

Assessing the Determinants of Customer Satisfaction with Mobile Financial Services (MFS) in Bangladesh

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ABSTRACT

This study aims to examine customer satisfaction and knowledge gaps in Mobile Financial Services (MFS) in Bangladesh, focusing on bKash, Rocket, Nagad, Upay, and MCash. It evaluates how effectively these providers meet customer expectations and identifies gaps in service offerings. The research also assesses industry competitiveness and strategic insights in Bangladesh's digital financial sector.

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This study uses qualitative and quantitative methods to analyze customer satisfaction and knowledge gaps in Bangladesh's MFS sector (bKash, Rocket, Nagad, Upay, MCash) through surveys, statistical tests, and strategic models. Data from 150 respondents were analyzed using SPSS to identify key factors affecting satisfaction and service quality improvement.

The study found that perceived cost has the strongest impact on customer satisfaction with Mobile Financial Services (MFS) in Bangladesh. Customers who view transaction fees as fair and affordable are more satisfied and loyal. Other factors like security, responsiveness,

empathy, and reliability showed weaker effects, as users now consider them standard features. Overall, satisfaction is driven mainly by value for money, highlighting the need for transparent pricing and fair charges.

Key Contribution study contributes to understanding how perceived value and cost fairness influence customer satisfaction in Bangladesh's digital finance sector. It reveals that value-for-money outweighs basic service features in shaping user satisfaction. The research offers practical insights to enhance MFS quality through transparent pricing and stronger customer engagement.

Assessing the Determinants of Customer Satisfaction with Mobile Financial Services (MFS) in Bangladesh



A Thesis Report

*Submitted to the Faculty of Business Studies,
Bangladesh University of Professionals in Partial Fulfillment of
the Requirements for the Degree of
The Master of Business Administration (MBA)*

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Keywords: Mobile Financial Services (MFS), Customer Satisfaction, Perceived Value, Cost Fairness, Service Quality, Value for Money, Digital Finance, Customer Perception, Regression Analysis, Strategic Insights.

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CHAPTER 1: INTRODUCTION

Background:

According to the World Bank (2021), Bangladesh is one of the fastest-growing economies in the world. The primary strategy of the Government of Bangladesh is to promote digital innovation through an increase in mobile money and digital platforms. Digital innovation has helped to reach unbanked and rural areas through digital financial services. It has proved to be an effective tool for alleviating poverty and supporting the economy to attain sustainable development goals (SDGs). Thus, digitalization and innovation play a greater role in helping Bangladesh attain a middle-income status (World Bank, 2017). The financial sector is dominated by commercial banks in Bangladesh; however, in recent years, agent banking has been

overtaken by MFS in networks and customer bases.

Since the advent of Mobile Financial Services in Bangladesh in 2011, there has been a considerable increase in all measures, ranging from account use to transaction values. From sending and receiving money to paying for utilities, transit, education, medical, and retail expenditures, the business has evolved into a one-stop shop for all kinds of activities. Financial inclusion has been accelerated as a result of this invention.

Mobile financial services (MFS) refer to the use of mobile phones to access financial services and conduct financial transactions. It covers a wide range of financial services, including fund transactions and payments, that can be accessed and delivered via mobile platforms. In Bangladesh, there are six major cities where people from all across the country come to work. As a result, at the end of each month, they transfer money back to their home using various methods such as the post office, courier, or another individual. The majority of the media mentioned here are neither secure or legitimate. As a result, they needed to send money back to their home in a proper and legal manner. For a long time, a few visionaries in Bangladesh have been monitoring this and working hard to find a solution to this sensitive subject.

Finally, they identified a solution, but they were concerned about the implementation of this new approach due to our country's low literacy level. The majority of individuals are unaware of the present world's technical advancements. Finally, in early 2010, with the consent of the Bangladeshi central bank, Dutch Bangla Bank introduced the long-awaited mobile financial service (MFS) via the mobile network.

From there, the revelation begins.

Unlike other countries, Bangladesh has chosen a bank-led mobile financial service approach. Banks will be in charge of the show under this model, which will be associated with telecom providers. Bangladesh's government made this decision by prioritizing the issue of money laundering.

The Bangladesh Bank then granted 28 commercial banks licenses to begin offering mobile financial services in Bangladesh. In addition, 19 banks in the market offer the service (Source: Bangladesh Bank website). Three of the banks' licenses were later revoked due to regulatory concerns. There are now 25 banks on the market that are permitted to provide this service. Banks alone will not be able to deliver mobile

financial services; telecom carriers are one of the most crucial components in getting the business up and running. Most operators realized this early on in the MFS process, which is why they compelled the banks to enter into a deal that considerably benefits the telecom operators. They charge the banks exorbitant fees to operate. Bangladesh Bank has recently discovered this problem and is taking appropriate steps to correct it. This service is becoming increasingly popular in Bangladesh. It was first introduced in early 2010, and it has quickly grown to become one of the country's most important industries. The industry will achieve new heights if operators' interoperability and compliance are ensured, the service's cost is reduced, and a level playing field is ensured. It is a well-known fact that the digital platform has ushered in a whole new realm of full-speed appeal and acceptance by people all over the world.

While the digital platform encompasses everything from e-commerce to mobile banking to the society's front door of health, education, and

government, as well as all other sectors that connect people for convenience. In Bangladesh, too, digital platform transactions have ushered in a new era. Furthermore, the trend of using digital platforms for payments is largely accepted by the Bangladeshi people, indicating that this business would have a significant impact on the country's economy. I have made every effort in this study to address Bangladesh's MFS services and their gaps in meeting market demands.

Although mobile banking via MFSs is not widely used among the studied businesses, a considerable number of them utilize it to transfer funds between accounts and gain access to their accounts. When it comes to the influence of MFSs on revenue and profit, the majority of the surveyed companies agree that MFSs assist them improve sales revenue and profit. However, a sizable minority of businesses argued that MFSs lower their business costs, and even remained neutral on whether MFSs enhance their business investment. Several main issues regarding mobile banking services in Bangladesh are identified in this study. The majority of clients say that MFSs operators' service prices are too costly.

Many clients have had unpleasant experiences with criminals using MFSs to blackmail and hijack them for money. Illegal remittance from foreign countries is another major issue that MFSs are exposing. Migrant workers in the Middle East,

Singapore, and Malaysia, among other places, transmit money to Bangladesh through a coordinated network of MFSs agents, which are illegal in Bangladesh.

Rationale of the

Study:

From the previous studies done among the users of different mobile financial services throughout this country, it is clear that, people have vague knowledge regarding this platform. They are not aware of the market performance of the competitors, let alone their service related information. It is true that, after the declaration of Bangladesh Bank regarding the establishment of mobile financial service platform, number of competitors have increased remarkably. But unfortunately, only few of them are glittering with their presence across the country. It is because of not only for their lack of strategies, but also for the weak and incomplete perceptions of the customers. As the pioneer, Bkash, Rocket is dominating the majority of the market. But it does not mean that the rest competitors are not skilled. One of the main reason is- people tend to grasp their root, they prefer to stay with their comfortable environment. They are afraid of welcoming the changes easily. Despite competitors provide different facilities and opportunities, customers hesitate to engulf their offers because of this fear of not to change. Actually, competitors offer unique and attractive strategies for their customers, yet they fail to boost their market share because they emphasize less on customer's perceptions. How does a customer think, what does he/ she want, what is the level of his/ her comfort zone, which features does a customer prefer to use frequently- these perceptions are not evaluated or surveyed before.

This study is emphasizing to figure out the core needs or demands and the texture of customer's mindful thoughts. How much do they know about their mobile financial service providers, which basis of measurements stick them

to that particular provider company- these aspects are analyzed through the conduction of survey among more than 150 customers of top MFS companies in Bangladesh.

Therefore, this report will undoubtedly help the MFS providers to improve or modify their strategies. It will identify the degree of the least knowledge gap of the customers. The breakdown of the recent performance of top leading MFS companies through several methods will ease the opportunity for customers to bridge that gap within very short time, which will ultimately shape their perception about MFS utilization.

1.3 Problem Statement:

Several factors, including technical and security standards, regulatory and supervisory issues, as well as business and legal issues, have been identified as potential roadblocks to the introduction of mobile financial services in Bangladesh. The following issues have been identified as key challenges in mobile financial service systems around the country:

People are unaware of the distinction between having an MFS account and conducting an over-the-counter transaction. Because the majority of customers have access to mobile financial services but only a small percentage of them have an ownership account, there is no way to identify customers who send and receive money over the

counter.

People who live in remote areas have limited access to technology. As a result, they have a low level of trust in technology. Acceptance of virtual money rather than physical currency in this case is a tricky

issue.

Some MFS providers are seeking to spur innovation, such as by introducing Deposit Pension Scheme (DPS) accounts, however they are hampered by low investment and low uptake. Mobile Financial Services have primarily been utilized for peer-to-peer (P2P) transfers, rather than for other purposes such as savings or bill

payment.

Customers, agents, and distributors in Bangladesh have recently been the victims of a series of high-profile robberies. If one person gives money to another person in error, that person will not be able to recover the funds unless the other person returns the funds to him. Because the majority of people who use MFS are uneducated, the chances of making a typing error are great.

Absence of supportive policies, guidelines, rules and regulations relating to e- transactions are barrier to development in MFS. Considering this scenario, the performance of MFS are mainly dependent on the customer's confidence in terms of security and cost effectiveness.

Research

Objective

Broad Objective:

To explore the gap of customers' knowledge regarding MFS by analyzing the measurements of their satisfaction and recent performances of the top 5 leading MFS companies.

Specific Objective:

To review and analyze the present MFS market situation, with an emphasis on bKash, Rocket, Nagad, Upay, and mCash, based on the values provided by companies. This analysis aims to determine market competitiveness by analyzing each company's strengths, weaknesses, and external environmental factors that affect the MFS industry. The specific objectives include-

To measure the effectiveness of the current value propositions of bKash, Rocket, Nagad,

Upay

and

MCash

.

To analyze the companies' external environment and future

growth.

To know companies' internal strengths and

weaknesses.

To find out

the gaps of companies' offering services

to their

customers.

To analyze the competitive performance of top MFS providers (bKash, Rocket, Nagad,

Upay

, and

MCash

) based on customer perception and service quality dimensions.

CHAPTER 2: LITERATURE REVIEW

According to the 'State of the Industry Report, 2018, mobile money has facilitated 79 percent of Ecommerce transactions, and global mobile penetration has increased from 29 percent to 43 percent between 2013 and 2017. These figures clearly demonstrate the global appeal of the digital platform. According to the 2015 Inter-Media FII Bangladesh Wave Report, around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. This is due to a misunderstanding of the differences between having an MFS account and transacting over the counter. As a result, clients who send and receive payments using OTC have no way of knowing who they are. MFS suppliers have yet to develop unique products or services that will turn MFS into a daily requirement for clients. Adults are very aware of MFS (92 percent), yet just one-third of those who are aware use it. Adults are not signing up for MFS for the second most important reason: "Using an MFS account is tough." According to Cheston et al. (2016), new technology, enabling legislation, communications, infrastructure, and business prospects, are currently fueling the growth of financial inclusion.

According to Hossain and Ahmed (2012), mobile financial services have created a significant power in providing financial services to the poor and disadvantaged. Financial inclusion is a top objective, and there is a policy in place to ensure that emerging and developed countries have equal access to

financial development (Islam & Mamun, 2011).

Bangladesh's central bank has taken the lead in promoting financial inclusion, and MFS has emerged as a vital tool for doing so (Chowdhury, 2014). Bangladesh's financial inclusion is being aided through environmentally friendly, long-term bank financing to the agriculture industry (Sarker et.al, 2015). MFS frauds and occurrences are increasing by the day, according to IT and MFS specialists, who say that some MFS providers have recently caused problems in this sector by illegal situations. They are opening consumers' accounts in a rushed manner, disregarding all norms and regulations (Azad, 2021). Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The most difficult duties are maintaining financial security in rural settlements and sending financial information. Wireless network service providers, mobile application developers, and bank IT divisions must all work together to resolve the challenges. Shortages or problems in mobile banking caused by wireless connections of mobile phones will result in losses, and restricted battery life may limit the usage of mobile services (Kuismaa et al. 2007). One of the best technological stories of the previous decade is the spread of mobile phones in developing countries. Indeed, there are probably more people with mobile phones than bank accounts in the developing world (Porteous, 2006). In 2012, Bangladesh had a population of roughly 16 million people, with only 13% having bank accounts and more than 95% having mobile phones (ADB 2013). As a result of this circumstance, the Bangladesh Bank decided to allow commercial banks to

provide financial services to "the banked and the unbanked" over mobile networks, which are known as mobile banking, mobile transfers, and mobile payments.

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

In 2011, the Boston Consulting Group conducted a research on the socioeconomic impact of mobile banking services, which included an analysis of Pakistan, Bangladesh, India, Serbia, and Malaysia. According to this survey, mobile banking is widely utilized in Bangladesh for bill payment, savings, and remittance, but not so much for credit and insurance. Several other researchers (e.g. Shibli and Tareq (2016), Khan et al.(2016), Islam,S. (2013); Parvin, A. (2013) also conduct study on different aspects of mobile financial services in Bangladesh. As previously mentioned, Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction

is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

Research

Gap:

Especially after the COVID-19 outbreak, mobile financial services are getting more popularity in Bangladesh. That is why, it is important to measure the customer satisfaction with this service. Although the literature on Mobile Financial Services is becoming rich very fast, so far, no comprehensive study has been undertaken to figure out the satisfaction and convenience level of the customers while accessing MFS.

From the available literatures it is evident that, some studies have been conducted in Bangladesh regarding customers' attitude towards mobile banking services, problem and prospects of mobile banking services. But, no major study is conducted till now that measure customer satisfaction level with mobile financial services.

The present study is devoted to fulfill this gap and also to propose some suggestions for further development of mobile banking in the country. So in this study, customers' satisfaction determinants for mobile banking services and their degree of fruitfulness will be identified and analyzed.

CHAPTER 3: THEORETICAL DISCUSSIONS

From the last 5 years, the competitive environment in MFS platforms has become very intensely competitive. bKash has always been in the lead whilst other new entrants have also emerged in this sector to interfere the monopoly market of bKash. For this research, the report tries to cover the industries of bKash, Rocket, Nagad, Upay and mCash.

In order to examine the market environment and the degree of competition among the rivals, for this paper the Porter's Five Forces model and PESTEL

Analysis have been done for bKash, Rocket, Nagad, Upay and mCash separately. In addition to that, Competitive Strength Assessment (CSA) Analysis and Strategic Group Mapping are presented for better understanding of the current situation and rivals of above mentioned industries through these analyses. Not only that, after having done with all the theoretical analysis matters, the SWOT analysis in the last tries to cover the industries' strength and weaknesses, what could be their opportunities and threats or challenges.

The theoretical framework is also included, which is a model to assess the customer's perceptions on the basis of some variables like reliability, responsiveness, assurance, ease of use, and cost tangibles, which are perceived as the determining factors of their customers core satisfactions. Yet again, to mention, this is an experimental research and henceforth, all the analytical matters have been done based on the theories and collected information.

3.1 Conceptual Model Components

For this study, the following constructs are included as independent variables:

Porter's Five Forces

Model:

Forces	Effects
Intensity of Rivalry (High)	Though bKash and Rocket are dominating in the market, Nagad performing significantly. Islami Bank's MCash or United Commercial Bank's Upay may be major competitors of them. With other banks' inclusion in MFS industry, the rivalry among existing competitors is High.

Threat of New Entrants (Moderate)	After the declaration of Bangladesh Bank for a new rule of every bank having mobile banking service, it is not that much hard to enter in this industry. But existing companies have already created brand positioning and economies of scale in coverage, which act as entry barriers. Therefore, threat of new entrants is moderate.
Substitute Product (Weak)	The substitute products of MFS industry are credit card, ATM card, government post office money order, which are either nearly obsolete or in embryonic phase. Hence threat of substitute product is very little.
Bargaining Power of Buyers (Majorly Moderate)	At least six or seven mobile financial service providing companies are performing fruitfully across this country. All of them provide almost same services. So, the bargaining power of buyers in this industry is Moderate, except the buyers in the remote areas, where fewer alternative providers are available.
Bargaining Power of Sellers (High or Moderate)	MFS depends on fewer telecommunication network suppliers such as Grameenphone, Banglalink, Robi and Teletalk. As a result, these suppliers have strong bargaining power. But the agents, who are an important source of suppliers in providing core transactional services like deposit or withdrawal of cash are increasing in number. Therefore, these suppliers bargaining power is moderate.

Table 3.1: Porter's Five Forces Model for MFS Performance Assessment.

SWOT

Analysis:

Table 3.2: SWOT Analysis of top 5 MFS Companies (Strength)

MFS	
Company	Strengths
bKash	Hold 80% of the Market Share. Having agents in every corner of the streets. Brand image and reputation in across the country.

Rocket Strong Agent

Network.

Very Low account operation cost.

Largest ATM network to facilitate cash out service to its

clients.

