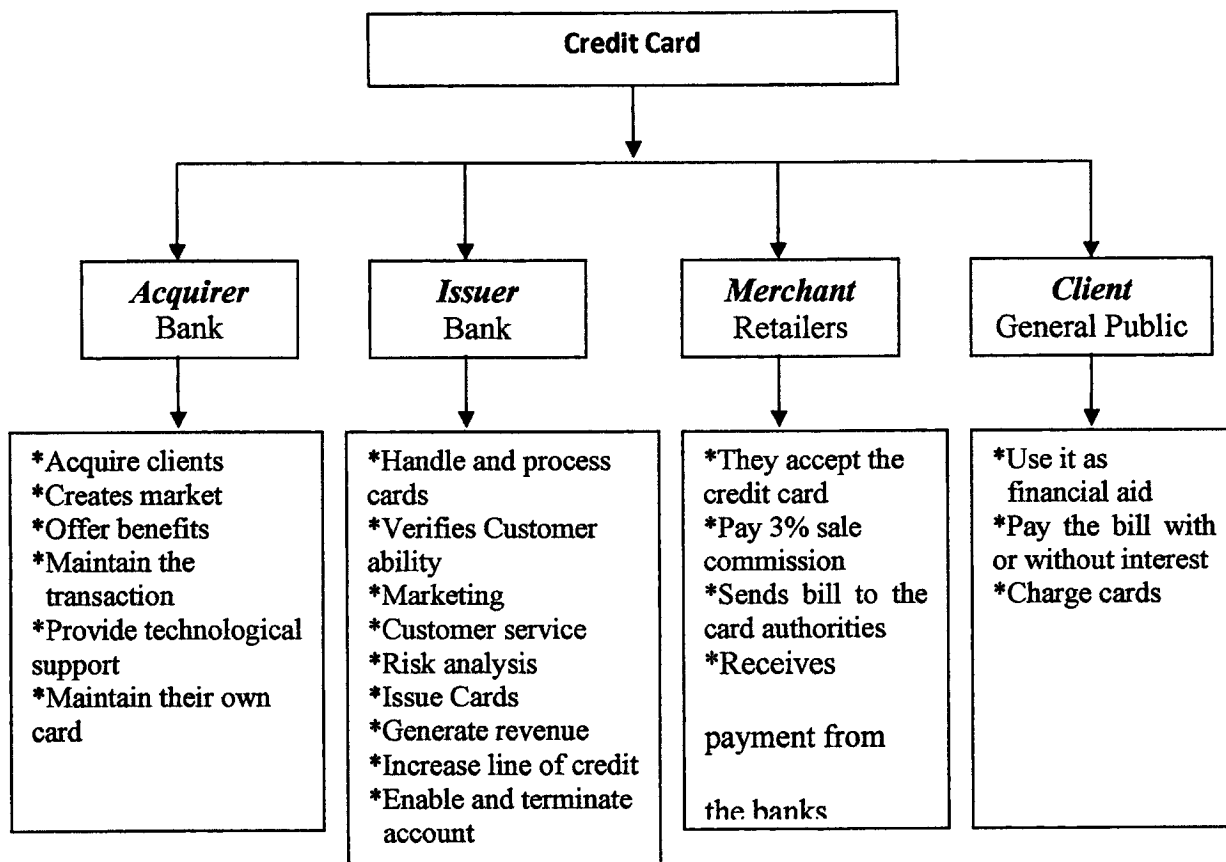
**Stage –3:** Credit card division appoints an agency to recover credit.

**Stage –4:** if the agency failed to recover the loan then credit card division to take the legal action to the default cardholder.

## **2.18 Operation of the Credit Card**

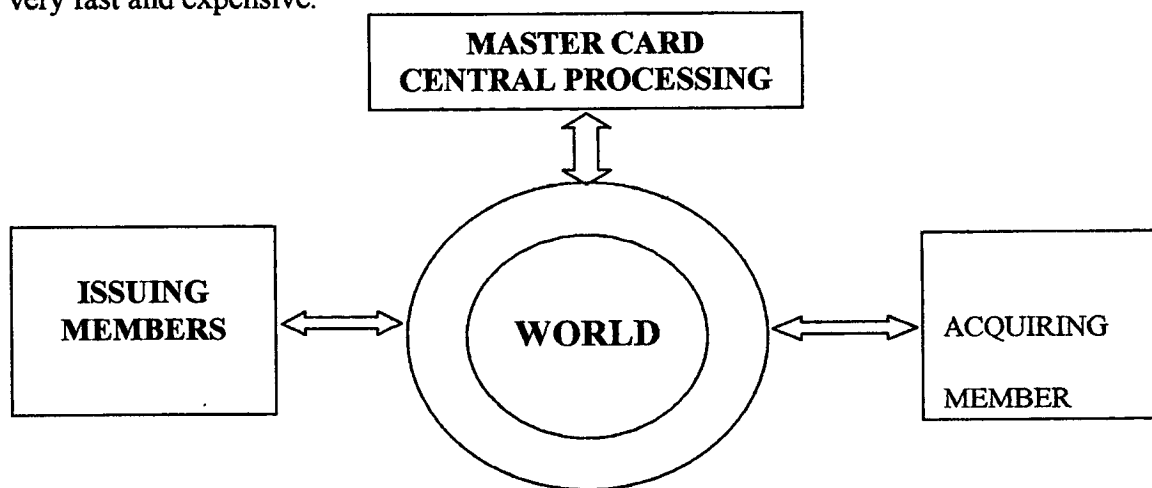
As it is known by all that credit card has a direct relationship between the bank, consumer, merchants and financial institutions. These are the participants of the bank Credit cards services.

