

Acceptance of E-banking by the Consumers of Dhaka City, Bangladesh

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Abstract

Electronic banking or E-banking is one of the few advanced technologies that have been introduced in this age of information. E-banking is a kind of system that is able to drive development, supporting growth, promoting innovation and enhancing competitiveness. In Bangladesh, E-banking has been one of the game changing inclusions in the banking sector. Using primary data, this paper tried to reveal the current scenario of E-banking facilities provided by the private and government banks in Dhaka, the capital city of Bangladesh. It has also intended to find out the consumers' satisfaction levels using these facilities. It is found from the analysis that ATM and Debit cards have an absolute domination over the other e-banking facilities in case of usage. On the other hand SMS and Mobile banking facilities have the least number of consumers in Dhaka city. Study also found that electronic banking users' are getting increased in a significant manner. Despite of some problems regarding the usage of e-banking, majority of the consumers are satisfied with the facilities provided.

Key word: E-banking; Online Banking; Consumers' Satisfaction;

Introduction

E-banking is a popular modern technology that delivers the new and traditional banking products and services to the customers electronically. Any type of intelligent electronic devices such as, personal computer (PC), Personal Digital Assistant (PDA), Automated Teller Machine (ATM), kiosk or Touch Tone Telephone. But from among these the ATM card, Debit card, Credit card, online banking, phone banking, SMS banking etc. are most used for e-banking. In the developed countries e-banking has become an invaluable part of everyday life. Besides the developed world, the developing countries also come into contact with vast increase in e-banking such as; India and the Republic of Korea are experiencing extensive e-banking elevation. In southern Asia like Thailand, Malaysia, Singapore and Philippine, e-banking is growing rapidly. Al-Smadi, [1] in Jordan; Addai et al., [5] in Ghana; Dhekra, [7] in Tunisia; Ismail & Alawamleh, [10] in Jordan; Kampakaki & Papathanasiou, [11] in

Greece and Taiwo&Agwu, [14] in Nigeria; can also be referred to being explored the expanse of acceptance and usage of e-banking. E-banking has been shown as a potent way to reduce the costs of operation for the financial institution. For example, by starting servicing through e-banking banks can reduce wasting on physical structures. It is thought that through e-banking banks can cut extra costs, increase revenue and become more convenient for customers. With the wonder known as e-banking, customers has no need to bother about banking, because rather than them going to the bank physically, bank is coming to them!

Extensive research has been done in Bangladesh on e-commerce issue Azam, [2], computer usage Azam, [3], Internet usage Awal, [4], telephone and electronic banking Bakta et al., [2007]. Even though there is huge demand from the business community as well as the retail customers especially the city consumers, E-banking in Bangladesh is still in infancy. Nonetheless e-banking is being slowly but surely getting recognition in Bangladesh. We can hope that E-banking can start to give positive profit on banks objectivity Siddik et al, [13].

But there seem to be several vital challenges and issues faced on the road of development of e-banking. Security concern is being the main concern of them all Baten, [8]. There have been studies done in Bangladesh in regards on various e-banking services like Hasan et al., 2010 which conveyed the significant gaps in existing knowledge about the internet banking. According to Redwanuzzaman & Islam [12], the challenges in regards of e-banking for Bangladeshi banks are for the most parts quadruple. First and the biggest challenge of e-banking is the complex and ever changing demand of the customers. The challenging part of banking resides in the increased amount of customers' expectations, E-channels specific marketing, security risks, technological challenges, and winning customer trust. Since 2001 E-banking services have started its journey in Bangladesh. Still Bangladesh is yet to reach the expected level in global banking system. So right now the most needed task is to upgrade the banking system. Huda & Chowdhury, [9] has showed in their

paper that there is an excellent opportunity for the e-banking to in Bangladesh. So this paper focused to determine the present scenarios of e-banking sectors in Dhaka city, Bangladesh and at the same time to identify the benefits and challenges faced by the consumers. Also to know their overall satisfaction level on Electronic banking system.

