Mobile Banking Problems in Bangladesh: An Investigation

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Mobile banking accounts for huge amount of daily transactions in Bangladesh. Previous researches in this field revealed some problems in this aspect. But more structured and detailed problems have been discussed in this paper. 250 samples has been selected for the study and the samples have been collected in the year of 2014.Problems have been identified at first and then descriptive statistics, correlation & regression analysis have been applied to find out the states of each identified problems. New variables which are responsible for mobile banking problems in Bangladesh have been identified in this paper with their remedies.

1. Introduction

Mobile banking has not reached its peak point yet in Bangladesh. There are many gaps in the minds of people about mobile banking. There are still some segments of customers who are not familiar with mobile banking activities. They are very traditional in nature and unwilling to transact digitally. Modern financial institutions are utilizing technologies to render better service to their customers.

Mobile banking could be defined as a facility which provides banking services such as balance enquiry, funds transfer, bill payment, and transaction history via a user's mobile phone (Quick 2009). Segun (2011) defined mobile banking as an occurrence when customers access a bank's networks using cellular phones, pagers, personal digital assistants, or similar devices through telecommunication wireless networks. While Akpan (2009) viewed mobile banking (M-banking) as an application of mobile commerce that enables customers to bank virtually at any convenient time and place.

Today banking industry focuses on E-Banking technologies to provide branchless banking service to the customers. E-banking provides convenient, speedy and dependable service to the customers (Nupur 2010). According to Bangladesh bank there are more than 1.50cr registered clients of mobile banking service served by 2.93

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lakh agents transacting over 263.18cr tk per day (Suman 2014). At present mobile banking service is very popular among all classes of people on Bangladesh. Mobile banking service began in Bangladesh in the year 2011. In the beginning the primary goal is to provide banking service to the unbanked population. (Islam 2012).

It has been found that the previous papers in this field of research have similarities with most of the identified variables in this paper. The similar variables are namely Technological difficulty, Conceptual gap, Preference, Knowledge gap, Unwillingness, Habit, Security threat and Confidentiality concern. Previous researchers have somehow used these variables in their papers. But in this paper few additional new variables that are also responsible for mobile banking problems in Bangladesh have been introduced. Unavailability of fund, Educational gap and Inexperience are the additional new variables that have been introduced in this paper exclusively from previous papers.

According to Ahmed et al. (2011) common mobile banking problems in Bangladesh are heard about Mobile Banking, interest to Use, takes time by Mobile Banking than Traditional Banking, Time Saving, Cost, Trustworthy and Use. They have discussed these problems in brief but there are additional problems existing which must be described broadly. They also have not provided required suggestions to deal with these problems. In addition they didn't conduct deep statistical analysis which is required in this aspect. These gaps have been selected to fill up in this paper. So, in this paper the problems related to mobile banking service in Bangladesh have been discussed broadly with relevant statistical analysis. Some remedies also have been discussed to help combat these problems in an efficient manner. This paper is different from previous studies in above mentioned aspects. The additional variables that have been identified here are important indicators of mobile banking problems in Bangladesh. These variables have widened the research scopes in this regard. Bangladeshi banks will be benefitted from this paper's findings. Bangladeshi banks will get certain knowledge about their mobile banking faults and take fruitful actions by going through this paper.

The paper has been organized as follows: Section 1 of this paper deals with Introduction of the study. Section 2 focuses on Literature Review and Section 3 contains Methodology. Results are provided in Section 4 and Conclusion is in Section 5.

1.1 Objectives

The major objectives of writing the paper have been mentioned below:

- Identifying the mobile banking problems in Bangladesh.
- Identifying the significance of relationships between mobile banking problems in Bangladesh and the reasons of mobile banking problems in Bangladesh.

1.2 Problem statement

Ahmed et al. (2011) mentioned very few variables responsible for mobile banking problems. In this paper more variables have been identified and introduced. They also

haven't developed any hypothesis. But this kind of study requires formulation of research questions and hypothesis which has been done in this paper. They also didn't show the relationships between the dependent and independent variables. In a brief, in this paper mobile banking problems in Bangladesh has been thoroughly investigated and related statistical analysis has been conducted to portray the real scenario in this regard.

