

Mobile Money System: The Bangladesh Experience

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Abstract- This study is about the Mobile Money System in Bangladesh. Major objectives of this study are to give an overview about cost, usage and all other benefits of Mobile Banking as well as to produce a scenario of Mobile Banking in Bangladesh. Both the primary and secondary data have been used for the study purpose. The major findings of this study are 94% respondents think that it saves time than traditional banking, the highest number of respondents use Mobile Banking for 'Air-time top-up' service, out of 50 respondents 92% have replied it is less costlier than traditional banking, 100% respondents have agreed that it is speedy, and 100% respondents have opined any type of set can be used for Mobile Banking. Besides, 64% respondents have mentioned that DBBL plays a significant role in mobile banking sector, whereas 28% respondents have agreed that Bkash performs a vital role. Although this concept is new in Bangladesh but its potentiality is high and already it has started to contribute in the economy significantly. From this research, other researchers and policy makers will get an insight about the Mobile Banking in Bangladesh.

Index Terms- M- Banking, Bkash, . ICTD, IBMC, SMS, NFC.

I. INTRODUCTION

Mobile financial services (MFS) is a method to offer financial services which integrates banking with mobile wireless networks that makes enable users for executing banking transactions. It indicates the ability to make deposits, withdraw, and to send or receive money from a mobile account and habitually such services are enables by the use of bank agents which permit mobile account holders to transact at independent agent locations outside of bank branches (BB, 2012). Mobile phone has turned into a device for daily usage which generates an opportunity for the development of banking services for the unbanked people who have access to a cell phone with the help of mobile phone banking. The remarkable progression of mobile sector all over the world has made an exclusive chance for delivering financial as well as social services through mobile network (Kabir, 2013). Mobile money system is one of the updated services of banking business which has developed some significant banking operations in the pockets of people. It also averts fake activities of banking which creates some new economic relationship between a bank and its customers (Parvin, 2013). Mobile Banking eliminates the time as well as space shortcomings from banking operations like, balance inquire and fund transfer from one account to another account without visiting bank branches (Mishra and Sahoo, 2013). Mobile Banking enhances efficiency, offers access financial and banking

services, generates new opportunities for income generation and improving governance and give poor people a voice. It is required for each country which wants to adopt m-banking for increasing economic development and creation of wealth to produce an informed m-banking development strategy for main streaming Mobile Banking services in the productive sectors as a matter of economic survival (Macharia and Okunoye, 2013).

The first Mobile Banking services was established in European Banks before 1999 via SMS, which is known as SMS banking as well as later on its operated via mobile web. However, the new era of banking in Bangladesh 'Mobile Banking', through any mobile device, was inaugurated at 31st March 2011 by Dutch Bangla Bank Limited (DBBL). At present, in Bangladesh, almost every bank has Mobile Banking operations. Mobile Banking also directly deals with Foreign Exchange through remittance payment. Some of the Banks including Dutch Bangla Bank Ltd, Bangladesh Islamic Bank Ltd, Mercantile Bank Ltd as well as Brac Bank Ltd has already made strategic alliance with different international Money Exchanger for receiving remittance from foreign countries. The study will be a practicable one for those who want to do research further about Mobile Banking in Bangladesh as well as feasible one for the actual and potential customers of Mobile Banking. It will also be an important one for the government when the government will need information about Mobile Banking. The prime motive of this study is to produce the scenario of Mobile Banking in Bangladesh.

II. LITERATURE REVIEW

The outcomes of (Chian-Son, 2012) has revealed that individual intention to accept Mobile Banking is significantly influenced by social factors, perceived financial cost, performance expectancy, and perceived credibility, in the order of their influencing strength. According to Hasan et al. (2010), e-banking facilitates to the Bangladeshi banking sector in various ways, however Bangladeshi customers have lack of sound knowledge regarding e-banking providing by banking industry in Bangladesh. Rahman et al. (2012) have found in their study that the new challenges of E-banking in Bangladesh are to formulate and execute policy from the perspectives of society, banks, regulatory authorities and government as well. According to Ahmad et al. (2012), Mobile Banking saves time compared to traditional banking, majority customers use Mobile Banking for Air-time-top-up service and it is costlier than traditional banking. The prospect of mobile phone banking is high, although this concept is new in Bangladesh. Sharma (2011) has identified that banks have welcomed wireless and mobile technology into their boardroom to offer their customers the freedom to pay bills,