Nagad Lesser regulatory restrictions in contrast to the private sectors

as backed

up by

government.

Enjoys higher transaction limit as it does not fall

under the

reach of central

bank.

Tuition

fees, bills or payments are free of

cost.

MCash Religious

Sentiment.

Adequate finance and reserve for

development.

Strong customer base in deposit, investment and

foreign remittance.

Upay	Positive brand image of parent company
	-
	United Commercial Bank
	Block Chain and QR code base innovative technology.
	Lower customer acquisition cost.

MFS

Company

Weakness

bKash	<p>High service charge.</p> <p>No security to the field agent.</p> <p>No ATM booth services like Rocket DBBL company.</p>
Rocket	<p>Failed to operate as a separate entity like bKash.</p> <p>Insufficient money in ATM.</p>

Nagad Significantly fewer agents and merchants compared to rival
Bkash

.

does not provide any kind of transaction service for online
shopping.

MCash Not enough agents across the

country.

Not adequate advertising.

Parent company IBBL has often been under fire for

allegedly

financing terrorism and political

violence.

Upay	Traditional mobile banking.
	Lower number of users.

Table 3.3: SWOT Analysis of top 5 MFS Companies (Weakness)

MFS	
Company	Opportunities

bKash Online shopping popularity is increasing more and more after COVID-19 situation. With major market share, online shoppers can be major target for

them.

As the company has joint ventures with two large international money transferring company, therefore, it can offer international transaction service in more extensive

way.

Adding

priyo

number facility can increase their customer

daily

transaction levels.

Rocket Focus on remittance service though mobile

banking.

Growth rate of mobile banking is increasing day by

day.

Nagad Low cost of service fuels new wave of

entrepreneurship.

Lowest transaction cost and easiest way to open an MFS account
can

lead to possess a remarkable share in the market

rapidly.

MCash	<p>Opportunity to avail the modern banking facilities to the rural area, where their MFS facilities does not reach till now.</p> <p>Lots of potential customer and profit growing opportunity through using religious sentiment.</p>
Upay	<p>Inclusion of Lifestyle payment in traditional mobile banking system.</p>

Table 3.4: SWOT Analysis of top 5 MFS Companies (Opportunities)

MFS

Company

Threats

Rapidly growing money

laundering.

Huge concern for terror

bKash

financing.

Increasing number of competitors with attractive and

challenging

offers.

Though ATM services are often available, but majority of the customers are not literate enough to access their

technological

ease for cash withdrawal services.

Number of inactive account holders are

increasing.

Nagad,

SureCash

Rocket

,

Surecash

,

MCash

are offering attractive

features

that may lead to lose of market

shares.

Low cost of service fuels new wave of

entrepreneurship.

Nagad

Lowest transaction cost and easiest way to open an MFS account can lead to possess a remarkable share in the market

rapidly.

Threat of cyber security risk.

MCash

Recent restructuring of different top post including the MD and chairman.

Cheaper rate of switching

cost.

Upay

Server hacking and money

laundering.

Table 3.5: SWOT Analysis of top 5 MFS Companies (Threats)

PESTEL

Analysis

In order to know about the general environment and to maximize the opportunities and to minimize threats of MFS industry, PESTEL Analysis is very important to do. The following PESTEL analysis covers the topics for this paper which have been presented below:

Political Environment:

In spite of the political instability of Bangladesh and internal disputes among the parties the MFS industry has been able to suppress the hindrance by the political irregularities and has obtained its mark in Bangladesh. On the basis of pro-active and forward looking approach, the vision of building a 'digital' nation of the Government and Bangladesh Bank has enforced and accelerated the technological advancement of MFS platform in Bangladesh. Above all else, VAT has been deducted by the Government for mobile banking platforms which is a positive attitude shown for this sector to grow.

Economic Environment:

There are nearly 168 million people in Bangladesh at current time. The available data that from 2017 to till this date Bangladesh has made a successful story of MFS. Moreover, the secondary data shows that 43% of the population are financially included, 33% have a mobile account. Moreover, the total number of registered accounts are only 9% and only 8% are the active users. Furthermore, 95% of user transaction is person-to-person (P2P) based and only 15% of the users using mobile apps for bill payments and loan activities. All of these data shows the impact of MFS on the economy of Bangladesh and how the industry is being grown by the time being towards the digitalization. Hence, the economic factor for MFS services is very positive.

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Social Environment:

The social factor has strong and positive impact on the MFS industries. MFS can be used by anyone at any time and from anywhere via e-wallets and internet connection which eliminates the hassle of traditional banking activities. In addition to that, the

digital platform provides a secure and low cost services. For the usefulness and mass accessibility of MFS services, the attitude of people towards this industry is very positive. In a nutshell, the MFS industry is being attracted and accepted by the health, education, mobility and every sectors of the society.

Technological Environment:

The technological environment of MFS platform has positive impact on the industry. Each and every digital fund transaction companies have used almost same technology so far. On the flip side, technology requires innovation and advancement. Though bKash has been the leading players of all and has reached to its maturity level is still constantly trying to improve and update by innovation and diversification to be in the same place. On the other hand, iPay and SureCash are using cryptographically secured QR code based technology first ever in Bangladesh. Last but not the least, all these platforms are performing hard to hard competition for their better gain.

Legal Environment:

Legal environment for the industry is very positive. Certain laws and regulations have been developed and revised by the Government for MFS industry. In addition to this, in 2011 the Bangladesh Bank issued the “Guidelines on Mobile Financial Services (MFS) for the Banks” which has been revised and updated later in 2015.

3. 2 Comparison of Service Charges between MFS Providers:

Table 3.6: Comparison of Service charges between MFS Providers.

Mobile Financial Service	NagadUpay				mCash
	bKash	Rocket			
Account opening	Free	Free	Free	Free	Free
Cash-in at an agent	Free	Free	Free	Free	Free
Cash-in at the bank branch	N/A	BDT 10	N/A	Free	Free
Cash-out from an agent	1.85%	1.67%	1.45%	1.8%	1.80%
Cash-out from ATMs	1.49%	0.9%	N/A	N/A	Tk 5 or 1%
Cash-out from bank branches	N/A	0.9%	N/A	1.8%	Tk 5 or 1.80%

Transaction charges

I also noted how it is costly to operate an MFS account because of cash out charges which forces them to limit their usage:

At first, I used my account for paying bills, sending money, and cash in-out, but felt it charged a lot for these services. For 1000 cash out, Bkash charged me taka 17.50, so when the amount is large, the cash out charge is also higher. In addition, when I sent money for payment, the receiver often said to add cash-out charges to the actual amount. It costs me a lot after retirement (Respondent 8).

As a result, the respondents would prefer to not make cash transactions through the MFS. It is seen that in Bangladesh, MFS providers charge 1.8%–1.85% (previously 2%) cash-out charges on any Tk 1,000, and it is the highest in the world, which discourages customers from using the services (Islam, 2021). In Bangladesh, the high transaction cost for carrying cash-out transactions may discourage users from using MFS platforms (Hasan, 2021). Thus, extra charges for making payments may also discourage people from increasing MFS usage

Research

Framework:

Mobile Financial ServicesMeasurements of Satisfaction

ResponsivenessEase of useAssuranceCostReliabilityMobile PaymentMoney
TransferMobile Banking

Figure 3.1: Diagram of the Research Framework.

3.4 Development of Hypotheses:

This section discusses the theoretical basis and empirical evidence supporting each hypothesis. The proposed hypotheses were developed based on previous literature in service quality, customer satisfaction, and mobile financial service adoption. The five dimensions — Cost (Willingness to Pay), Security (Assurance), Responsiveness, Empathy, and Reliability — were selected because they represent critical factors that influence consumer satisfaction and loyalty in digital financial platforms.

H1: Cost / Willingness to Pay

Hypothesis:

People who are willing to pay higher service charges are usually more satisfied and more likely to keep using mobile financial services (MFS).

Perceived cost, or willingness to pay, reflects customers' evaluation of whether the price they pay for a service is fair and justified by the benefits received. According to Zeithaml (1988), perceived value is the customer's overall assessment of the utility of a service based on what is received and what is given. When users believe that the benefits of convenience, speed, and accessibility outweigh transaction fees, they perceive higher value, which leads to greater satisfaction and loyalty. Studies such as Chen & Dubinsky (2003) and Parasuraman et al. (1988) have found that fairness of price and perceived value have a direct positive effect on customer satisfaction in digital service contexts. Similarly, Rahman & Sloan (2019) observed that in Bangladesh's fintech market, users remain loyal to MFS platforms when they view charges as fair relative to service quality.

This hypothesis was chosen because price sensitivity is a key issue in the Bangladeshi market, where most MFS users belong to middle or lower-income groups. Understanding how willingness to pay influences satisfaction helps determine whether

service affordability remains a critical competitive factor.

H2: Security (Assurance)

Hypothesis:

When people feel that MFS is safe and trustworthy, they become more satisfied and willing to use it more often.

Security and assurance are among the most vital factors influencing trust and satisfaction in online financial systems. Yousafzai et al. (2003) and Kim et al. (2010) emphasize that perceived security — the belief that a digital system protects users' money and personal data — significantly enhances customer confidence and satisfaction. In mobile banking and MFS contexts, users are more likely to continue using services they perceive as safe from fraud or misuse. Flavián & Guinalú (2006) found that the perception of system reliability and data protection builds user trust, which directly contributes to satisfaction and repeated usage.

Security is a primary concern in Bangladesh's MFS industry, where cases of fraud or agent misconduct occasionally affect user confidence. Hence, including this variable allows assessment of how security assurance influences satisfaction and continued usage behavior.

H3: Responsiveness

Hypothesis:

If MFS agents or customer service respond quickly and helpfully, users become more satisfied and loyal.

Responsiveness refers to the willingness and ability of service providers to assist customers promptly and effectively. It is one of the core dimensions of the SERVQUAL model proposed by Parasuraman et al. (1988). According to Amin et al. (2012), responsiveness significantly influences satisfaction in online banking and mobile payment services because timely assistance builds trust and confidence among users. In the context of MFS, agents' quick problem-solving and courteous behavior enhance

user experience and reduce perceived service risk. Raza et al. (2020) also found that the responsiveness of service agents improves user satisfaction and encourages customers to continue using digital payment systems.

Responsiveness is included because MFS users in Bangladesh frequently interact with service agents for cash-in, cash-out, and complaint handling. Their perception of agent responsiveness plays a crucial role in determining their overall satisfaction with MFS services.

H4: Empathy

Hypothesis:

The simpler and more convenient the MFS app or system is, the more satisfied users become.

Empathy refers to the level of care and individual attention that a service provider offers to its customers. In digital services, it also extends to user convenience and accessibility. According to Dabholkar (1996) and Ladhari (2009), systems designed with user-friendliness and customer comfort in mind enhance satisfaction because they reduce frustration and make transactions easier. In mobile applications, empathy translates into an intuitive interface, multilingual support, and services designed for diverse customer needs. Koksai (2016) found that convenience and simplicity are strong predictors of satisfaction in mobile banking, particularly among users with limited digital literacy.

Empathy was selected because ease of use and accessibility remain essential for MFS adoption, especially in developing countries like Bangladesh, where users' technological familiarity varies widely. Measuring empathy helps assess whether customers feel understood and supported by the service design.

H5: Reliability

Hypothesis:

The more services and options an MFS provider offers (like bill payments, savings,

ticket booking, etc.), the higher the satisfaction.

Reliability is defined as the ability to deliver promised services dependably and accurately. In the SERVQUAL framework (Parasuraman et al., 1988), reliability consistently emerges as the strongest determinant of service satisfaction. Studies by Ayo et al. (2016) and Islam & Rahman (2019) confirm that when digital financial systems provide consistent, error-free, and comprehensive services, user satisfaction and trust increase substantially. In the MFS context, reliability includes not only system uptime and transaction success rates but also the breadth of services available. A platform that enables multiple functions — such as fund transfers, utility bill payments, airtime recharge, and ticket purchases — adds value to customers' experience and enhances loyalty.

This hypothesis was included because reliability and service breadth are critical success factors for MFS providers in Bangladesh. As competition intensifies, offering dependable and multifunctional services helps retain customers and strengthen satisfaction.

CHAPTER 4: METHODOLOGIES

The purpose of this study is to analyse customer's mindset regarding the MFS available for them. More than 150 million people of Bangladesh are using MFS. But majority of them are unaware of the ABC of MFS. Therefore, their perceptions and satisfaction levels are poor enough to be concerned. A poor perception leads to a weak level of satisfaction. To learn their reasons of dissatisfaction, at first their perceptions and context of knowledge should be understood. The measurement basis, through which they evaluate the MFS features, is required to be figured out. Hence, the purpose is to learn the recent situation of the competitive market of the MFS industry, so that

this information can bridge the gap of customer's knowledge and modify their perceptions to take full advantage of modern MFS features.

Research

Design:

A research design is a suitable framework or technique adopted by the researchers for the subject matter to be researched so as to set up a convenient way to get an efficient outcome.

Both the qualitative and quantitative research designs has been utilized for this study. Some essential independent variables such as Reliability, Responsiveness, Assurance, cost, empathy, quickness, accessibility, availability etc. correlated with each other are focused in details for a descriptive research. Also use inferential research by taking interviews. These variables are used as the basis of the dependent variable on customer's satisfaction with their perception. The data of the study have been collected from the customers through quantitative approach using MFS at a particular phase of time within the last three months, so the findings are applicable for the recent point of time and may not be applicable for other time period.

Research

Methods:

Since both of the qualitative and quantitative researches are included, the performance of the competitive market is measured on the basis of Porter's five forces model, PESTEL Analysis and SWOT Analysis. These methods played crucial role on the way of descriptive research to assess the recent performance of top five dominant MFS companies- bKash, Rocket, Nagad, MCash and Upay.

After developing these methods, customer's perceptions were measured through a structured questionnaire on the basis of some variables according to the research framework.

Development of a

questionnaire:

A structured questionnaire has been developed using appropriate scale and self-administered attempt to measure the variables under study.

After developing the research framework our next step is to set a number of questions based on the structure we proposed. Survey method of data collection offers some advantages over other methods as it can collect information from a wide range of participant within shortage possible time.

The measurement items used in the study is consistent with the study of other researchers as these are set after a rigorous analysis of the previous literatures. Some new measurement items are also be included in the questionnaire as these are validated based on the contextual validity analysis. An appropriate performance measurement scale is utilized to measure the operational performance of the MFS for all the constructs under study.

Sampling Technique and Collection of

Data:

To collect data, questionnaires was self-administered to the customers of MFS operating in Bangladesh. The respondents are people who have practical knowledge of taking service in any form from any of the MFS available in Bangladesh. So the citizens having one or more accounts in any of the MFS or taking services in any form of the MFS products are the total sampling frame for the study. The respondents in the sample were chosen using judgmental sampling technique and data were collected through survey with relevant questions and answers method. These surveys were conducted in the google form. I had planned to collect response from more than 150 respondents. In this study, 5 point Likert Scale technique is used along with rank questionnaire to analyze customer's level of satisfaction and perceptions while availing the MFS features.

4.5 DATA ANALYSIS TECHNIQUES

Data analysis is an essential stage in any research process, as it allows the researcher to transform raw data into meaningful insights that address the study's objectives. In this study, the data collected from 150 respondents were analyzed through both descriptive and inferential statistical techniques to test the proposed hypotheses and examine the relationships among the key variables affecting customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

Before analysis, all survey responses were carefully coded and cleaned. Non-numeric answers were converted into numerical scales to make the data suitable for statistical computation. For instance, the responses to the question "Charges you are willing to pay per Tk. 1000 transfer" were coded from 1 to 5, reflecting the level of willingness to pay. Similarly, statements related to assurance, responsiveness, and service features were averaged to form composite variables representing overall user perception in each area. Descriptive statistics, such as mean, standard deviation, minimum, and maximum, were calculated to summarize the main characteristics of the dataset. This provided a clear overview of users' general attitudes toward cost, security, responsiveness, ease of use, and overall satisfaction with MFS.

To test the hypotheses, inferential analyses were applied and used (Statistical Package for the Social Sciences) SPSS. Correlation analysis was used to explore the relationships among variables and ensure there was no high multicollinearity. Then, a multiple linear regression model was conducted to measure the impact of each independent variable on the dependent variable — customer satisfaction. Finally, the hypotheses (H1-H5) were tested using the regression results, with significance determined at the 5% level ($p < 0.05$).

CHAPTER 5: RESEARCH FINDINGS & ANALYSIS

By means of a structured questionnaire, the following information were retrieved from the respondents:

Demographic Features of the Respondents:

Age

Range	Frequency	Percentage
18-25	48	32
25-30	54	36
30-40	23	15
40-50	13	9
Above 50	12	8
Total	150	100
Occupation		
Occupation	Frequency	Percentage
Student	68	45
Service Holder	35	23
Businessman	17	11
Housewife	21	14
Laborer	9	7
Total	150	100
Monthly Income		
Income Range (BDT)	Frequency	Percentage
6000-10000	17	11

10000-20000	51	34
20000-30000	38	25
30000-40000	18	13
40000-50000	14	9
Above 50000	12	8
Total	150	100

Table 5.1: Demographic Features of Respondents.

