




Research Paper

## Users' Experiences of Mobile Financial Services at Rural Areas of Bangladesh

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### ABSTRACT

Mobile Financial Services (MFS) is one of the new innovations of the modern financial system. It nowadays plays a crucial role in banking users' day-to-day financial activities. This study investigates users' experiences of MFS at rural areas of Bangladesh. Specifically, this study sought to gain an understanding of to what extent different factors positively or negatively influence users' experience in using mobile financial services. This study was mainly a survey research. The data were obtained using a questionnaire from a total of 128 MFS users (102 male and 26 female) living in rural areas of Bangladesh who were conveniently chosen from five Upazilla in Barishal city. The findings suggested that MFS users in rural areas of Bangladesh have both positive and negative experiences toward the use of mobile financial services. This study further revealed six major factors that have influenced the users' positive and negative experiences in general, i.e. perceived usefulness, perceived ease of use, perceived risk, trust, customer and MFS agent relationship, and perceived cost. It was found that the last factor (perceived cost) have generated the users' negative experiences toward mobile financial services. Therefore, the government and MFS providers are encouraged to work together with some innovative strategies to change the users' negative experiences into positive experiences of using the mobile financial services.

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## Introduction

For nearly a decade, rapid development of information and communication technology has significantly affected the banking industry. Mobile phone is one of the most

documented and well-established technologies in developing countries like Bangladesh. Alam (2017) found that only 13% of people have bank accounts in Bangladesh. As mobile phones are cheaply available and mobile operators offer low call rates, most of the people of Bangladesh use mobile phones (Akhtaruzzaman et al., 2017). Recently in Bangladesh, it was observed that traditional branch banking is going to reduce due to the increase in mobile financial services (Bhuiyan & Rahman, 2013). Akhtaruzzaman et al. (2017) suggest that the mobile platform offers a suitable method for managing money without handling cash. Mobile phone operators recognize MFS as a potential service that can be offered to the customers. Alternatively, banks and other financial institutions see MFS as a medium to provide services to the unbanked and rural people of the country. Technological advances and consumer confidence in mobile financial services have made possible the rapid growth of MFS. Mobile financial services can be divided into mobile banking and mobile payment (Bhuiyan & Rahman, 2013).

Mobile financial services are the products and services that a financial institution such as banks provides to its customers through mobile devices. The mobile channel provides a chance for financial institutions to boost customer access to different financial products or services and reduce costs (Akhtaruzzaman et al., 2017). According to Donner and Tellez (2008), mobile banking, m-payments, m-transfers, and m-finance refer jointly to a set of applications that allow people to use their mobile phones to control their bank accounts, store value in an account linked to their mobiles, transfer funds, or even access credit or insurance products.

According to Sultana and Khan (2016), mobile financial services are also known as mobile banking that performs finance associated functions on a mobile device like a smartphone or tablet. With the use of a mobile, users can perform mobile banking via call, text, website, or app. Mobile banking is referred to as actions on a traditional bank account through mobile devices. These actions include obtaining account information, doing banking transactions, and so on through mobile devices. Mobile banking is offered by the most prominent banks. Generally, people use a smartphone app to perform bank transactions securely (Akhtaruzzaman et al., 2017).

Mobile payments are paying for goods and services using a mobile device as the transaction terminal. Mobile payments can use a traditional bank account or an MFS account (Akhtaruzzaman et al., 2017). Branchless banking via a mobile device is also another part of MFS. Customers can take advantage of this service to make basic payments like utilities and other bills, and domestic and international remittances. These transactions become swift, simple, and cost-effective through MFS (Sultana & Khan, 2016). Mobile banking as the channel of branch banking became very helpful to rural customers in saving the travel time and money to visit the distant branches for the

financial transaction (Dhillon, 2014).

Bangladesh Bank has introduced mobile financial services in 2011 which promoted only scheduled commercial bank-led MFS. According to Central Bank of Bangladesh (2018), Bangladesh Bank permits the following Mobile Financial Services: (a) disbursement of inward foreign remittances; (b) cash in/out using mobile account through agents/bank branches/ATMs/mobile operator's outlets; (c) person to business (P2B) payments; (d) business to person (B2P) payments; (e) government to person (G2P) payments; (f) person to government (P2G) payments; (g) person to person (P2P) payments; and (h) other payments like microfinance, overdrawn facility, and insurance premium.

Central Bank of Bangladesh has provided approval to 28 banks for running mobile banking services but at present 15 banks are currently providing MFS in Bangladesh. According to the Bangladesh Bank MFS report, the number of registered MFS clients stood at 92.94 million in August 2020. It means that more than 55% of the total population is under MFS coverage in Bangladesh. The number of active accounts stood at 42.68 million in July 2020. The number of daily transactions and amount of daily transactions stood at 10.01 million and BDT 20,322.4 million in July 2020. Among different services, cash in, cash out, and P2P transaction services dominate the mobile financial activities. The amount of cash in, cash out and P2P transaction stood at BDT 1,70,588 million, BDT 1,91,462.5 million, and BDT 1,72,934.3 million respectively in July 2020.

Customer experience is distinctive and personal to each user. Although any service can be highly consistent and identical, each customer perceived their own experience. User experience creation is two-way. The service provider creates one part of it, and another part will be created and perceived by the customer. Customer experience is defined as being holistic and involving the customer's cognitive, affective, emotional, social, and physical responses to the service provider (Klaus & Maklan, 2013). According to Heinonen, Strandvik, and Voima (2013), customer experience refers to all points of time (before, during, and after the current moment); in addition to the illusion of an ideal service-use experience. Experience is created in the mind of a person who is connected to a service on an emotional, physical, intellectual, or spiritual level. Besides, the experience is subjectively socially constructed, with being contextual and situation-specific (Helkkula & Kelleher, 2010). As experience is socially constructed, the experiences and accounts of other people can affect the customer experience (Dube & Helkkula, 2015). Helkkula and Kelleher (2010) suggest that customers are active producers of both their actual and imaginary experiences.