**Operational Chart**



**2.19 How does Bank network?**

Like other Tele communications all data pass through a central switching center (a star network configuration). Through the world Master card has 16 switching center. Among those 7 switches are exits in US and rest of them exits the whole world. In Asia two switches are exiting. (Bahrain & Singapore)<sup>9</sup> Recent Master card is going to establish more switch. This network is very fast and expensive.



**Figure: 2 Master Card Bank Network.**

The Bank net network offers several routes that information can travel along to arrive at any given destination. This is called a distributed network & also referred to as Peer-to-Peer (PTP) architecture. Compare to Star network it is cheaper.

## **2.20 Authorization**

Authorization is the process by which a payment card transaction is either approved or declined by an issuer or its authorized agent or by MasterCard on behalf of the issuer. The authorization is required before the merchant completes the transaction. To facilitate authorization, the central site host computer maintains the member master and other organization support files. Payment and card transaction is approved or decline by an issuer in one of the voice authorization or POS terminal authorization.

Standard authorization process is a step-by-step procedure for authorization the use of MasterCard. For terminal authorization these seven steps processes is complete in an average 2.1 seconds (MIP to MIP) if the issuer and acquirer are different parts of the world.

**Step 1:** The cardholder gives the card to the merchant.

**Step 2:** The merchant starts the authorization process by either:

- Placing a call to the acquirer or its agent, or
- Entering the transaction in to the POS terminal.

**Step 3:** The acquirer host computer system sends an authorization request message to the Banknet network through the acquirer MasterCard Interface Processor (MIP).

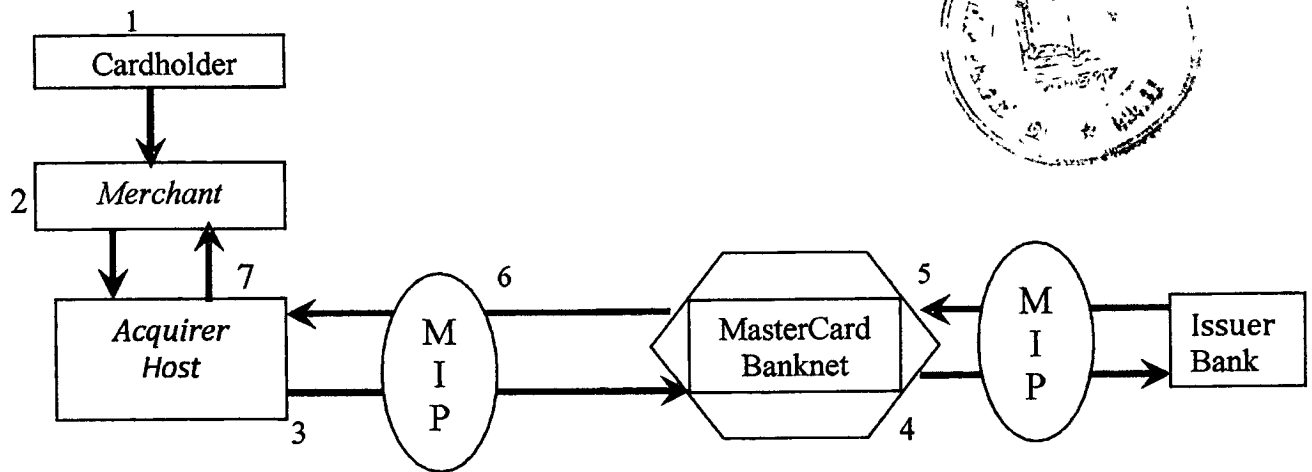
**Step 4:** The Banknet network sends the authorization request message through the issuer MIP. The issuer MIP sends the authorization request to the issuer host computer.

**Step 5:** The issuer host computer processes the authorization request and sends an authorization request response.

**Step 6:** Banknet routes the response to the acquirer or its agent.

**Step 7:** The acquirer or agents delivers the response to the merchant.

**Standard Authorization Flow**



**Figure: 3 Standard Authorization Flow**

**2.21 Security and Fraud**

Security is the main feature in the card business. For the security purpose the following actions are involve.

(A). Security Staff- Job responsibilities can be divided in to the following parts.

**(A)1- Internal:**

- ❑ Conduct pre-employment investigating of prospective card department employee.
- ❑ Plan and supervise the manufacturing shipping, storing, embossing, encoding and mailing of cards.
- ❑ Plan and supervise the physical protection of card department and building including the related data processing and data communication facilities.
- ❑ Conduct investigations for other Master card members on request.
- ❑ Maintain liaison with the Master card security and risk management department on Network and relevant internal department.
- ❑ Train all personnel including employees with direct customer contract in fraud and awareness and detection.

**(A)2- Cardholder or Merchant related:**

- Investigate prospective merchant (if applicable).
- Investigate cases of fraud involving the institution.
- Creates and implement cardholder and merchant education program (if applicable).
- Assists consumer civic and business groups in preparing and conducting fraud awareness programs.

