

Customer Satisfaction Survey on Mobile Financial Services of Dutch Bangla Bank Limited

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Abstract

At present banking sector is trying to make its activity customer centric and sustainable. This paper has attempted to examine the effect of mobile financial service on the customers' satisfaction of Bangladesh through a case study on Dutch Bangla Bank Limited. The paper has found overall mobile financial service in Bangladesh is growing day by day. Descriptive statistics show that most of the customers are satisfied by using this sophisticated service. They are mostly satisfied about the responsiveness of the service and least satisfied about the reliability. The satisfaction-specific independent variables (reliability, responsiveness, assurance, empathy and tangibility) positively and significantly affect the overall satisfaction level of the customers.

Keywords: Mobile Financial Services, Customer Satisfaction, Bangladesh.

Introduction

Banks are playing the most promising role to the development of any country. Bangladesh is moving forward day by day through its diversified banking services. It is a matter of hope that the people of Bangladesh are also now very much concerned about their banking activities; they want updated and automated services. Banks are now moving from traditional services to digital and modern services in response to the customer's demand. As a consequence of this, banks have introduced mobile financial service. They are providing almost all types of services through the mobile phones of their customers. So, banking has become the most convenient activity for the bankers and the customers as well. For this, customers are paying a lot to get the services of their banks. They also compare one bank with another and sometimes they switch for getting better service. That is why this paper has tried to know the overall satisfaction level of mobile financial service customers of Bangladesh through Dutch Bangla Bank Limited (which is named as Rocket) because this bank is the pioneer in mobile banking operation or mobile financial service in Bangladesh.

Objectives of the Research

This research paper has been conducted to achieve the followings objectives:

1. To know the overall mobile financial services of Bangladesh.
2. To evaluate the overall customers' satisfaction from mobile financial services of Dutch Bangla Bank Limited.
3. To rank the variables which affect the customers' satisfaction of Dutch Bangla Bank Limited.

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Research Methodology

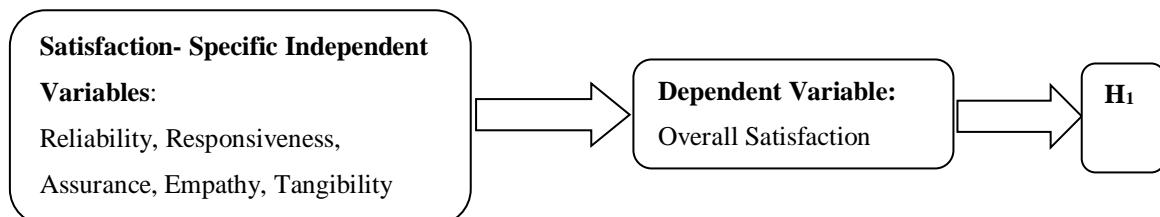
This study has been conducted mainly based on primary data which have been collected by structured questionnaire survey among 200 mobile financial service users of Dutch Bangla Bank Limited by using convenient sampling method. All the mobile financial service customers of the bank are the population of the study. This study considers the following variables to measure the users' satisfaction: Reliability, Responsiveness, Assurance, Empathy and Tangibility. These variables have many sub factors to get a detail viewpoint about the customers' satisfaction level. The questionnaire has been developed by using 5 point Likert-type scale consisting of assigned values between 1 to 5 where value 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree for the questions. Secondary data have been collected from articles of different journals and websites etc. Collected data have been analyzed through descriptive statistics (frequency, mean, standard deviation) and regression by using SPSS version no. 16. To achieve the objectives the following hypothesis has been developed:

H_1 : Satisfaction-specific variables (reliability, responsiveness, assurance, empathy and tangibility) positively affect overall mobile financial service user's satisfaction level.

For regression, the following model has been used: $Y = a_0 + b_1 x_1 + b_2 x_2 + \dots + b_n x_n + e$

Here, Y = Dependent variable, a_0 = Constant, x_1, x_2, \dots, x_n are the independent variables and b_1, b_2, \dots, b_n are the coefficients of the independent variables and e is the error term.