In the MFS context, where the service is new and developing, imaginary experiences and ideas about the future development of the service are also important

and require to be taken into account. The customer experience creates value for the users through how the service is delivered to them and how the interaction between the mobile service and the user functions (Dube & Helkkula, 2015). Interaction in the case of a mobile financial service refers to interaction with the application, which may have a strong influence on customer experience. Alkhaldi (2017) mentioned recent studies in the field of technology acceptance have verified that users' experiences, as well as users' awareness, have not been sufficiently considered. Shaikh and Karjaluoto (2015) reported that despite several factors that have been identified as appropriate factors to be considered for example users' experience and users' awareness; they have not been adequately measured. Different research findings demonstrated that there is a link between users' experiences and the use of m-banking and it is very important to consider users' experience concerning mobile banking use (Amin & Ramayah, 2010; Shaikh & Karjaluoto, 2015).

Globally, mobile banking is one of the latest mobile technology efforts (Shaikh & Karjaluoto, 2015) and so technology-based studies recommend that users' intentions toward m-banking use should be investigated. In several developing countries, customers having more mobile phone experience, ultimately have accepted and using MFS more intensive (Chitungo & Munongo, 2013). Customer satisfaction has a strong relationship with the use of mobile banking. The core factors that determine user experience in mobile banking are service quality, functional quality, perceived value, agent-customer engagement, perceived usability, and perceived risk. There is a significant relationship between user experience, satisfaction, and loyalty, which are related to the financial performance of the financial institution (Mbama, 2018). Customers are probably to use mobile financial services if they perceive these services as reliable with their experience (Kabiry & Forghani, 2013). This provides indirect proof that users' experiences have a significant impact on their awareness and motivation in adopting mobile financial services (Komulainen & Saraniemi, 2019). Medberg and Heinonen (2014) mentioned that customers' needs are growing as more and more transactions take place on mobile phones, demanding real-time, personalized, and seamless payment experiences.

As a result of the above explanation, understanding users' experience regarding mobile banking services has become increasingly important. Moreover, the majorities of mobile banking studies are quantitative and focus on the customers' behavioral intention to adopt mobile banking services (Shaikh & Karjaluoto, 2015). However, recent literature criticizes this and suggests that research should focus more on actual usage behavior, instead of only on use intentions (Laukkanen, 2016). Besides, small number of research have been conducted on mobile financial services especially focusing on the rural people of Bangladesh. As mobile financial services are new for

rural people, and so it is very necessary to examine rural users' experience of mobile financial services in Bangladesh.

Drawing on the above gaps, this study shed some light on the users' experiences of using mobile financial services in rural areas of Bangladesh. Using a survey research, this study seeks to answer the question 'how do banking users at rural areas of Bangladesh experience the use of mobile financial services?' This study's results potentially contribute to providing insights and references for Bangladesh government and Bangladesh banks to develop and enhance the efficacy of mobile financial service practices, particularly in rural areas of Bangladesh.

## **Method**

### ***Rationale of the Method***

A research design is defined as a plan of research specifying what is to be done and how to do it (Creswell, 2012). This research followed a quantitative approach using survey design. The rationale of survey design is to measuring current beliefs, attitudes, opinions or practices in a short amount of time. In the context of this study, survey research was conducted to examine beliefs and perspectives of mobile financial service users at rural areas of Bangladesh.

### ***Sample Selection and Data Sources***

This study was conducted in a small town and village area of the Barishal district of Bangladesh. The population of this study consisted of mobile financial service users who live in that rural area. A sample of 128 MFS users was conveniently selected as participants for conducting the study considering the accessibility of the researcher. The participants were identified from five Upazila (sub-district) which were located in the Barishal district, which is also the researcher's place of living. This allowed the researcher to manage time and collect data within a short period of time. This technique of data collection also kept the cost affordable for the researcher.

### ***Instrumentation and Data Collection***

This study used a questionnaire with a Likert type scale to collect users' experiences on mobile financial service usage. The questionnaire consisted of three sections. The first section focused on the respondents' demographic information. The demographic variables included gender, age, occupation, level of education, and monthly income. The second section concerned on the respondents' basic usage of MFS. This section included whether respondents' have a bank account, the name of the MFS they are using, and the time duration of their use. The respondents were also requested to indicate which services they are using regularly, the number of MFS use on monthly basis, the time duration of a transaction, and travel time to the nearest MFS agent. Furthermore, the third section asked the respondents to indicate their agreement or

disagreement with the statements based on their MFS using experience.

The questionnaire was 5 points Likert-scale and the anchors vary from "Neutral/don't know" to "strongly agree". The values of anchors were as follows: "Neutral/don't know"= 0, "strongly disagree"= 1, "disagree"= 2, "agree"= 3 and "strongly agree"= 4. Here, the researcher made 'zero' as neutral or don't know so that it can be excluded from the calculation and won't interfere with the calculation of user experiences. There were 18 statements in the 5 points Likert-scale of the questionnaire.

The purpose of the questionnaire was to understand the respondents' experience regarding MFS use. The questionnaire was structured and examined users' experiences focusing on users' perceived usefulness, perceived ease of use, perceived risk, perceived cost, agent-customer engagement, and trust towards the MFS. As the respondents were from rural areas and they have low access to the internet, so the questionnaire was distributed manually through offline papers.