Data & Methodology

A questionnaire survey was carried out to meet the research objectives. The survey was restricted to consumers who have used any of the e-banking service that is, ATM card, Debit card, Credit card, online banking, Phone banking, SMS banking and Mobile banking. As such, stratified sampling method was chosen and the questionnaire was given out to 290 users of e-banking in Dhaka city. Out of the 290, 61 of the responses were discarded, as they either had blank or unanswered parts of the questionnaire. The remaining 229 questionnaires were used for data analysis. Data was collected during the period July, 2018 to October, 2018.

Different statistical methodologies have used to examine the relationships between the explanatory and the outcome variables. Bivariate analysis: As our data is categorical type, we have used cross-tabulation and chi-square test to examine the relationships.

Multivariate analysis: Our dependent variable is Dichotomous which is the use of any e-banking facilities and independent variables are categorical, so we have applied logistic regression analysis to examine the relationship. Logistic Regression Model: Binary logistic regression model is used not only to identify the contributing factors but also to predict the probability of success that is probability of occurring the event.

Data Analysis

We have seen that a majority number (32%) of bank accounts of the respondents are in Dutch Bangla Bank Limited (DBBL), the second position is jointly holding by Standard Chartered Bank (SCB) (10.3%) and HSBC Bank (10.1%), Govt. bank has 9% of the consumers account and 24% accounts are in other banks figure 3.1.

ATM card is dominating over other facilities in case of usage by the consumers. Approximately 84% of the total respondents use ATM card for their different necessities, 47.5% of the total respondents use Debit card and 25.5% of them use online banking, while we found that 21.6 % use credit cards. Phone banking, mobile banking and SMS banking has the lowest percentage of user’s figure 3.2.

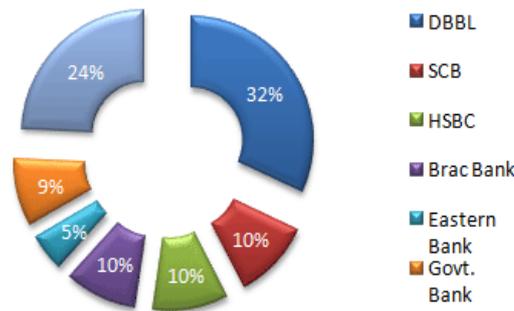


Figure 3.1: Doughnut Chart for the Distribution of Bank Accounts in Different Banks

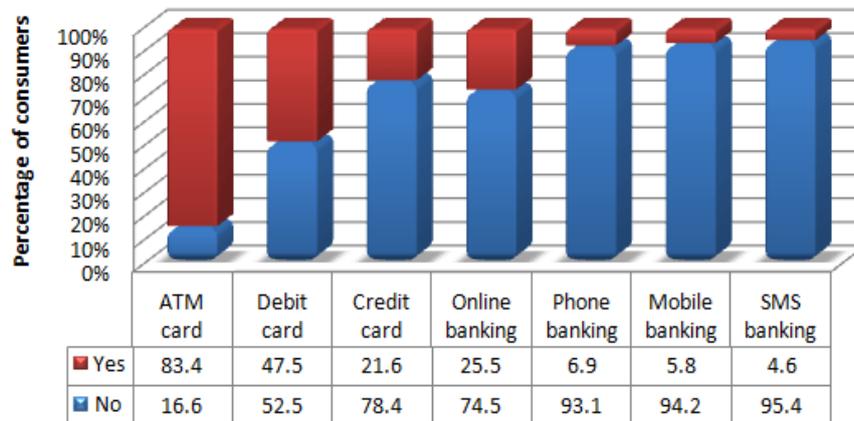


Figure 3.2: Users of Electronic Banking facilities

Our analysis found that both young and middle aged people are more willing in using e-banking. Male consumers dominating the e-banking market in a huge percentage (64.9%) over the female consumers (35.1%). On the other hand education, occupation, and income have a significant association with the usage of E-banking facilities. Income level per month has an influence on the usage of different e-banking facilities of the consumers. Consumers belong to different income level use different facilities

according to their capacity and necessities. Table 3.1 shows use of e-banking in accordance with income table 3.1.