Multiple Regression Model



Literature Review

Chemingui and Lallouna (2013) identified one resistance dimension—tradition and four motivational dimensions—compatibility, trialability, perceived enjoyment and system quality. Tradition has a negative and a significant impact on the intention to use mobile financial services, whereas compatibility, trialability and perceived enjoyment have a positive and a significant impact on intention to use such services. In addition, system quality has a significant and positive impact on trust. Hsu et al. (2011) applied the Technology Acceptance Model (TAM), which incorporates perceived security, perceived cost and subjective norms as additional belief-related constructs to accurately explain users' acceptance of MFS. An empirical study involving 275 subjects was conducted to test the model. The findings indicated that perceived usefulness (PU), attitude and subjective norms explain about 74% of MFS usage. Interestingly, perceived cost had no effect on intention to use MFS. According to Lee et al. (2012)

MFS is not only useful for a firm, but also is useful from a time and monetary value standpoint. Personal innovativeness significantly influences perceived ease-of-use, so innovative users can take advantage of MFS more frequently. Absorptive capacity also directly affects usage intention. Finally, perceived task technology, versus a task characteristic view, significantly influences perceived usefulness. Aboelmaged and Gebba (2013) have shown a significant positive impact of attitude toward mobile banking and subjective norm on mobile banking adoption. The research found that the effects of behavioral control and usefulness on mobile banking adoption were insignificant. Furthermore, the regression results indicated a significant impact of perceived usefulness on attitude toward mobile banking while the effect of perceived ease of use on attitude toward mobile banking was not supported. On the other hand, Alsheikh & Bojei (2012) have written perceived value is a subjective concept that differs among bank customers and tried to examine factors affecting the value held by bank customers toward the use of mobile banking services. Amin et.al. (2006) have analyzed the undergraduate students' willingness on adopting the usage of mobile phone in banking transaction focusing on Islamic banking in FT, Labuan and found that students tend to learn and adopt mobile banking in their banking transactions. In addition, the results also demonstrate students' attitudes and expectations to be the most consistent explanatory factors in predicting their willingness on adopting mobile banking usage in the future. Many researchers tried to find out the impact of mobile banking. Anyasi & Otubu (2009) have shown the use of mobile phone in the banking industry, its economic implications, and in general a systematic look into the various forms of mobile banking with emphasis on the security measures that makes the whole process safe for adoption. Begum (2014) has tried to know the customer's preference, customer's level of satisfaction and motivational factors towards Islamic banks and conventional banks. In this study a comparison between the services of both the banks has been developed. Whether Trust Level of the customer creates effect on mobile banking satisfaction is examined by Chung and Kwon (2009). The research model also has articulated how perceptions of the system quality, information quality and information presentation of mobile banking moderated by trust influence customer satisfaction with this type of service. Self-efficacy is the strongest antecedent of perceived ease-of-use, which directly and indirectly affects behavioral intention through perceived usefulness in mobile banking (Gu et al., 2009). Many researches have been conducted to find out the factors related to the adoption of mobile banking (Ismail and Masinge, 2012; Khraim et al., 2011; Noor, 2011; Riquelme & Rios, 2010; Sulaiman et.al., 2007; Suoranta, 2003; Yu, 2012). Laforet and Li (2005) have examined consumers' attitudes towards online and mobile banking in China. The barriers to mobile banking adoption were lack of awareness and understanding of the benefits provided by mobile banking. Laukkanen and Lauronen (2005) have explored consumer value creation in various mobile banking services. They have written that mobile devices represent the recent development in electronic service distribution. Their findings increase the understanding of customer-perceived value and value creation on the basis of attributes of mobile services and customer-perceived disadvantages of mobile phones in electronic banking context. Laukkanen and Pasanen (2008) have studied how mobile banking innovators and early adopters differ from other users of online banking services through internet survey among customers of a large Scandinavian bank in Finland yielding 2,675 responses and found that only gender differentiates these two groups of customers, while education, income, occupation and size of the household were found to be insignificant in differentiating the groups. Morawczynski and Miscione (2008) have inferred customers use the M-PESA (a mobile banking system in Kenya) service because they believe that their money will be kept safe by the concerned firm. Over all the mobile banking users are