#### ***Validity and Reliability of the Instrument***

The instrument was developed by the researcher based on relevant literature focusing on specific research questions of the study. Initially, related literature was reviewed, and based on that a draft of instrument was developed. Then, initial editing of the instrument was made as per the consultation with the expert on the related field. Finally, the draft instrument was piloted and based on feedback received from the tryout phase and the expert's comment the researcher finalized the instrument.

Cronbach's Alpha was designed as a measurement of internal consistency of items in the Likert type scale of the questionnaire. It varies between zero and one. The closer alpha is to one, the greater the internal consistency of the items in the Likert-type scale of the questionnaire. This study's Likert-type scale consisted of 18 items and Cronbach's alpha test was performed to check the reliability of items. The score of Cronbach's alpha test was 0.783 indicating internal consistency of the items. As the Cronbach's alpha score is  $> .75$ , so it can be concluded that the internal consistency of Likert-type scale items is good (Tavakol & Dennick, 2011) and the instrument is reliable.

#### ***Data Analysis***

The data from the survey were analyzed using a quantitative or statistical approach for answering the research question. The analysis included descriptive techniques as percentages, mean and standard deviation. Initially, the frequency of responses of every item of the questionnaire was categorized. The data was analyzed using SPSS 20.0 for Windows. For 5 point Likert type scale, neutral or don't know was excluded from the calculation. Then, the categories "strongly agreed" and "agreed" were collapsed into one category of "Agreed". Similarly, the categories "strongly disagreed" and "disagreed" were collapsed into one category of "Disagreed". Then the percentage

for each category against each response was counted. The data were analyzed based on the weighted mean of statements (Mohiuddin, 2015). After analyzing the data results of survey, findings were presented through tables. The data were analyzed according to the research question and is presented section by section.

## Results

### *Respondents' Information about Using MFS*

#### *Users' Information about Bank Account*

Figure 1 shows that most of the respondents (78.13%) have bank accounts in several Bangladesh banks. There was only one-fifth of the respondents (21.88%) have no bank accounts. This 21.88% of respondents only have mobile financial service accounts. They are not very familiar with formal banking services and they avoid opening any bank accounts. In contrast, as they could easily use MFS with their mobile phone, so they became accustomed to mobile banking.

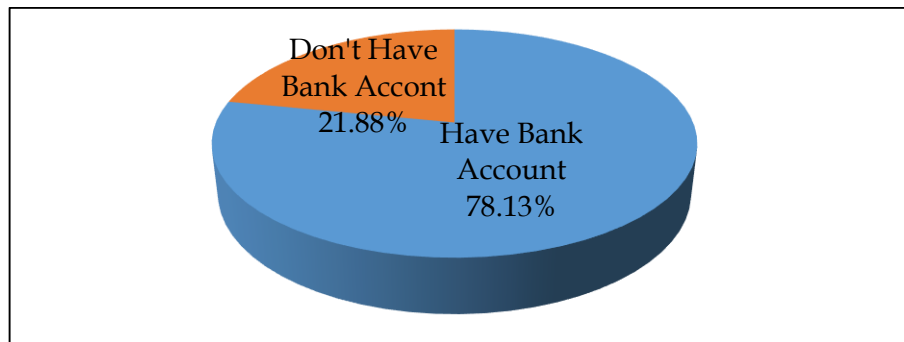


Figure 1. Respondents' Information about Bank accounts

#### *Mobile Financial Services Used by Respondents*

Figure 2 describes that 84.38% of the respondents are using the most popular mobile financial service in Bangladesh named "Bkash". Half of the respondents are using "Rocket" which has initially introduced MFS in Bangladesh. Only 14.06% of the respondents are using "Nagad" which is currently growing very its popularity in Bangladesh.

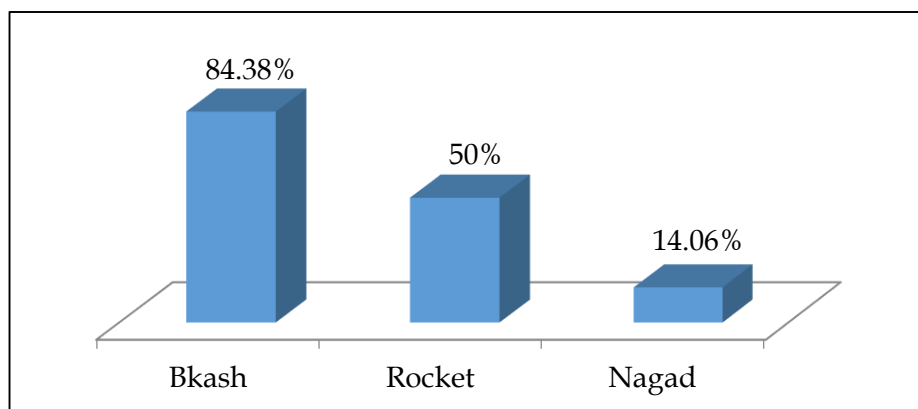


Figure 2. Percentages of users who use MFS

*Length of MFS Use*

Table 1 demonstrates that most of the respondents (31.25%) are using MFS for more than 5 years. The highest percentage of respondents (28.13%) are using MFS for 3 to 5 years. Some respondents (18.75%) are using MFS for 1 to 2 years, while only few respondents (12.5%) are using it for 2 to 3 years. The rest 3.13% of respondents are new MFS users (using for less than six months) and 6.25% are using for 6 months to less than one year.

Table 1. Length of MFS Use

<b>Time Range</b>	<b>Number of Users</b>	<b>Percentages</b>
>6 months	4	3.13%
6 months - 1 year	8	6.25%
1 year - less than 2 years	24	18.75%
2 years - less than 3 years	16	12.50%
3 years - less than 5 years	36	28.13%
More than 5 years	40	31.25%

*Different Services of MFS*

Table 2 portrays that more than two-thirds of respondents are regularly using cash in (68.75%), cash-out money from agents (71.88%), sending money to others (70.31%), and recharging mobile balance (79.69%) through their MFS. Some respondents are also checking balance statements (40.63%) and cash-out money from ATM (32.81%) regularly. Few respondents are using MFS for bill payment (18.75%), transfer money within bank and MFS (9.38%), and getting international remittance (1.56%).