In the literature review section previous related studies has been mentioned. Two research questions and two sets of hypothesis have been developed to judge the fact. Sampling techniques, methods used to analyze the results have been discussed in the methodology section. The findings have been analyzed logically in the results section. The mentioned hypotheses have been tested in this section. The conclusion section talks about the distinctiveness and similarities of this paper with previous related works. Policy implications and significance of the study also have been discussed here. Limitations of this paper and indications for future researchers have been discussed in the conclusion part as well.

2. Literature Review

From various literatures reviewed it has been found that 30% of households in the United Kingdom use their mobile phones to perform banking operations (Quick 2009). The slow adoption of mobile banking technology is caused by security issues (Luarna and Lina 2005). This finding of the paper is related with the mentioned independent variable of this paper security threat.

The method of financial services via mobile devices with telecommunication network makes customers justifiably nervous and less confident to use the mobile banking technology (Barbuta et al. 2012). This finding of the paper is related with the mentioned independent variable of this paper unwillingness.

Each bank has their own protection way that may differ with other banks. As very few incident of mobile banking the risks are still unknown and security actions are undefined (Chandran 2014). This finding of the paper is related with the mentioned independent variables of this paper namely confidentiality concern and security threat.

The main challenges in mobile banking are to convince and educate customers on safety usage and the benefits of mobile banking technology. The relevant issues related to mobile banking technology are skills, safety of usage and confidentiality. There exist risks of failures of technological advancements (Shuhidan et al. 2016). This finding of the paper is related with the mentioned independent variables of this paper namely confidentiality concern and security threat, Knowledge gap, technological difficulty, conceptual gap and preference.

Customers reluctant to use mobile banking because they have fear of privacy breach across telecommunication network. There were 50 Android mobile users hit by malware targeting mobile banking users in Singapore (Tham 2015). This finding of the paper is related with the mentioned independent variables of this paper namely confidentiality concern, security threat and technological difficulty.

The anxiety of broken and slow internet connection during transaction and possible loss their money is one of customers concern. Mobile banking requires internet connection to enable success transaction. For those who are in rural area, they will have difficulties to access to the mobile banking (Chandran 2014). This finding of the paper is related with the mentioned independent variable of this paper namely technological difficulty.

Lee (2009) conducted a study on perceived risk of internet banking adoption. He divided perceived risk to five facets: performance risk, social risk, financial risk, time risk and security risk which provided more in-depth understanding of characteristics of risks towards internet banking. Five facets derived from perceived risks for mobile banking as described as follows:

Performance Risk refers to the losses incurred by deficiencies or malfunctions of mobile banking. Mobile phone for example, has limited battery life and wireless connection may break, limiting the use of mobile services. Consumers feel the insecurity of their bank account when system are suddenly disconnect or breakdown (Kuismaa at el 2007). Performance risk is related with the mentioned independent variables of this paper namely technological difficulty.

Security or Privacy Risk is defined as potential loss due to fraud or a hacker which compromising the security of a mobile banking user. The PIN codes that are portable be placed in phone may be used by others by hacking and other means. This action can cause potential security risk and privacy risk (Kuismaa et al 2007). Security or Privacy Risk is related with the mentioned independent variables of this paper namely confidentiality concern and security threat.

The new means of stealing consumer information is through phishing. Phishers are obtaining consumer sensitive data, such username, password and credit card information by masquerading as a trust-worthy entity in an electronic communications (Reavley 2005). This is related with the mentioned independent variables of this paper namely confidentiality concern and security threat.

Time or Convenience Risk refers to the loss of time in any inconvenience incurred due to the delays of receiving payment or the difficulties to navigate the mobile banking (finding the appropriate services). With relate to the time, the

infrastructure of mobile banking that can be cater the speed of changing section without any lagging (Forsythe & Shi 2003). Convenience Risk is related with the mentioned independent variable of this paper namely Unwillingness. Time risk is not enough concern in Bangladeshi perspective as in most of the cases it is faster than traditional banking.