Different e-banking provide different transaction facilities to make the financial complication a lot easier in everyday life. From our analysis we found that, the most frequently done transaction through ATM, debit and credit card is money withdrawal (Table 3.2), while people mostly use online banking for balance inquiry (53.8%) table 3.2.

Table 3.1: Respondents' income level (per months) and use of E-banking

Income level (per months)	Total user in each Income Level (%)	User of E-banking facilities (%)						
		ATM card	Debit card	Credit card	Online banking	Phone banking	Mobile banking	SMS Banking
Less than TK. 15000	17.9	16	4.7	0.0	0.9	0.9	0.9	0.5
TK. 15000- TK. 30000	31.1	26.4	16	4.2	7.5	3.8	1.4	1.9
TK. 30001- TK. 45000	22.4	18.4	11.8	5.2	7.1	0.0	2.4	0.0
TK. 45001- TK. 60000	11.3	10.4	8.5	6.1	3.8	0.9	0.9	1.9
Above TK. 60000	17	12.7	8.0	9.4	7.5	1.9	0.5	0.5

Table 3.2: Transaction done through different E-banking facilities provided

e-banking (Usage %)	Transaction (%)	Make payment (%)	Balance inquiries (%)	Transferring fund (%)	Withdrawal (%)	Making deposit (%)
ATM Card (83.4%)	Never	44.9	5.6	52.3	8.3	46.3
	Rarely	16.2	14.8	13.9	9.3	19.4
	Sometimes	23.1	44.0	25.0	25.0	26.4
	Frequently	15.7	35.6	8.8	57.4	7.9
Debit Card (47.5%)	Never	36.6	6.5	48.8	1.6	38.2
	Rarely	24.4	15.4	20.3	7.3	17.1
	Sometimes	27.6	50.4	27.6	30.9	32.5
	Frequently	11.4	27.6	3.3	60.2	12.2
Online Banking (25.5%)	Never	20	4.6	24.6	47.7	33.8
	Rarely	23.1	10.8	30.8	29.2	27.7
	Sometimes	29.2	30.8	32.3	16.9	26.2
	Frequently	27.7	53.8	12.3	6.2	12.3
Phone Banking (6.9%)	Never	5.6	5.6	44.4	33.3	55.6
	Rarely	22.2	22.2	33.3	38.9	16.7
	Sometimes	38.9	55.6	11.1	22.2	27.8
	Frequently	33.3	16.7	11.1	5.6	0.0
Mobile Banking (5.8%)	Never	53.3	33.3	46.7		
	Rarely	6.7	20.0	26.7		
	Sometimes	13.3	20.0	13.3		
	Frequently	26.7	26.7	13.3		

One of the major aims of our study was to know the impact of e-banking on consumers' lifestyle. For this we made analysis on consumers' opinions regarding the facilities provided by E-banking and the influences that has been made over their day-to-day lives. Corresponding results are displayed on the following tables (Table 3.3, 3.4). Most of the consumers agreed that they are satisfied with the facilities provided (Table 3.3) and also they think these facilities are making positive impacts on their lives table 3.3 and table 3.4

From this study we wanted to find the overall satisfaction of

the consumers on e-banking facilities and we found that debit card has made the consumers satisfied (8.05 out of 10). Mean satisfaction level for Debit, online and mobile banking are pretty close (8.05, 7.95, 7.93 respectively). Lowest satisfaction goes for SMS banking which is just below 7.20 figure 3.4.

In our analysis we found ATM, Debit, Credit and online Banking are the frequently used Electronic Banking facilities. We have done logistic regression model for these four facilities to see the actual probability of success or relation with the factors like education, occupation, and income table 3.5.