Table 2. Different Services of MFS

<b>Time Range</b>	<b>Number of Users</b>	<b>Percentages</b>
Cash in	88	68.75%
Cash-out from agent	92	71.88%
Cash-out from ATM	42	32.81%
Send Money	90	70.31%
Mobile Recharge	102	79.69%
Bill Payment	24	18.75%
Balance check/Statement	52	40.63%
Transfer Money (Bank to MFS/ MFS to Bank)	12	9.38%
International Remittance	2	1.56%



*Monthly Frequency Use of MFS*

Figure 3 shows that the majority of the respondents (37.50%) are using MFS 4 to 8 times a month. Some respondents (26.56%) are using MFS less than 3 times in a month. Few respondents (14.06%) use MFS 9 to 15 times a month. There are only 10.94% of the respondents use MFS either 16 to 20 times or more than 20 times.

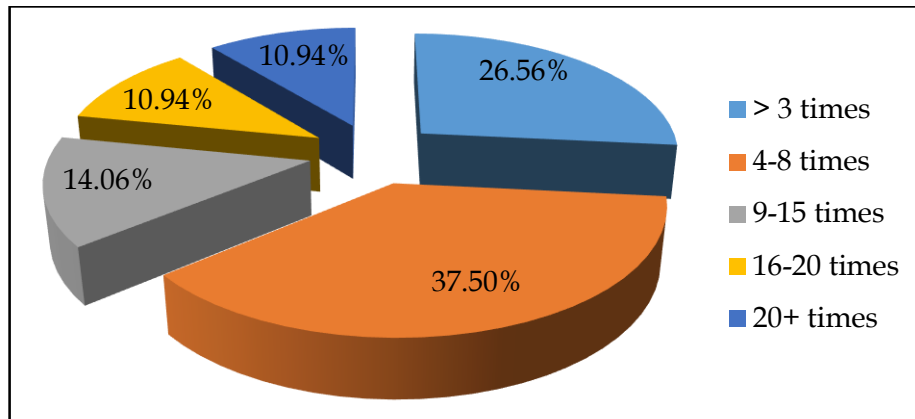


Figure 3. Frequency of MFS Use in a Month

*Transaction Time for Using MFS*

Figure 4 reveals that most of the respondents (62.5%) needed one to three minutes for making a transaction. Some respondents (20.31%) experienced that in less than a minute they could do a transaction with MFS. Few respondents (17.19%) also found that the transaction time was around four to six minutes.

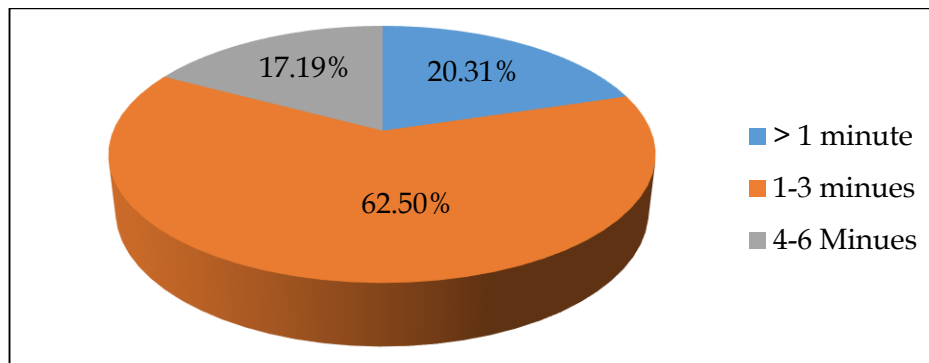


Figure 4. The Transaction Time for MFS Users

*Respondents' Travel Time to the Nearest MFS Agent*

Figure 5 implies that more than one-third of the respondents (39.06%) informed that travel time to the nearest agent is less than five minutes. Almost one-third of respondents (31.25%) travel time is five to ten minutes. 12.5 % of respondents required eleven to twenty minutes and 9.38% of the respondents required twenty to thirty minutes for going to the nearest MFS agents. Only 7.81% of the respondents needed more than thirty minutes for travelling to the nearest MFS agent.

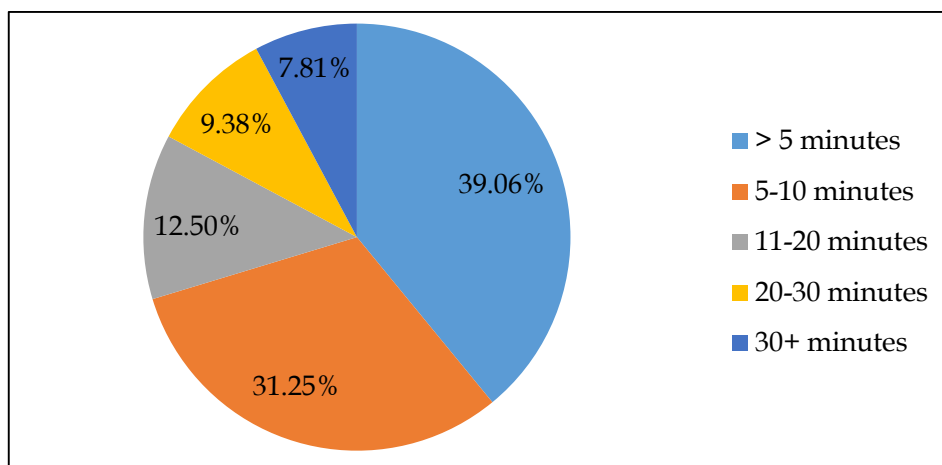


Figure 5. Travel Time to the Nearest Agent among Respondents

### *Results of Data Analysis*

The analysis of the Likert scale results was conducted by determining frequency, mean, and percentage. In this analysis, statements that are correlated to one another are put in the same table with their underlying theme as the section heading. A criterion was developed to interpret based on the weighted mean of each statement of the experience.