**(A)3-System related:**

- Review proposed changes in institutions card production and processing systems.
- Establish and monitor fraud detection systems for both card holder and merchant account.
- Report all fraudulent transactions to the Master card fraud reporting system, called Systems to Avoid Fraud Efficiency (SAFE).
- Continually check that your institutions system is operating efficiently and effectively.

**(B) Card and System Security:**

Make sure for the card production and processing the following criteria are required

- Physical security of the premises.
- Protection of cards during their production and issuance.
- Merchant education and monitoring (if applicable).
- Early warning systems monitoring
- Fraud reporting and analysis.
- Investigation of cards and merchant fraud.

## 2.22 Credit Card Vs ATM card

ATM refers to Automated Teller Machine. It has been created to withdraw money from his/her bank account, at a convenient place, whenever needed without going to the Banks physically. Lot of people confuses themselves with the feature of the Credit card and the ATM card. Though they are both known as plastic money but still there features are totally different from

each other. The ATM cards are the debit cards, which can be only used in the teller machines in order to withdraw money from the booths. And to withdraw money one must have equivalent or more amounts of money available in his bank account from where he has obtained the card.

On the other hand, Credit Card can be used at any place wherever it is accepted. Though the credit cards are also accepted to the teller machines as well but Dhaka Bank credit card is not accepted to the teller machines. Besides to use Credit Cards one does not need to have money available in his account at all time like the ATM card. So, Credit card and ATM cards are the two separate cards offering different features and should not be mixed up with their services.

## **Debit Card Concept**

### **2.23 History of Debit Card**

The history of debit cards is an interesting one. Debit cards helped to change the way that people used money and bank accounts. Debit cards are used to pay for purchases at stores and other locations around the world. A debit card works by debiting the money from your checking account. For many people debit cards have taken the place of cash and checks. However, debit cards are still a relatively new banking tool.

Credit cards paved the way for debit cards. Many people used credit cards to pay for transactions. This also put in place the infrastructure that debit cards needed to be practical as a method of payment. Seattle's First National Bank offered the first debit card to business executives in 1978<sup>10</sup>. Initially, they were like a check signature or guarantee card, with which the bank would guarantee that the fund would be paid, but you did not need a check to do the transaction. They also required a large savings account be kept at the bank to cover the funds. These cards were only issued to people who had a long and good standing with the bank, because the funds were not directly debited from the account. These types of cards generally come with the Visa or MasterCard symbol on them.

In 1984 Landmark created the first nationwide debit system, using ATMs and other networks that allowed debit cards to be used nationwide. This allowed the smaller banking systems within states to connect with bank systems outside of states. As technology improved the debit cards moved to a system that was able to directly debit the money from a checking account. When this happened the debit cards became available to more and more consumers. These types of debit



cards may have the Plus symbol or other similar symbols on them. However, many banks will also use the Visa or MasterCard symbol for a direct debit card because they are accepted at so many different places around the country.

In 1998 debit card transactions first outnumbered the use of checks around the world. This number has continued to grow over time. Debit cards are now commonly used for most transactions at stores in the United States. Debit cards are more convenient to use than a check. Debit cards speed up transactions at stores. Additionally debit cards are safer than carrying cash, because banks can stop fraudulent purchases and consumers are not held liable for purchases made when the card is stolen. Debit cards have made banking a much easier process for many people.

In the future transactions will continue to move away from cash and check. Debit cards may be left behind as well as banks move to use one card that you can quickly scan at a variety of locations. This will speed up transactions as well as virtually eliminate the need for cash in the future. Over time the history of debit cards may be one step to moving to a completely cash less system.

## **2.24 A brief introduction to the ATM debit card**

ATM (Automated Teller Machine) debit card is a multifaceted, power packed globally accepted plastic debit card, which enables one to access ones account from anywhere. The ATM debit card may have either the Visa or the MasterCard logo embossed on it.

The ATM debit card is linked to an account from where the fees or charges are deducted as the transaction demands. The ATM debit card has the name of the debit card holder embossed on the debit card.

### **Withdrawal limit and Cost:**

The maximum amount which one may withdraw per day is not more than \$500. The cost of an ATM debit card is usually \$150<sup>11</sup>. The money is denominated in US Dollar.

### **Working of the ATM debit card:**

Whenever a transaction is processed on entering the PIN (personal identification number) the ATM debit card number is sent to the bank issuing the ATM debit card where it is verified for the authenticity of the transaction as well as for the availability of funds.

The bank checks for the availability of funds. If there is a sufficient fund the bank replies the same and the ATM debit card holder can carry out the transaction. In the event of non availability of the fund the message of “Insufficient Fund” is displayed on the screen.

Usefulness:

The ATM debit card is useful in the following ways:

- Withdrawal: One can withdraw money from anywhere, from any Visa or MasterCard terminal with the help of one's ATM debit card.
- ATM debit card allows an individual to deposit money from any Visa or MasterCard terminal available.
- With the help of the ATM debit card, one can transfer cash from one place to another in no time.
- Information on the available balance can be viewed by accessing any Visa or MasterCard terminals with the ATM debit card.
- The details of all the transactions taking place using the ATM debit card is made available to the ATM debit card holder by the statement generated by the issuing bank of the ATM debit card holder.
- Time taken for any transaction is much less because entering a PIN (personal identification number) is always faster than writing a cheque.

