

# Initiation and Recent Status of Mobile Banking in Bangladesh

Shahjady Sultana

**Abstract:** *Mobile Banking is a financial service provided by a bank or a financial organization that allows financial transactions using a mobile device. It's an independent service that is not connected to any other account; you can call this a bank in your pocket. These transactions are very popular in rural areas, especially for small transactions. There are around 151.82 million people in Bangladesh as of 2012; only 13 percent of them have bank accounts. But more than 95 percent of people in Bangladesh use mobile phones. Banks can now offer banking services to both the rural community and the wider population (without banking transactions) through mobile phones. Day by day this service will become more popular in Bangladesh. Through it, it is possible to take money easily to remote areas. Small transactions are become very easy through mobile banking. Not only in rural areas, but also in urban areas these transactions are equally popular. Since the beginning of 2011, mobile financial service has become quite popular in eight years. The article describes the popularity, benefits and present situation in mobile banking in Bangladesh.*

**Keywords:** Meaning of Mobile Banking, Features, Benefits, Present Situation

## 1. Introduction

“Mobile Banking” is a sign of possibility for Bangladesh. Mobile Banking idea at first came in October, 2009. The City Bank Ltd. is the first bank to introduce the idea of mobile banking software named ‘City Wallet’. But Dutch Bangla Bank Limited started its formal journey in Bangladesh in December 2010. DBBL first MFS market operation began in May 2011. Which was then known as Dutch Bangla Mobile Banking, whose current name is Rocket. Later in the month of July 2011 bKash arrived in the market, as a subsidiary of BRAC Bank. bKash has played an important role in the field of mobile banking in Bangladesh. Their banking network has spread across the country. Mobile money has reached very easily to people in remote areas. Later comes to the market U cash by United Commercial Bank Limited, My Cash by Mercantile Bank Limited, Ok Mobile Banking by One Bank Limited etc. Every organization has added new possibilities to the mobile banking market in Bangladesh. Currently there are eighteen mobile banking operators in Bangladesh.

Mobile Banking is a financial service provided by a bank or a financial organization that allows financial transactions using a mobile device. It's an independent service that is not connected to any other account. There are around 151.82 million people in Bangladesh as of 2012; only 13 percent of them have bank accounts. But more than 95 percent of people in Bangladesh use mobile phones. Banks can now offer banking services to both the rural community and the wider population (without banking transactions) through mobile phones. This service has become more popular in Bangladesh day by day. These transactions are equally popular in urban areas and rural areas. Since the beginning of 2011, mobile financial service has become quite popular in eight years.

By using a regular mobile phone, any customer is able to avail this service. However, before that the customer must open a mobile account at his registered SIM with his specific ID card and picture from a particular agent's shop. MFS has different types of money transfer arrangements. Bank Transfer, Cash In, Cash Out, Send Money, Payment, Mobile Recharge, Remittance, Interest on Savings etcetera services

are usually provided by these operators. If the customer is using smart phone this transaction becomes easier. Customers can receive these services through an app. It has been said before such mobile banking is not connected with any other account and this is an entirely independent account. This type of account can be easily got Cash Out and Cash In from a particular agent's shop. This agent's store will easily get around you. And also money can be transferred to this mobile account from some bank accounts. But these transactions are not unlimited as per regular bank account. These transactions have limitation according to Bangladesh Bank Policy. Another important thing is that mobile banking features are different from SME Banking and Internet banking. According to 2012 data, mobile banking was going on in around more than 14 countries around the world (Wikipedia- List of countries by mobile banking usages). Mobile Banking is dependent on Grameenphone, Banglalink, Robi, Citycell and Teletalk these telecommunication networks. Mobile banking is increasingly getting popular in Bangladesh, its generating 994 crore taka in daily transactions on an average. The total number of mobile banking customers stands at 6.4 crore, 3.6 crore doing actively transaction of them (Star Business Report. 14 Sep, 2018). Bangladesh Post Office is coming with their new digital financial service NOGOD. This service will be operated by the “Bangladesh Postal Act Amendment 2010”. With 9886 post offices around the country and over 100 years of experience in Bangladesh Post Office believes that it can protect its users from any type of digital scam. To provide the best service in the industry, it has appointed Third Wave Technologies Limited as the Master Agent.