planning payments while stuck in traffic jams, to receive updates on the various marketing efforts while present at a party to provide more personal and intimate relationships. The main objective of her study is to examine consumer adoption of a new electronic payment service as Mobile Banking and the factors influencing the adoption of Mobile Banking. Cheney (2008) has obtained that three relatively new communication technologies – SMS text messaging, wireless Internet access, and near field communication (NFC) that are making important contributions to mobile financial services. Online banking and contactless payments and consumer’s experience with them are also studied as building blocks to mobile financial services. In addition, her analysis considers other factors that are affecting adoption patterns, including financial inclusion opportunities, data security problems, and coordination issues. Together, the building blocks and these other factors will influence how markets for mobile financial services develop. Ismail and Masinge (2011) have found that customers in the BOP will consider adopting Mobile Banking as long as it is perceived to be useful and perceived to be easy to use. But the most critical factor for the customer is cost; the service should be affordable. Furthermore, they also claimed that the Mobile Banking service providers, both the banks and mobile network providers, should be trusted. Trust was found to be significantly negatively correlated to perceived risk. Trust therefore plays a role in risk mitigation and in enhancing customer loyalty. Klein and Mayer (2011) have discovered that by unbundling payments services into its component parts, Mobile Banking provides important lessons for the design of financial regulation more generally in developed as well as developing economies. Donner (2008) has emphasized the need for research focusing on the context of m-banking/m-payments use. In his research he has suggested that the challenges of linking studies of use to those of adoption and impact reflect established dynamics within the Information and Communication Technologies and Development (ICTD) research community. Rochanakitumnui and Speece (2003) have investigated why corporate customers do not accept Mobile

Banking, which can assist banks to implement this self-service technology more efficiently. They have found that banks offer service via this channel claim that it reduces costs and makes them more competitive. Those already using Internet banking seem to have more confidence that the system is reliable, whereas non-users are much more service conscious, and do not trust financial transactions made via Internet channels. Non-Mobile Banking users tend to have more negative management attitudes toward adoption and are more likely to claim lack of resources. Legal support is also a major barrier to Internet banking adoption for corporate customers.

III. METHODOLOGY

Data has been collected from various sources; there is a combination of both primary and secondary data that has been used in this research. Primary data have been collected by using a questionnaire with relevant questions to know the services of Mobile Banking those banks are offering at present. Here both the Mobile Banking customers and the employees of the banks are interviewed. By using convenient sampling method, sixty customers are selected from those customers who get Mobile Banking service directly or indirectly who can know account balance in their mobile phone through SMS after debit card transaction) from the selected banks. The questions which are related to the various services of Mobile Banking are measured by a five-point Likert Scale. Different journals, books, internet and reports of the banks have been used as the important sources of secondary data.

IV. FINDINGS

4.1 Responses of Respondent about Usages, Cost and other Benefits of Mobile Money System

Table 1: Responses of Respondent about Usages, Cost and other Benefits of Mobile Banking

Statement	Yes	%	No	%
Heard about Mobile Banking	50	100	-	0
Have Mobile Banking account or not	27	55	23	45
Cost of Mobile Banking lower than traditional banking	46	92	4	8
Mobile Banking is more safety and speedy than traditional banking	48	96	2	4
Foreign remittance can be sent to Mobile Banking account	45	90	5	10

Source: Field Survey

Mobile money system is a new technology which was introduced in 31st March 2011 through DBBL. In my survey, I took 50 people as my sample survey. Most of them were student and others work in different Mobile Banking Company and 100% of them have said they know about Mobile Banking. So, it is clear to understand that Mobile Banking has already reached to each and every stakeholder of banking industry. Many people heard about Mobile Banking. But some of them yet have not felt that they should use it as they are happy to use traditional banking system. Some people feel interest to use it. About 55% respondents have replied they have Mobile Bank account and

45% respondents have not mobile bank account according to the survey. But those did not open Mobile Banking account yet they are the potential customer for future. Around 92% respondents have said Mobile Banking has lower cost compare to general banking and only 8% respondents have opined in some cases mobile baking costs more than traditional banking. So, it suggests that Mobile Banking more cost effective than conventional banking. Since Mobile Banking is a new technology in Bangladesh, people may worry about it safety as well as time it needs for working but I got a tremendous result from my survey. Around 96 percent respondents have opined that

Mobile Banking is safer and speedy than conventional banking while only 4 percent respondents has replied it may involve risk according to my survey. A positive aspect of mobile phones is that mobile networks can reach remote areas at low cost. I have found that 90 percent respondents said they receive foreign remittance through their Mobile Banking account while near about 10% respondents have replied that remittance cannot be

sent to Mobile Banking account. So, it is one of the best services of Mobile Bank.