Table 3.3: Consumers' opinion regarding facilities of e-banking

Facilities	Strongly agree (%)	Agree (%)	Neither Agree nor disagree (%)	Disagree (%)	Strongly disagree (%)
*Using e-banking is easy for the consumer	25.9	64.5	5.8	1.9	1.9
*Privacy of e-banking	14.3	62.5	16.6	5.8	0.8
*Accuracy of e-banking	13.1	61.4	17.8	6.6	1.2
*Easiness of secure transaction	20.8	59.1	14.7	4.2	1.2
*e-banking gives more control over account	16.6	52.9	17.4	11.6	1.5
*Users feel comfortable using e-banking	22	68	8.1	1.9	-
*e-banking service quality is satisfactory	13.5	62.2	13.5	9.3	1.5

Table 3.4: Impact of Electronic banking on consumers' lifestyle

Impacts	Strongly Agree (%)	Agree (%)	Neither Agree nor disagree (%)	Disagree (%)	Strongly agree (%)
e-banking saves time on consumers' life	47.5	47.5	3.5	0.8	0.8
No need to stand on a queue anymore	45.5	4.1	6.2	5.4	1.2
e-banking simplifies the financial complications	23.2	64.9	9.7	1.9	0.4
Users don't need to go to bank anymore	19.7	35.1	16.6	23.9	4.6
e-banking makes life easier with the facilities	28.6	62.2	6.2	1.9	1.2
Willingness to pay has increased than before	15.4	58.7	18.5	5.8	1.5
Paying bill is easier due to e-banking	27.4	62.2	8.9	0.8	0.8
Carrying cash seems to be more hassling now	27	61.8	6.6	3.9	0.8
People tend to spend more due to easiness of banking through E-banking	16.2	52.9	17.4	12.4	1.2
e-banking can't do everything as employee can do	12	49.4	19.3	18.5	0.8
Mistakes are more likely to occur in e-banking	4.6	35.5	21.6	33.6	4.6

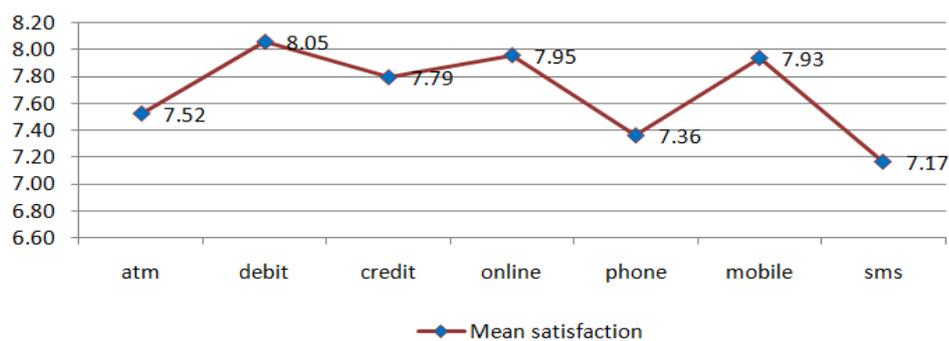


Figure 3.4: Mean satisfaction level of the consumers

Table 3.5: Logistic Regression estimates of ATM card on some selected covariates

Variables	β	S.E.	p-value	OR
Education level				
Secondary (r)			.032*	
Higher secondary	-2.672	0.534	.009*	0.691
Graduate	2.098	0.534	.009*	8.153
Masters & above	0.943	0.534	0.099	1.903
Occupation				
Gov. Service (r)			0.216	
Others	-0.281	0.714	0.693	0.755
Student	1.122	0.83	.006*	3.071
Business	-0.193	1.133	.005*	0.824
Private jobs	0.439	0.801	0.583	1.552
Income level				
< TK. 15000 (r)			0.442	
TK. 15000- TK. 30000	1.706	0.147	.007*	5.504
TK. 30001- TK. 45000	0.628	0.311	.002*	1.873
TK. 45001- TK. 60000	1.524	1.121	0.174	4.589
> TK. 60000	0.973	1.042	0.35	2.647

P<.05, r=reference category*

From table 3.5, it is observed that graduate consumers are significantly (p value=.009) 8 times more likely to use ATM cards (OR=8.153) than those who only pass secondary levels. Again students are 3 times more likely to use ATM cards (OR=3.071) than those who are in government jobs. From income level, we see that, consumers' having 15000-30000 TK income are significantly (p value=.007) 5 times more likely to use ATM card (OR=5.504) than those who earn less than 15000 TK table 3.6.

P<.05, r=reference category*

From table 3.6, it is observed that, business and private job holders are significantly (p value=.024, .038) 3 times more likely to use debit cards (OR=3.990, and OR=3.942) than those who are in government service table 3.7.