## 2. Literature Review

Ali Muntaka Student of Chittagong Independent University, Bangladesh. Published overview of mobile banking industry in Bangladesh in “Economy & Finance” at 3<sup>rd</sup> May, 2017. This is an analysis of bKash by Brac Bank, Rokat by DBBL and Mcash by Islami Bank. In his slide he explain meaning and history of mobile banking. Most popular transaction Cash in (42%), Cash Out (37 %), person to person (19 %), Value of daily transaction \$ 47.44 million, number of daily transaction 2.57 million and 43% active customer as of

February 2015. Bangladesh Bank has allowed 28 banks to offer MFS but only 10 of them have gone providing MFS. The total number of Agent at the end of February 2015 more than 540,000. He also compares service charges between MFS providers. From his analysis we found bKash is the market leader and he also analysis weakness of MFS.

Afroza Parvin Assistant Professor of Northern University of Bangladesh publish her article “Mobile Operation in Bangladesh: Prediction of Future” in Journal of Internet Banking and Commerce. Her study was about mobile banking, customer satisfaction and future of banking business. In her study she says, serves as a mobile wallet, convenient, fast, simple and secure. 41% customers think that mobile banking service is good whereas only 10% think that as very poor. So, the field of Mobile Banking is being created gradually. Her overall study says that is creating better future for mobile banking as well as overall banking business in Bangladesh.

Sheikh Shamcur Rahman (Tusher) published his research “Mobile Banking in Bangladesh” A New Device to Explore Banking (Daffodil International University Bangladesh, 2012). His research says over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. In Asian countries like India, China, Bangladesh, Indonesia and Philippines, where mobile infrastructure is comparatively better than European countries, where mobile phone penetration is very high (at least 80% of consumers use a mobile phone). In his research he explains background, history, features, advantages and disadvantage of mobile banking.

Mr. Mahbubur Rahman Alam, Assistant Professor of Bangladesh Institute of Bank Management published his article “An Exploration Of The Booming Mobile Banking Market In Bangladesh” in Fintech, 19 March 2017. There is large number of unbanked and under-banked people living in remote areas. This report is based on information from a total of 3000 respondents (users of mobile banking services without an account, active and inactive account holders and unbanked people) and 1000 agents covering urban and rural areas of 7 divisions and 23 districts. It is clearly seen that mobile banking growth crossed all channels (internet banking, Credit card, Debit card, ATM). At least 17 provider’s already offering services on the market. At the end of 2016, the number of total agents was 7,10,026 and the number of registered customers was almost 41.1 million, of which active accounts were almost 15.8 million. The number of total transactions was 1,473.24 million in 2016 while the amount of total transactions was BDT 2346.92 billion at the end of same month (Payment Systems Department, Bangladesh Bank). In the few years since the launch of the MFSs, the sector has shown significant growth. bKash (BRAC Bank) currently dominates the MFS space accounting for 55.11% of the market. DBBL has occupied 38.26% of market. The remaining eleven providers with live services currently account for around 6.63% of the total market share. The prices of the main services from the MFS providers are mostly similar. There is no cost for opening a mobile account with any of these providers. This study also considered education and income level including occupation

of the respondents. Challenges are also faced by the users. Sometimes the USSD menu “times out” when they are executing a transaction, and they are unsure if the transaction was completed. If they try to execute the transaction again, they worry that it might go through twice. The biggest challenge is the Recent Trends in fraud, extortion and social crime through the use of MFSs. In this regard Mobile Financial Services (MFS) opened up a new window for Bangladesh.