Social Risk refers to the possibility to not use the mobile banking because of disapproval or negative view from friends, family, groups or even media. Social risk reflects the potential loss of status in a social group, as a result of adopting a product or service (Lee 2009). This is related with the mentioned independent variables of this paper namely conceptual gap and knowledge gap.

Financial Risk refers to the potential of losing money due to transaction error or bank account misuse. Customers are fear that they themselves may make mistakes in their banking processes if they use a computer (Kuismaa et al 2007) or a cell phone (Laukkanen and Lauronen 2005). This is related with the mentioned independent variables of this paper namely technological difficulty, habit and unwillingness.

Ahmed et al. (2011) mentioned few variables responsible for mobile banking problems in Bangladesh. The mentioned variables in their paper are heard about Mobile Banking, interest to Use, takes time by Mobile Banking than Traditional Banking, Time Saving, Cost, Trustworthy and Use. This finding of the paper is related with the mentioned independent variables of this paper namely confidentiality concern, Knowledge gap, technological difficulty and preference. But they didn't test any hypothesis to prove whether these variables are responsible for mobile banking problems in Bangladesh or not. Here the following research question has been formulated to remove this weakness of that paper:

RQ 1: Are the mentioned variables responsible for Mobile banking problems in Bangladesh?

To test this in this paper the following hypothesis has been developed according to the above mentioned research question:

First set of hypotheses:

H_0: The mentioned variables are not responsible for Mobile banking problems in Bangladesh.
H_1: The mentioned variables are responsible for Mobile banking problems in Bangladesh.

Ahmed et al. (2011) didn't show the significance of relationships between the dependent variable and independent variables. In this paper the significance of relationships

between the dependent variable named mobile banking problems and independent variables have been shown. Here the following research question has been formulated to remove this weakness of that paper:

RQ 2: Is there any significant relationship between the dependent and independent variables?

Following hypothesis has been developed to answer the above mentioned research question:

Second set of hypotheses:
H_0: There is insignificant relationship between the dependent and independent variables.
H_1: There is significant relationship between the dependent and independent variables.

After thorough literature review it has been found that the previous papers in this field of research have similarities with most of the identified variables in this paper. The similar variables are namely Technological difficulty, Conceptual gap, Preference, Knowledge gap, Unwillingness, Habit, Security threat and Confidentiality concern. Previous researchers have somehow used these variables in their papers. But they missed out few additional new variables that are also responsible in this regard. Unavailability of fund, Educational gap and Inexperience are the additional new variables that have been identified in this paper exclusively from previous papers. These additional new variables are helpful to contribute to the body of knowledge about mobile banking problems in Bangladesh. These variables have never been identified by any paper previously. There is lack of research work in this aspect still now. So, this paper is filling out the knowledge gap in an efficient manner by providing new variables to work with.

3. Methodology

Mobile banking in Bangladesh has many problems. So, this research widens a way to identify the major problems. A survey has been conducted on customers of different banks in Bangladesh over their mobile banking use status with the help of a questionnaire. The research is a descriptive one in nature. The data has been collected throughout the year of 2014. Primary data has been collected from fieldwork. Specially instructed & trained interviewers were sent to collect data. Secondary data has been collected from previous researches, publications & internet.

3.1 Sampling Techniques

Convenience sampling technique has been used to collect the samples. The samples are spread over the country. So, it is reasonable to take sample according to the availability of the respondents. Sample size is 250 in this regard. The samples were collected from different customer segments that have experience in conducting banking activities.

3.2 Descriptive Statistics

Mean values of the independent variables have been used to answer the first research question 'Are the mentioned variables responsible for Mobile banking problems in Bangladesh?' as well as to test the first set of hypothesis. The mean values of the variables indicate the respondents agreements or disagreements with the fact whether the variables are responsible for Mobile banking problems in Bangladesh or not. The respondents gave all of their responses through 7 point likert scale. So the mean values of these variables are representative of the respondents opinion about the fact that whether the variables are responsible for Mobile banking problems in Bangladesh or not.

3.3 Correlation

Two tailed Pearson correlation test has been used in this study for finding correlations among variables. It showed the relationships among the dependent and independent variables which is necessary for conducting the regression analysis. The multicollinerity also has been tested to find out whether there is overlapping of close variables which should be excluded.