4.2 Responses of Respondent about Different Services of Mobile Banking

Table 2: Responses of Respondent about Different Services of Mobile Money System

Statement	Extremely Good	Very Good	Good	Not Good	Extremely Not Good
Utility payment and Air-time top-up of Mobile Banking	21	17	7	2	3
Withdraw from Bank branch and agent	29	14	3	2	2
Withdraw from ATMs and fund transfer via Mobile Banking	16	21	8	3	2

*Using weights of 5, 4, 3, 2, and 1 for extremely good, very good, good, not good, and extremely not good respectively.
Source: Field Survey

Table 1, depicts that more than 42% respondents have replied that both utility payment and air-time to-up are extremely good, while 34% respondents have said that these services are very good and only 14% respondents have replied both are good. But, on the other hand, 6 % respondents have opined that these services are extremely not good and 4% respondents have replied as not good. When respondents have been asked about the withdraw money from bank branch and agent services of Mobile Banking, more than 58% have replied that these services are extremely good, 28% have replied as very good services and 17% have said these services are very good. From another point of view, 4% respondents have replied these services are not good and 4% have replied as extremely not good respectively. Both withdraw from ATMs and fund transfer services are extremely good, have said 32% respondents and at the same time 42% respondents have opined that these services are very good. Afterward, more than 16% respondents have said these services are good. But then 6% respondents have replied that these services are not good and 4% have said as extremely not good.

4.3 Responses of Respondent about more Convenient Banking in Bangladesh

Table 3: Responses of Respondent about more Convenient Banking in Bangladesh

Statement	Mobile Banking	%	Traditional Banking	%	E-Banking	%
About more convenient banking in Bangladesh	37	74	8	16	5	10

Sources: Field Survey

Table 2, illustrates that about 74 percent respondents have replied that Mobile Banking is more convenient than other banking while 10 percent respondents have said about E-banking and rest 16 percent respondents have urged that traditional baking is more convenient.

4.4 Responses of Respondent about Mobile Set Type that's needed for Mobile Banking Operation

Table 4: Responses of Respondent about Mobile Set Type that's needed for Mobile Banking Operation

Statement	Any kind of Mobile Set	%	Smart Phone	%	Multimedia Set	%
About Mobile Set Type that's needed for Mobile Banking Operation	46	92	3	6	1	2

Table 3 shows that Mobile Banking requires multimedia or smart phone for its operation. But according to my survey, more than 92 percent respondents have replied that Mobile Banking does not require any multimedia phone set. Any kind of mobile set can be used for Mobile Banking. On the hand, 6 % respondents have opined it requires smart phone and only 2%

respondents have believed that multimedia phone set needed for Mobile Banking.

4.5: Responses of Respondent about Best mobile bank in Bangladesh

Table 5: Responses of Respondent about Best Mobile Bank in Bangladesh

Statement	DBBL	%	Bkash	%	IBBL	%	EBL	%
About best Mobile Bank in Bangladesh	33	64	14	28	2	4	2	4

Table 5 reveals that around 64 percent respondents have said that Dutch Bangla Bank Ltd is providing good services, 28 percent respondents have replied that Brac Bank Bkash providing good services and rest of the respondents have opined about other bank. So, DBBL is seems to be the market leader of Mobile Banking according to customer perception.

4.7 Scenario of Mobile Banking in Bangladesh

As a first service provider of Mobile Banking in Bangladesh DBBL has been providing different types of services through their Agents, Bank Branches, Mobile Banking Branches and ATMs since 31 March, 2011. DBBL has 126 general bank branches, 374 Mobile Banking branches, more than 2375 ATM booths and more than 25576 agents throughout the country, which are providing Mobile Banking services around the year. In addition, DBBL also has more than 22 Mobile Banking biller and more than 774 merchants, those are directly receiving DBBL Mobile Banking services. DBBL is the first Mobile Banking company who has introduced withdraws money from ATMs booth, without any cards, with mobile bating account. At present DBBL have around two million clients of Mobile Banking.