satisfied but they want some new edition of the services (Parvin, 2013). Environment is also important for mobile banking transaction (Porteous, 2006). On the other hand, customers view point has been assessed by some researchers (Poussotchi & Schurig, 2004). Tiwari et al. (2007) examined innovative mobile solutions in the field of mobile financial services (MFS) by using four case studies from Germany and Switzerland – representing two banks and two different technology solutions. Yu and Fang (2009) have tried to establish a better measurement model for post-adoption user perception of mobile banking services. Based on 458 valid responses of mobile banking users, the results show that the instrument, consisting of 21 items and 6 factors, is a reliable, valid, and useful measurement for assessing the post-adoption perception of mobile banking.

Analysis and Findings

Table 1: Mobile Financial Service Scenario in Bangladesh

Serial no.	Description	Amount in July, 2015	Amount in July, 2016	Amount in July 2017
1	No. of Banks in the Services	20	18	17
2	No. of agents	531,731	613,151	772,109
3	No. of registered clients in Lac	287.32	365.79	544.33
4	No. of active accounts in Lac	119.23	134.44	283.18
5	No. of total transaction	97,728,117	119,532,904	152,314,614
6	Total transaction in taka(in crore BDT)	13,811.52	17,639.63	23,369.14
7	No. of daily average transaction	3,257,604	3,984,430	4,913,375
8	Average daily transaction (in crore BDT)	460.38	587.99	753.84
9	Additional information	Amount (in crore BDT)	Amount (in crore BDT)	Amount (in crore BDT)
a.	Inward Remittance	2.83	5.91	7.71
b.	Cash In transaction	5,773.08	7,288.42	9,502.00
c.	Cash Out Transaction	5,049.97	6,986.47	9,106.85
d.	P2P transaction	2,424.35	2,700.17	3,615.41
e.	Salary Disbursement (B2P)	146.71	120.24	198.04
f.	Utility Bill Payment (P2B)	145.62	174.54	203.36
g.	Merchant Payment	-	-	100.16
h.	Government Payment	-	-	237.49
i.	Others	268.95	363.87	398.13

Source: <https://www.bb.org.bd/fnansys/paymentsys/mfsdata.php>

From the above table it has been observed that over the years the mobile financial service picture in the Bangladesh is becoming better. In the year 2017 highest number of agents, active clients

and transactions have been involved in the sustainable banking practices. Among the observed three years, 2015 is in the lowest position. But cash out transaction is lowest in 2017 whereas there was no merchant and government payment in 2015 and 2016.

Table 2: Customer-Specific Variables

Variables	Category	Percent	Variables	Category	Percent
Age	Below 20	8	Profession	Govt. Service holder	17.5
	20-30 Years	35		Non Govt. Service holder	16.5
	30-40 Years	46		Businessman	16.5
	40-50 Years	10		Student	34.0
	Above 50 Years	1		Worker	7.5
	Total	100		Housewife	8.0
Gender	Male	70		Total	100
	Female	30	Monthly Income Level	Below Tk. 20,000	75.5
	Total	100		Tk.20,000-30,000	17.0
Marital Status	Married	62.5		Tk.30,000-40,000	4.5
	Unmarried	35		Tk.40,000-50,000	2.5
	Others	2.5		Above Tk.50,000	0.5
	Total	100		Total	100
Education Level	Under S.S.C	4.5	Experience of Banking	One year	50
	S.S.C	11.5		Two years	12.5
	H.S.C	25.5		Three years	10
	Graduate	44.0		Four years	15
	Postgraduate	14.5		More than four years	12.5
	Total	100		Total	100
Types of accounts	Current	25			
	Savings	45			
	Term	30			
	Total	100			

Source: Field Survey

From the above table it can be noticed that 8% of the respondents are below 20 years, 35 % between 20-30 and 46% between 30-40 years, 10% between 40-50 and only 1% is above 50 years age. Most of the maximum respondents are male (70%) and only 30% of the respondents are female, while 62.5% are married, 35% are unmarried. Most of the customers are graduate student, so their monthly income level is Below Tk. 20,000. Most of the customers have saving account in their bank and they are doing banking for one year.

