

Use of Automated Teller Machine (ATM) card in Dhaka City: A Survey to Reveal the Problems and Prospects

Md. Abdulla-Al-Mamun

Lecturer Department of Business Administration Bangladesh Islami University

Abstract: Automated Teller Machine (ATM) card is one of the prominent card services which offers customers 24- hours banking access, such as cash withdrawal, purchasing of goods and services, etc. However, sometimes customers are to face many problems i.e. non-availability of Taka, network problem, lack of desired value denominated notes and so on. This paper investigates the customer satisfaction in this regard. From the study, it was found that although people of our country were reluctant to use technology, people seem to get more comfortable to technology now. For the blessing of ATM card, users really don't need to stand on queue in the bank for transaction.. By using ATM card consumers can perform secure & quick transactions in their accounts but sometimes they get serious trouble on their account like ID theft, account hacking, mistransaction etc. For these reasons, consumers have mixed opinion on satisfaction. By improving network service, providing receipt after transactions and solving of problems promptly, banks can make their ATM card users fully satisfied.

I. Introduction

Since the beginning, private banks have been trying their best to keep their customers satisfied. ATM card service is one of their latest services and it let customers bank any time. ATM was first introduced in 1967 at Barclays Bank in Enfield in London by the Scottish Scientist Shephard Baron. The study is aimed to explain the present scenario of existing ATM services & to analyze the satisfaction level of consumer.

The persistent influence of information technology is felt robustly in the banking sector of Bangladesh. The advance of communication and computer technology and the availability of the Internet have made it possible that one can do most banking transactions from a remote location even without stepping into a physical financial structure - that is, the emerging of e-banking . E-banking is now a global phenomenon. The developed country as a part and parcel of their economy is now using electronic banking or online banking. The most popular e-banking service is the ATM card, the present study aims to reveal its problems and prospects.

II. Objectives of the Study

The main aim of this study is to:

- Assess the extent and dimension of ATM card using in Dhaka City.
- Investigate the problems and prospects of ATM card using in Dhaka City.
- To reveal the customer satisfaction of ATM card using in Dhaka City.

III. Research Methodology

Sample size determination

We know that, for a assumed proportion, the sample size is determined by the following formula

$$n = \frac{z^2 pq}{d^2}$$

Where, n = desired sample size,

z= standard normal deviate, usually set at 1.96 (at 95% confidence level)

p= assumed proportion in the target population estimated to have a particular characteristic = 0.22 (Here assumed that 22% of the customers use E-banking).

$$q = 1-p = 1-0.22 = 0.88$$

d = degree of accuracy desired in the estimated proportion = 0.05 (at 95% confidence level)

Now putting the values in the above mentioned formula we get the desired sample size,

$$n = \frac{z^2 pq}{d^2} = 263.68$$

Hence we set the sample size as 264. For the above study 264 customers using E-banking were selected for the interview, 5 customers refused to participate in the interview, due to 5 non-response the actual sample size became 259. Out of this 259 users of E-banking 216 were found to use ATM card.

Sample selection method

The method of sampling used in this study was convenience sampling. Non-probability samples that are unrestricted are known as convenience sampling. Though it is less reliable, this method is applied in this study because of low cost and less time. So our sample of this study consists of respondents living in a easily accessible locality and those who are willing to response.

IV. Literature Review

Automated Teller Machine (Atm)

Automated Teller Machine is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smartcard with a chip that contains a unique card number and some security information, such as an expiration date. Security is provided by the customer entering a personal identification number (PIN). According to Steve (2002), ATMs are placed not only near or inside the premises of banks, but also in locations such as shopping centers/malls, airports, grocery stores, petrol/gas stations, restaurants, or any place large numbers of people may gather. These represent two types of ATM installations: on and off premise. On premise ATMs are typically more advanced, multi-function machines that complement an actual bank branch's capabilities and thus more expensive. Off premise machines are deployed by financial institutions and also Independent Sales Organizations (ISOs) where there is usually just a straight need for cash.