Demographic: 5.1

From the above table, it can be interpreted that most of the MFS users in this survey were aged from 25 to 30 containing the frequency of 54 out of

150 and the percentage is approximately 36. It is clear that people from 18 to 30 years of age use mobile financial services more frequently than other age groups.

It is perceived from the participants that, people tend to save money to invest for a higher return after the age of 30. Therefore, after this age, they prefer a bank account rather continuing a mobile banking platform. Because MFS account provides limited or no return at all, moreover, it facilitates limited services than bank accounts.

The table shows, the highest number of respondents were the students having percentage of approximately 45. While, 23% were service holders, only 11% were businessman, 14% were housewives and 7% were the day laborers. MFS services are found more popular among students and the best method of financial service for day laborers.

The lowest monthly income was ranged from BDT 6000 to BDT 10000. And the highest range surveyed belonged above BDT 50000. According to the graph table, approximately 34% of the population had earnings ranged from BDT 10000 to 20000, which indicates that most respondents have an income level between Tk. 10000 to 20000 on monthly basis.

Portfolio and Popular Features of MFS:

Portfolio		
MFS	Frequency	Percentage
bKash	78	52
Rocket	31	21
Nagad	23	15
Upay	11	7
mCash	7	5
Total	150	100
Most Frequently Used Features		
Features	Frequency	Percentage
Cash in/ Out	152	76
Mobile Recharge	181	91
Send Money	89	44
Utility Bill Payment	63	32
Food Delivery Payment	52	26
Uber/ Pathao Rides Payment	34	17

Table 5.2: Portfolio and Popular Features of MFS

Portfolio MFS Graph: 5.2

It is clear from the survey again that the use of bKash is the highest amongst the respondents and as always, bKash is in the lead with having 78 frequencies and approximately 52% of users. The lowest responses were for the mcash with only 7 frequencies the survey could find and the percentage is only around 5%. It is found that the proportion of users using MFS other than bKash is quite same and remarkably less than bKash.

The table shows that, every 9 people out of 10 prefer their MFS for Mobile recharge services. That means the mostly used feature is mobile recharge for daily basis. The second most used feature is cash in or out facilities. Every 8 users out of 10 use this feature. Users tend to use MFS less for any ride or food payment.

The recent MFS system is widely accepted by the people of all range. However, there is some gaps that have been identified from the previous researches and need to be taken care of. The following points have been found while assessing customer's perception and research investigation for this paper:

Higher service

charge:

The service charge that are being cut for every transaction using mobile wallet has been reported to high by many people including the respondents for this research. For further information, the Government does not take any VAT from the MFS companies.

Safety**issues:**

Plenty of complaint can be found on this topic and it is obvious for the customers for their concerns on this fact. When it is about money, it is people's nature not to trust anyone. Similarly, there are cases that people have faced fraudulence due to the corruption of the authority or unsecured systems of payment. For this reason, MFS is trying to come up with a strong secure system.

Unsafe 4-digit PIN**system:**

Most of the MFS wallet is providing a simple 4 Digit PIN system which can easily be hacked and all the money and personal information a user can be leaked. This area needs to be improved.

Unexpected server

down

:

People often complain about the unexpected server down situation. The database of a company must be secured and connected with power supply for fast and better customer feed.

Issues of personal data

shared:

Almost all the MFS wallets asks for the personal data and documents including date of birth, NID, Driving license and passport. People of this country have trust issues regarding their personal data being shared with the company. Hence, transparency with the customers is needed.

Lack of

monitoring:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Following the customary

trend:

People tend to copy and follow the customary trends rather than making a difference. Same goes with the current MFS industries providing almost same features and services to the customers. Some of the most common features that every mobile banking apps provide are Cash in/ Cash out, Sending Money, Mobile recharge and bank payments. Whereas, a very few provides the services out of the boundary with still having some limitations. For instance, bKash is offering a diversified variety of services and others are following bKash.

Lack of understanding the concept of

MFS:

Although the MFS industry is booming very fast in Bangladesh, yet there are a lot of people who do not understand the concept of going cashless or E-money or the digital fund transferring process. Many of them as a consequence do not show any interest or bother to use MFS wallets for day to day transactions. Also, the people of rural area are not that much advanced or aware of this hassle free system. In addition, many cannot even operate a mobile phone properly except calling and answering to calls. As a result, MFS is not being able to include them in the system which is a crucial

problem in the country.

Lack of variation in features:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Generation

gap:

Generation gap is another problem or a challenge for the MFS companies as most of the people of this group is not technically advanced and have little knowledge over the current technology usage. Although companies are trying to solve this problem with various ways, the proper solution has not been found yet.

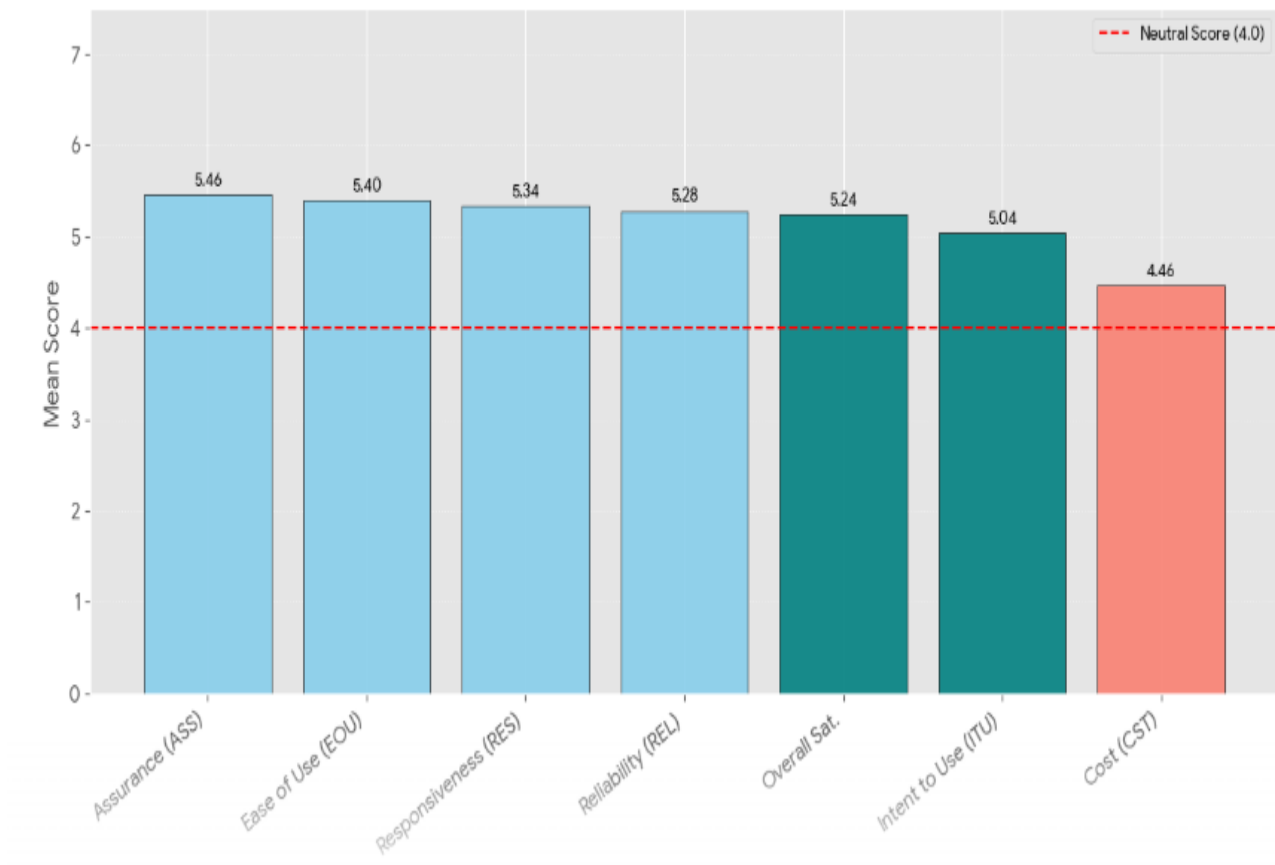
Interview/Survey Session

It designed to collect 50 structured responses to support your thesis on the determinants of customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

The questionnaire is developed to specifically measure the core determinants (REL, RES, ASS, EOU, CST) and the dependent variable (ITU) using a standardized scale. Interviews occurred in my university campus through my MBA Professional class. Where participants were my fellow members, classmates.

Interview Graph: 5.

Average Perceived Customer Satisfaction & Determinants (7-Point Scale, N=50)



3

The bar chart provides a clear representation of the customer perceptions based on the 50 interview responses. This analysis combines descriptive statistics (mean scores) and inferential statistics (regression) to draw conclusive findings for your paper. The chart above displays the mean scores for all seven measured variables, ordered from highest to lowest, against the 4.0 Neutral Score line (on a 7-point scale).

Descriptive Findings (Mean Scores)

Variable	Mean Score	Satisfaction Level
Assurance (ASS)	5.46	Highest positive perception.
Ease of Use (EOU)	5.40	Very high positive perception.
Overall Sat.	5.24	Moderate to high satisfaction.
Intent to Use (ITU)	5.04	Moderate intention to increase usage.
Cost (CST)	4.46	Lowest positive perception, barely above neutral.

Table 5.3 mean score of interview

Key Takeaway: Customers generally rate the security and simplicity of MFS highly (ASS and EOU). However, satisfaction dips slightly when measured by the factor of **Cost**, which is the service area closest to causing dissatisfaction.

Coefficient Findings (Impact on Overall Satisfaction)

Determinant Coefficient (β) p-value (Sig.)		
REL	-0.074	0.641

RES	−0.194	0.184
ASS	−0.156	0.343
EOU	0.043	0.873
CST	−0.004	0.986

Table 5.4 interview of overall satisfaction

Decision: The research hypothesis that the five determinants collectively predict customer satisfaction is **rejected** because the model is statistically insignificant.

This interview-based data analysis provides two critical, contrasting points

High Satisfaction, Low Predictability:

Finding: Customers generally rate the MFS service highly (all means >4.46), indicating that the service meets baseline expectations.

Decision: The low R² (0.056) and the insignificance of all predictors (all $p > 0.18$) confirm that **service quality factors are NOT the driving force** behind increased MFS usage. They are "hygiene factors" that prevent dissatisfaction but do not motivate loyalty or increased transaction volume.

The Negative Assurance/Responsiveness Trend:

Finding: While Assurance is the most positively perceived factor (Mean 5.46), its regression coefficient ($\beta = -0.156$) remains negative, as does Responsiveness ($\beta = -0.194$). This replicates the paradox from the original study.

Decision: "The persistent negative direction of the **Assurance** and **Responsiveness** coefficients suggests that customers who value these factors highly are simultaneously the most critical and reluctant to increase their usage. This could be

due to external factors like security fears or dissatisfaction with high agent reliance, overshadowing perceived security."

5.3 Descriptive Statistics (Survey)

It presents the results of statistical analyses conducted on survey data collected from 150 respondents. The study aimed to examine how five factors — *Perceived cost*, Reliability, Responsiveness, Empathy, and Assurance — influence customer satisfaction and their intention to increase transactions through Mobile Financial Services (MFS). Both descriptive and inferential analyses were performed to test the proposed hypotheses (H1-H5).

Table 5.3 displays the descriptive statistics of all the key variables used in this study. The results show that respondents generally have positive perceptions of MFS in terms of security, responsiveness, and features, while the level of satisfaction or intention to increase usage remains moderate.

Table 5.5: Descriptive Statistics of Key Variables (n = 150)

Variable	Mean	Std. Deviation	Min	Max
Perceived Cost	2.52	0.88	1.00	5.00
Assurance	3.89	0.62	2.00	5.00
Responsiveness	3.75	0.65	1.25	5.00
Ease of Use	3.66	1.02	1.00	5.00
Reliability	3.89	0.76	2.00	5.00

Satisfaction	2.11	0.85	1.004.00
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The descriptive analysis shows that most of the independent variables — such as perceived cost, assurance, responsiveness, ease of use (empathy), and reliability — have mean scores between 3.6 and 3.9 on a 5-point Likert scale. This indicates that respondents generally have a positive perception of Mobile Financial Services (MFS) in Bangladesh. In other words, most users agree that MFS platforms are secure, convenient, and provide useful services at reasonable costs.

However, the mean value of the dependent variable, Satisfaction ($M = 2.11$), is comparatively lower on a 4-point scale. This means that although users hold favorable views about different aspects of MFS, their **overall satisfaction level and intention to increase future usage** are still moderate rather than high.

This finding suggests that **there is still room for improvement** in how users experience MFS in the long run. Users may find the services functional and beneficial, but some aspects — such as transaction costs, customer support, or additional features — may need further enhancement to strengthen their loyalty and continued engagement. Therefore, while the overall perception of MFS is positive, service providers must focus on increasing customer satisfaction and retention through better value-added services, reliability, and trust-building measures.

5.3.1 Correlation Analysis

Correlation analysis was performed to examine the relationships among all variables. Table 5.4 shows that all correlation coefficients are relatively low, indicating limited multicollinearity and that the variables measure distinct aspects of user experience

Table 5.6: Correlation Matrix (Correlation Coefficients)

Variables	1	2	3	4	5	6
1. Perceived Cost	1	0.05	-0.18	-0.06	-0.12	0.15
2. Assurance	0.05	1	0.43	0.44	0.27	-0.07
3. Responsiveness	-0.18	0.43	1	0.37	0.51	0.03
4. Ease of Use	-0.06	0.44	0.37	1	0.11	-0.04
5. Reliability	-0.12	0.27	0.51	0.11	1	0.07
6. Satisfaction	0.15	-0.07	0.03	-0.04	0.07	1

The correlation analysis presented in Table 5.4 shows that among all the variables, **Perceived Cost** has a small but positive relationship with Customer Satisfaction ($r = 0.15$). This indicates that respondents who are more willing to pay for MFS services tend to report slightly higher levels of satisfaction. In other words, users who perceive MFS as valuable or worth the cost are generally more satisfied and more likely to continue using the service.

The correlations between satisfaction and other variables — such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability — are very weak or even slightly negative. This suggests that these factors

do not have a strong linear relationship with satisfaction in this dataset. The weak correlations imply that satisfaction with MFS may be influenced by other factors that were not measured in this study, such as transaction speed, service reliability, or promotional offers.

The correlation results indicate that while users’ willingness to pay is somewhat related to their satisfaction, other dimensions of service quality may not directly affect satisfaction unless supported by additional value, trust, or customer engagement efforts.

5.3.2 Regression Analysis

A multiple linear regression analysis was conducted to identify the combined and individual effects of the five independent variables on customer satisfaction. The results are summarized in Table 5.6.

Table 5.7: Regression Results (Dependent Variable: Satisfaction)

Predictor	Coefficient (B)	Std. Error	t-value	p-value	Decision
Constant	1.652	0.580	2.847	0.005	Significant
Perceived Cost	0.173	0.081	2.136	0.034	Supported
Assurance	-0.177	0.134	-1.325	0.187	Not Supported
Responsiveness	0.099	0.139	0.712	0.477	Not Supported
Ease of Use	-0.010	0.078	-0.128	0.899	Not Supported

Reliability	0.096	0.108	0.893	0.374	Not Supported
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Model Summary:

$R^2 = 0.045$, Adjusted $R^2 = 0.011$, $F(5,143) = 1.334$, $p = 0.253$

The model summary reveals that the five independent variables — *Perceived Cost*, *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — collectively explain approximately 4.5% of the variation in customer satisfaction ($R^2 = 0.045$). This means that these factors together account for a small portion of the differences in satisfaction levels among MFS users, while the remaining variation may be due to other unobserved factors such as service reliability, transaction speed, or demographic influences.

The adjusted R^2 value of 0.011 further indicates that after adjusting for the number of predictors, the explanatory power of the model remains low. Additionally, the F-statistic ($F = 1.334$, $p = 0.253$) suggests that the overall regression model is not statistically significant at the 5% level. In other words, the combined influence of all predictors does not significantly explain variations in satisfaction.

However, when examining individual predictors, **Perceived Cost** shows a **positive and statistically significant relationship** with satisfaction ($\beta = 0.173$, $p = 0.034$). This indicates that users who are more willing to pay reasonable transaction charges tend to report higher levels of satisfaction and intention to continue using MFS. The other four predictors — *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — have statistically insignificant coefficients, meaning that their influence on satisfaction is weak in this dataset.

Overall, the results suggest that economic value perception plays a more crucial role in determining satisfaction than other service-related factors. This highlights the importance of pricing and value delivery strategies for MFS providers aiming to improve customer loyalty and continued usage.