Ahmed et al. (2011) wrote a paper in this field in the context of Bangladesh. But they just used simple questions to conduct a survey and the questions were not structured as well. In this paper 7 point likert scaling structured questions are designed to conduct the survey. They just used 120 samples which is very little in this context. In this paper 250 samples were drawn. They also didn't provide the demographic profile of the respondents and didn't mention whether all age group people are involved or not. In this paper a demographic profile of the respondents have been developed which shows involvement of all types of people. They didn't provide justification for used variables like this paper do. They didn't conduct correlation, regression and descriptive analysis which are done in this paper.

3.4 Justifications for Variables

The justifications for the variables of the study are mentioned below in a table:

Table 1: Justifications for Variables

Variables of the study	Mentioned previously by
Conceptual gap	Shuhidan et al. (2016), Lee (2009)
Technological difficulty	Shuhidan et al. (2016), Tham (2015), Chandran (2014), Kuismaa, Laukkanena & Hiltunenb (2007), Laukkanen & Lauronen (2005), Ahmed et al. (2011)
Security threat	Luarna & Lina (2005), Chandran (2014), Shuhidan et al. (2016), Tham (2015), Kuismaa, Laukkanena & Hiltunenb (2007), Reavley (2005),
Confidentiality concern	Chandran(2014), Shuhidan et al. (2016), Tham (2015), Kuismaa, Laukkanena & Hiltunenb (2007), Reavley (2005), Ahmed et al. (2011)
Knowledge gap	Shuhidan et al. (2016), Lee (2009), Ahmed et al. (2011)
Habit	Kuismaa, Laukkanena & Hiltunenb (2007), Laukkanen & Lauronen (2005)
Preference	Shuhidan et al. (2016), Ahmed et al. (2011)
Unwillingness	Barbuta et al. (2012), Kuismaa, Laukkanena & Hiltunenb (2007), Forsythe & Shi (2003), Laukkanen & Lauronen (2005)

3.5 Model

The multiple regressions analysis model has been chosen for statistical analysis in this paper. Multiple regression analysis has been used to test the relationships between independent variables and dependent variable in this regard.

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Regression analysis has shown the strength of relationship between the dependent variable and independent variables of the study. This analysis also showed that addition of other independent variables could not make remarkable contribution to influence the dependent variable. That means the independent variables chosen for the study are enough in this regard. The anova table of regression analysis has helped to show the significance of relationship between the dependent and independent variables of the study. This finding is helpful to answer the second research question 'Is there any significant relationship between the dependent and independent variables?' as well as to test the second set of hypothesis.

The multiple regression model for this study has been depicted below:
Equation 1:

$$MBP = D + \beta_1 I + \beta_2 C + \beta_3 T + \beta_4 S + \beta_5 CC + \beta_6 E + \beta_7 K + \beta_8 H + \beta_9 P + \beta_{10} U + \beta_{11} UF + e_i$$

Where,

MBP = Mobile Banking problems
I = Inexperience
C = Conceptual gap
T = Technological difficulty
S = Security threat
CC = Confidentiality concern
E = Educational gap
K = Knowledge gap
H = Habit
P = Preference
U = Unwillingness
UF = Unavailability of fund
ei = Error
D = Multiple Regression constant

4. Findings

Table 2: Demographic Profile of the Respondents

Variable	Frequency	Percent
Educational qualification		
Below SSC	23	9.2
S.S.C	24	9.6
H.S.C	58	23.2
Graduate	85	34.0
Masters and above	60	24.0
Total	250	100.0
Age		
15 to 24	30	12.0
25 to 34	70	28.0
35 to 44	65	26.0
45 to 54	60	24.0
55 and above	25	10.0
Total	250	100.0
Gender		
Male	143	57.2
Female	107	42.8
Total	250	100.0
Frequency of using Mobile Banking Service		
2-3 times per week	73	29.2
1-2 times per month	94	37.6
less than one per month	45	18.0
Everyday	38	15.2
Total	250	100.0

4.1 Description of Demographic Profile of the Respondents:

From Table.1 we can understand that each demographic variable had various response rates. There were 143 males and 107 females, ranging in age from 15 to greater than 55. People aged 25-34 had the highest response rate (28.0%). Graduate respondents were highest (34.0%) in the educational background variable. Customers using mobile banking service in 1-2 times per month (37.6%) were highest under the Frequency of using Mobile Banking Service variable.