Table 3. Scaling of Weighted Mean

Class Interval (Weighted Mean)	Categories
1.00-1.75	Strongly Disagree
1.76-2.50	Disagree
2.51-3.25	Agree
3.26-4.00	Strongly Agree

### *Users' Experiences on the Usefulness of MFS*

Here, table 4 consists of statements congruent with the perception of MFS usefulness. As shown in Table 4, most of the respondents (96.9%) agreed with the idea that MFS helped them to make payments more quickly (M= 3.09; SD= .46). Similarly, a large proportion of the respondents (93.8%) agreed that MFS has enhanced their payment effectiveness (M= 3.06; SD= .50). More than 90% of the participants perceived that MFS is very useful (M= 3.09; SD= .64). In terms of mean, the respondents agreed to all the statements. Therefore, it can be concluded that in general the respondents agreed (WM=3.08) that MFS is very useful for them.

Table 4. Users' Experiences on Perceived Usefulness of MFS

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. MFS helped me to make payments more quickly.	3.1%	96.9%	100%	3.09	0.46	3.08

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
2. MFS has enhanced my payment effectiveness.	6.2%	93.8%	100%	3.06	0.50	
3. MFS is very useful.	9.3%	90.7%	100%	3.09	0.64	

Note: SD= Standard deviation, WM= Weighted mean

#### *Users' Experiences on the Perceived Ease of Use of MFS*

Table 5 demonstrates that the statements congruent with the perception about ease of use of the MFS. As shown in Table 5, more than 90% of the respondents agreed that MFS is very easy to use (M= 3.17; SD= .61) and the payment process is very clear and understandable for them (M= 3.03; SD= .53). Quite a large portion of respondents (71.9%) agreed that the MFS payment process is very simple which needs no assistance (M= 2.84; SD= .72). But some respondents (28.1%) disagreed with this statement. In terms of mean, the respondents agreed to all the statements related to ease of use about MFS. Therefore, it is concluded that the respondents experienced (WM= 3.01) the easy use of MFS.

Table 5. User perceived ease of use about MFS

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. MFS is very easy to use.	4.7%	95.3%	100%	3.17	0.61	<b>3.01</b>
2. During MFS payment, the process is very clear and understandable.	9.3%	90.7%	100%	3.03	0.53	
3. MFS payment process is very simple that assistance is not needed.	28.1%	71.9%	100%	2.84	0.72	

Note: SD= Standard deviation, WM= Weighted mean

#### *Users' Experiences on the Cost of MFS*

Table 6 consists of statements congruent with respondents' experiences on the cost of using MFS. As shown in Table 6, more than two-thirds of the respondents (73.4%) perceived that the transactional charge of MFS is not affordable (M= 2.16; SD= .77). In the contrary, some respondents (26.6%) agreed to the idea that the transactional charge of MFS is affordable. Most of the respondents (70.3%) disagreed that the cost of MFS is lower than manual banking transaction (M= 2.11; SD= .86). But some respondents (29.7%) agreed with this statement. Hence, it is concluded that in terms of mean, the respondents disagreed to all the statements related to the cost of MFS. In other words, they experienced high cost of using MFS (WM= 2.14).

Table 6. User perceived cost about MFS

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. Transactional charge of MFS is very affordable.	73.4%	26.6%	100%	2.16	0.77	<b>2.14</b>
2. Cost of MFS is lower than traditional banking.	70.3%	29.7%	100%	2.11	0.86	

Note: SD= Standard deviation, WM= Weighted mean

*Users' Experiences on the Trust on MFS*

Table 7 consists of statements congruent with the respondents' trust to the MFS. As shown in Table 7, nearly two-thirds of the respondents (65.6%) perceived that the MFS system is very trustworthy (M= 2.61; SD= .73). However, more than one-third of the respondents (34.4%) disagreed with this statement. Although a large portion of respondents (61%) agreed that MFS always provides safe and secure services (M= 2.58; SD= .79), a large number of respondents (39%) disagreed with this statement. Most of the respondents (79.7%) experienced that MFS provides error-free records (M= 2.78; SD= .58). Thus, in terms of mean, the respondents agreed with all the statements in case of trusting MFS. So, it is concluded that MFS can be trusted (WM= 2.66).

Table 7. Users trust towards MFS

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. MFS system is very trustworthy.	34.4%	65.6%	100%	2.61	0.73	<b>2.66</b>
2. MFS always provides safe and secure services.	39%	61%	100%	2.58	0.79	
3. MFS provides error free records.	20.3%	79.7%	100%	2.78	0.58	

Note. SD= Standard deviation, WM= Weighted mean

*Users' Experiences on the Perceive Risk of MFS*

Table 8 consists of statements congruent with the respondents' perceived risk with MFS. As described in Table 8, more than half of the respondents (56.3%) perceived that the MFS system provides risk-free transaction service (M= 2.63; SD= .70). However, nearly half of the respondents (43.7%) disagreed with this idea. Moreover, more than 60% of the respondents agreed that MFS has a low risk of losing their money or financial details (M= 2.52; SD= .76) and also low uncertainty with MFS payment (M= 2.62; SD= .66). Around 40% of respondents showed disagreement with the statements. In terms of mean, the participants agreed to all the statements regarding perceived risk with MFS. Therefore in general the respondents perceived that MFS has low risk (WM= 2.59).