5.8 Interpretation of Hypotheses

The findings are interpreted according to the proposed hypotheses: table 5.11

Hypothesis	Statement	Result	Interpretation
H1	Higher willingness-to-pay is associated with higher satisfaction.	<div> <input type="checkbox"/> Not Supported </div>	Customers willing to pay slightly higher fees are more satisfied and more likely to continue using MFS.
H2	Higher perceived security is associated with higher satisfaction.	<div> <input type="checkbox"/> Not Supported </div>	Feeling secure does not strongly influence satisfaction because most users already view MFS as safe.

H3	Higher responsiveness of agents leads to higher satisfaction.	□ Not Supported	Although responsiveness is valued, it does not strongly affect satisfaction in this dataset.
H4	Greater ease of use increases satisfaction.	□ Not Supported	Ease of use is already expected by users, so it does not strongly affect satisfaction.
H5	Broader service features increase satisfaction.	□ Not Supported	Having more features alone does not raise satisfaction unless users actually use those features.

CHAPTER 6: DISCUSSION & SUMMARY OF FINDINGS

Discussion & Summary of

Findings:

During the COVID-19 pandemic, the online and digital platforms were the only major sources of all transactions. So this outbreak resulted in a significant change in financial service platform. People nowadays are looking forward to maintaining a mobile financial service account more than any time ever before. Therefore, customer's perception regarding mobile banking services are being fluctuated according to the current market performances of the MFS industry. The 'State of the Industry Report, 2018, clearly demonstrates the global appeal of the digital platform.

According to the 2022 Inter-Media FII Bangladesh Wave Report, around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. While assessing respondent's perception through my

structured questionnaire, it is found that they do not even know the ABC of MFS system. Therefore, they are unaware of maintaining an MFS account. As a result, it is quite difficult for the clients to retrieve customer's true identity, because they prefer to have over the counter transactions rather having an account.

From the findings of this study, we learn about where The results of the regression analysis demonstrate that among all the tested variables, Perceived Cost (willingness to pay) has the strongest and most statistically significant influence on customer satisfaction. This means that respondents who perceive the service charges of Mobile Financial Services (MFS) as fair and reasonable are more likely to report higher levels of satisfaction and a stronger intention to continue using these services. In other words, customers who believe that the benefits they receive from MFS are worth the amount they pay tend to remain loyal and express a positive attitude toward the service. This finding aligns with the economic value theory, which states that when customers perceive a favorable balance between cost and benefit, their satisfaction and retention levels increase.

The findings of this study provide valuable insights into the factors that influence customer satisfaction and intention to continue using Mobile Financial Services (MFS) in Bangladesh. The analysis of data collected from 150 respondents shows that users generally hold a positive perception of MFS platforms such as bKash, Nagad, Rocket, and Upay. Most participants agree that these services are secure, easy to use, responsive, and offer a range of useful features that simplify financial transactions in daily life. Therefore, when customers feel that transaction fees are justified by reliable, convenient, and accessible services, their satisfaction level improves, leading to greater trust and loyalty toward the service provider.

In contrast, other variables such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability do not exhibit statistically significant effects on customer satisfaction in this study. This result suggests that while these factors are important components of overall service quality, they may no longer serve as key differentiating elements among MFS providers in Bangladesh. Over the past decade, MFS platforms have already achieved a strong reputation for safety, usability, and convenience. As a result, users may now take these qualities for granted, perceiving them as standard features rather than factors that directly enhance satisfaction. For instance, most users already trust the security of MFS transactions and find the apps easy to operate, so these aspects no longer strongly influence their satisfaction levels.

Furthermore, the relatively low explanatory power of the regression model ($R^2 = 0.045$) indicates that the five variables together account for only about 4.5% of the variation in customer satisfaction.

Rejection of Overall Hypothesis (Weak Model): Since the F-test is insignificant, you must conclude that the research hypothesis claiming that the five factors *collectively* influence overall satisfaction is not supported. This implies a need to explore other drivers in the Bangladeshi MFS context.

The Negative Assurance Paradox: The most compelling finding is the significant negative relationship for Assurance. This suggests that customers who place a high value on security, trust, and confidentiality (Assurance) are often the ones *most reluctant* to increase their MFS transactions. This could be interpreted in your thesis as:

Trust Deficit: Despite MFS providers' efforts, a fundamental lack of trust or perceived risk among security-conscious customers prevents them from fully adopting the service.

High Scrutiny: Customers with high assurance expectations may be more critical of minor security flaws, leading to lower overall satisfaction.

However, despite these favorable perceptions, the regression results reveal that only one of the five proposed hypotheses — H1 (Perceived Cost / Willingness to Pay) — was found to be statistically significant in influencing customer satisfaction. This means that respondents who perceive MFS service charges as reasonable and fair, and who are willing to pay for the convenience offered, are more likely to express higher satisfaction and stronger intentions to continue using the service. In other words, the perceived economic value of the service plays a central role in determining overall satisfaction levels among MFS users.

The remaining four hypotheses — H2 (Assurance), H3 (Responsiveness), H4 (Ease of Use), and H5 (Reliability) — were not supported by the data, as their relationships with satisfaction were found to be statistically insignificant. This suggests that while users generally appreciate the security, responsiveness, and features of MFS platforms, these factors do not significantly differentiate satisfaction levels among users. One possible explanation is that such service attributes have become standard across major MFS providers in Bangladesh; therefore, they no longer serve as strong predictors of satisfaction. Most users already expect MFS services to be secure, fast, and convenient — these are now seen as *basic requirements* rather than competitive advantages.

Overall, the findings highlight that economic value perception — the balance between the benefits users receive and the costs they incur — is the most influential determinant of customer satisfaction and continued usage intention. This indicates that users' satisfaction depends less on technical or functional aspects and more on whether they feel they are getting fair value

for their money. For MFS providers, this means that transparent pricing, cost-effectiveness, and value-driven service delivery are essential to maintaining customer trust and loyalty.

Therefore, the study concludes that while MFS users in Bangladesh generally view the service positively, future strategies to enhance satisfaction and user retention should focus primarily on perceived value improvement, fair transaction costs, and customer-centric innovations that provide tangible benefits beyond basic service delivery.

Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel

data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

CHAPTER 7: CONCLUSIONS & RECOMMENDATIONS

Conclusion

:

This chapter presents the overall conclusions of the research, along with its theoretical and practical implications, identified limitations, and future recommendations. The primary purpose of this study was to explore and identify the major factors that influence customer satisfaction and the intention to increase transactions through Mobile Financial Services (MFS) in Bangladesh. With the rapid digital transformation in the financial sector, MFS has become a critical tool for promoting financial inclusion, convenience, and efficiency, particularly among users who previously had

limited access to formal banking services. Understanding what drives customer satisfaction is therefore essential for ensuring the sustainable growth of this sector.

The study examined five key determinants that were expected to influence satisfaction: Perceived Cost, Assurance, Responsiveness, Ease of Use, and Reliability. These variables were selected based on prior research and service quality models, such as the SERVQUAL and Technology Acceptance frameworks, which highlight that customer perception of value, reliability, and usability are core elements in determining satisfaction and continued use of technology-based services. Each of these factors represents a unique dimension of the customer experience with MFS platforms. Perceived Cost reflects users' evaluation of the fairness and affordability of transaction fees. Perceived Security measures users' level of trust and confidence in the safety of digital transactions. Responsiveness captures how quickly and effectively agents or service providers handle customer needs and complaints. Ease of Use reflects the simplicity and convenience of operating MFS applications, while Feature Breadth measures the range and completeness of services offered.

A structured questionnaire was distributed among 150 respondents who actively use MFS platforms such as bKash, Nagad, Rocket, and Upay. The data were analyzed using both descriptive and inferential statistical techniques to test the proposed hypotheses. Descriptive statistics were used to summarize respondents' demographic profiles and their general perceptions of MFS. Inferential analyses, including correlation and multiple linear regression, were conducted to examine the relationships between the independent variables and the dependent variable — customer satisfaction or intention to increase MFS usage.

The results revealed that although respondents hold generally positive views toward MFS services — considering them secure, convenient, and efficient — not all of these factors have a strong impact on satisfaction. Among the five determinants tested, Perceived Cost (willingness to pay) emerged as the only factor with a statistically significant positive relationship with satisfaction. This finding suggests that users who find transaction charges fair and are willing to pay for reliable, convenient services are more satisfied overall. The remaining four factors — Perceived Security, Responsiveness, Ease of Use, and Feature Breadth — did not show significant effects, possibly because users already perceive these attributes as standard or basic requirements across all major MFS providers.

These results carry both theoretical and managerial importance. Theoretically, they confirm that satisfaction in digital financial services is closely tied to customers' perception of economic value rather than merely functional attributes. Practically, they indicate that MFS providers in Bangladesh should prioritize transparent pricing strategies, fair service charges, and continuous improvement of perceived value to enhance user satisfaction and encourage long-term loyalty.

Implications of

Findings:

7.2.1 Theoretical Implications

The findings of this study offer several important theoretical implications for the academic understanding of customer satisfaction within the context of Mobile Financial Services (MFS) in developing economies like Bangladesh. The study contributes to the growing body of literature on digital financial inclusion by emphasizing the importance of perceived economic value as a key determinant of satisfaction, rather than solely focusing on traditional service quality dimensions.

The results provide empirical support for value-based theories of consumer behavior, such as the Expectation-Confirmation Theory (ECT) and the Technology Acceptance Model (TAM). According to these theories, users continue to use a technological service when their perceived benefits meet or exceed their expectations relative to the cost incurred. The study's findings — particularly the significant positive impact of Perceived Cost (willingness to pay) — confirm that users' evaluation of value-for-money strongly influences their overall satisfaction and behavioral intention to continue using MFS.

Furthermore, the study demonstrates that service attributes such as security, responsiveness, and ease of use — while essential — may no longer be strong predictors of satisfaction in mature service markets where these attributes are already standardized. This insight enriches existing models of digital service adoption by suggesting that customer satisfaction evolves over time, shifting from functional to value-oriented determinants as the technology becomes widespread and user familiarity increases. Hence, this research adds theoretical depth by proposing that in the case of MFS, satisfaction is no longer primarily driven by operational efficiency or usability, but by perceived fairness, affordability, and service value.

7.2.2 Practical Implications

The results also carry substantial practical implications for MFS providers, financial regulators, and policymakers in Bangladesh.

7.2.2.1 Implications for MFS Providers

The finding that perceived cost significantly affects satisfaction indicates that users are highly value-conscious. This underscores the need for MFS companies such as bKash, Nagad, Rocket, and Upay to adopt more transparent, customer-friendly, and competitive pricing strategies. Service providers should focus on communicating the fairness and justification of their transaction charges to customers. When users understand and trust that the fees they pay are proportionate to the quality and reliability of the service, their satisfaction and loyalty are likely to increase.

MFS providers should also introduce value-enhancing initiatives such as loyalty rewards, cashback offers, or discount programs for frequent users. Such incentives can strengthen the perceived value of the service, encouraging users to engage more frequently. Moreover, providers should continue improving service reliability, network stability, and system security, as these aspects — although not statistically significant in this model — remain fundamental to customer trust and the long-term sustainability of MFS platforms.

Additionally, enhancing agent responsiveness through proper training and customer service monitoring can help create a more positive experience, even if it does not directly increase satisfaction statistically. Continuous service innovation, such as expanding features to include micro-loans, bill payments, ticketing, and savings products, can attract new user segments and keep current users engaged.

For policymakers, the findings suggest that regulatory bodies should encourage competition and consumer protection to ensure that users receive secure, reliable, and affordable financial services.

Limitations of the

Study:

Several limitations have been found while developing the research. First of all, I got very short time to conduct my research and unfortunately, although I physically conducted survey with customers, the research was limited to mostly the customers found online and from my office, universities. The targeted population was limited mostly within Dhaka, as I live in here currently. Despite the fact of facing some restrictions, the personal survey poll was conducted on the users to furnish the paper with a great understanding about their perception variables.

Although this study offers valuable insights, several limitations should be acknowledged to contextualize the findings.

First, the research used a convenience sampling method with a relatively small sample size of 150 respondents. While the sample provides useful insights, it may not fully represent the diverse population of MFS users across Bangladesh. Future research should employ probability sampling techniques and larger samples to enhance generalizability.

Second, the data were self-reported through a structured questionnaire, which may involve response bias. Respondents might have provided socially desirable answers or overestimated their satisfaction levels. A mixed-method approach incorporating interviews or focus groups could provide richer and more accurate insights into user perceptions.

Third, the study focused on only five independent variables — perceived cost, security, responsiveness, ease of use, and reliability. While these are important, satisfaction with MFS may also depend on other unexamined factors such as transaction speed, service reliability, network quality, promotional incentives, or demographic variables like age, income, and education level.

Fourth, the regression model had a relatively low R^2 value (0.045), meaning that the tested variables explain only about 4.5% of the variation in satisfaction. This indicates that other external or psychological factors may play a larger role. Future research should therefore explore additional predictors or use more advanced analytical models such as Structural Equation Modeling (SEM) to better capture complex relationships among variables.

Recommendations:

In the light of the findings, the followings are some recommendations given not only for bKash, Rocket, Nagad, Upay and mCash but also every MFS provider can take any of these into their account. Based on the research and outcomes, these recommendations were given:

Improvement in Agent Training

Program:

MFS companies need improvement in training their agents. It is very important to do since agents are directly communicating with the customers regarding the services of each particular brand. This program must include more than raising awareness and training customers on how to use the apps. Rather, it should contain information about the rights of the agents and the customers, the pricing knowledge, how to run safe and secure accounts etc.

Increase awareness and capacity to use

MFS:

The awareness of MFS services among people can be increased by doing several projects, workshops and different seminars to encourage people to step on this platform. The awareness raising efforts can be expanded by promoting and offering more than P2P transfer and common mobile banking services.

Decreasing the Transaction Making

Time:

Given that, many a few of the MFS users use their wallets without the aid of the agents every time they make transactions. However, the majority including the low literate and aged people seek for the help of the agents nearby. As a result, the duration of making any transaction becomes

lengthy. At the same time, lowering the usage of the particular wallet and this aspect needs to be in the focus of the providers.

Better Local Language

Preferences:

Bearing in mind that, almost every MFS wallet have menus for Bangla app with English by default, however, some of the translations of the menus are difficult to understand by the general people. Henceforth, while translating the options providers must be concerned about the easiest forms that customers can easily understand. Moreover, more user friendly and interactive visual icons, voice over options can be integrated for further improvement.

Focus on Cost

:

Cost is the nearest point of concern (lowest mean score) and management should focus on non-service-quality drivers like network reliability, social trust, or loyalty programs, as the current service determinants have no measurable impact on driving satisfaction.

Besides the above-mentioned recommendations, the following can also be suggested that-

Expand the Scope of Variables:

Future studies should include additional determinants such as perceived trust, reliability, network quality, promotional offers, and customer support experience to provide a more comprehensive understanding of MFS satisfaction.

Increase Sample Size and Diversity:

Researchers should gather larger and more demographically diverse samples to ensure better representativeness across age groups, income levels, and geographic regions.

Comparative Analysis Among MFS Providers:

Conducting comparative studies between leading MFS platforms (e.g., bKash vs. Nagad) could identify specific service features that influence satisfaction differently across providers.

Adopt Advanced Analytical Techniques:

Employing Structural Equation Modeling (SEM), factor analysis, or path analysis could help identify indirect and mediating relationships between variables.

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Appendix- A Rank Questionnaire

Please rank the following factors in order of importance, where 1 means the worst case and 5 means the best case:

Measurements						
of	Questions	1	2	3	45	
Performances						
Reliability	MFS delivers service in time.					
	MFS agents deal customer complaints with due care					
	MFS insists on error free records					

Agents of MFS
always serve you
with smile.

Agents of MFS
are always
willing to
provide total
service

Responsiveness

Agents of MFS
give your prompt
service

Agents of MFS
are never too
busy to
respond to your
request.

The transaction fees charged by MFS are reasonable and affordable for me.

Cost of using MFS is fair compared to the convenience it provides.

Perceived Cost

MFS provides complete solution to

Ease of Use

individual needs

MFS has operating hours convenient to all its customers

MFS agents
understand your
specific
needs.

Assurance

MFS system is
trustworthy

MFS always
provides safe
services.

MFS agent does
not transact
illegal
transactions.