“The Growth of Mobile Financial Service in Bangladesh” by Greg Chen was published at CGAP on September 10, 2012. He says, 2011 and 2012 two early leaders have emerged with the largest customer bases and agent networks. Nearly 500,000 new mobile accounts and more than 9,000 new agents. A survey conducted by Bangladesh’s central bank found that the new services are reaching multiple parts of Bangladesh and that most clients and agents express cautious optimism about mobile financial services being valuable to them. Three quarters of clients said their main reason to use this service is to send or receive payments. Rural users specifically mentioned the benefits of receiving payments. It is an exciting time in Bangladesh for mobile financial services and much will be learned in the coming months.

“Mobile finance - a new challenge for banks” by Mustafa K Mujeri Executive Director of Institute for Inclusive Finance and Development. Published his article at Financial Express on 3<sup>rd</sup> November, 2017. No one can deny the fact that something big is happening in the world of finance in Bangladesh. Mobile financial services (MFS) have been changing the relationship between the banks and the consumers. In Bangladesh, as in many other developing countries, dramatic growth in MFS has emerged as the most promising development in financial inclusion. The total number of mobile phone subscriptions in the country has reached 129.6 million in February 2017. Bangladesh also has one of the most successful MFS market globally, having 54.4 million registered clients. In July 2017, the number of total transactions is recorded at 152.3 million involving BDT 233.7 billion. The total number of agents is more than 772 thousands. The transactions covered inward remittances; cash-in/cash-out transactions; P2P, B2P and P2B transactions; merchant and government payments, among others. Bangladesh is also driving the shift from cash to digital. Although all forms of digital payments are increasing in Bangladesh, through MFS industry. For example, the use of mobile money can contribute directly to generating many multiplier effects in the economy with significant macro impacts. One thing is clear: mobile banking is a powerful technology. And great power carries a great responsibility; so banks need to exploit the mobile opportunity properly and enjoy the benefits of mobile banking services.

“Mobile Banking is a New Dimension of Banking System of Bangladesh: A case study on DBBL and bKash” by Md. Abdulla-Al-Mamun, Lecturer (Finance), Department of Business Administration, Bangladesh Islami University. Published his Article on European Journal of Business and Management. This study explains basic banking services to the vast majority of unbanked people. Research was gone

through over 120 respondents. 61 % respondents think it saves time than traditional banking, the highest number of respondents use mobile banking for 'fund transfer' service, that is 22%, out of 120 respondents 56% replied it is less costly than traditional banking, 100% respondents did agree that it is speedy, and 38% respondents are of upper class. It is much more effective in developing savings habits. It's using system is also easy. Poor people are often not considered viable customers by the formal financial sector as their transaction sizes are small, and many live in remote areas beyond the reach of banks branch networks. So, mobile banking system develops to bring poor people into banking system. Bank's need to take a hard and deep look into the mobile usage patterns among their target customers and enable their mobile services on a technology which reaches out to the majority of their customers.

### 3. Methodology

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. In this study two methods are used to complete.

- 1) Data collection
- 2) Data Analysis

#### Data Collection

This research work has been completed with the help of primary, secondary data and Case Study.

- a) Source of Primary Data: Primary data has been collected from various Mobile Financial Service point with a proper structural questionnaire. Data collected from customer, Agent and direct employee of MFS. Here used three kinds of questioner for data collection. One questioner for general customer different ages and different class to understand their need, advantages and disadvantages. One questionnaire for MFS agent to understand their opinion about MFS and what kind of people does this kind of transaction every day. Some questionnaire fills up personally by some SMF direct employee. So from this study data collected from every angle for better understanding about MFS.
- b) Source of Secondary Data: Secondary data collected from different web site, journal, article and some news portal.
- c) Case Study: Some case studies have been cooperated also to complete this study.

#### Data Analysis

This is a total descriptive study. So first of all the data is collected, then according to the questions, these are divided into different categories. Then the selected data are explained in percentages, graphs, and charts. As we have been able to collect some case studies, some of these points of these case studies have been discussed also in this study.