Transaction through Mobile Banking service has been increasing at a rate of 20% every month. The central bank has already approved 25 banks to operate Mobile Banking services. Some 5 million people now make the use of different services under Mobile Banking services being provided by 17 banks through their 70 thousands outlets across the country. The number of transactions reached to around 450,000 per day, involving a substantial amount of Tk1.12 billion. Provision of banking and other related financial services such as cash-in, cash-out, merchant payment, payment of utility bills, disbursement of salaries, handling of foreign remittance, disbursement of money to the beneficiaries of government allowances and other financial supports, withdrawal of money from automated teller machine (ATM) booths through mobile technology devices with the use of mobile phones, do largely come under the operational domain of Mobile Banking. The Brac Bank-initiated Mobile Banking service, 'Bkash', is at present the country's leading service-provider in Mobile Banking. There are, in all, 16 such service-providers, all of them being in the banking sector. Dutch-Bangla Bank and Islami Bank Cash are next in line, after 'Bkash', as the service-providers in Mobile Banking, in terms of volume of transactions, clientele coverage and number of personnel, directly or indirectly, involved in the process of making such services available to the people. The number of users availing themselves of mobile banking facilities in the country has hit 52.54 lakh as of June 10, 2013. 26 Banks has got permission for providing Mobile Banking services. Responding to a question, the official said the central bank had given permission to 26 banks so far for providing mobile banking services. The banks that have already introduced the services are Trust Bank, Eastern Bank, Brac Bank, Mercantile Bank, AB Bank, Dhaka Bank, Dutch Bangla Bank, Premier Bank, Southeast Bank, Prime Bank, Bank Asia, UCB, NCC Bank, First Security Islami Bank, Islami Bank, Commerce Bank and Standard Bank. On the other hand, Sonali Bank, Jamuna Bank, ONE Bank, IFIC Bank, Al Arafah Islami Bank, Exim Bank,

Janata Bank, Shahjalal Bank Limited and City Bank NA are yet to introduce the mobile banking service.

V. CONCLUSION

Mobile Banking started with the idea to bring the poor under the umbrella of banking sector especially rural poor as there are not much bank facilities, also there savings is low so they feel shy to go to bank. Near about 55% people have Mobile Banking account but this industry has potential customers. As it is a new method of banking people haven't 100% faith on it. Mobile Banking is real time on-line banking, available anytime, anywhere throughout the country, it is convenient, affordable and secure, it is much more effective in developing savings habits, it will make access to banking and advanced payment transactions at affordable cost, it is much safer, speedy and safeguard against fraudulent transactions. All of the characteristics of Mobile Banking make life easier. In Mobile Banking, a confidential pin code is used by the user. PIN ensures security of money and protects fraudulent transactions. So, Mobile Banking is fully secured. It is also believed by 96% respondents, but about 4% respondents say it is not secured as they cannot fully trust on online banking than traditional banking system. One benefits of Mobile Banking that it is very speedy process. Transaction can be done anytime anywhere quickly in less time. So, 100% people believe that it is a speedy process. Around 92% respondents have said Mobile Banking has lower cost compare to general banking. Above 70% respondents have believed that all the services of Mobile Banking are very good. It has been revealed that any kind of set can be used for Mobile Banking operations from the 92% respondents answer. It has been known that Dutch Bangla Bank Ltd is the number one in Mobile Banking industry in Bangladesh from customer's perception. But then, it has been found that Bkash is in number one position on the basis of the transaction from Bangladesh Bank website.

Since Mobile Banking is a new technology in Bangladesh, its need mass advertisement to inform the potential customers. It has been found that people do not have 100% faith on Mobile Banking operation. So, through advertisement the banker should inform all the security issues about Mobile Banking. Another point is that all the actual customers do not know all available services of M-banking. Before opening account customers should be informed about all services of Mobile Banking. If actual customers use these services then their value of life-style will gradually increase. To catch the potential customers all available services of Mobile Banking should be disclosed. Moreover, though Mobile Banking is cost effective, some customers believe that in case of cash in and cash out via agent takes more cost than traditional banking. So, Banks should concern about cost because most of the customers are from rural area as well as unbanked community. At present, 17 banks have launched this M-banking operation and within recent future all bank should initiate this operation for the economic development of Bangladesh. Finally, Bangladesh Bank should monitor all the matters related to Mobile Banking. Most of customers do not know how to write a message and also most of them are illiterate. So, they are unfamiliar with English language. And next, most of the customers did not visit any ATM booth yet and even they do not

believe money can be withdrawn from an ATM booth. So, before going to use the Mobile Banking services they should be trained. Bankers should organize different training session across the country for the people those do not know how to use all the services for Mobile Banking.

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