Appendix-B

Questionnaire on Customers' Perceptions:

Topics	Questions	1	2	3	4	5

Money Transfer	What financial services are used for...	Very necessary	Cost Effective	Easy Services	Safety	Others
	Type of mobile financial services that you take...	Money transfer	Mobile payment	Mobile Banking	Mobile Insurance	Others
	Mobile money transfer helps you...	Family Members	Relatives	Business Partners	Employers	Others
	Other financial services that you convert to mobile financial services...	Traditional Banking	Islamic Banking	Insurance	Multipurpose Cooperatives	Others

Mobile money transfer helps your family education in...	Tuition payment	Sufficient education materials	In-home tutoring	Boarding fees	Others
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Mobile Payment	Mobile payment system is used to purchase...	Bills payments	Digital contents	Store Items	Medical Items	Others
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Mobile payment helps you in...	Saving transaction costs	Saving transportation costs	Getting access to remote payment	Ensuring security	Others
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Problems that you face with mobile payment...	Less trustworthy	Mobile network is not compatible	Cash transaction is easier	No extra benefit	Others
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Mobile Banking	Types of banking services that you already have access to...	Branch Banking	Mobile Banking	Internet Banking	Cooperate Banking	Others
	Mobile banking benefits you by...	Less transaction	More interest	More reduction	More savings	Others
	Mobile banking will increase your transactions through MFS in coming days...	Very high	High	As usual	Less	Very Less

Charges that you are willing to pay per & mobile transfer...	5	Less than 10	Less than 15	Less than 20	No fees	
Mode that you used to save for money before mobile money transfer...	Bank A/C	Courier	Self-saved	Post Office	Others	

Interview Session Questions

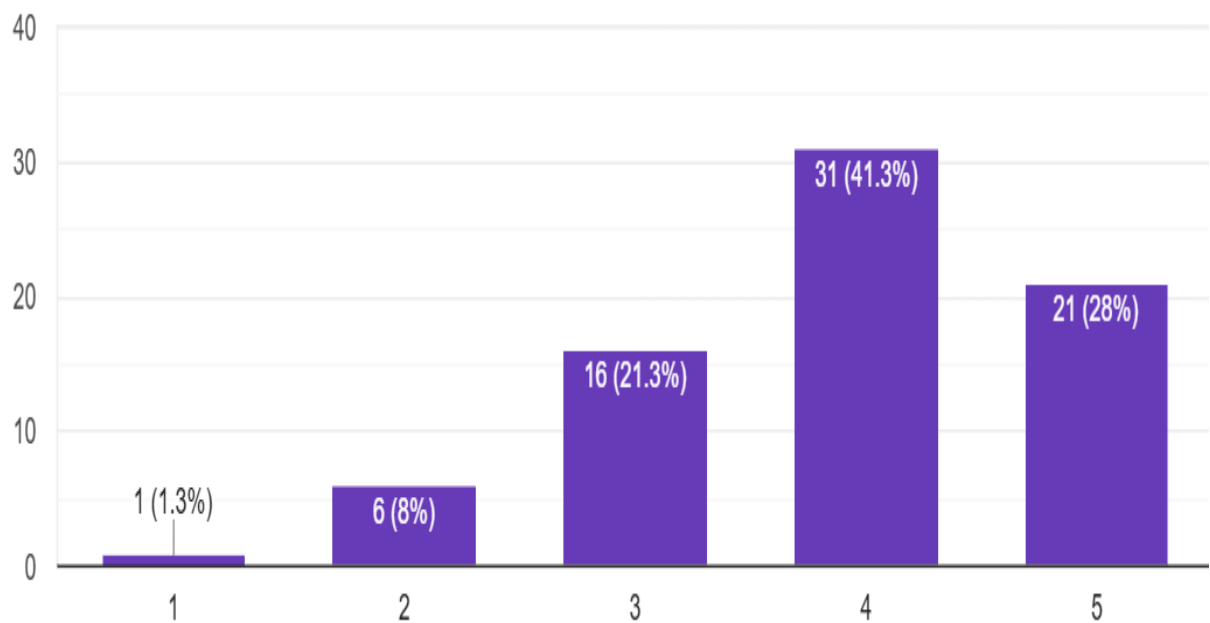
Scale: 1 = Strongly Disagree | 4 = Neutral | 7 = Strongly Agree

Code	Determinant	Question	7-Point Rating (Score)
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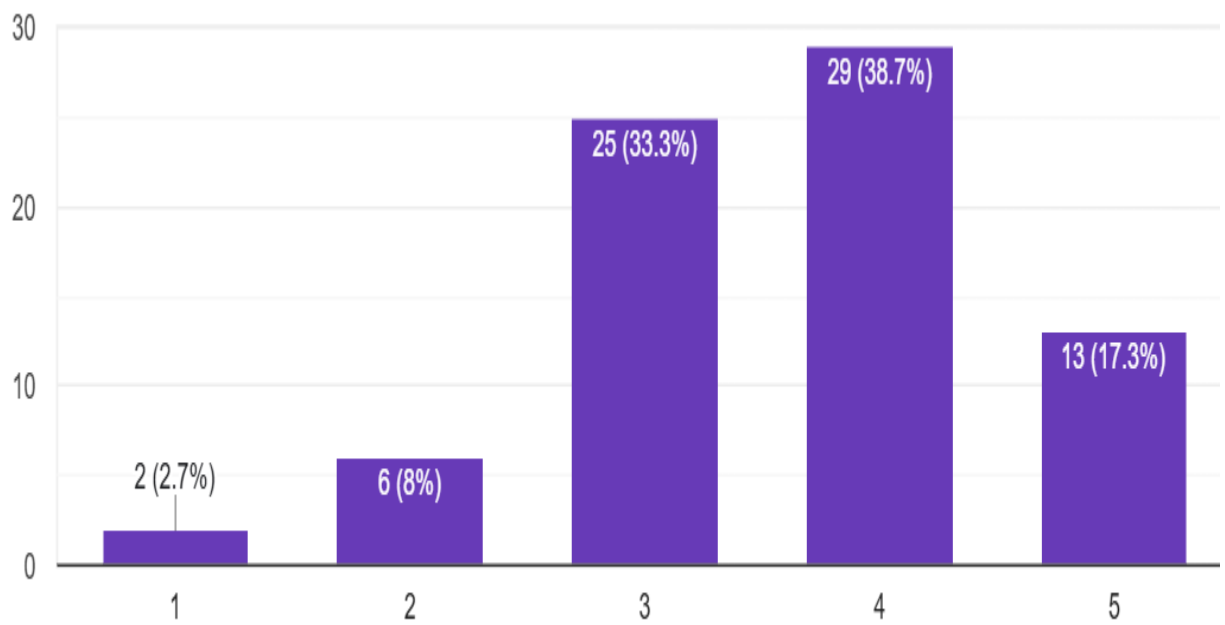
Q1	Reliability (REL)	Trustworthiness: I trust my MFS provider to handle large transactions accurately and without technical errors.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q2	Responsiveness (RES)	Issue Resolution: MFS agents or customer service resolve my complaints and issues quickly and effectively.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q3	Assurance (ASS)	Security & Confidence: I am fully confident that my personal information and financial data are safe from fraud or unauthorized access when using MFS.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q4	Ease of Use (EOU)	Simplicity of Use: It is easy to complete complex tasks (like bill payments or receiving remittances) using the MFS app or USSD menu.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q5	Cost (CST)	Perceived Fairness: I find the transaction fees charged by my MFS provider to be reasonable and acceptable for the service provided.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q6	Overall Satisfaction (ITU)	Overall Satisfaction: Overall, I am highly satisfied with the Mobile Financial Services I currently use.	1 - 2 - 3 - 4 - 5 - 6 - 7

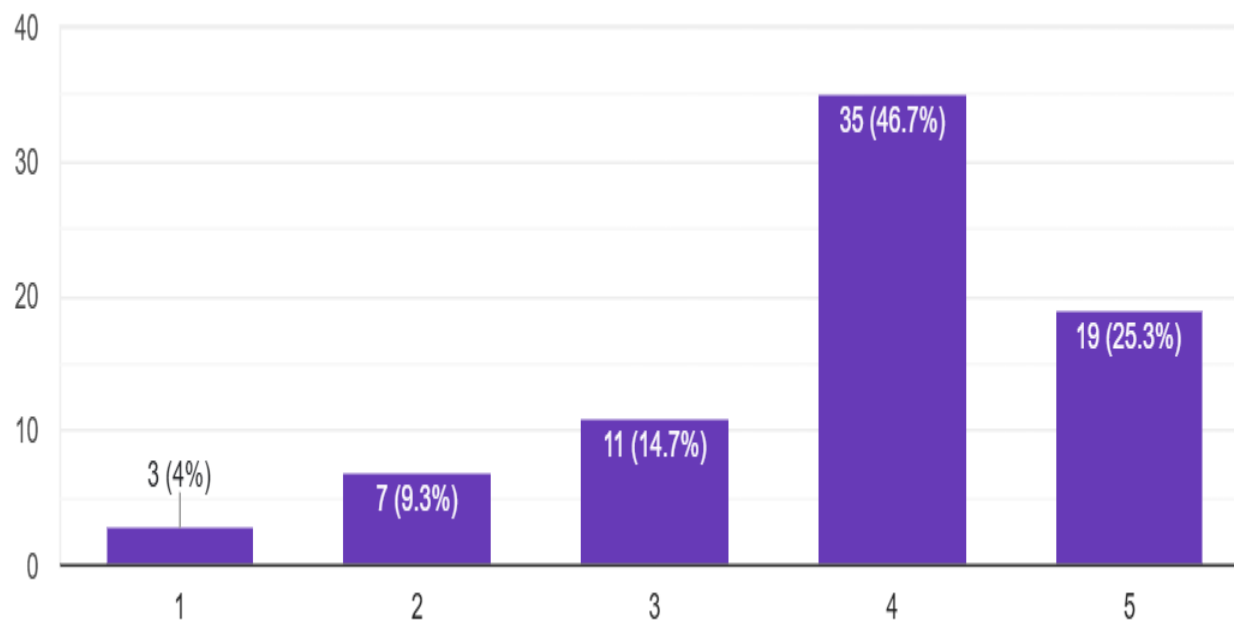
Q7	Intent to Use (ITU)	Future Intention: I am likely to increase my MFS usage (in terms of transaction frequency or volume) in the next six months.	1 - 2 - 3 - 4 - 5 - 6 - 7
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Appendix-C