### 4. Result

There are currently eighteen government approved MFS operators in Bangladesh. They are doing a lot of transactions by MFS every day. It has already been mentioned in this study that MFS is an autonomous service. Only one valid SIM is required to subscribe to a MFS account. The customer can open this account in his valid SIM from the nearest agent's store through his NID and photo. This research is based on the framework, convenience, popularity and present situation of MFS.

Present MFS operators:

- 1) Rokat by Dutch Bangla Bank Ltd.
- 2) bKash by BRAC Bank Ltd.
- 3) mCash by Islamic Bank Bangladesh Ltd.
- 4) MYCash by Marcantile Bank Ltd.
- 5) Ucash by United Commercial bank Ltd.
- 6) IFIC Mobile Banking by IFIC Bank Ltd.
- 7) T-Cash by Trust Bank Ltd.
- 8) OK wallet by One Bank Ltd.
- 9) First Pay Sure Cash by First Security Islami Bank Ltd.
- 10) Hello by Bank Asia Ltd.
- 11) Sure Cash by Bangladesh Commerce Bank Ltd.
- 12) NCCB Sure Cash by National Credit & Commerce Bank Ltd.
- 13) RBL Sure Cash by Rupali Bank Ltd.
- 14) TeleCash by South East Bank Ltd.
- 15) NAGAD by Bangladesh Post Office

#### Regular Bank Account Vs Mobile Account :

This study has been reviewed as well as the percentage of people who have their own bank account and also continue a MFS account. And the people who don't have any bank account but they continue a MFS account. Most of the female who live in rural area and under secondary or primary education level, they never think about their own bank account but now they have a mobile account in their phone. They are managing money by their own account. This research has been applied on some MFS service center. The people who come there almost 75% has no bank account. MFS is the only way to do their personal transaction. So it has been clear MFS is adding more people under banking sector who never think about their personal bank account.

#### Bank Branch Vs MFS Agent Shop:

MFS is more popular for its availability. There are currently fifty nine banks in Bangladesh. These fifty nine banks have almost 10430 branches and 9627 ATM's services. Where DBBL has 4672 ATM services. But according to 2018 there are 868747 MFS agent point in Bangladesh. According to this survey most of the bank's branches and ATM services are in urban area. This means that only the urban people get all the facilities. But MFS bring a new window for everyone. These eight lakh sixty thousand agent point serve all over the Bangladesh equally.

Name of Bank, their branches and ATM services number are given below:

SL No.	Bank Name	Branch	ATM	MFS
1	AB Bank Limited	104	277	
2	Agrani Bank Limited	952	35	
3	Al-ArafahIslami Bank Limited	77	74	
4	Bangladesh Commerce Bank Limited	60	3	Sure Cash
5	Bangladesh Development Bank Limited	41		
6	Bangladesh Krishi Bank	1034	6	
7	Bank Al-Falah Limited	7		
8	Bank Asia Limited	127	136	Hello
9	BASIC Bank Limited	69		
10	BRAC Bank Limited	186	370	bKash
11	Citibank N.A	4		
12	Commercial Bank of Ceylon Limited	17	4	
13	Dhaka Bank Limited	106	57	
14	Dutch-Bangla Bank Limited	184	4672	Rokat
15	Eastern Bank Limited	85	197	
16	EXIM Bank Limited	123	64	
17	First Security Islami Bank Limited	177	137	First Pay Sure Cash
18	Habib Bank Ltd.	8	7	
19	ICB Islamic Bank Ltd.	33	13	
20	IFIC Bank Limited	139	54	IFIC Mobile Banking
21	Islami Bank Bangladesh Ltd	59	621	mCash
22	Jamuna Bank Ltd	131	236	
23	Janata Bank Limited	913	64	
24	Meghna Bank Limited	47	16	
25	Mercantile Bank Limited	136	158	My Cash
26	Midland Bank Limited	30	22	
27	Modhumoti Bank Ltd.	35	32	
28	Mutual Trust Bank Limited	118	182	
29	National Bank Limited	205	39	
30	National Bank of Pakistan	4		
31	National Credit & Commerce Bank Ltd	116	88	NCCB Sure Cash
32	NRB Bank Limited	40	37	
33	NRB Commercial Bank Limited	68	44	
34	NRB Global Bank Limited	45	43	
35	One Bank Limited	99	95	OK wallet
36	PalliSanchay Bank	484		
37	Premier Bank Limited	109	27	
38	Prime Bank Ltd	128	146	
39	ProbashiKollyan Bank	64		
40	Pubali Bank Limited	473	96	
41	RajshahiKrishiUnnayan Bank	374		
42	Rupali Bank Limited	565		RBL Sure Cash
43	ShahjalalIslami Bank Limited	122	84	
44	Shimanto Bank Limited	13	11	
45	Social Islami Bank Ltd.	155	77	
46	Sonali Bank Limited	1213	90	
47	South Bangla Agriculture & Commerce Bank Limited	61	23	
48	Southeast Bank Limited	137	147	TeleCash
49	Standard Bank Limited	132	89	
50	Standard Chartered Bank	26	54	
51	State Bank of India	7	4	
52	The City Bank Ltd.	102	272	
53	The Farmers Bank Ltd	57	17	
54	The Hong Kong and Shanghai Banking Corporation. Ltd.	13	27	
55	Trust Bank Limited	111	222	t-Cash
56	Union Bank Limited	77	34	
57	United Commercial Bank Limited	187	398	Ucash
58	Uttara Bank Limited	235	26	
59	Woori Bank	6		