Table 3: Descriptive Statistics

	N	Mean
Inexperience	250	4.8880
Conceptual gap	250	4.8520
Technological difficulty	250	4.7760
Security threat	250	5.0560
Confidentiality concern	250	5.2160
Educational gap	250	4.4680
Knowledge gap	250	4.8440
Habit	250	4.8680
Preference	250	4.9440
Unwillingness	250	4.8560
Unavailability of fund	250	5.0360
Mobile banking problems	250	5.2800
Valid N (listwise)	250	

4.2 Hypothesis Testing (First Set):

From the above descriptive table it's clear that mobile banking service has so many problems regarding Bangladesh. All the variables have mean value of more than 4 (Somewhat Agree) and some are above 5 (Disagree) which is alarming. This finding supports the rejection of the null hypothesis from the first set of hypothesis that the mentioned variables are not responsible for Mobile banking problems in Bangladesh. The rejection of the null hypothesis indicates the acceptance of the alternate hypothesis from the first set of hypothesis that the mentioned variables are responsible for Mobile banking problems in Bangladesh.

Table 4: Two Tailed Pearson Correlation Test

		Inexperience	Conceptual gap	Technological difficulty	Security threat	Confidentiality concern	Educational gap	Knowledge gap	Habit	Preference	Unwillingness	Unavailability of fund
Inexperience	Pearson Correlation	1	-.208[**]	-.204[**]	-.107	-.024	.044	.112	.053	.106	.094	-.083
	N	250	250	250	250	250	250	250	250	250	250	250
Conceptual gap	Pearson Correlation	-.208[**]	1	-.010	-.231[**]	.273[**]	-.117	-.027	-.077	.020	-.012	.001
Technological difficulty	Pearson Correlation	-.204[**]	-.010	1	.089	-.126[*]	-.251[**]	.009	-.071	.000	-.038	.000
Security threat	Pearson Correlation	-.107	-.231[**]	.089	1	.063	-.033	-.027	-.080	.092	.062	.010
Confidentiality concern	Pearson Correlation	-.024	.273[**]	-.126[*]	.063	1	-.321[**]	.105	-.195[**]	.106	-.156[*]	-.052
Educational gap	Pearson Correlation	.044	-.117	-.251[**]	-.033	-.321[**]	1	.034	.080	.040	-.066	.086
Knowledge gap	Pearson Correlation	.112	-.027	.009	-.027	.105	.034	1	.012	-.024	-.059	.065
Habit	Pearson Correlation	.053	-.077	-.071	-.080	-.195[**]	.080	.012	1	-.004	-.096	-.153[*]
Preference	Pearson Correlation	.106	.020	.000	.092	.106	.040	-.024	-.004	1	.101	-.021
Unwillingness	Pearson Correlation	.094	-.012	-.038	.062	-.156[*]	-.066	-.059	-.096	.101	1	-.074
Unavailability of fund	Pearson Correlation	-.083	.001	.000	.010	-.052	.086	.065	-.153[*]	-.021	-.074	1
Mobile banking problems	Pearson Correlation	**-.390**[**]	**-.259**[**]	**.176**[**]	**.239**[**]	**-.136**[*]	**.090**	**.142**[*]	**-.097**	**-.113**	**-.062**	**.012**

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

4.3 Description of the Correlation Table

Correlation analysis helps to identify the relationship between dependent variable & each independent variable. Here the dependent variable Mobile banking problems is positively related with the independent variables namely educational gap, knowledge gap, technological difficulty, security threat & unavailability of fund. This result indicates that these variables are much closer to influence the dependent variable. All the variables have correlation value of less than 0.7. It is an indication of the fact that there is no multicollinearity problem in the variable set and all the variables have their separate influence and importance.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.598[a]	.357	.327	.90374

a. Predictors: (Constant), Unavailability of fund, Technological difficulty, Conceptual gap, Preference, Knowledge gap, Unwillingness, Habit, Security threat, Educational gap, Inexperience, Confidentiality concern

4.4 Description of the Model Summary

Here, the Value of R = 0.598 indicates that there is a high degree of positive correlation among the independent & dependent variables. The value of R^2 = 0.357 means that 35.7% or 36% variation in the dependent variables can be explained by the regression model. The value of adjusted R^2 = 0.327 or 32.7% suggests that addition of the other independent variables couldn't make a remarkable contribution in explaining the variation in the dependent variable.