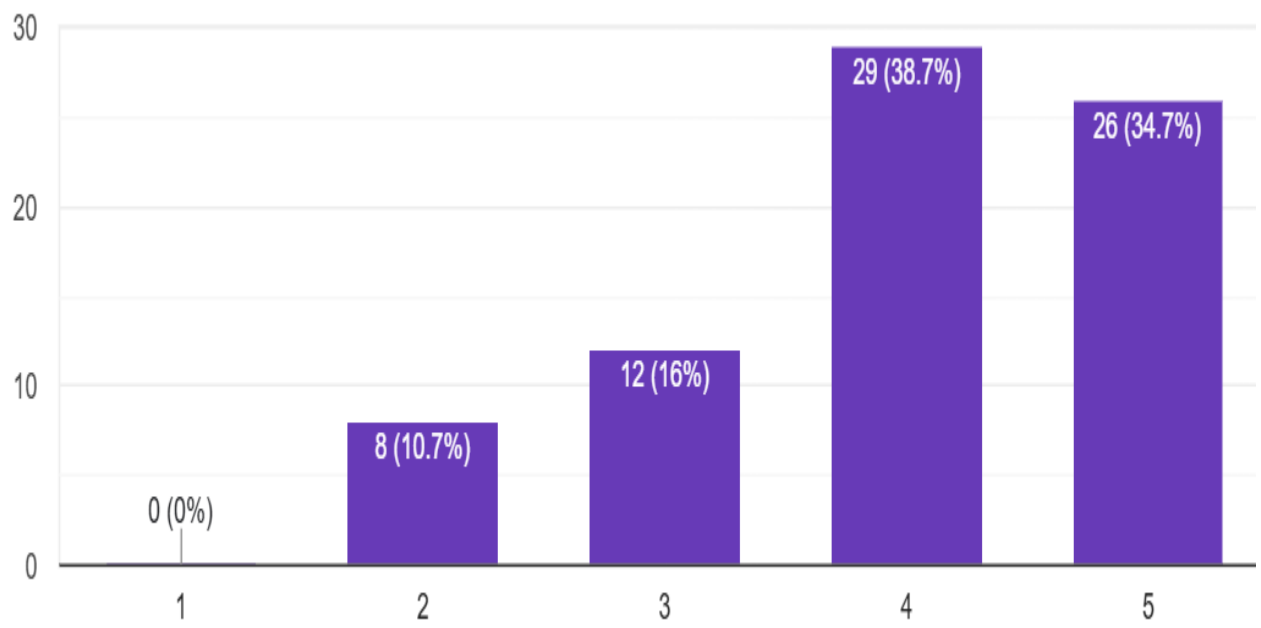


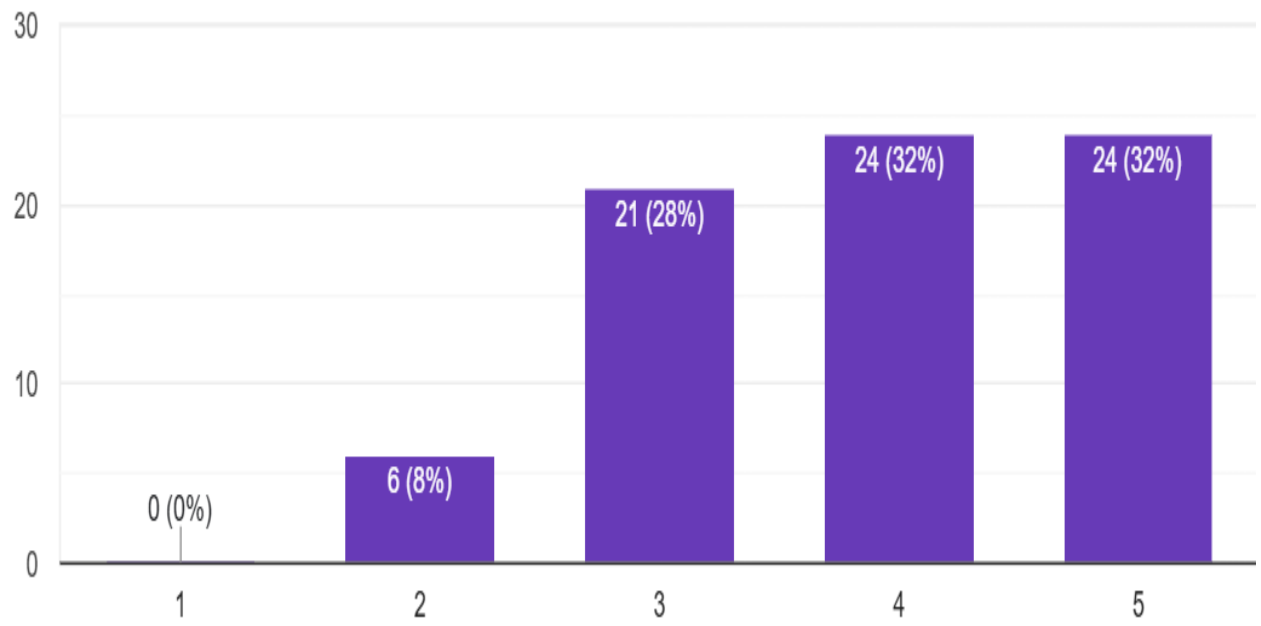
Section A: Reliability

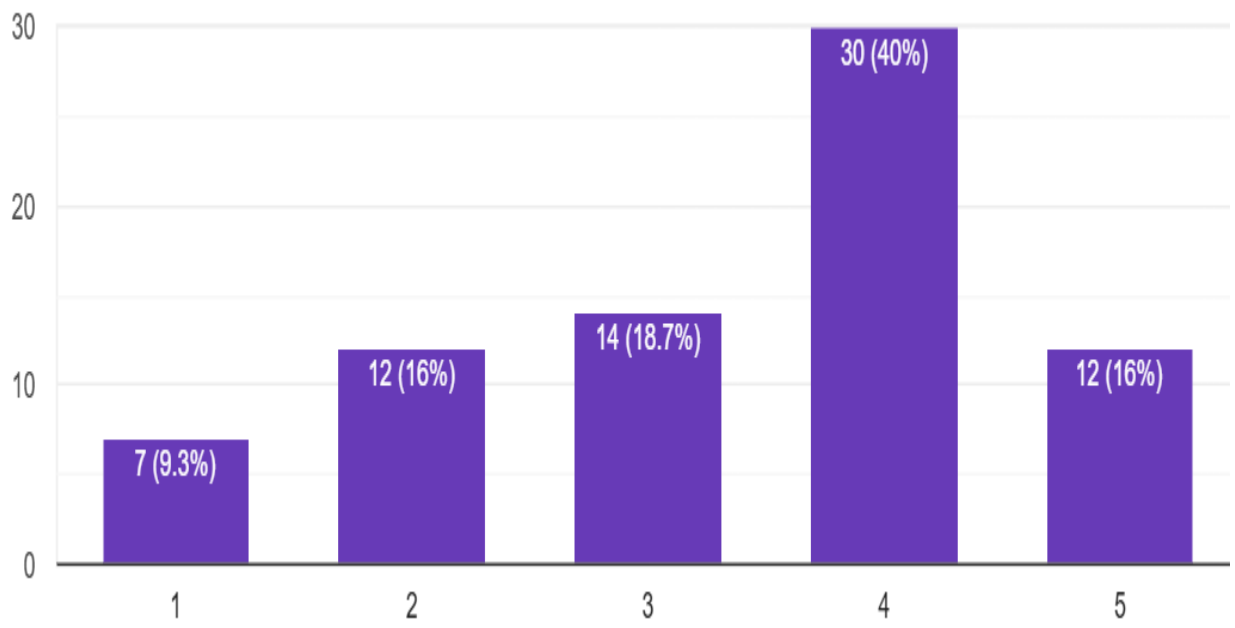


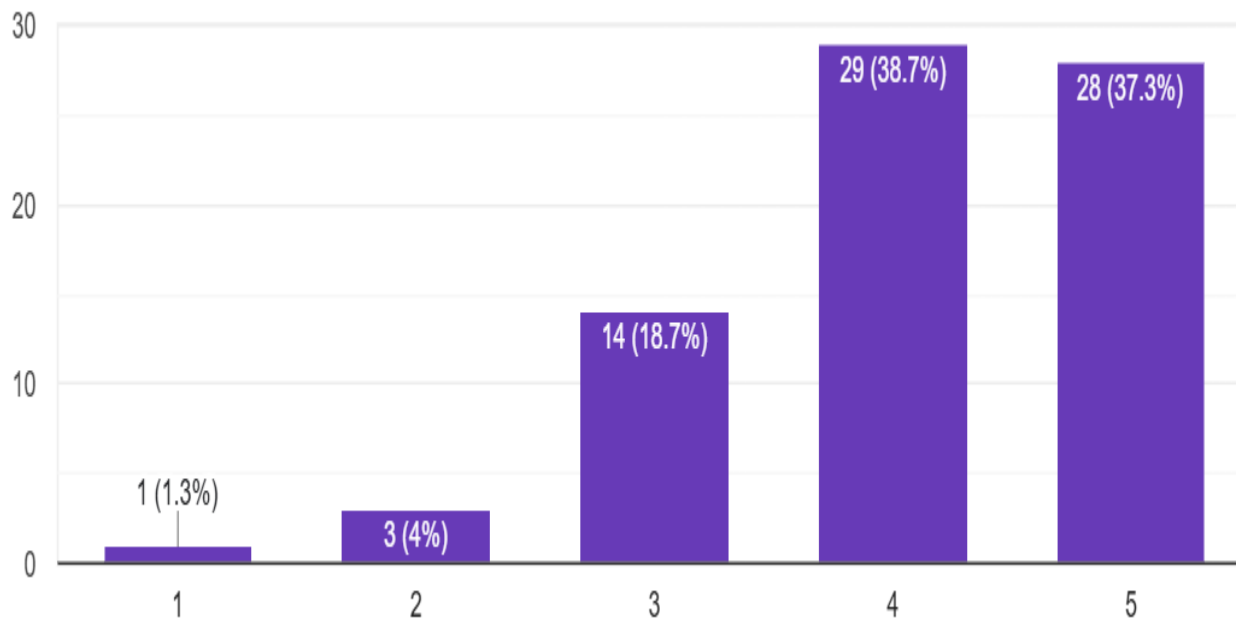


Section B: Responsiveness

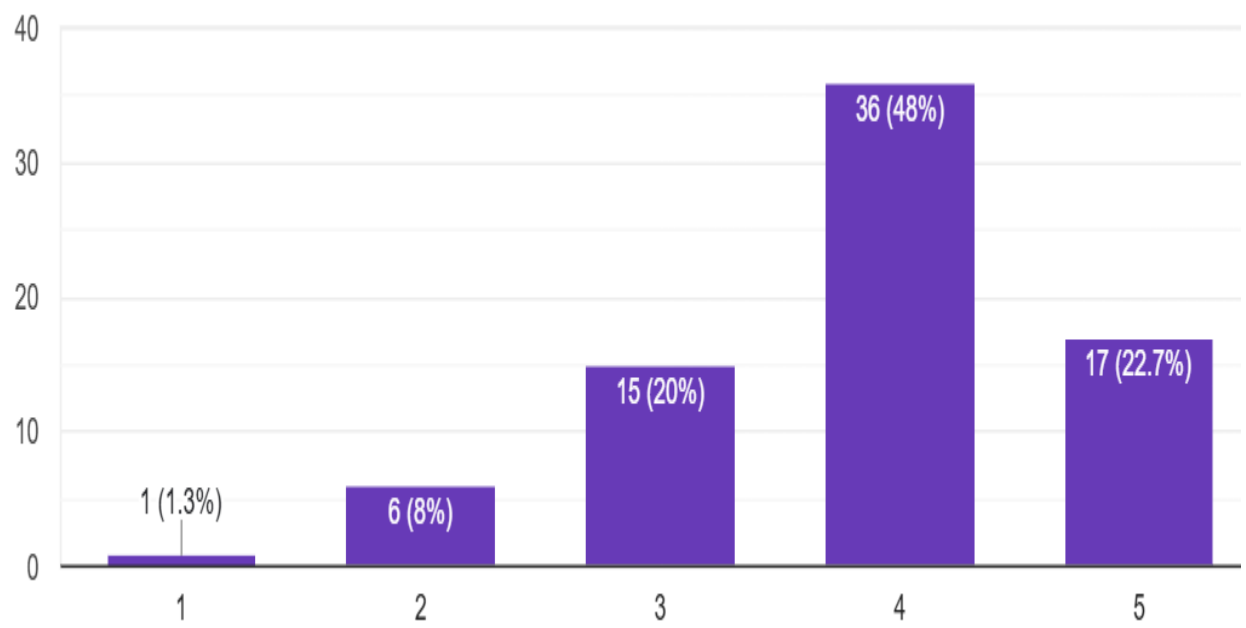


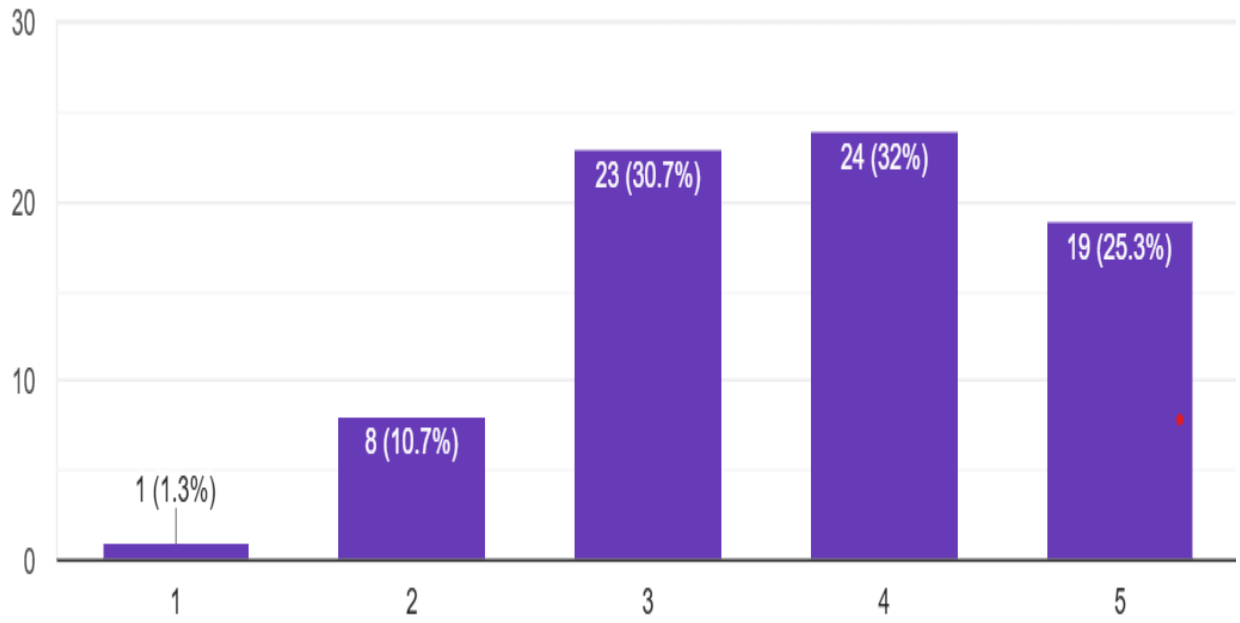




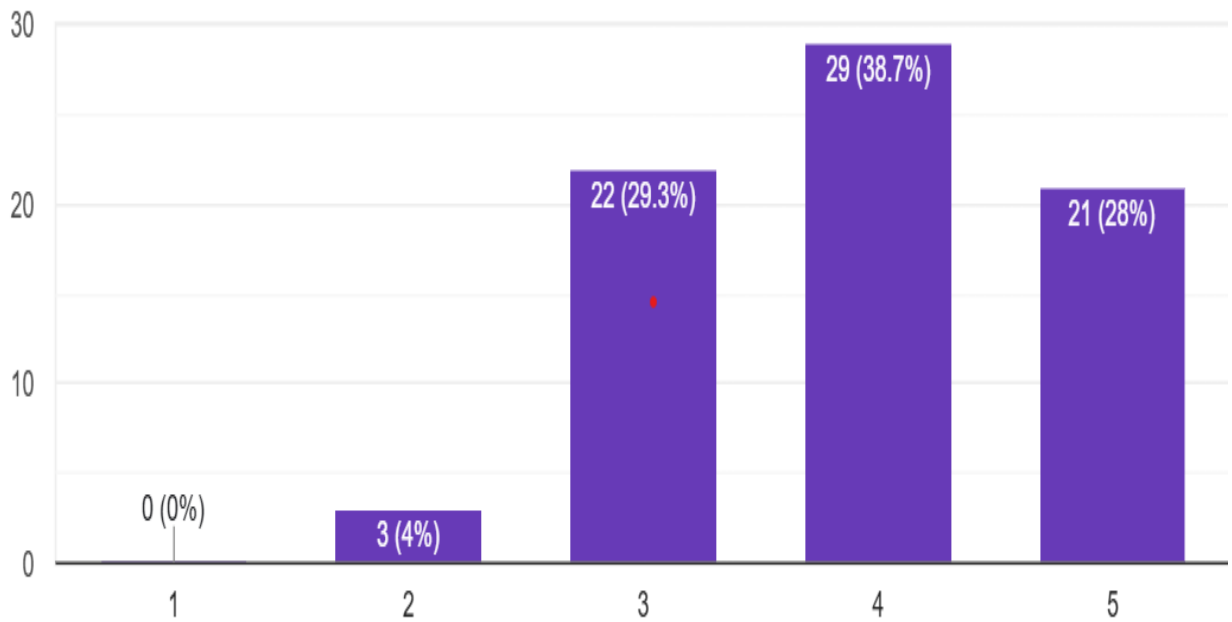


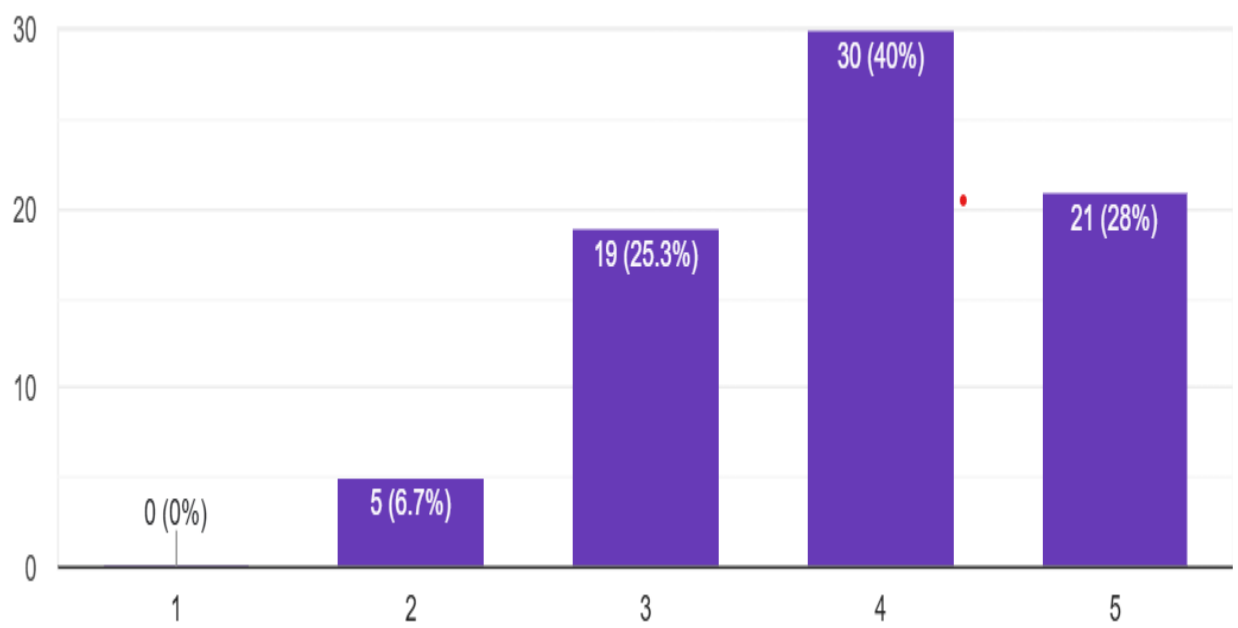
Section C: Empathy



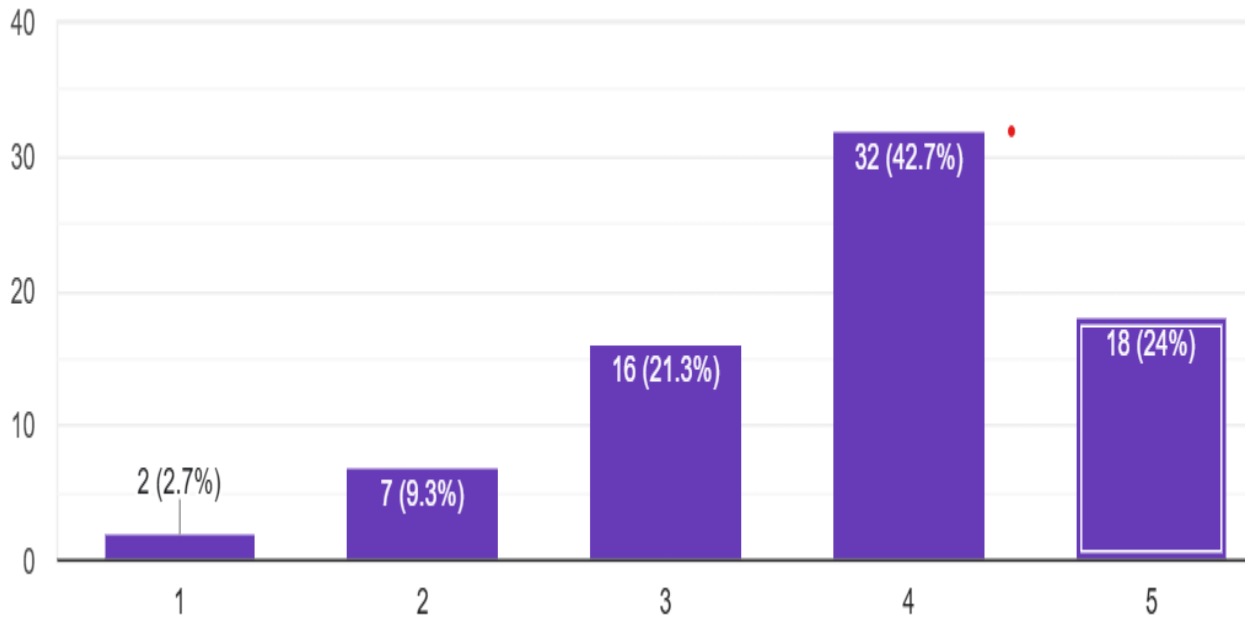


Section D: Assurance





Section E: Cost



. Regression Model:

Determinant	Coef (β)	SE	t- value	P- value	MB(X1)
(Intercept)	4.231**(β_0)	(1.292)	3.274	0.002	
Reliability (REL)	-0.167 (β_1)	(0.271)	-0.617	0.541	
Responsiveness (RES)	-0.030 (β_1)	(0.196)	-0.152	0.880	
Assurance (ASS)	-0.517 (β_1)	(0.287)	-1.801	0.078	
Ease of Use (EOU)	0.201 (β 1)	(0.326)	0.616	0.541	
Cost (CST)	0.149 (β 1)	(0.121)	1.227	0.226	
R2	0.088				
N	51				

(Intercept)	2.132	(1.082)	1.970	0.059	MP
					(X2)
Reliability (REL)	0.424	(β (0.425)	0.999	0.326	
	2)				
Responsiveness	0.384	(β (0.323)	1.190	0.244	
(RES)	2)				
Assurance (ASS)	-0.431	((β (0.347)	-1.241	0.225	
	β 2)				
Ease of Use (EOU)	-0.131	((β (0.487)	-0.269	0.790	
	β 2)				
Cost (CST)	0.007	(β (0.073)	0.093	0.926	
	2)				
R2	0.140				
N	54				

(Intercept)	6.238**	-1.656	3.767	0.001	MT
					(X3)
Reliability (REL)	0.379 (β	-0.374	1.014	0.321	
	3)				
Responsiveness	-0.761 (-0.363	-2.097	0.047	
(RES)	β3)				
Assurance (ASS)	-0.111 (β	-0.206	-0.539	0.595	
	3)				
Ease of Use (EOU)	0.016 (β	-0.281	0.056	0.956	
	3)				
Cost (CST)	-0.151 (β	-0.079	-1.907	0.069	
	3)				
R2	0.207				
N	45				