**Bank Branch Costing Vs MFS Agent Shop Costing:**

Keeping a bank branch active is enough expensive, where security issue is also important. Bank has given high salaries to their senior officers. But in an agent shop only one person take all the liabilities. To active an agent shop is cheaper

than bank. The agent's store cannot be equal to the bank because the bank do lot of task. Bank is doing different kind of transaction but the agent store has a limitation. For this limited transaction it is not possible to establish bank branches in every rural area because it's costly. But MFS is

a way to give service to general people under low costing all over the country.

#### Economical Discrimination:

People of different levels of society are associated with MFS. Those people who are educated and upper class they manage an MFS account as well as a bank account and enjoy some extra benefits. They are not depended on MFS. They are conducted with MFS to save time and sometimes for little transactions, because it is very easy to use for time consuming and its availability. But MFS is a different medium for them who are underneath and less educational qualified. Those who used to trade in different ways before but now MFS are their trustworthy medium. To send money in rural area is a hard way and its take long time. But now they can send money just couple of seconds to their relatives. So from this study we find the importance of MFS is different by class.

#### Rural & Urban Area:

From this research we also identify the scenario is different by rural and urban area. Generally, people of all classes in the city area do this transaction. Among them 40% people are educated and they have their own bank account. They take this service for its suitability. But in the village area this image is completely different. About 98% people do not have any bank account. They are only dependent on MFS. Those workers who work in the Middle East they are also sending remittances through MFS. It is very easy to sending remittance by MFS from abroad. This study shows that people's dependency on this service is more in rural areas than urban areas.

#### Time Consuming:

We are asking some people why they go to near agent shop when bank is very near to him and he also has a bank account. They said, everyday they didn't need large amount of money, when they need small amount they prefer to go agent shop. If they go to bank for small amount its take a long time, first need to collect token then wait for the transaction. For little transaction they prefer to go agent shop. Sometimes people can send money to others by their own account at home. They did not go outside for the transaction. So MFS is a time consuming service also.

#### Fraud Activity:

Some unscrupulous people use this service in different ways. By very tactics, they take money from ordinary people. First they send false SMS from a server then call the customer and say this transaction has been made by mistakenly. Kindly send his money back and give a MFS account number. Most of time people don't check their account balance. By trust on this SMS they return the money back.