Table 8. Users perceived risk with MFS

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. MFS system is risk-free transactions than other financial services	43.7%	56.3%	100%	2.63	0.70	<b>2.59</b>
2. There is a low risk of losing my money/financial details from MFS account.	39.1%	60.9%	100%	2.52	0.76	
3. There is low uncertainty associated with using MFS payment.	37.5%	62.5%	100%	2.62	0.66	

Note: SD= Standard deviation, WM= Weighted mean

#### *Users' Experiences on MFS Agent-Customer Engagement*

Table 9 presents the respondents' experiences with MFS agent-customer engagement. As shown in Table 9, more than half of the respondents agreed that MFS agents deal their complaints with care (M= 2.58; SD= .75) and also provide solutions within a limited time (M= 2.45; SD= .62). On the contrary, around 50% of respondents disagreed with these statements. A number of 60% of the respondents experienced that MFS agents always serve them with a smile (M= 2.56; SD= .61). However, 40.6% of the respondents disagreed with this idea. Most of the respondents (68.8%) experienced that MFS agents are very available for them (M= 2.67; SD= .67). Therefore, it can be concluded that in general the respondents agreed that MFS agent-customer engagement is positive (WM= 2.57).

Table 9. Users experience regarding MFS agents customer engagement

Statements	Percentage		Total	Mean (M)	SD	WM
	Disagree	Agree				
1. MFS agents deal customer complaints with due care.	45.3%	54.7%	100%	2.58	0.75	<b>2.57</b>
2. MFS provides complete solution to individual needs in time.	48.4%	51.6%	100%	2.45	0.62	
3. MFS agents always serve people with smile	40.6%	59.4%	100%	2.56	0.61	
4. MFS agents are very available for people.	31.3%	68.8%	100%	2.67	0.67	

Note: SD= Standard deviation, WM= Weighted mean

## **Discussion**

### ***Rural Users' Usage of Mobile Financial Services***

This study revealed that most of the rural MFS users (78.13%) have bank accounts. Bkash is the most dominant MFS brand used by nearly 85% of the rural users. Bkash is the most popular mobile financial service in Bangladesh (Islam et al., 2017). Mobile banking started the journey to bring the poor under the umbrella of the banking sector especially the rural poor as there are not many bank facilities, and their savings are low so they feel uncomfortable to go to the bank (Alam, Patwary & Rahim, 2013). MFS provides to benefit millions of rural people in Bangladesh by giving them financial independence on top of making life comfortable (Hossain & Russel, 2017). Rural people were introduced to the formal banking system through mobile banking. The use of MFS has paved its way to open bank accounts. This study's result indicates that rural users are getting included in the formal banking system.

It is found that nearly 60% of rural users are using MFS for more than at least 3 years. MFS has become very popular for the last couple of years and it has also covered the rural areas. It is because MFS not only offers a safe and convenient mechanism for saving but also makes an encouraging environment for women to save more money (Hossain & Russel, 2017). Additionally, no cost is needed for having an MFS account which has attracted the un-banked population of Bangladesh (Rahman et al., 2020). For the last couple of years, the number of MFS users is rising gradually. The concept of digitalizing the whole country has also covered many spheres of rural people's life. The increase in technology usage in the urban areas is influencing user behavior, payment techniques, and purchasing habits too (Akhter & Khalily, 2020). The more rural people are using MFS; they are getting more comfortable with MFS.

Cash in, cash out, sending money and mobile recharge are some most common and frequent services that rural users are using with their MFS. Sarpong and Agbeko (2020) found that airtime top-up and sending and receiving money were the two most common transactions that were frequently done by users. Hasan (2020) also found that the most common use of mobile banking is balance transfer between the users and users transfer their balance for different purposes. MFS started its journey with features like sending and receiving money among rural users. Still, now rural users are frequently using these services. Chavali and Kumar (2018) expressed that mobile banking offers a wide range of services for users to choose from. However, rural users have limited knowledge about different new features of MFS like merchant payments or online shopping. Akhter and Khalily (2020) mentioned that MFS is a simple, cost-effective, safe, and affordable way to send and receive money. Rural women use MFS mainly for receiving money from their husbands working in urban areas. Most of the time rural people transact small amounts of money within their limits (Hossain & Russel, 2017).

This study verified that majority of the rural users (37.5%) either use MFS four to eight times or more than nine times (35.9%) monthly. The frequency of using MFS is increasing rapidly among rural users. Mbama (2018) argued that users who frequently use digital banking are enjoying it to use it for their good experience with it. On the contrary, Hossain and Russel (2017) mentioned that at present savings tendency through MFS is not in enormous volume due to the lack of facility, lack of product diversification, and business operation duration of mobile financial service. Rural users prefer to get hard cash rather than saving digital money in their MFS accounts. Hasan (2020) claimed that MFS payment is a popular method that is also a part of modern e-transactions for favorable offers by mobile banking outlets (especially shops or supermarkets). Rural people will be encouraged to use MFS if they get these types of payment facilities in their respective areas. Even if payment offers are unavailable in rural areas, utility bill payment (electricity, gas, telephone, etc.) is growing up usage among users in Bangladesh. MFS has created a positive experience among users because users believe that all services of MFS are very good for them (Alam et al., 2013).