Table: 6 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	108.015	11	9.820	12.023	.000[a]
	Residual	194.385	238	.817		
	Total	302.400	249			

a. Predictors: (Constant), Unavailability of fund, Technological difficulty, Conceptual gap, Preference, Knowledge gap, Unwillingness, Habit, Security threat, Educational gap, Inexperience, Confidentiality concern
b. Dependent Variable: Mobile banking problems

4.5 Hypothesis Testing (Second Set):

The above ANOVA table provides us the significance value of **.000**. This finding indicates that there is a significant relationship between dependent & independent variables. So, it can be said that mobile banking problems are significantly influenced by the independent variables namely Technological difficulty, Conceptual gap, Preference, Knowledge gap, Unwillingness, Habit, Security threat, Educational gap, Inexperience, Confidentiality concern & Unavailability of fund. This finding supports the rejection of the null hypothesis from the second set of hypothesis that there is insignificant relationship

between the dependent and independent variables. The rejection of the null hypothesis indicates the acceptance of the alternate hypothesis from the second set of hypothesis that there is significant relationship between the dependent and independent variables.

Table: 7 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.930	1.140		7.836	.000
	Inexperience	-.503	.064	-.440	-7.811	.000
	Conceptual gap	-.331	.066	-.290	-4.993	.000
	Technological difficulty	.078	.066	.068	1.190	.235
	Security threat	.146	.062	.131	2.367	.019
	Confidentiality concern	-.097	.068	-.090	-1.429	.154
	Educational gap	.081	.062	.078	1.313	.190
	Knowledge gap	.209	.057	.195	3.663	.000
	Habit	-.139	.063	-.122	-2.218	.027
	Preference	-.065	.059	-.059	-1.107	.269
	Unwillingness	-.038	.055	-.039	-.704	.482
	Unavailability of fund	-.075	.056	-.072	-1.346	.180

a. Dependent Variable: Mobile banking problems

4.6 Regression Equation

The Regression equation for this study has been shown below:

Mobile banking problems = 8.930 + (-.503) (Inexperience) + (-.331) (Conceptual gap) + (.078) (Technological difficulty) + (.146) (Security threat) + (-.097) (Confidentiality concern) + (.081) (Educational gap) + (.209) (Knowledge gap) + (-.139 (Habit) + (-.065) (Preference) + (-.038) (Unwillingness) + (-.075) (Unavailability of fund).

From the above evidences it is clear that the dependent variable mobile banking problems is influenced by the independent variables namely Non-essentiality view, Technological difficulty, Conceptual gap, Lack of preference, Knowledge gap, Unwillingness, Lack of Habit, Security threat, Educational gap, Inexperience, Confidentiality concern. Among these variables we can find from Table.6 that Inexperience (.000), Knowledge gap (.000), Conceptual gap (.000) are highly significant than the other ones in this regard.

Ahmed et al. (2011) showed little analysis with some simple graphs and insufficient number of variables. They didn't show deep statistical analysis using SPSS software which is required in this regard. Here correlation analysis has been done to show whether there is multicolinerity problem in the variable set. Descriptive statistics has been used to show the importance of the mentioned variables. Regression analysis has been performed to show the relationship of dependent and independent variables. All of these important analysis are absent on the mentioned paper. So, this paper is a germane one than other paper in this field to show more analysis to prove the relationships. This study also found additional new variable's influences on mobile banking problems which were not mentioned in any other paper before.