Although ATMs were originally developed as just cash dispensers, they have evolved to include many other bank-related functions. In some countries, especially those which benefit from a fully integrated cross-bank ATM network, ATMs include many functions which are not directly related to the management of one's own bank account, such as: Paying routine bills, fees, and taxes (utilities, phone bills, social security, legal fees, taxes, etc.), Printing bank statements, Updating passbooks, Loading monetary value into stored value cards, Purchasing and so on.

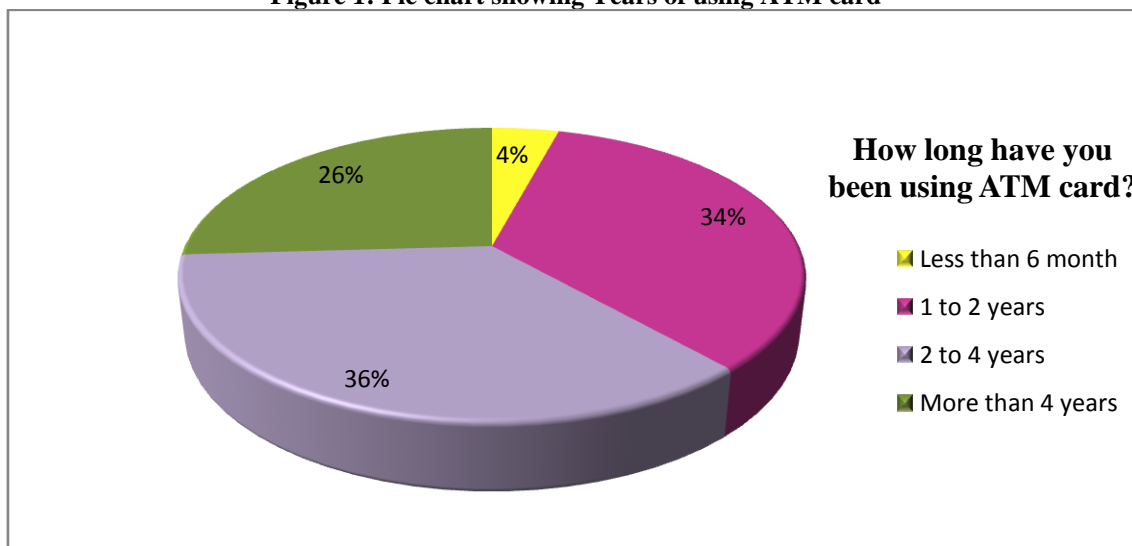
Christoslav et al (2003) in a research asserted that ATM services are highly profitable for banks, and banks aggressively market the use of ATM cards. ATMs that are off bank premises are usually more profitable for banks because they attract a higher volume of non-bank customers, who must pay service fees. Unfortunately, customers using offpremise ATMs are more vulnerable to robbery. ATM robberies estimates are derived from periodic surveys of banks conducted by banking associations. According to those surveys, there was an estimated one ATM crime (including robbery) per 3.5 million transactions.