## **2.25 Debit Card PIN**

A debit card PIN (personal identification number) is a four digit secret number or code, which is given to the customer at the time of issuing a debit card for security. The debit card is valueless without the debit card pin. The debit card PIN pad consists of a series of numbers and some other buttons like “Menu”, “Enter”, “Cancel”, etc. A transaction using a debit card PIN is called an online debit card transaction. The debit card PIN authenticates a transaction. With the help of a debit card, one can make purchases from any ATM (automated teller machine) terminal or shop (point of sale).

The debit card PIN is required to be entered when making purchases. This debit card PIN is card specific and customer specific. Prior to using a debit card the customer is required to activate the one's debit card by entering the debit card PIN which comes in a sealed envelope.

It is advisable to change the debit card PIN at regular intervals to avoid theft. It is assumed that a transaction using a debit card PIN is more secured than a signature based transaction but several were reported where debit card holders were ripped off their money due to debit card PIN theft or disclosure. There are few tips to save one's money from being drained out by taking care of the debit card PIN.

- One should not give the details of the debit card PIN over the telephone no matter how reliable the person is.
- The debit card PIN should never be written on a postcard, envelope or a piece of paper, which is left unattended or have the possibilities of being lost.
- One should always check the debit card transactions before entering one's debit card PIN.

Transaction involving the debit card PIN is generally preferred by retailers and merchants over the signature based transaction because the retailers or the merchants have to pay less for accepting a debit card. Comparison between debit card PIN based and signature based transaction will continue but one cannot deny that both methods have their own advantages and lacunae.

## 2.26 Apply for Debit Card

Apply for a debit card if you want to make transactions in a simpler way. To apply for a debit card, certain criteria need to be fulfilled and procedures to be followed.

### *Apply Debit Card: Procedure*

Upon opening a checking account, banks usually give a debit card to the account holder. However, if one has a very old account that did not furnish a debit card when the account was opened, one can apply for a debit card. The application for a debit card can be made online, by calling customer services or by visiting the main branch of the bank concerned. Some banks create a debit card on the spot, as soon as one applies for it. Others mail it to the account holder's mailing address. Once the debit card has been received, you need to activate it at an ATM or on the bank's website.

To apply for a debit card, an individual needs to submit certain documents to the bank in which s/he has an account. These documents comprise identity and residence proof, among other

things. Bank details in the form of statements for saving and current account are also required. The account holder who wants to apply for a debit card needs to submit his/her salary statement or income declaration. It is the salary slip or the monthly income declaration that is instrumental in deciding the debit or credit limit of a card. Minors are not eligible to apply for a debit card.

## **2.27 Devices of ATM Machine**

An ATM machine is generally made with the following devices.

- **CPU:**  
It is used to control the user interface and transaction devices.
- **Magnetic card/Chip card:**  
It is used to identify the customer.
- **PIN:**  
This used to track the customer's identity.
- **Function key/Touch screen:**  
Keys or touch screen which is used to select the alternative options for doing the transaction.
- **Cash Cartridge:**  
It contains the cash amount.
- **Record Printer:**  
Print the available balance amount and the transaction amount after if the user is interested.
- **Vault:**  
To store the parts of the machinery requiring. Here the access is restricted.

## **2.28 Work process of ATM**

### **System Operator:**

The system operator is the person who is assigned from the bank to start up the machine. He took money from the bank and enters the money in the ATM machine. When the ATM system starts up, it asked to enter an amount of money currently in the cash dispense and then establish a connection to the bank. Then the system is ready for servicing the customer. The operator can also shut down the ATM machine after making sure that no customer is using the machine, and

then he turns the operator switch to the “off” position. When the machine is in off status, it has no connection with Bank. Operators can remove the deposits; replenish cash and other papers that time.

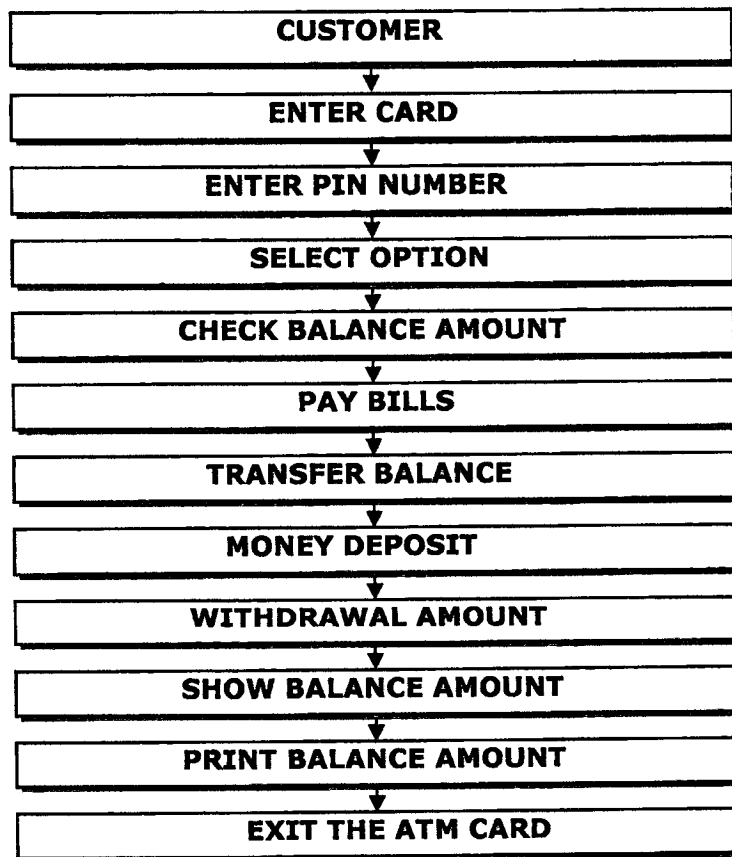
Bank

SYSTEM SHUTDOWN

SYSTEM STARTUP

Operator

Customer:



**Figure: 4 Work process of ATM**

## CHAPTER THREE

### Data Analysis and Interpretation

<b>Serial No.</b>	<b>Title</b>	<b>Page No.</b>
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3.2	Satisfaction level of ATM booth user	31

## **Chapter Three:**

### **Data Analysis and Interpretation**

#### **3.1 Demographic profile of the respondent:**

Demography is the study of human population in terms of size, density, location, age, gender, race, occupation and other statistics. The demographic environment is of major interest to marketers because it involves people and people make up markets. The world population is growing at an explosive rate. It now totals more than 6.4 billion and will exceed 8.1 billion by the year 2030<sup>12</sup>. The world large and highly diverse population poses both opportunities and challenges.

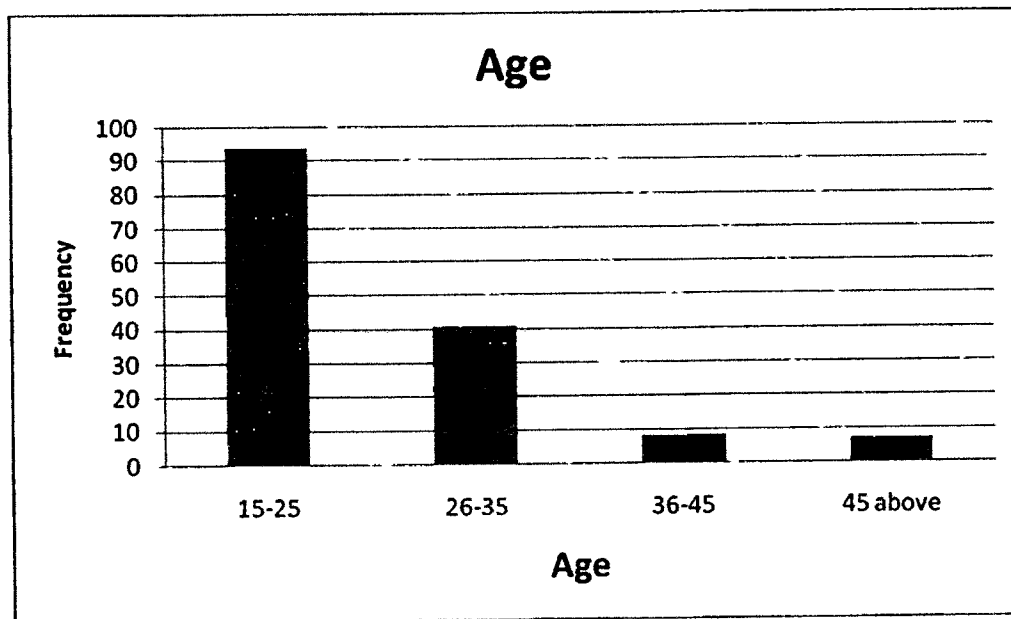
Changes in the world demographic environment have major implication in business. For example consider china. Twenty five years ago to curb its sky rocketing population, the Chinese government passed regulation limiting families to one child each. As a result Chinese children known as little emperor and empresses are being showered with attention and luxurious under what knows as the six pocket syndrome. As many as six adults two parents and four doting grandparents may be including the whims of each child. Parents in the average Beijing household now spend about 40 percent of their income on their cherished only child. Among other things this opportunities for children educational products.

The U.S. population stood at more than 293 million in 2004 and may reach almost 364 million by the year 2030. The single most important demographic trend in the United States is the changing age structure of the population.

Here I am going to discuss the age and occupation of the respondent as it is the most important demographic profile in any research work. For research purpose I have divided the age in to for group as 15 to 25, 26 to 35, 36 to 45 and 45 above. Occupation is also important factor in this regard. I am trying to collect primary data from businessman, students, government employee and private employee.

**Table: 1 Age distribution of respondent**

Age Range	Frequency	Percent	Valid Percent	Cumulative Percent
15-25	94	62.7	62.7	62.7
26-35	41	27.3	27.3	90.0
36-45	8	5.3	5.3	95.3
45 >	7	4.7	4.7	100.0
Total	150	100.0	100.0	