5. Conclusions

The mentioned independent variables are responsible for mobile banking problems in Bangladesh. The mean values of the responses indicate that all of the independent variables are responsible for mobile banking problems in Bangladesh. This finding has given a positive answer to the first research question as well as to the first objective of the study. There exist significant relationships between the dependent and independent variables. The correlation analysis, model summary analysis and anova analysis has showed significant relationships between the dependent and independent variables. This finding has given a positive answer to the second research question as well as to the second objective of the study.

There was lack of deep literature review in previous papers of Bangladesh in this field. In the literature review section it has been found that the previous researches in the same field in Bangladesh didn't mention enough important variables. So, in this paper deep literature review has been conducted to strengthen the field of research and identify more relevant variables. This study has similarity with Ahmed et al. (2011) in respect of the topic but different in many aspects. They provided very few variables which are not enough. In this paper other important variables also included to strengthen the findings. They didn't show enough statistical analysis to support the fact but in this paper relevant statistical analysis has been conducted to support the fact. So this paper is completely different in terms of its relevant findings. This paper has identified the relevant variables responsible for mobile banking problems in Bangladesh which other papers on same topic didn't mention. The findings of this paper introduced additional new relevant variables that will contribute to the body of knowledge in this field in an efficient manner.

Mobile banking has not gained that much popularity as it should have in our country. So there are requirements of improving the situations by taking some steps. Banks of our country should notice these recommendations to improve themselves in this regard. Bank managers should raise mobile banking transaction experience among people to reduce the inexperience gap. Mobile banking is relatively less known term in our country than the developed world. So there is existence of conceptual gap among the people. This can be removed by communicating the services and benefits with the customers in understandable ways. Network difficulty is one of the major reasons of less popularity of

mobile banking services. Strong & flawless network channels development, regular maintenance & up gradation are recommended to improve the state. Security threat is another important issue to consider. In banking transactions security is a prime concern. Customers should be assured that if they choose to transact through mobile banking then they will be secured from all aspects. Cyber crime & network hacking are common threats now. Strong security system & digital infrastructure should be developed to keep the customer's data confidentiality. Some people in our country are not well educated. The situation is improving recently but still there are segments of people who are keeping away from taking standard education. They could be communicated with Bangla text messages in lieu of English texts. Then they could understand the mobile banking service's benefits & processes far better than before. Some people don't have the knowledge of using mobile banking services. So handbills, leaflets could be distributed among the customers to make them knowledgeable. Seminars, workshops are also helpful in this regard. In Bangladesh people have less habit of using mobile banking services than the developed world. Repetitive advertisement about benefits of using mobile banking services could be effective in this aspect. There are still some segments of people who prefer to transact in traditional channels than digital ones. Strong communication about the benefits of mobile banking should be communicated with them. Some people in our country are not ready to take mobile banking services. They are not willing to use the service. Examples of faster and developed country people should be communicated to them to make them regular users. Banks should appoint those dealers who can make fund available whenever the customers ask for it. Then customers can get fund according to their convenience. As a result they will consider it as an important mode of transaction. These remedial actions will be helpful to combat the mobile banking problems in Bangladesh. All of these actions have their separate effects and should be implemented distinctly. These suggestions will be helpful for Bangladeshi banks in improving the worst conditions related to mobile banking. The management of different banks in Bangladesh can practices these remedical actions gradually to digitalize their tasks in an efficient manner.

There is no single work in this world which doesn't have limitations. This paper also has some limitations. The major limitations of this paper are: samples were not taken equally from all age groups, all regions of Bangladesh were not covered while collecting the data through questionnaire, samples were not taken equally from all income groups, some customers were not helpful in filling up the questionnaire and additional variables also may be added to make the research a complete one etc.

According to the limitations firstly, the future research may take on larger sample size to make the research more germane. Secondly, the future research may cover all regions of Bangladesh to increase coverage area of the research. Thirdly, some suggestions have been provided in this paper to combat the mentioned problems but there is no direction on which task should be done first to combat each problem. Factor analysis of these remedial actions with the problems could be done to know which remedial action is more appropriate for combating which problem. Fourthly, Critical path analysis & PERT analysis could be applied here to know which tasks should be done on a priority

basis to combat the problematic situations. Finally, the importance of other variables in this field of study could be tested to increase the depth in this regard.

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