V. Findings and Discussion

5.1 Extent and Dimension of Using ATM card

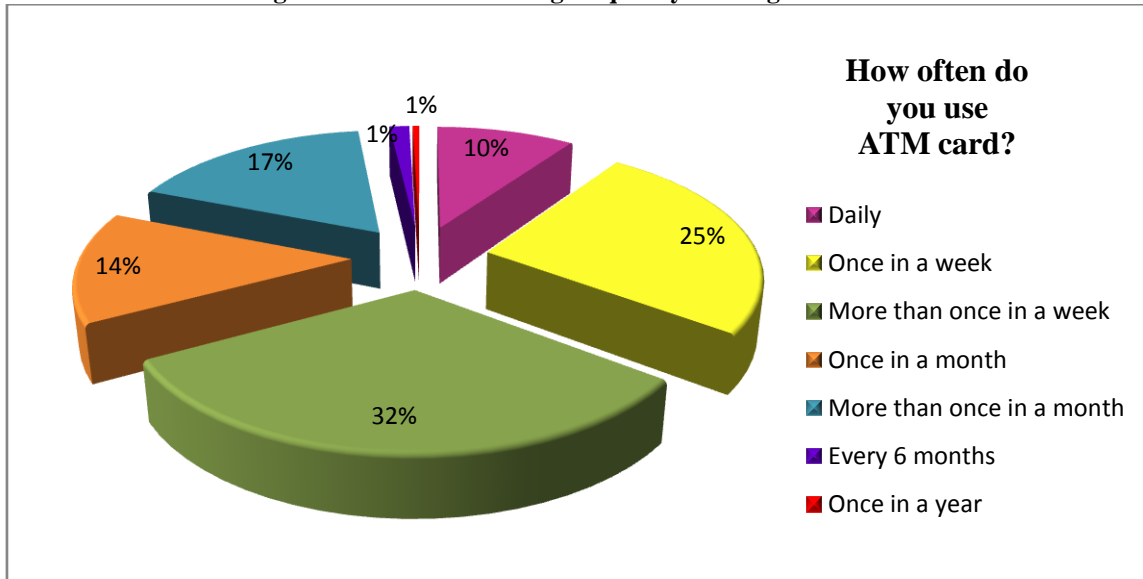
It was found from the study that respondents have been using ATM card for long time. Most of them are using it for 2 to 4 years. A good proportion has been using it for more than 4 years. But the percentage of new adopters that is users of less than 6 month is very few. We can explain this situation with the adoption years of ATM card. Banks of our country has adopted ATM card service long ago. This results long time users of ATM card. But after the arrival of the debit card service, ATM card has lost its popularity due to the more attracting features of debit card.

Figure 1: Pie chart showing Years of using ATM card



Most of the respondents (32%) use ATM card more than once in a week. The second highest percentage (25%) belongs to those respondents who use ATM card once in a week. This proves consumers use ATM card on a regular basis. They use ATM card for doing most of their banking transactions in their day to day life.

Figure 2: Pie chart showing frequency of using ATM card



Most frequently done transaction is the withdrawal of cash through ATM card. A big proportion of ATM users (leaving some peoples as exceptions) either frequently (124) or sometimes (58) withdraw cash. Only 18 respondents out of all ATM card users have never withdrawn cash. The transaction that most of the respondents sometimes do is balance inquiries. Another big proportion says they also do it frequently. But the transactions that people usually never do are making payments, transferring fund and making deposit.

Table 1: Distribution of transactions done through ATM card

Transactions	Make payment		Balance inquiries		Transferring fund		Withdrawal		Making deposit	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Never	97	44.9	12	5.6	113	52.3	18	8.3	100	46.3
Rarely	35	16.2	32	14.8	30	13.9	20	9.3	42	19.4
Sometimes	50	23.1	95	44.0	54	25.0	54	25.0	57	26.4
Frequently	34	15.7	77	35.6	19	8.8	124	57.4	17	7.9
Total	216	100.0	216	100.0	216	100.0	216	100.0	216	100.0

5.2 Problems in Using ATM Card

It can be seen that people (44%) sometimes have to cope up with slow speed of the ATM machine. 14.4% respondents are exceptions saying that they have to work with the slow ATM machine frequently. Although some respondents (12.5%) totally opposed that, which is never.

Table 2: Frequency distribution for machine working too slowly

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	27	12.5	12.5	12.5
Rarely	63	29.2	29.2	41.7
Sometimes	95	44.0	44.0	85.6
Frequently	31	14.4	14.4	100.0
Total	216	100.0	100.0	

Machine running out of money does not happen frequently, which is evident from the statement of only 11.6% of the respondents. It happens sometimes to 34.3% respondents and the rest of the respondents are approximately equally divided in stating that it has never happened and it has happened rarely.