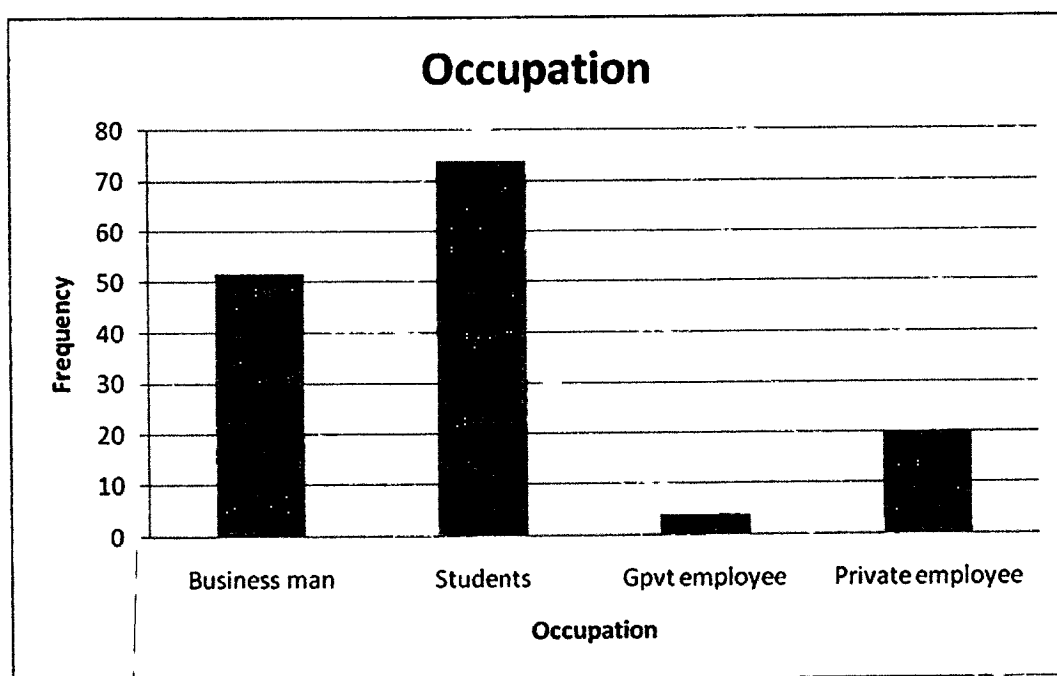
**Figure- 5** Graphical presentation of the age distribution of respondent

The above table -1 shows the age distribution of the respondent. From the table we see that 62.7% of the users of ATM card are young generation whose age limit is 15 to 25 years, 27.3% whose age limit between 26 to 35 years and 4.7% are those people whose age limit is 45 and above.



**Table: 2 Occupation distribution of the respondent**

Occupation	Frequency	Percent	Valid Percent	Cumulative Percent
Business man	52	34.7	34.7	34.7
Students	74	49.3	49.3	84.0
Govt. employee	4	2.7	2.7	86.7
Private employee	20	13.3	13.3	100.0
Total	150	100.0	100.0	



**Figure-6** Graphical presentation of occupation of the respondent

The above table-2 shows the occupation distribution of the respondent. From the table we see that maximum 49.3% of the respondent is students, 34.7% of the respondent is businessmen, 13.3% of the respondent is private employee and only 2.7% of the respondent is govt. employee.

### 3.2 Satisfaction level of ATM booth user in Bangladesh

Table-3 Descriptive statistics

Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Service	150	1.00	5.00	3.8733	.83784
Security	150	2.00	5.00	3.6733	.74633
No. of ATM Booth	150	1.00	5.00	3.2667	.84874
Location	150	1.00	5.00	3.1333	.84079
N	150				

The table-3 shows the customer satisfaction in terms of service of ATM center, security of the center and location of the ATM center. The mean value of the service 3.8733 and standard deviation is .83784, security 3.67 and standard deviation is .74633 on the other hand In case of number of ATM centers provided by the bank the mean is 3.2667 and standard deviation is .84874, in case of location of ATM centers the mean is 3.1333 and standard deviation is .84079. The research result also shows that 80.0 percent people says that it will take less than 5 minutes to wait in a queue and they are satisfied with the service, 13.7 percent says that it will take 5 to 10 minutes to process their transaction and 7.3 percent says that it will take more than 10 minutes to process their transaction and they are not satisfied with the service. About 80.7 percent customer says that it will take less than 5 minutes to process their transaction and they are satisfied with the service, 11.3 percent says that it takes 5 to 10 minutes and 8.0 percent says that it takes 10 minutes or more to process their transaction and they are not satisfied with the service.



**Table: 4 Percentage of customer satisfaction on service**

	Frequency	Percent	Valid Percent	Cumulative Percent
Highly dissatisfied	2	1.3	1.3	1.3
Dissatisfied	8	5.3	5.3	6.7
Neutral	27	18.0	18.0	24.7
satisfied	83	55.3	55.3	80.0
Highly satisfied	30	20.0	20.0	100.0
Total	150	100.0	100.0	

The above table-4 shows the satisfaction level of ATM booth user in regard to service quality. From the table we found that 1.3% people are highly dissatisfied with the ATM service, 6.7% people are dissatisfied with the ATM service and the people who are neither satisfied nor dissatisfied is 18%. More than 55% people are satisfied with the service and 20% people are highly satisfied with the ATM service.

**Table: 5 Percentage of customer satisfaction on security**

Ranking	Frequency	Percent	Valid Percent	Cumulative Percent
Less secured	6	4.0	4.0	4.0
Secured	56	37.3	37.3	41.3
very secured	69	46.0	46.0	87.3
Highly secured	19	12.7	12.7	100.0
Total	150	100.0	100.0	

The above table-5 shows the security level of ATM card user. From the table we found that 4% respondent think that ATM card is less secured, 41.3% think that it secured, 87.3% think that ATM card is very secured and 12.7% says that it is highly secured to bear and ATM card.