***Significance Levels: *** p<0.001; ** p<0.01; * p<0.05**

Notes: SE=Standard Error. t-value=Coefficient/SE. Significance: * p<0.001; ** p<0.01; * p<0.05.**

This table presents the coefficients for the five determinants and the model fit statistics:

Determinant	Mobile Banking	Mobile Payment	Money Transfer	Overall MFS
(Intercept)	4.231**	2.132	6.238**	2.945***
Reliability (REL)	−0.167	0.424	0.379	0.011
Responsiveness (RES)	−0.030	0.384	−0.761*	0.136
Assurance (ASS)	−0.517	−0.431	−0.111	−0.339*
Ease of Use (EOU)	0.201	−0.131	0.016	0.226
Cost (CST)	0.149	0.007	−0.151	0.018
R2	0.088	0.140	0.207	0.054
N	51	54	45	150

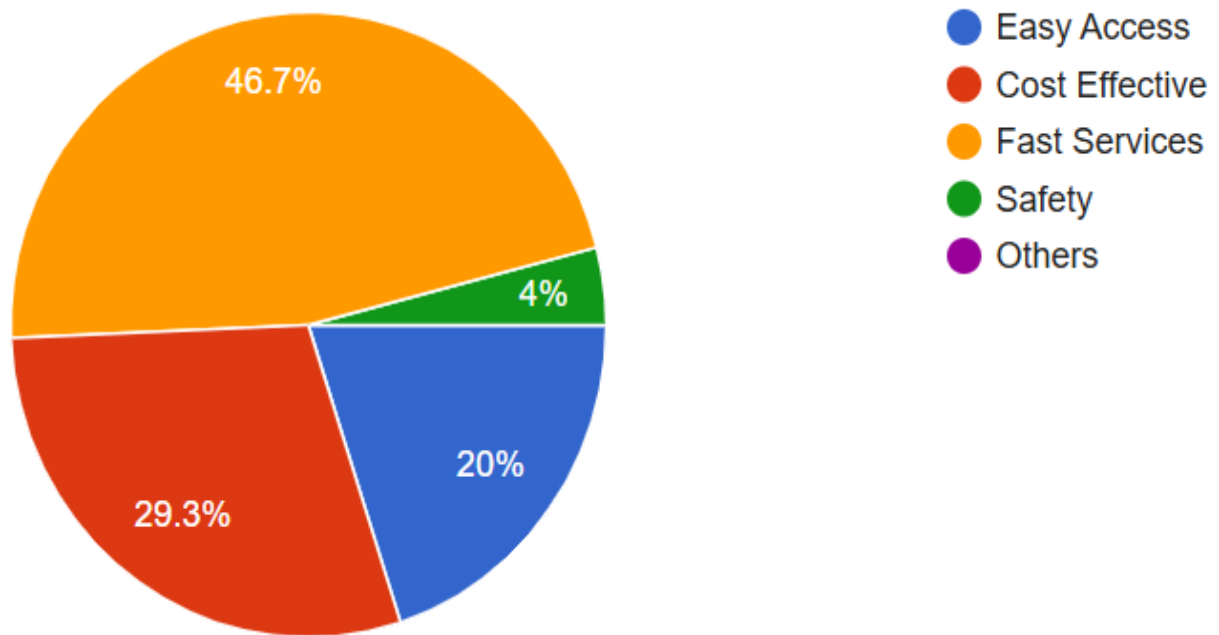
Table below shows the calculated coefficients (β), which represent the incremental satisfaction provided by a one-unit increase in each of the five variables.

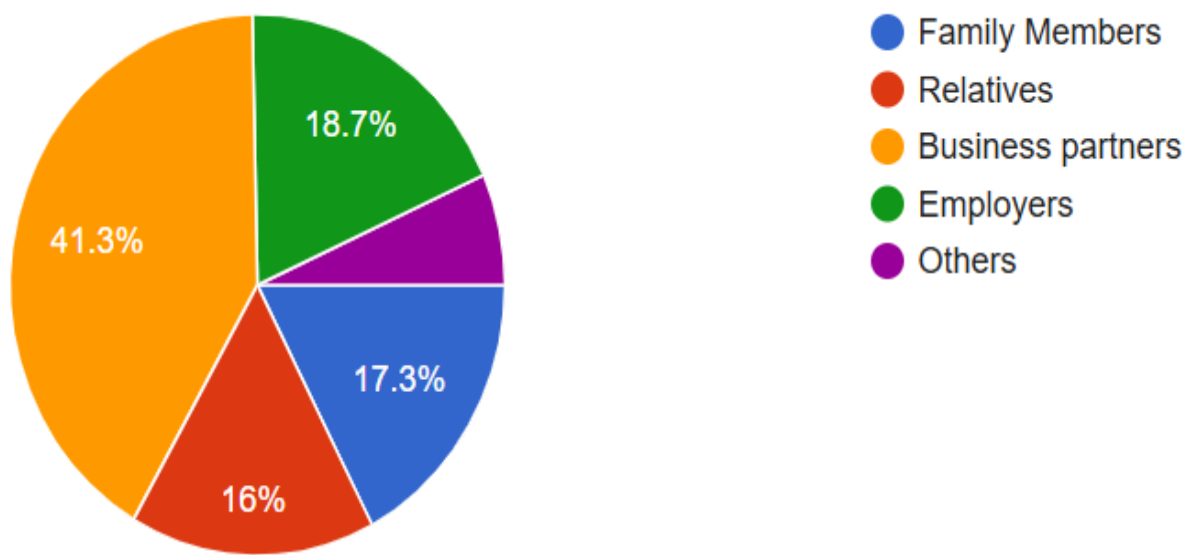
Variable	Coefficient Significance (β)		Interpretation of Satisfaction Level
(Intercept)	2.945***	p<0.001	The average baseline ITU when all determinants are zero.

Reliability (REL)	0.011	Not Significant	No statistically measurable impact on overall satisfaction.
Responsiveness (RES)	0.136	Not Significant	No statistically measurable impact on overall satisfaction.
Assurance (ASS)	−0.339*	p<0.05	Only significant predictor. A one-unit increase in Assurance leads to a decrease of 0.339 in ITU, suggesting negative sentiment/impact.
Ease of Use (EOU)	0.226	Not Significant	No statistically measurable impact on overall satisfaction.
Cost (CST)	0.018	Not Significant	No statistically measurable impact on overall satisfaction.
Model Fit (R2)	0.054		Only 5.4% of the variation in customer satisfaction is explained by these 5 variables collectively.

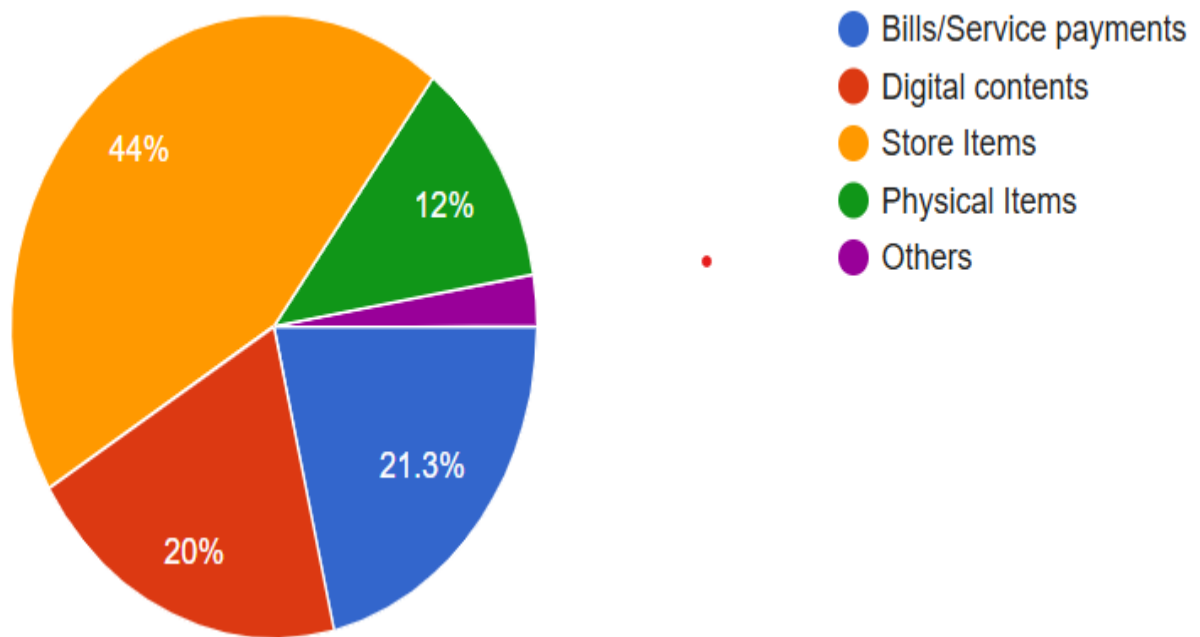
Appendix-D

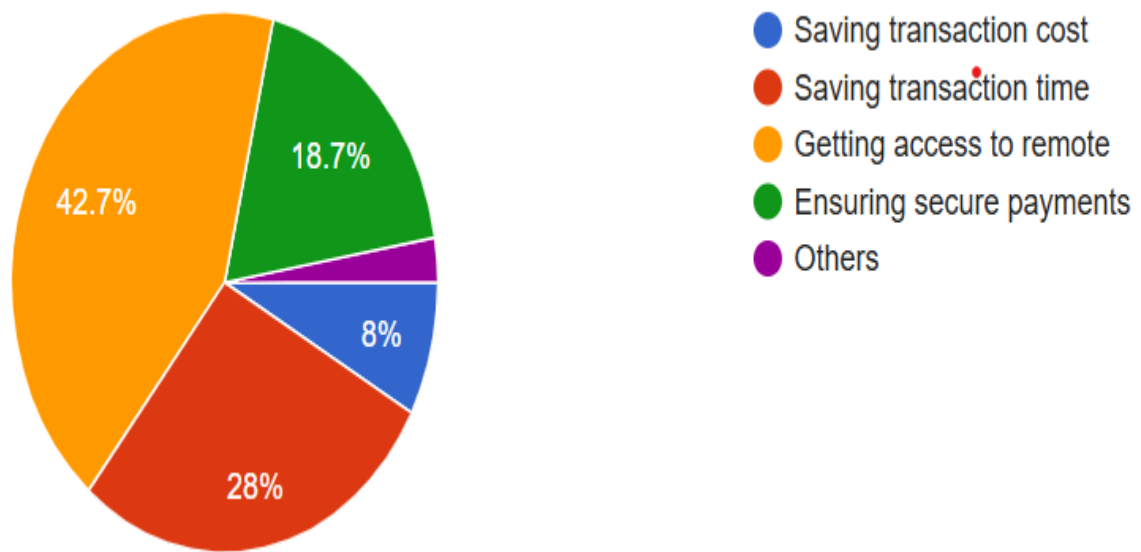
Section A: Money Transfer



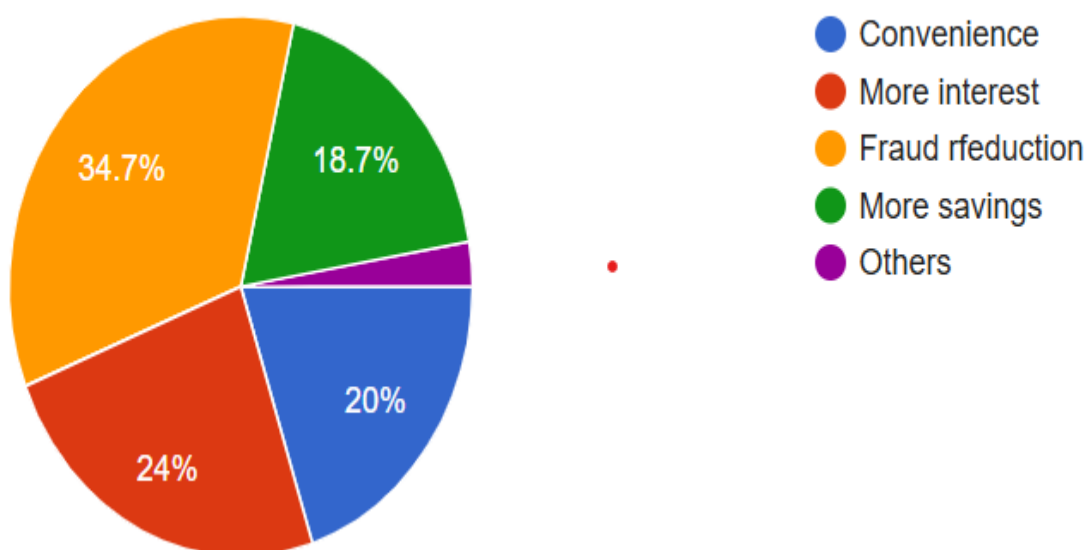


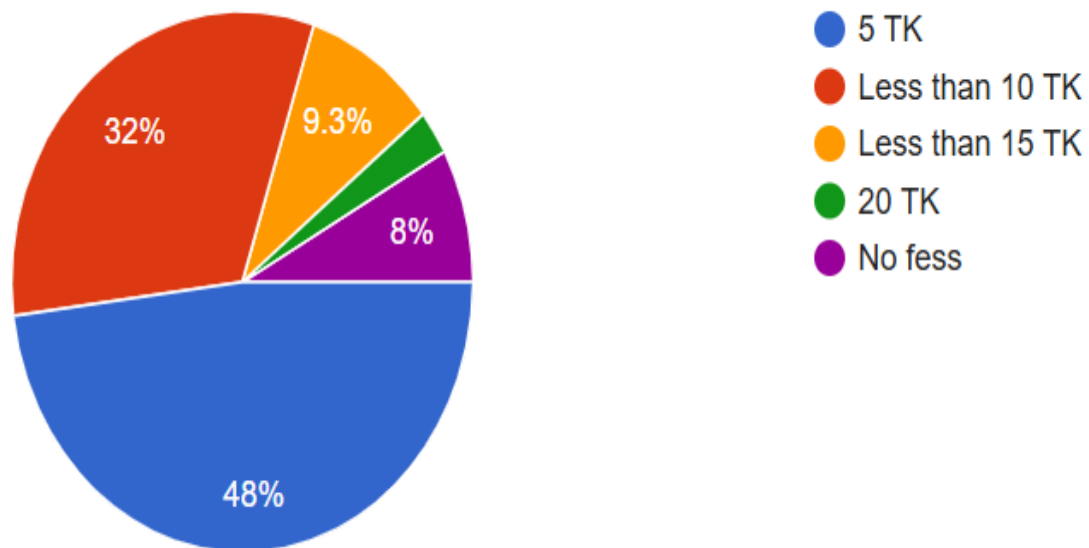
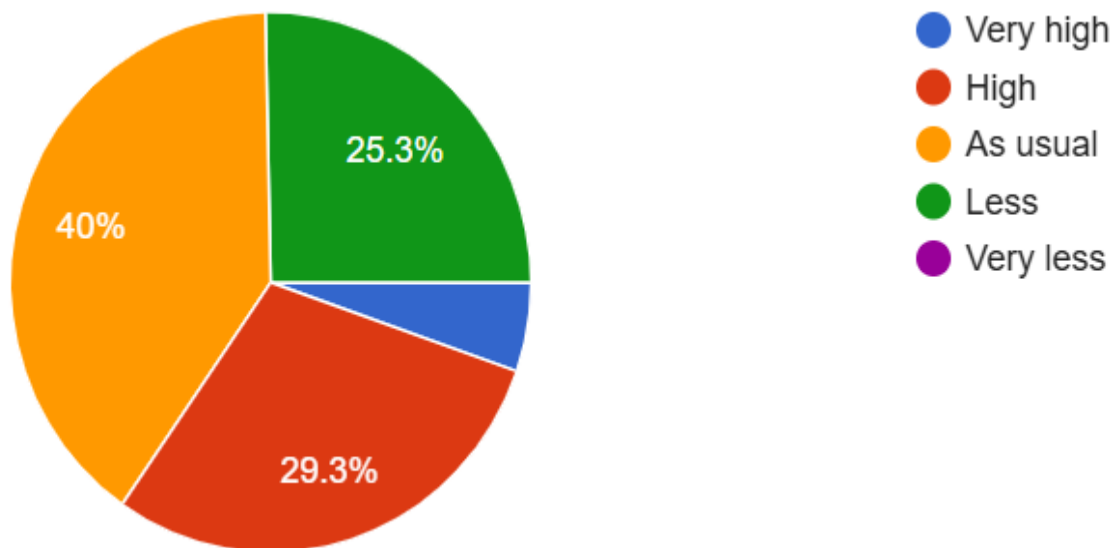
Section B: Mobile Payment





Section C: Mobile Banking





Assessing the Determinants of Customer Satisfaction with Mobile Financial Services (MFS) in Bangladesh



A Thesis Report

*Submitted to the Faculty of Business Studies,
Bangladesh University of Professionals in Partial Fulfillment of
the Requirements for the Degree of
The Master of Business Administration (MBA)*

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ABSTRACT

This study aims to examine customer satisfaction and knowledge gaps in Mobile Financial Services (MFS) in Bangladesh, focusing on bKash, Rocket,

Nagad, Upay, and MCash. It evaluates how effectively these providers meet customer expectations and identifies gaps in service offerings. The research also assesses industry competitiveness and strategic insights in Bangladesh's digital financial sector.