But this money actually cut from their original account. Sometimes frauds tell about lottery. They call the customer and tell you win lottery kindly send money this account and you get your lottery amount. Many such complaints were collected from the customer service center. From the collected information of this research almost 30% of people have been victims of these frauds. Since MFS account did not have any legal papers in the beginning, so many people at the time open false account and used this for dishonest purpose. In present MFS operators are promoting public awareness campaign advertising. In addition, certain regulations have also been introduced to open MFS account.

#### Network Problem:

70% of the people in this study have mentioned network problems. This network problem is usually happen at a specific time. This problem is higher in peak hour. Generally the customer will face this problem from 6pm to 9pm. Sometimes it's happen at midnight. After transaction, when SMS does not come in proper time sometimes the customer doing double transaction. It makes misunderstanding between agent and customer. When customers are doing Mobile recharge sometimes it does not happen at certain times. If there is a wrong transaction (mistakenly doing transaction in a wrong number) then there is no way to correct it. Customers expect the network to improve in future and they can enjoy this service hassle free.

#### MFS Services:

The services that top MFS operators offer are describe below:

- **bKash:** Bank Transfer, Bill Pay, Cash In, Cash Out, Send Money, Payment, Mobile Recharge, Remittance, Interest on Savings.
- **Roket:** Cash-in(cash deposit), Cash-out (cash withdrawal), Mobile Top-up, Person to Person Transfer (P2P), Bank A/C – Roket account transfer, Foreign Remittance, Salary Disbursement, Bill Payment, Merchant Payment .
- **Mycash:** Cash In, Cash Out (Cash Withdrawal, Salary Withdrawal), Send Money, Bank Deposit, Top UP, Merchant Payment, Utility Bill.
- **UCash:** Cash In, Cash Out, P2P
- **OK wallet:** Cash-in, Cash –out, Merchant Payment, Mobile Recharge, Money Transfer, Utility Bill Payment.
- **SureCash:** Cash In, Cash Out, Send Money, Mobile Recharge, Payment (Educational, Utility & Municipality Bills, E-commerce payment).
- **Nagad:** Cash In, Cash out, Send Money, Mobile Recharge.

Transaction Fees & Limitation:

Some general transactions fees &amp; Limit are described below:

MFS Operators Name	Fees & Limit	Open Account	Cash In	Send Money P2P	Cash out Agent/Branch	Cash Out ATM	Mobile recharge	Statement Enquiry
bKash	Fees	Free	Free	5 TK for every transaction	1.85%	2%	Free	Free
	Limit Tk	Account Limit 300000	50-15000 per Txn 15000 Daily 100000 Monthly	10-10000 Per Txn 10000 Daily 25000 Monthly	50-10000 per Txn 10000 Daily 50000 Monthly	2000-10000 per Txn 10000 Daily 50000 Monthly	10-1000 per Txn 10000 daily 100000 Monthly	
Roket	Fees	Free	Free	5 TK for every transaction	1.80%	1.80%	Free	3 tk
	Limit Tk		20-15000 per Txn 15000 Daily 100000 Monthly	10-10000 Per Txn 10000 Daily 25000 Monthly	20-10000 per Txn 10000 Daily 50000 Monthly	500-10000 per Txn 10000 Daily 50000 Monthly	10-1000 per Txn 5000 daily 25000 Monthly	
Mycash	Fees	Free	Free	5 TK for every transaction	1.85%		Free	
	Limit Tk		50-15000 per Txn 15000 Daily 100000 Monthly	20-10000 Per Txn 10000 Daily 25000 Monthly	50-10000 per Txn 10000 Daily 50000 Monthly		10-1000 per Txn 10000 daily 100000 Monthly	
UCash	Fees	Free	Free	5 TK for every transaction	1.85% above 300			
	Limit Tk							
OK wallet	Fees	Free	Free	5 TK for every transaction	1.80%	1%	Free	3 tk
	Limit Tk	Account Limit 300000	50-15000 per Txn 15000 Daily 100000 Monthly	10-10000 Per Txn 10000 Daily 25000 Monthly	50-10000 per Txn 10000 Daily 50000 Monthly		10-1000 per Txn 10000 daily 100000 Monthly	
Nagad	Fees	Free	Free	4tk(USSD) Free (App)	1.80% (USSD) 1.70% (App)			
	Limit Tk		250000 Daily 500000 Monthly	250000 Daily 500000 Monthly	250000 Daily 500000 Monthly			