**Table: 6 Percentage of customer satisfaction as number of ATM centers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Highly dissatisfied	3	2.0	2.0	2.0
Dissatisfied	25	16.7	16.7	18.7
Neutral	56	37.3	37.3	56.0
Satisfied	61	40.7	40.7	96.7
Highly satisfied	5	3.3	3.3	100.0
Total	150	100.0	100.0	

The above table-6 shows the percentage of customer satisfaction as number of ATM centers. From the table we found that maximum 40.7% respondent are satisfied with the number of ATM centers, 37.3% are neither satisfied nor dissatisfied, 16.7% are dissatisfied, 3.3% are highly satisfied and only 2% are highly dissatisfied with the number of ATM centers.

**Table: 7 Percentage of customer satisfaction in location of ATM centers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Highly dissatisfied	2	1.3	1.3	1.3
Dissatisfied	26	17.3	17.3	18.7
Neutral	84	56.0	56.0	74.7
satisfied	26	17.3	17.3	92.0
Highly satisfied	12	8.0	8.0	100.0
Total	150	100.0	100.0	

The above table-7 shows the percentage of customer satisfaction with regard to location of ATM centers. From the table we found that 56.0% people are neutral, 17.3% are dissatisfied, 17.3% are also satisfied, 8% are highly dissatisfied and 1.3% is highly dissatisfied with the location of ATM centers.



The above table-10 shows the time spend to process transaction at ATM centers. From the table we found that 80.7% respondent says that it takes less than 5 minutes to process their transaction, 11.3 percent says that it takes 5 to 10 minutes and 8% says that it takes more than 10 minutes to process their transaction.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5 Minutes	121	80.7	80.7	80.7
5 to 10 minutes	17	11.3	11.3	92.0
10 minutes or more	12	8.0	8.0	100.0
Total	150	100.0	100.0	

**Table: 10 Time spend to process transaction**

The above table-9 shows the time spend waiting in queue at ATM center by an ATM card user. From the table we found that 80% of the respondent says that it takes less than five minutes, 12.7% says that it takes 5 to 10 minutes and 7.3% says that it takes more than 10 minutes to wait in queue.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5 minutes	120	80.0	80.0	80.0
5 to 10 minutes	19	12.7	12.7	92.7
10 minutes or more	11	7.3	7.3	100.0
Total	150	100.0	100.0	

**Table: 9 Time spend waiting in queue at ATM center**

The above table-8 shows the reason for using ATM card. The reason for using ATM card is cash withdrawal, balance enquiry and balance transfer. From the table we found that maximum 74.7% respondent says that they use ATM card for cash withdrawal, 10.7% use for balance enquiry and 14.7% use for balance transfer.

	Frequency	Percent	Valid Percent	Cumulative Percent
Cash withdrawal	112	74.7	74.7	74.7
Balance enquiry	16	10.7	10.7	85.3
Balance transfer	22	14.7	14.7	100.0
Total	150	100.0	100.0	

**Table: 8 Reason for using ATM card**

Table: 11 Problem faced by customer using ATM card

Problems	Frequency	Percent	Valid percent	Cumulative Percent
Poor money quality	12	3.0	3.0	3.0
Card locking	9	2.3	2.3	5.3
Machine complexity	7	1.7	1.7	7.0
Unsuitable location	73	18.3	18.3	25.3
Delay in card delivery	13	3.2	3.2	28.5
Machine breakdown	4	1.0	1.0	29.5
Unsecured	11	2.8	2.8	32.3
Old fashioned	10	2.5	2.5	34.8
Problem in power supply	107	26.7	26.7	61.5
Unavailability of money	51	13.0	13.0	74.5
In adequate internet connection	104	25.5	25.5	100.0
<b>Total</b>	<b>400</b>	<b>100</b>	<b>100</b>	

The above Table-11 shows the problem faced by customer using ATM card. From the table we found that the problem of poor money quality is 3%, card locking 2.3%, machine complexity 1.7%, Unsuitable location 18.3%, delay in card delivery 3.2%, Machine breakdown 1%, unsecured 2.8%, Old fashioned 2.5%, Problem in power supply 26.7%, Unavailability of money 13.0%, and inadequate internet connection is 25.5% .

## Recommendation and Conclusion

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## **Chapter Four:**

### **Recommendation and Conclusion**

#### **4.1 Recommendation:**

The potential market for cards in Bangladesh is estimated to be 25,000,000(25 million) users. The users of cards facilities have been growing day by day all over the world, particularly in ASIA. Prime Bank Ltd, National Bank Ltd, Dutch-Bangla Bank Ltd, Brac Bank Ltd, Dhaka Bank Ltd, Southeast Bank Ltd and One Bank Ltd are the topmost private Commercial Banks in the country, and it has been operating quite successfully. Although it has a healthy and steady growth in sales trend of credit and debit cards, the organization needs to address some of the bottlenecks found out from the survey conducted for the concerned study. In an attempt to solve various problems so far identified in this study, the following recommendations have given from the survey and observational point of view:

- Bank should increase the number of ATM centers at strategic positions.
- Software used by the bank should be updated and should be fast so that people are not made to wait in the queue.
- Bank can bring all its services on the ATM machines.
- Facilities like cash deposit should also start at the ATM centers.
- To increase the customer base and the customer satisfaction the ATM facility should be made as secured and safe as possible.
- The ATM centers should be trim and tidy as well as well decorated because when a customer enters into it should feel comfortable.
- Some bank has no its own ATM machines. They always depend on the other bank ATM machines. Therefore, banks should procure their own ATM machines.
- Banks depend on BTTB line, sometimes this line keeps to remaining down. For this reason, it creates a problem for the cardholders. Banks should take alternative way for this matter.
- Banks should put maximum emphasis on the ATM card marketing equally because it is very essential to increase the number of card holders and also play a vital role for earning profit.
- Prompt customer services should require for maximizing customer of card.
- Banks should give offer to the card holders in different session.