Table 3: Frequency distribution for machine running out of money

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	55	25.5	25.5	25.5
Rarely	62	28.7	28.7	54.2
Sometimes	74	34.3	34.3	88.4
Frequently	25	11.6	11.6	100.0
Total	216	100.0	100.0	

People seem to be very cautious about remembering their respective secret code. We can conclude this, since a huge percentage (63.4%) of the respondents has never forgot the secret code. Although some people (9.7%) has admitted that they forget the code sometimes but frequently forgetting the code (2.3%) is not an usual thing to happen.

Table 4: Frequency distribution for forgetting secret code

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	137	63.4	63.4	63.4
Rarely	53	24.5	24.5	88.0
Sometimes	21	9.7	9.7	97.7
Frequently	5	2.3	2.3	100.0
Total	216	100.0	100.0	

It is evident that most of the respondents (52.3%) never had the problem of machine keeping card. Rarely machine keeps card in case of 35.2% respondents which is not also a small proportion. But only 4 respondents, that is only 1.9% respondents frequently face this rare problem.

Table 5: Frequency distribution for machine keeping card

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	113	52.3	52.3	52.3
Rarely	76	35.2	35.2	87.5
Sometimes	23	10.6	10.6	98.1
Frequently	4	1.9	1.9	100.0
Total	216	100.0	100.0	

ATM machine seems to function well in printing slips when demanded. We can say that on the basis of the response (never) of 46.3% respondents. But this problem occur rarely (28.7%) and sometimes (22.2) also.

Table 6: Frequency distribution for ATM not able to print slips when demand

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	100	46.3	46.3	46.3
Rarely	62	28.7	28.7	75.0
Sometimes	48	22.2	22.2	97.2
Frequently	6	2.8	2.8	100.0
Total	216	100.0	100.0	

It is obvious from the figure that theft/losing the card is a rare thing to happen, as a major proportion (73.6%) of the respondents have never lost their card by theft or on their own. And also, not a single person (0%) from our sample has ever faced this problem frequently.

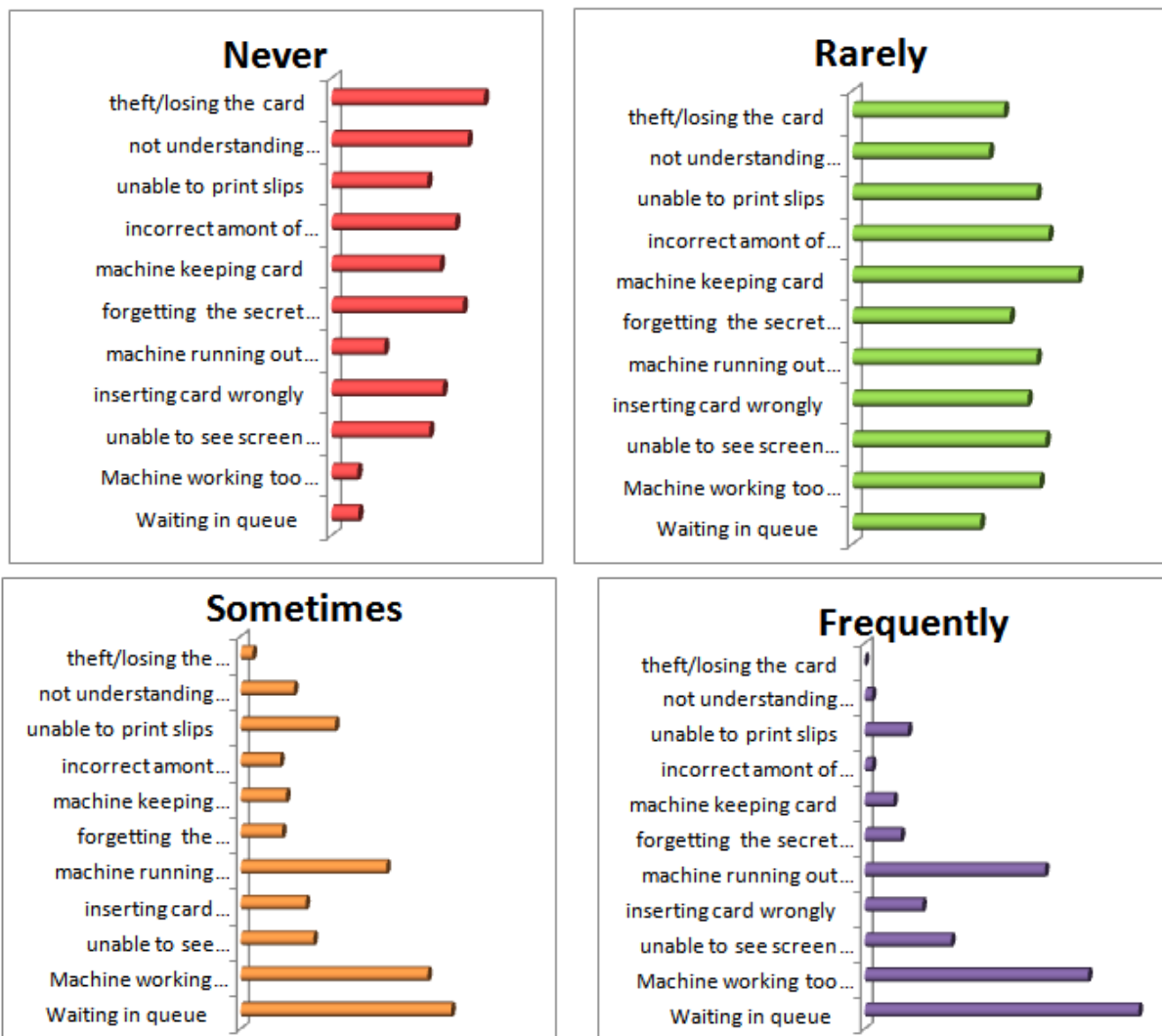
Table 7: Frequency distribution for theft of card/losing the card