## 5. Discussion

MFS is only eight years old in Bangladesh. In these eight years they have progressed a long way. Many new services have been added to this service. Various types of bills, fees for university, shopping costs, etc. are available for ordinary people by this service. The precious transactions have come to the hand pants. The biggest advantage is its 24 hour service. This means that the customer can take this service at any time. Remittance is one of the most important services of this sector. Because at once when underneath workers from the Middle East sent money to their loved ones, it took a lot of time to reach. Many times the money did not reach to them properly. But MFS made this service very easy.

But some miscreants want to use this service in different ways. They are cheating the common people by trick of deceit. MFS operators should take a tough step in this regard and they will increase awareness among common people. Moreover, the agents who work in the field, their security is not enough. As it is a matter of money transfer so these operators will be Initiative to provide field level security. Also, be aware of the network and make sure customer will get SMS in right time after every transaction.

Actually it's an awesome service for small & medium amount of money transaction. A huge population those who were out of the banking sector so far. This service bring them under banking sector, this is the biggest achievement of MFS. Since this research has been done in very small

range so this discussion was based on a small amount of information.

## 6. Conclusion

MFS is a new window of banking sector. This is very potential for Bangladesh. In eight years there are eighteen MFS operators, 6.13 crore customers, 2.29 crore active accounts, 32823 crore monthly transactions and average 1051crore daily transaction which is added extra value in banking sector. Gradually the general people are becoming dependent on it. Hopefully in future MFS will ensure more customer service by eliminating current issues.

## 7. Acknowledgements

This research was partially supported by the people who gave their valuable time and answered our questionnaire. I am thankful to these customers, agents and those people who gave their valuable opinion and share their experience about MFS to us.

I am also grateful to Kamrul Hasan Emon, Junior officer of a rewarded MFS operator for his assistance and Suhan Ahmed Omi, Communication Officer of BRAC who moderated this papers for its improved the manuscript significantly.

I am also immensely grateful to Ali Muntaka Student of Chittagong Independent University, Afroza Parvin Assistant Professor of Northern University of Bangladesh, Sheikh Shamcur Rahman (Tusher), Mr. Mahbubur Rahman Alam

Assistant Professor of Bangladesh Institute of Bank Management, Greg Chen, Mustafa K Mujeri Executive Director of Institute for Inclusive Finance and Development, Md. Abdulla-Al-Mamun Lecturer (Finance) of Department of Business Administration of Bangladesh Islami University for their research work that help me to collect data and I used their work as my literature reviewed.