- Banks should not count excess charges (when card holder not pays the amount within the month).
- The financial and other service benefits provided by bank should also be increased for the customer.
- Annual charges for cards should be sufficiently reduced. The charge for additional cards should also be reduced.
- Banks should endeavor to provide better service to the cardholders outside city. To achieve this objective, they may consider creating an efficient and effective employee in each of the Bank's main branches in the Divisional Headquarters outside city.
- Arrangement for offering attractive gifts and prizes should be made so that the number of card holder's increases day by day.
- Last but not the least; it is found from the survey banks can increase their cardholder and can easily coverage the card market by magnifying their ATM booth capabilities

**Table: 12 Respondent recommendations to solve the problem**

<b>Recommendation</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid percent</b>	<b>cumulative percent</b>
Better customer service	57	11.4	11.4	11.4
Prompt card delivery	11	2.2	2.2	13.6
New ATM location	89	17.8	17.8	31.4
Increase in number of ATM	107	21.4	21.4	52.8
More withdrawal limit	63	13.8	13.8	66.6
Better currency quality	19	3.8	3.8	70.4
24 hours power supply	121	24.2	24.2	94.6
Denomination of currency	27	5.4	5.4	100.0
<b>Total</b>	<b>500</b>	<b>100.0</b>	<b>100.0</b>	

The above table-12 shows the respondent recommendation to solve the problems that are faced by ATM card user. Among the total recommendation 11.4% is better customer quality, prompt card delivery 2.2%, new ATM location 17.8%, increase in number of ATM 21.4%, more withdrawal limit 13.8%, better currency quality 3.8%, 24 hours power supply 24.2% and denomination of currency is 5.4%.



## **4.2 Conclusion:**

From the above analyses, it is evident that ATM has many positive features but the customers selected on the basis of convenience. These customers are also facing different types of problems with which ATM is directly related. Machine complexity, machine breakdown, poor quality notes, 24 hours power supply, inadequate internet connection, suitable location, card locking etc are the major problems identified by the ATM users. Some inconvenient features are not directly related to ATM such as safety security, decoration etc. ATM users have different levels of satisfaction with various aspects of ATM. The most important thing is that at every aspect, the selected customers have more than neutral state of satisfaction. Though this study can't provide conclusive evidence to determine particular courses of action and further research will be required to provide conclusive evidence. But the management should consider the findings and take all necessary steps for further research and if they think that the customers of ATMs are homogeneous in their choice and preferences, They may follow the recommendations made by the customers such as increase of number of ATM locations, new ATMs, better currency quality, increase of safety-security, 24 hours power supply, denomination of currency, more withdrawal limit better customer service etc. to gain more customer base and achieve more customer satisfaction.



## References:

- [1] Long, M., & McMellon, C. (2004). Exploring the determinants of retail service quality on the internet. *Journal of Services Marketing*, 18(1), 78-90.
- [2] Lovelock, C. H. (2000). Functional integration in service: understanding the links between marketing, operations, and human resources. In Swartz, T.A. and Iacobucci, D.
- [3] Madu, C.N., & Madu, A.A. (2002). Dimensions of e-quality. *International Journal of Quality & Reliability Management*, 19(3), 246-58.
- [4] Malhotra, N.K. (2004). *Marketing Research: An Applied Orientation*. Pearson Education Inc, Upper Saddle River, New Jersey
- [5] Marshall, J., & Heslop, L. (1988). Technology acceptance in Canadian retail banking: a study of consumer motivations and use of ATMs. In Barker, T. (Eds.), *Financial Services Marketing in Canada*, (pp.31-41). IJBM, Toronto.
- [6] Merrilees, B. (2002). Interactivity design as the key to managing customer relations in ecommerce. *Journal of Relationship Marketing*, 1(3), 111-26.
- [7] Mobarek, A. (2007). E-Banking Practices and Customer Satisfaction - A Case Study in Botswana. Retrieved on August, 14, 2009, from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1011112](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1011112).
- [8] Moutinho, L., & Goode, M. (1995). The effects of free banking on overall satisfaction: the use of automated teller machines. *International Journal of Bank Marketing*, 13(4), 33-40.
- [9] Moutinho, L. (1992). Customer satisfaction measurements: prolonged satisfaction with ATMs. *International Journal of Bank Marketing*, 10 (7), 30-7.
- [10] Moutinho, L., & Brownlie, D.T. (1989). Customer satisfaction with bank services: a multidimensional space analysis. *International Journal of Bank Marketing*, 7(5), 23-7.
- [11] "Consumer Complaint Board: Banks also responsible for the success of ATM withdrawals abroad" Kuluttajavirasto (Finnish Consumer Agency & Ombudsman)
- [12] ^ "New reasons to guard your ATM card" Christian Science Monitor via MSN

## Other References:

- [www.yahoo.com](http://www.yahoo.com)
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.google.com](http://www.google.com)
- [www.questia.com](http://www.questia.com)
- [www.businessworldbangladesh.com](http://www.businessworldbangladesh.com)
- Principles of marketing by Philip Kotler.
- Marketing research by Naresh K Malhotra