P<.05, r=reference category*

From table 3.7, it is found that, consumers doing private service and business are significantly 8 times and 5 times more likely to use credit cards (OR=8.950 and OR=5.878) than those who are in government service. And also consumers' who earn more than 60000 TK are significantly 3 times more likely to use credit cards (OR=3.060) than those who earn less than 15000TK table 3.8.

P<.05, r=reference category*

From table 3.8, we observed that, students are significantly 2 times more likely to use online banking (OR=2.341) than those who are in government service.

Table 3.6: Logistic Regression estimates of Debit card on some selected covariates

Variables	β	S.E.	p-value	OR
Education level				
Secondary (r)			.004*	
Higher secondary	0.137	1.094	0.9	0.872
Graduate	0.097	1.079	0.929	0.908
Masters & above	1.524	1.188	0.2	0.218
Occupation				
Gov. Service (r)			.025*	
Others	0.046	0.486	.925	1.047
Student	0.145	0.667	.828	1.156
Business	1.372	0.779	.038*	3.942
Private jobs	1.384	0.614	.024*	3.99

Income level				
< TK. 15000 (r)			.008*	
TK. 15000- TK. 30000	-.542	.707	.443	.581
TK. 30001- TK. 45000	1.799	.793	.023*	.165
TK. 45001- TK. 60000	-.936	.685	0.172	.392
> TK. 60000	-.716	.627	0.254	.489

Table 3.7: Logistic Regression estimates of Credit card on some selected covariates

Variables	β	S.E.	p-value	Odds ratio
Education level				
Secondary (r)			.008*	
Higher secondary	-2.674	0.433	0.099	0.069
Graduate	-2.847	0.433	0.999	0.058
Masters & above	-0.192	0.433	0.099	0.825
Occupation				
Gov. Service (r)			.003*	
Others	.656	0.541	.025*	1.927
Student	.688	0.758	0.064	1.99
Business	1.771	0.917	.008*	5.878
Private job	2.192	0.82	.008*	8.95
Income level				
< TK. 15000 (r)			.001*	
TK. 15000- TK. 30000	-2.83	1.183	.007*	.059
TK. 30001- TK. 45000	-0.807	3.183	0.097	.446
TK. 45001- TK. 60000	-1.873	0.183	.008*	.000
> TK. 60000	1.118	0.183	.008*	3.06

Table 3.8: Logistic Regression estimates of online banking on some selected covariates

Variables	β	S.E.	p-value	OR
Education level				
Secondary (r)			.899	
Higher secondary	-2.053	0.97	.999	.000
Graduate	-2.355	0.97	.999	.000
Masters & above	-.371	0.28	.001*	0.69
Occupation				
Gov. Service (r)			.003*	
Others	-.444	.532	.04*	0.641
Student	.851	.723	.007*	2.341
Business	.025	.907	.978	1.026
Private job	.589	.671	.742	1.802
Income level				
< TK. 15000 (r)			.055*	
TK. 15000- TK. 30000	-1.97	.960	.040*	0.139
TK. 30001- TK. 45000	.168	.007	.008*	1.183
TK. 45001- TK. 60000	-1.565	.949	.099	0.209
> TK. 60000	-1.459	.915	.111	0.232

Discussion and Conclusion

Based upon the interviews and questionnaire answered by the selected group of people all the necessary information has been gathered. Analysis found that, ATM card and Debit Card rule over all other e-banking service. We can also state that most of the e-banking users on Dhaka city either use ATM card or Debit card, or both. It is found that graduate consumers are significantly more likely to use ATM cards than those who pass only secondary levels. Again students are more likely to use ATM

cards, while business and private job holders are more likely to use Debit cards and credit cards than those of Government job holders. ATM and Debit card has approximately same features .But Debit card provide more facilities than ATM card. In that sense, Debit card should have more users than ATM card. But we are observing the opposite here. It's mainly because ATM card was introduced earlier than Debit card in our country as well as in the city. But now-a-days the user of Debit card is increasing. Secondly, people sometimes get confused about whether they have ATM card or Debit card. It happens because some banks

provide the same features as debit card with the ATM card. The third reason for domination of ATM card over Debit card could be all Banks are not adopting the Debit card service yet.