## References

- [1] Bangladesh Bank , <https://www.bb.org.bd/>
- [2] Banks BD.org, <https://www.banksbd.org/>
- [3] Mobile Banking Wikipedia, [https://en.wikipedia.org/wiki/Mobile\\_banking](https://en.wikipedia.org/wiki/Mobile_banking)
- [4] The Daily Star news portal, 14 September 2018 and 22 October 2018
- [5] Sure Cash , <http://surecash.net/>
- [6] bKash, <https://www.bkash.com/>
- [7] Rocket web portal, <https://www.dutchbanglabank.com/rocket/rocket.html>
- [8] IFIC mobile banking web portal, <http://www.ificbank.com.bd/mbanking/>
- [9] mCash, <http://mcash.islamibankbd.com/>
- [10] MYcash, <http://www.mycashmbl.com/>
- [11] OK wallet , <https://okwallet.com.bd/>
- [12] UCash, [https://www.ucash.com.bd/?page=about\\_us](https://www.ucash.com.bd/?page=about_us)
- [13] Nagad, <https://www.nagad.com.bd/>
- [14] New Nation news portal, 13 January 2019
- [15] AB Bank , <http://abbl.com/>
- [16] Agrani Bank , <https://www.agranibank.org/>
- [17] Al-Arafa Bank , <https://www.al-arafahbank.com/>
- [18] Bangladesh Commerce Bank , <http://bcblbd.com/>
- [19] Bangladesh Development Bank , <http://www.bdbl.com.bd/>
- [20] Bangladesh Krishi Bank, <http://www.krishibank.org.bd/>
- [21] Bank Al Falah, <https://www.bankalfalah.com/bd/>
- [22] Bank Asia, <http://www.bankasia-bd.com/>
- [23] BASIC Bank, <https://www.basicbanklimited.com/>
- [24] BRAC Bank, <https://www.bracbank.com/en/>
- [25] Commercial Bank of Ceylon, <https://www.combank.net.bd/en/>
- [26] Dhaka Bank, <https://dhakabankltd.com/>
- [27] Dutch Bangla Bank, <https://www.dutchbanglabank.com/>
- [28] Eastern Bank, <https://www.ebl.com.bd/>
- [29] EXIM Bank, <http://www.eximbankbd.com/>
- [30] First Security Islami Bank, <http://www.fsibld.com/>
- [31] Habib Bank, <http://globalhbl.com/Bangladesh/>
- [32] ICB Islami Bank, <https://www.icbislamic-bd.com/>
- [33] IFIC Bank, <http://www.ificbank.com.bd/>
- [34] Islami Bank Bangladesh, <https://www.islamibankbd.com/>
- [35] Jamuna Bank, <http://jamunabankbd.com/>
- [36] Janata Bank, <https://www.jb.com.bd/>
- [37] Meghna Bank, <https://www.meghnabank.com.bd/mbl/index.php>
- [38] Mercantile Bank, <http://www.mblbd.com/>
- [39] Midland Bank, <https://www.midlandbankbd.net/>
- [40] Modhumoti Bank, <https://www.modhumotibankltd.com/>
- [41] Mutual Trust Bank, <http://www.mutualtrustbank.com/>
- [42] National Bank, <https://www.nblbd.com/>
- [43] National Credit & Commerce Bank, <https://www.nccbank.com.bd/>
- [44] NRB Bank, <http://www.nrbbankbd.com/>
- [45] NRB Commercial Bank, <http://www.nrbcommercialbank.com/>
- [46] One Bank, <https://www.onebank.com.bd/>
- [47] PalliSanchay Bank, <http://www.pallisanchaybank.gov.bd/>
- [48] Premier Bank, <http://premierbankltd.com/pbl/>
- [49] Prime Bank, <https://www.primebank.com.bd/>
- [50] ProbashiKollyan Bank, <http://www.pkb.gov.bd/>
- [51] Pubali Bank, <https://www.pubalibangla.com/>
- [52] RajshahiKrishiUnnayan Bank, <http://www.rakub.org.bd/>
- [53] Rupali Bank, <https://www.rupalibank.org/>
- [54] ShahjalalIslami Bank, <http://www.sjibld.com/>
- [55] Shimanto Bank, <http://www.shimantobank.com/>
- [56] Social Islami Bank, <https://www.sibld.com/>
- [57] Sonali Bank, <https://www.sonalibank.com.bd/>
- [58] South Bangla Agriculture & Commerce Bank, <http://www.sbacbank.com/>
- [59] Southeast Bank, <https://www.southeastbank.com.bd/>
- [60] Standard Bank, <https://www.standardbankbd.com/>
- [61] The city Bank, <http://www.thecitybank.com/home>
- [62] The Farmers Bank, <http://www.farmersbankbd.com/>
- [63] The HSBC Bank, <https://www.hsbc.com.bd/1/2/>
- [64] Trust Bank, <https://www.tblbd.com/>
- [65] Union Bank, <http://www.unionbank.com.bd/>
- [66] United Commercial Bank, <https://www.ucb.com.bd/>
- [67] Uttara Bank, <http://www.uttarabank-bd.com/>