This study shows that the maximum number of rural users' transaction time was one to three minutes. Nearly 70% of rural users could reach their nearest MFS agent within ten minutes. Similarly, Dona et al (2014) also found that there were available agents and branches of DBBL mobile banking, Bkash, mCash, and so on. Additionally, Sarpong and Agbeko (2020) found that most of the users claim it takes not more than 5 minutes during a transaction and not more than 15 minutes to travel to an agent. Rural users can easily reach their MFS agents and get the necessary mobile banking service from them. As transaction time is shorter, so users feel more comfortable making a transaction through MFS. Besides, Alam et al. (2013) found that users believe MFS transaction is a speedy process because it can be done anytime anywhere quickly in less time. People believe that MFS takes less time than traditional banking (Ahmed et al., 2012). People don't have to wait in the queue or fill up different papers to transfer money. MFS has reduced the burden of paperwork and time consumption of traditional banking for rural people. So, everyone believes that MFS is more beneficial due to saving time for them (Sarpong & Agbeko, 2020; Khan et al., 2017). Nevertheless, sometimes users face problems due to late payments or for any other purpose, which causes loss of time (Rahman et al., 2020).

#### ***Users' Experiences of Perceived Usefulness***

Perceived usefulness refers to the degree to which an individual feels that his/her performance will improve as a result of using a particular system (Davis, 1989). This study finding suggests that rural users have a positive experience regarding the usefulness of MFS. More than 90% of users perceive that MFS is very useful for them because it has helped them to make payments more quickly and also enhanced their

effectiveness of payment. Likewise, Komulainen and Saraniemi (2019) found that speed is one of the vital properties of mobile banking for the users, and so they use the service and found it useful. Liza (2014) also found that current users of mobile banking services perceived mobile banking as useful. People will accept mobile banking services when the value and benefit of mobile banking are evident. Continuous development of MFS has made it faster for mass people. Unbanked and rural people were also able to make payments within a few minutes.

Prior research found that perceived usefulness is positively related to system usage (Talukder, 2014). Furthermore, Zarpou, Saprikis, Markos, and Vlachopoulou (2012) also established the strong influence of perceived usefulness on the adoption of mobile services. The strong, direct effect of perceived usefulness on an intention to use m-commerce has also been confirmed by Chong (2013). Finally, when an individual perceives that innovation offers a relative advantage over the firm's current practice, it is more likely to be adopted and implemented (Talukder et al., 2014). According to Chavali and Kumar (2018), mobile banking helps people in two ways. People can make proper financial planning as they can continuously monitor their financial transactions. Mobile banking also saves time since people need to not to visit the bank branch for a regular transaction like traditional banking. At present many workers get their salary in their MFS account and they regularly make a transaction through MFS. It gave rural people the power to analyze their financial activities frequently. Moreover, MFS reduces the expenses of stepping in and out in addition to allow people living in rural areas to get money in real-time (Hossain & Russel, 2017). Rural users' perceived usefulness has increased their MFS usage and created a positive experience among them.

#### ***Users' Experiences of Perceived Ease of Use***

Perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). This study established that most of the rural users experienced that MFS is very easy to use because the process is very clear and understandable. Over the years providers are trying to make their payment process as simple as they can so that people can do it very easily. Maximum rural users can make a payment without any assistance but some users experience the payment process as complex and need assistance to do it. The previous studies found that current users of mobile banking services perceived mobile banking to be easy to use, all tasks can be accomplished and it does not need a lot of effort (Chavali & Kumar, 2018; Liza, 2014). Chavali and Kumar (2018) added that, if mobile banking technology is easy to use, it will enhance the usefulness of mobile banking and as a result, people will adopt the mobile banking. When people can understand the whole process of MFS simply and do it instantly by themselves, then it creates a positive experience for them.



Moreover, Hossain and Russel (2017) claimed that rural people are getting money through MFS very easily without any harass and can use that money quickly for their convenient time, which helps much for the development of a living standard of rural people of Bangladesh. It is important for users to feel that they know how to use and control the mobile banking service smoothly. The sense of control is affected by the ease, transparency, and logic of the service (Komulainen & Saraniemi, 2019). Rural people never got control over their financial stability until MFS has come into the picture. They can manage their money effortlessly as they can control their MFS account without other help. This study result reflects that easy usability has increased the rate of usage of MFS for all users. Previous research findings also indicated that the perceived ease of use variable has a significant positive relationship with perceived usefulness (Chavali & Kumar, 2018; Liza, 2014). Perceived ease of use has been used as a powerful factor in new technology adoption in mobile services (Zarmpou et al., 2012) and mobile banking (Wei et al. 2009).

#### ***Users' Experiences of Perceived Cost***

According to Luarn and Lin (2005), the cost is defined as the extent to which an individual believes that using mobile banking would cost money. This study demonstrated that most of rural users were unhappy due to the high transaction cost of MFS. Poor and unbanked rural people don't have the affordability to pay this price. As most of the users have a bank account, they consider that cost of traditional banking is lower than MFS. So, some rural people prefer traditional banking rather than MFS in terms of cost.

The previous studies also found that most of the users are dissatisfied with the high transaction charges of MFS (Hasan, 2020; Sarpong & Agbeko, 2020). In contrast, Alam et al. (2013) found that most of the users believe mobile banking has a lower cost compared to traditional banking. But some users perceived that cash out via agents takes more cost than traditional banking. Wei et al. (2009) claimed that cost can impede the successful development of mobile banking. Chong (2013) suggested that many mobile users are young customers for instance students, and they may be more price-sensitive compared to other consumers. Most of the rural users feel discouraged to use MFS due to its 1.75% cash out charge. The high charges created a negative experience among many rural users. Wessels and Drennan (2010) found that there is a negative relationship between perceived cost and the intention to use mobile banking. It means the higher are the costs of using mobile financial service, the less it will be used by people.