Compared to ATM and Debit card, Credit card has a very small number of users in our country. In developing countries like ours, most of the people don't have the financial capability to use Credit card. The main reason working behind for not using Credit card is 'I am concerned about the cost of using the system'. Some people reasoned that 'I don't see a need for the service'. This statement can be justified by saying that they don't need cash advances from bank.

After ATM and Debit card, the Online banking service has good number of users. As online banking is a new concept in our

country so it's not even adopted by all the banks yet. Moreover, online banking in our country does not provide all the facilities needed. And for being a new service, not all the people are aware of this service. One of the most powerful reasons for not using online bank we found is 'I don't know how to use the system'. Again those who use these facilities face difficulties like low speed, account hack, no availability of network etc. figure 4.1.

The three least used e-banking services are Phone banking, Mobile banking and SMS banking. Phone banking and SMS banking provide limited facilities, which results non interest in using these services. Consumers are not satisfied and even face problems using phone banking figure 4.2.

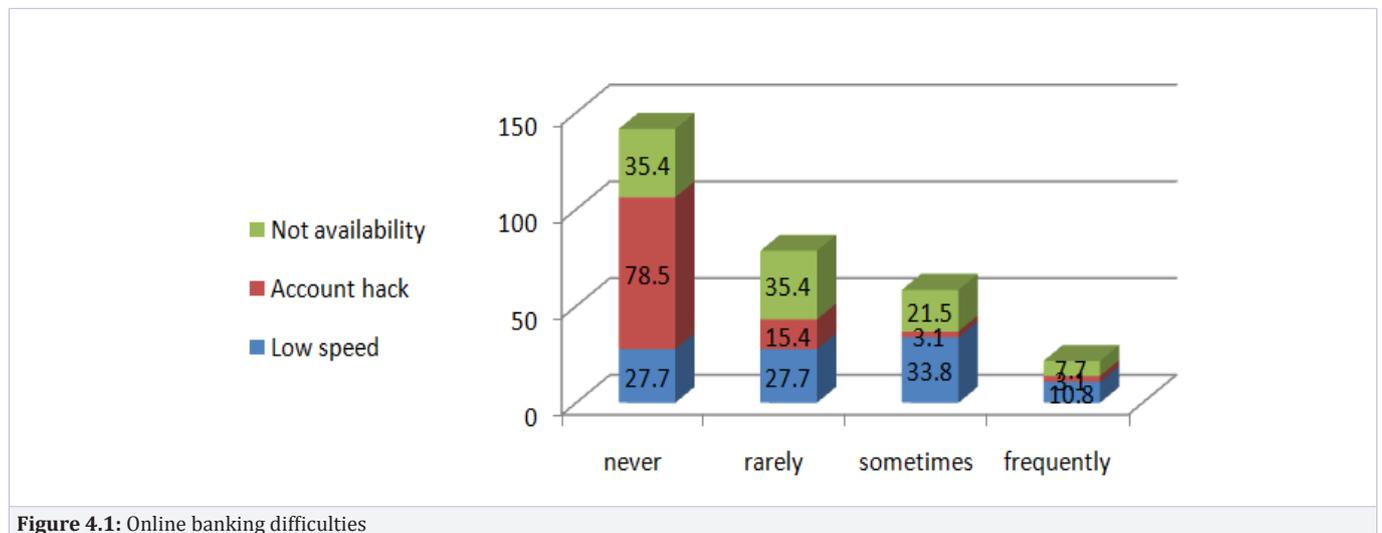


Figure 4.1: Online banking difficulties

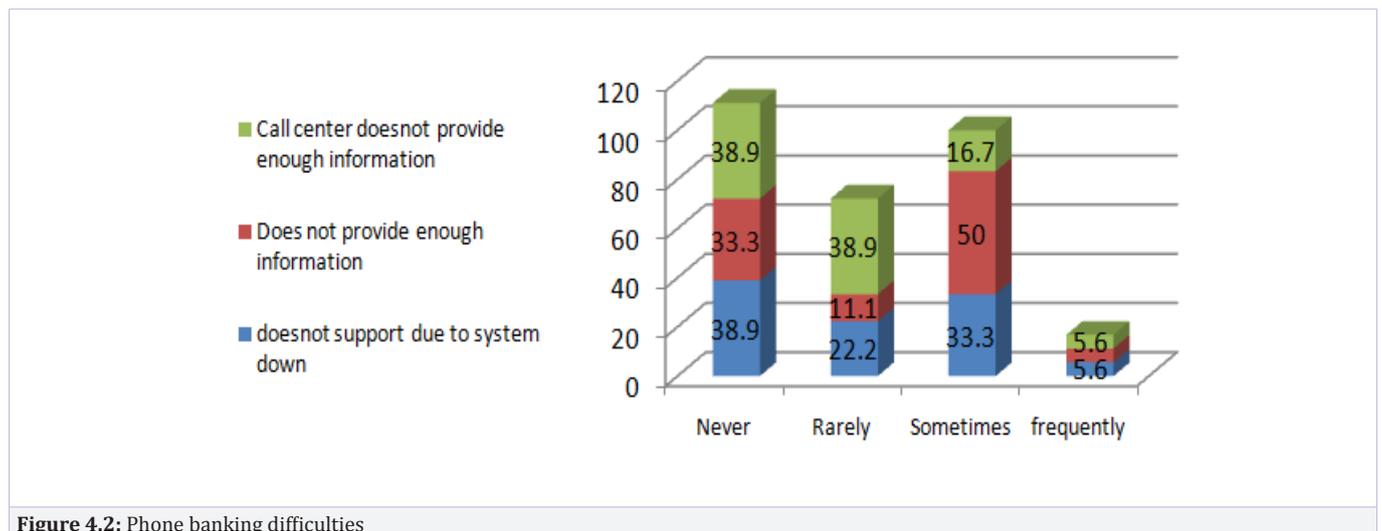


Figure 4.2: Phone banking difficulties

Phone banking has less users because only 15 banks of our country provide SMS banking. The reason for not using SMS and mobile banking is that these both are recently introduced in our country, so most of the peoples are not aware of these services. Between these two, mobile banking is the latest one. But mobile

banking has more user than SMS banking according to our sample. This could result from sampling biasness.

Most of the respondents think that using e-banking is easy for them. But in case of privacy they have moderate opinion.