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Never	159	73.6	73.6	73.6
Rarely	51	23.6	23.6	97.2
Sometimes	6	2.8	2.8	100.0
Total	216	100.0	100.0	

5.3 Comparison of the Problems faced in using ATM Card

The comparison of the different problems faced by the ATM card users are shown in the following figure:

Figure 3: Comparison of problems in using ATM card



VI. Conclusion and Policy Recommendations

From the study findings, it seems to have more than one difficulty people never face usually. But ‘waiting in queue’, ‘machine working too slowly’, ‘machine running out of money’ are the exceptions, these three got the lowest responses. Rest have approximately same responses. But we can definitely say that that ‘theft/losing the card’, ‘not understanding how to do what to do’, ‘forgetting the secret code’ are the difficulties that most of the people never face. It seems all of the difficulties happen rarely to the respondents. But ‘machine keeping the card’ is the rarest thing to happen to most of the respondents. The problems that happen sometimes to most of the respondents are ‘waiting in queue’, ‘machine working too slowly’, ‘machine running out of money’. The frequently happening problem to most of the respondents are ‘waiting in queue’, ‘machine working too slowly’, ‘machine running out of money’. So we can draw the conclusion that the main difficulties in ATM

booth for card users are 'waiting in queue', 'machine working too slowly', 'machine running out of money'. And the difficulties about which peoples are least bothered are 'theft/losing the card', 'not understanding how to do what to do', and 'forgetting the secret code'. For better ATM card service, the following strategies are recommended:

- Banks should improve the network service quality so that customers are not refused when they go to ATM booth.
- As customers want to be updated about their account balance, debit card transaction should provide receipt always.
- Banks should increase their own booth. As own booth is cost free, customers always prefer to use it.
- Some customers have recommended that banks should reduce the transaction cost of ATM card. They have to pay this cost when use other bank's ATM booth.
- Sometimes customers do not get Taka from booth though that is automatically reduced from their account. This is a main factor for users' dissatisfaction. Banks can take initiatives to solve this problem promptly.
- As users need different value denominated notes, banks should keep most of the value denominated notes in the booth (Taka 100 multiples).

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