#### ***Users' Experiences on Trustworthy of Mobile Financial Services***

According to Khan et al. (2017), trust refers to a user's belief that his/her privacy

regarding personal and transaction information will not be harmed, and the technology is reliable enough to protect his/her private information from illegal parties such as hackers. This study explored that, although most of the rural users trust the MFS system, more than one-third of users don't trust MFS. The finding suggests that users' experience is quite similar in the case of providing safe and secure services. Similarly, the previous study found that numerous people still do not trust the MFS system as they are concerned about their faulty transactions or frauds (Ahmed, Imtiaz & Kausar, 2020; Ramdhony & Munien, 2013). On the contrary, Malaquias and Hwang (2016) observed a positive association between trust and mobile banking use considering respondents from Brazil and the USA.

Trust can also enhance users' intention to use and increase their perception related to mobile banking satisfaction (Sharma & Sharma, 2019). Trust can help users to overcome perceptions related to insecurity and risks. Trust also affects users' continuance intention in mobile payment (Zhou, 2013). Koksai (2016) claimed that, when trust is developed among people, it reduces perceived risk and uncertainty with mobile banking, thus leading to a favorable effect on customer intentions. Malaquias and Hwang (2016) considered that the frequent use of mobile banking contributes to an increase in trust in mobile devices. So, previous research suggested that banks and service providers should constantly innovate and offer better safe and trustworthy mobile applications to boost users' confidence towards mobile banking services (Chitungo & Munongo, 2013).

#### ***Users' Experiences of Perceived Risk***

Perceived risk refers to the five facets of risk including performance risk, security/privacy risk, time risk, social risk, and financial risk (Kabir, 2013). If a person perceived higher risks and insecurity for instance issues of loss and theft of money or financial information due to system hacking, this would discourage the adoption of mobile banking by the rural communities (Chitungo & Munongo, 2013). Although most participants agreed that MSF is safe and has low risk, this study results in nearly 40% of the total participants experienced that the MFS system is risky than other financial services and they fear losing their money or financial details from the MFS account. These have generated a high uncertainty to make payment with MFS.

Every mobile financial service is associated with some risk. Moreover, many people fear financial loss because of the hacking of account information. On the contrary, other researchers found that most people believe that mobile banking is fairly or highly secured (Alam et al., 2013; Bhuiyan & Rahman, 2013). If a person perceived higher risks and insecurity for instance issues of loss and theft of money or financial information due to system hacking, this would discourage the adoption of mobile banking by the rural communities (Chitungo & Munongo, 2013). This research suggests

that rural people perceive much risk connected with MFS and it generates negative experiences for them. Similarly, Makanyeza (2017) found that perceived risk had negatively influence users' behavioral intention to adopt mobile banking services.

### ***Users' Experiences of Customer and Agent Relationship***

Most of the customers seem to face different issues related to mobile banking and so they seek help from mobile banking employees or agents. Customers also file complaints against different problems they face with mobile financial services. Karatepe and Aga (2016) expressed that bank employees have interactions with customers which are the most significant link in service delivery and complaint handling processes. They need to be friendly, proficient, capable of sustaining interpersonal distance (Garg, Rahman & Qureshi, 2014), and in building trust and influencing customer behavior (Mbama, 2018).

This research showed that almost half of rural users have negative experiences regarding agents' customer engagement. They experienced that agents don't deal with their complaints with due care and took huge time to provide any solution for them. Most of the rural users experienced that agents serve them with a smile and they are always available. Nevertheless, almost one-third of users' experienced agents are unavailable and they are not very friendly at all. Customer care representatives can't give them proper solutions within time. Akhtaruzzaman et al. (2017) explored that the agents are not competent in dealing with customers' queries and complaints. They do not know how to provide entire services to clients. They are even blamed for colluding with miscreants in illegal transactions through MFS in Bangladesh. Mbama (2018) mentioned employee-customer engagement influences and improves customer experience on digital banking. This research shows that sometimes the negligent behavior of agents and customer care representative has formed a negative experience among rural users. MFS agents' engagement with customers may influence their satisfaction and experience with MFS as well as increase profit for a service provider.

### **Conclusion**

This study aims to shed some light on users' experiences of mobile financial services at rural areas of Bangladesh. This study further examine the users' understanding on to what extent several factors (perceived usefulness, perceived ease of use, perceived cost, trust, perceived risk, and customer-agent relationship) contribute to their perception toward mobile financial services. Drawing on a survey research, this study's findings portray that these factors become considerations of the users both in terms of positive and negative experiences. Although the users provide a fair perception to the majority of above-mentioned factors, it was found that high cost of using MFS partially contributes to their negative view on the mobile financial services offered by several

Bangladesh banks. This study indicates that the more users are willing to adopt mobile financial service, the more they get used to it will be. In addition, it is also noticed that their intention to use the mobile financial service has affected their actual use of it in day-to-day financial transaction.

These findings suggest that there is a plethora of scopes where all stakeholders have to work hand-in-hand cooperatively to make MFS more lucrative, particularly for users in rural areas. Only then MFS will contribute to alleviate poverty especially at rural areas and ensure financial inclusion and economic growth of a developing country like Bangladesh. Apart from these compelling results, this study have several limitations. The data were collected within a short period of time due to the bad situation of covid-19. Additionally, the target population and sample size was very small which cannot be generalized for all rural people of Bangladesh. Moreover, reluctance, resistance, and time pressure may have influenced some of the respondents when responding to the questionnaire. The result from this study suggest that there are some areas for further research. Further research is essential that would investigate the challenges of rural users' experienced during their MFS use. The current study can be replicated with more sample from both rural and urban areas to get in depth understanding about users experience about MFS. Finally, further research is needed to examine strategies that can minimize MFS users' negative experience regarding mobile financial services.

### **Author's Declaration**

The author made substantial contributions to the conception and design of the study. The author took responsibility for data analysis, interpretation and discussion of results. The author read and approved the final manuscript.

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