One of the main objectives is to assess the impact of e-banking on consumers' lifestyle. To achieve this goal, we have asked the respondents their opinion about some statements. Almost all the users think that e-banking saves time and simplifies their financial complications. It's free from trouble of manual banking. Users don't need to think more about the security of their money because of e-banking, they can use different type of cards, and other facilities which simplify their financial complications. Also consumers can perform secure & quick transactions in their accounts but sometimes they get serious trouble on their account like ID theft, account hacking, miss-transaction etc. For these reasons, consumers have mixed opinion on this statement. Most of the respondents think that e-banking makes their life easier using the facilities provided.

E-banking brings the total bank to the consumers' pocket. Using e-banking users can easily perform banking activities without going to the bank by themselves. Whenever the users go on purchasing they don't need to worry about running out of money due to the blessings of these Cards. Most of the respondents think that paying bill is easier now due to E-banking as they don't need to go bank for paying bill. Almost all the users think that carrying cash is more hassling now. For the blessing of different type of cards like ATM, debit & credit card users really don't need to carry cash with them.

From the study we can conclude that people of Dhaka city is adopting e-banking. And the extent of adoption is increasing day by day. People are now dependent on e-banking for their day to day banking transactions. Although people of this metro city were reluctant to use technology, people seem to get more comfortable to technology now. In order for e-banking to continue to grow, the security and the privacy aspects also need to be improved. Corruption and fraudulence related to e-banking activities must be controlled drastically to improve the image of e-banking. The future of e-banking can be very prosperous if security and privacy issues resolved.

Limitations of the study

One limitation in this study is that, this study limits to Dhaka city only. The second limitation of this study is that the study considered only 229 people. Other than these, the study was based on limited variables and data was collected within a shorter time frame.

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