Table 3: Descriptive Statistics of Satisfaction-Specific Variables

DESCRIPTIVE STATISTICS						
Variables	N	Minimum	Maximum	Mean	Ranking	Std. Deviation
RESPONSIVENESS	200	4	5	4.96	1	.184
TANGIBILITY	200	4	5	4.9230	2	.19198
ASSURANCE	200	3.17	5	4.7767	3	.43520
EMPATHY	200	2	5	4.75	4	.763
RELIABILITY	200	2.75	5	4.6725	5	.51142
SATISFACTION	200	4	5	4.94		.238
VALID N (LISTWISE)	200					
Grand Mean of the Variables				4.81644		

Source: Author's Calculation

From the table it can be said that among five satisfaction-specific variables responsiveness has got the highest mean value which means customers have almost agreed strongly about the responsiveness of the service quality. On the other hand, customers are least agreed about the reliability. But it is clear all the variables have got very good mean value because the values are near the grand mean value (4.81644) of all the variables. At last it can be inferred that as a whole the customers are very much satisfied (mean value 4.94) about the mobile financial service of Dutch Bangla Bank Limited and the country (at a greater extent).

Multiple Linear Regression between Satisfaction-Specific Variables and Overall Satisfaction from Mobile Banking Services:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672 ^a	.452	.438	.179

A. Predictors: (Constant), Reliability, Responsiveness, Assurance, Empathy, Tangibility.

B. Dependent Variable: Overall Satisfaction

ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.098	5	1.020	31.994	.000 ^a
Residual	6.182	194	.032		
Total	11.280	199			

A. Predictors: (Constant), Reliability, Responsiveness, Assurance, Empathy, Tangibility.

B. Dependent Variable: Overall Satisfaction

<u>Model</u>	<u>Coefficients^a</u>				
	<u>Unstandardized Coefficients</u>		<u>Standardized Coefficients</u>		
	<u>B</u>	<u>Std. Error</u>	<u>Beta</u>	<u>t</u>	<u>Sig.</u>
(Constant)	2.395	.435		5.501	.000
Reliability	.004	.025	.009	.158	.875
Responsiveness	.159	.077	.123	2.054	.041
Assurance	.065	.037	.119	1.755	.081
Empathy	.162	.020	.520	8.057	.000
Tangibility	.134	.071	.108	1.885	.061

a. Dependent Variable: Overall Satisfaction

The above model summary finds there remains a very positive correlation between independent variables (Reliability, Responsiveness, Assurance, Empathy and Tangibility) and dependent variable (overall satisfaction). At 1% significance level the correlation is 67.2%. This model tells that 43.8% variation in overall satisfaction can be explained by the five independent variables. From ANOVA test, it can be remarked that the satisfaction specific variables positively affect the overall mobile banking satisfaction level of the customers. Hence, H_1 is accepted.

So, Overall Satisfaction = $2.395 + (.004) \text{Reliability} + (.159) \text{Responsiveness} + (.065) \text{Assurance} + (.162) \text{Empathy} + (.134) \text{Tangibility} + e$. Thus the model infers if Reliability, Responsiveness, Assurance, Empathy and Tangibility increases by 1 point respectively; overall satisfaction will increase by .004, .159, .065, .162 and .134 point respectively.

Limitations of This Research and Scope for Further Study

This paper has been completed by taking into account of a single bank. So it could be better if more banks were included in the study and the study considered some other variable (other than overall satisfaction) that might have affected the sustainable banking in Bangladesh and some more research can be conducted on sustainable banking by taking into consideration of different services and different countries.

Conclusion

At the very end, it can be said banks are really doing very well regarding the mobile financial services or mobile banking and it will lead to the development of sustainable banking in Bangladesh. The customers think they are getting very good services from mobile financial services and as a whole, the customers are satisfied by using this dynamic service. The paper has also found that reliability, responsiveness, assurance, tangibility, empathy are positively affecting the overall satisfaction of the customer and hopefully this satisfaction will affect the banking practice in Bangladesh. So the banks in Bangladesh should give more attention to sustainable banking activity which will lead to the sustainable development of Bangladesh.

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