This study uses qualitative and quantitative methods to analyze customer satisfaction and knowledge gaps in Bangladesh's MFS sector (bKash, Rocket, Nagad, Upay, MCash) through surveys, statistical tests, and strategic models. Data from 150 respondents were analyzed using SPSS to identify key factors affecting satisfaction and service quality improvement.

The study found that perceived cost has the strongest impact on customer satisfaction with Mobile Financial Services (MFS) in Bangladesh. Customers who view transaction fees as fair and affordable are more satisfied and loyal. Other factors like security, responsiveness, empathy, and reliability showed weaker effects, as users now consider them standard features. Overall, satisfaction is driven mainly by value for money, highlighting the need for transparent pricing and fair charges.

Key Contribution study contributes to understanding how perceived value and cost fairness influence customer satisfaction in Bangladesh's digital finance sector. It reveals that value-for-money outweighs basic service features in shaping user satisfaction. The research offers practical insights to enhance MFS quality through transparent pricing and stronger customer engagement.

Keywords: Mobile Financial Services (MFS), Customer Satisfaction, Perceived Value, Cost Fairness, Service Quality, Value for Money, Digital Finance, Customer Perception, Regression Analysis, Strategic Insights.

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CHAPTER 1: INTRODUCTION

Background:

According to the World Bank (2021), Bangladesh is one of the fastest-growing economies in the world. The primary strategy of the Government of Bangladesh is to promote digital innovation through an increase in mobile money and digital platforms. Digital innovation has helped to reach unbanked and rural areas through digital financial services. It has proved to be an effective tool for alleviating poverty and supporting the economy to attain sustainable development goals (SDGs). Thus, digitalization and innovation play a greater role in helping Bangladesh attain a middle-income status (World Bank, 2017). The financial sector is dominated by commercial banks in Bangladesh; however, in recent years, agent banking has been overtaken by MFS in networks and customer bases.

Since the advent of Mobile Financial Services in Bangladesh in 2011, there has been a considerable increase in all measures, ranging from account use to transaction values. From sending and receiving money to paying for utilities, transit, education, medical, and retail expenditures, the business has evolved into a one-stop shop for all kinds of activities. Financial inclusion has been accelerated as a result of this invention.

Mobile financial services (MFS) refer to the use of mobile phones to access financial services and conduct financial transactions. It covers a wide range of financial services, including fund transactions and payments, that can be accessed and delivered via mobile platforms. In Bangladesh, there are six major cities where people from all across the country come to work. As a result, at the end of each month, they transfer money back to their home using various methods such as the post office, courier, or another individual. The majority of the media mentioned here are neither secure or legitimate. As a result, they needed to send money back to their home in a proper and legal manner. For a long time, a few visionaries in Bangladesh have been monitoring this and working hard to find a solution to this sensitive subject.

Finally, they identified a solution, but they were concerned about the implementation of this new approach due to our country's low literacy level. The majority of individuals are unaware of the present world's technical advancements. Finally, in early 2010, with the consent of the Bangladeshi central bank, Dutch Bangla Bank introduced the long-awaited mobile financial service (MFS) via the mobile network.

From there, the revelation begins.

Unlike other countries, Bangladesh has chosen a bank-led mobile financial service approach. Banks will be in charge of the show under this model, which will be associated with telecom providers. Bangladesh's government made this decision by prioritizing the issue of money laundering.

The Bangladesh Bank then granted 28 commercial banks licenses to begin offering mobile financial services in Bangladesh. In addition, 19 banks in the market offer the service (Source: Bangladesh Bank website). Three of the banks' licenses were later revoked due to regulatory concerns. There are

now 25 banks on the market that are permitted to provide this service. Banks alone will not be able to deliver mobile financial services; telecom carriers are one of the most crucial components in getting the business up and running. Most operators realized this early on in the MFS process, which is why they compelled the banks to enter into a deal that considerably benefits the telecom operators. They charge the banks exorbitant fees to operate. Bangladesh Bank has recently discovered this problem and is taking appropriate steps to correct it. This service is becoming increasingly popular in Bangladesh. It was first introduced in early 2010, and it has quickly grown to become one of the country's most important industries. The industry will achieve new heights if operators' interoperability and compliance are ensured, the service's cost is reduced, and a level playing field is ensured. It is a well-known fact that the digital platform has ushered in a whole new realm of full-speed appeal and acceptance by people all over the world.

While the digital platform encompasses everything from e-commerce to mobile banking to the society's front door of health, education, and government, as well as all other sectors that connect people for convenience. In Bangladesh, too, digital platform transactions have ushered in a new era. Furthermore, the trend of using digital platforms for payments is largely accepted by the Bangladeshi people, indicating that this business would have a significant impact on the country's economy. I have made every effort in this study to address Bangladesh's MFS services and their gaps in meeting market demands.

Although mobile banking via MFSs is not widely used among the studied businesses, a considerable number of them utilize it to transfer funds

between accounts and gain access to their accounts. When it comes to the influence of MFSs on revenue and profit, the majority of the surveyed companies agree that MFSs assist them improve sales revenue and profit. However, a sizable minority of businesses argued that MFSs lower their business costs, and even remained neutral on whether MFSs enhance their business investment. Several main issues regarding mobile banking services in Bangladesh are identified in this study. The majority of clients say that MFSs operators' service prices are too costly.

Many clients have had unpleasant experiences with criminals using MFSs to blackmail and hijack them for money. Illegal remittance from foreign countries is another major issue that MFSs are exposing. Migrant workers in the Middle East,

Singapore, and Malaysia, among other places, transmit money to Bangladesh through a coordinated network of MFSs agents, which are illegal in Bangladesh.

Rationale of the

Study:

From the previous studies done among the users of different mobile financial services throughout this country, it is clear that, people have vague knowledge regarding this platform. They are not aware of the market performance of the competitors, let alone their service related information. It is true that, after the declaration of Bangladesh Bank regarding the establishment of mobile financial service platform, number of competitors

have increased remarkably. But unfortunately, only few of them are glittering with their presence across the country. It is because of not only for their lack of strategies, but also for the weak and incomplete perceptions of the customers. As the pioneer, Bkash, Rocket is dominating the majority of the market. But it does not mean that the rest competitors are not skilled. One of the main reason is- people tend to grasp their root, they prefer to stay with their comfortable environment. They are afraid of welcoming the changes easily. Despite competitors provide different facilities and opportunities, customers hesitate to engulf their offers because of this fear of not to change. Actually, competitors offer unique and attractive strategies for their customers, yet they fail to boost their market share because they emphasize less on customer's perceptions. How does a customer think, what does he/ she want, what is the level of his/ her comfort zone, which features does a customer prefer to use frequently- these perceptions are not evaluated or surveyed before.

This study is emphasizing to figure out the core needs or demands and the texture of customer's mindful thoughts. How much do they know about their mobile financial service providers, which basis of measurements stick them to that particular provider company- these aspects are analyzed through the conduction of survey among more than 150 customers of top MFS companies in Bangladesh.

Therefore, this report will undoubtedly help the MFS providers to improve or modify their strategies. It will identify the degree of the least knowledge gap of the customers. The breakdown of the recent performance of top leading MFS companies through several methods will ease the opportunity for customers to bridge that gap within very short time, which will ultimately shape their perception about MFS utilization.

1.3 Problem Statement:

Several factors, including technical and security standards, regulatory and supervisory issues, as well as business and legal issues, have been identified as potential roadblocks to the introduction of mobile financial services in Bangladesh. The following issues have been identified as key challenges in mobile financial service systems around the country:

People are unaware of the distinction between having an MFS account and conducting an over-the-counter transaction. Because the majority of customers have access to mobile financial services but only a small percentage of them have an ownership account, there is no way to identify customers who send and receive money over the

counter.

People who live in remote areas have limited access to technology. As a result, they have a low level of trust in technology. Acceptance of virtual money rather than physical currency in this case is a tricky

issue.

Some MFS providers are seeking to spur innovation, such as by introducing Deposit Pension Scheme (DPS) accounts, however they are hampered by low investment and low uptake. Mobile Financial Services have primarily been utilized for peer-to-peer (P2P) transfers, rather than for other purposes such as savings or bill

payment.

Customers, agents, and distributors in Bangladesh have recently been the victims of a series of high-profile robberies. If one person gives money to another person in error, that person will not be able to recover the funds unless the other person returns the funds to him. Because the majority of people who use MFS are uneducated, the chances of making a typing error are great.

Absence of supportive policies, guidelines, rules and regulations relating to e- transactions are barrier to development in MFS. Considering this scenario, the performance of MFS are mainly dependent on the customer's confidence in terms of security and cost effectiveness.

Research

Objective

Broad Objective:

To explore the gap of customers' knowledge regarding MFS by analyzing the measurements of their satisfaction and recent performances of the top 5 leading MFS companies.

Specific Objective:

To review and analyze the present MFS market situation, with an emphasis on bKash, Rocket, Nagad, Upay, and mCash, based on the values provided by companies. This analysis aims to determine market competitiveness by analyzing each company's strengths, weaknesses, and external environmental factors that affect the MFS industry. The specific objectives include-

To measure the effectiveness of the current value propositions of bKash, Rocket, Nagad,

Upay

and

MCash

.

To analyze the companies' external environment and future

growth.

To know companies' internal strengths and

weaknesses.

To find out
the gaps of companies' offering services
to their

customers.

To analyze the competitive performance of top MFS providers (bKash,
Rocket, Nagad,

Upay

, and

MCash

) based on customer perception and service quality dimensions.

CHAPTER 2: LITERATURE REVIEW

According to the 'State of the Industry Report, 2018, mobile money has facilitated 79 percent of Ecommerce transactions, and global mobile penetration has increased from 29 percent to 43 percent between 2013 and 2017. These figures clearly demonstrate the global appeal of the digital platform. According to the 2015 Inter-Media FII Bangladesh Wave Report,

around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. This is due to a misunderstanding of the differences between having an MFS account and transacting over the counter. As a result, clients who send and receive payments using OTC have no way of knowing who they are. MFS suppliers have yet to develop unique products or services that will turn MFS into a daily requirement for clients. Adults are very aware of MFS (92 percent), yet just one-third of those who are aware use it. Adults are not signing up for MFS for the second most important reason: "Using an MFS account is tough." According to Cheston et al. (2016), new technology, enabling legislation, communications, infrastructure, and business prospects, are currently fueling the growth of financial inclusion.

According to Hossain and Ahmed (2012), mobile financial services have created a significant power in providing financial services to the poor and disadvantaged. Financial inclusion is a top objective, and there is a policy in place to ensure that emerging and developed countries have equal access to financial development (Islam & Mamun, 2011).

Bangladesh's central bank has taken the lead in promoting financial inclusion, and MFS has emerged as a vital tool for doing so (Chowdhury, 2014). Bangladesh's financial inclusion is being aided through environmentally friendly, long-term bank financing to the agriculture industry (Sarker et.al, 2015). MFS frauds and occurrences are increasing by the day, according to IT and MFS specialists, who say that some MFS providers have recently caused problems in this sector by illegal situations. They are opening consumers' accounts in a rushed manner, disregarding all norms and regulations (Azad, 2021). Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main

problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The most difficult duties are maintaining financial security in rural settlements and sending financial information. Wireless network service providers, mobile application developers, and bank IT divisions must all work together to resolve the challenges. Shortages or problems in mobile banking caused by wireless connections of mobile phones will result in losses, and restricted battery life may limit the usage of mobile services (Kuismaa et al. 2007). One of the best technological stories of the previous decade is the spread of mobile phones in developing countries. Indeed, there are probably more people with mobile phones than bank accounts in the developing world (Porteous, 2006). In 2012, Bangladesh had a population of roughly 16 million people, with only 13% having bank accounts and more than 95% having mobile phones (ADB 2013). As a result of this circumstance, the Bangladesh Bank decided to allow commercial banks to provide financial services to "the banked and the unbanked" over mobile networks, which are known as mobile banking, mobile transfers, and mobile payments.

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

In 2011, the Boston Consulting Group conducted a research on the socioeconomic impact of mobile banking services, which included an analysis of Pakistan, Bangladesh, India, Serbia, and Malaysia. According to this survey, mobile banking is widely utilized in Bangladesh for bill payment, savings, and remittance, but not so much for credit and insurance. Several other researchers (e.g. Shibli and Tareq (2016), Khan et al.(2016), Islam,S. (2013); Parvin, A. (2013) also conduct study on different aspects of mobile financial services in Bangladesh. As previously mentioned, Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

Research

Gap:

Especially after the COVID-19 outbreak, mobile financial services are getting more popularity in Bangladesh. That is why, it is important to measure the customer satisfaction with this service. Although the literature on Mobile Financial Services is becoming rich very fast, so far, no comprehensive study has been undertaken to figure out the satisfaction and convenience level of the customers while accessing MFS.

From the available literatures it is evident that, some studies have been conducted in Bangladesh regarding customers' attitude towards mobile banking services, problem and prospects of mobile banking services. But, no major study is conducted till now that measure customer satisfaction level with mobile financial services.

The present study is devoted to fulfill this gap and also to propose some suggestions for further development of mobile banking in the country. So in this study, customers' satisfaction determinants for mobile banking services and their degree of fruitfulness will be identified and analyzed.

CHAPTER 3: THEORETICAL DISCUSSIONS

From the last 5 years, the competitive environment in MFS platforms has become very intensely competitive. bKash has always been in the lead whilst other new entrants have also emerged in this sector to interfere the monopoly market of bKash. For this research, the report tries to cover the industries of bKash, Rocket, Nagad, Upay and mCash.

In order to examine the market environment and the degree of competition among the rivals, for this paper the Porter's Five Forces model and PESTEL Analysis have been done for bKash, Rocket, Nagad, Upay and mCash separately. In addition to that, Competitive Strength Assessment (CSA) Analysis and Strategic Group Mapping are presented for better understanding of the current situation and rivals of above mentioned industries through these analyses. Not only that, after having done with all the theoretical analysis matters, the SWOT analysis in the last tries to cover the industries' strength and weaknesses, what could be their opportunities and threats or challenges.

The theoretical framework is also included, which is a model to assess the customer's perceptions on the basis of some variables like reliability, responsiveness, assurance, ease of use, and cost tangibles, which are perceived as the determining factors of their customers core satisfactions.

Yet again, to mention, this is an experimental research and henceforth, all the analytical matters have been done based on the theories and collected information.

3.1 Conceptual Model Components

For this study, the following constructs are included as independent variables:

Porter's Five Forces

Model:

Forces	Effects
Intensity of Rivalry (High)	Though bKash and Rocket are dominating in the market, Nagad performing significantly. Islami Bank's MCash or United Commercial Bank's Upay may be major competitors of them. With other banks' inclusion in MFS industry, the rivalry among existing competitors is High.
Threat of New Entrants (Moderate)	After the declaration of Bangladesh Bank for a new rule of every bank having mobile banking service, it is not that much hard to enter in this industry. But existing companies have already created brand positioning and economies of scale in coverage, which act as entry barriers. Therefore, threat of new entrants is moderate.
Substitute Product (Weak)	The substitute products of MFS industry are credit card, ATM card, government post office money order, which are either nearly obsolete or in embryonic phase. Hence threat of substitute product is very little.

Bargaining Power of Buyers (Majorly Moderate)	At least six or seven mobile financial service providing companies are performing fruitfully across this country. All of them provide almost same services. So, the bargaining power of buyers in this industry is Moderate, except the buyers in the remote areas, where fewer alternative providers are available.
Bargaining Power of Sellers (High or Moderate)	MFS depends on fewer telecommunication network suppliers such as Grameenphone, Banglalink, Robi and Teletalk. As a result, these suppliers have strong bargaining power. But the agents, who are an important source of suppliers in providing core transactional services like deposit or withdrawal of cash are increasing in number. Therefore, these suppliers bargaining power is moderate.

Table 3.1: Porter's Five Forces Model for MFS Performance Assessment.

SWOT

Analysis:

Table 3.2: SWOT Analysis of top 5 MFS Companies (Strength)

MFS

Company

Strengths

bKash Holds 80% of the Market

Share.

Having agents in every corner of the

streets.

Brand image and reputation in across the

country.

Rocket Strong Agent

Network.

Very Low account operation cost.

Largest ATM network to facilitate cash out service to its

clients.

Nagad Lesser regulatory restrictions in contrast to the private sectors

as backed

up by

government.

Enjoys higher transaction limit as it does not fall

under the

reach of central

bank.

Tuition

fees, bills or payments are free of

cost.

MCash Religious

Sentiment.

Adequate finance and reserve for

development.

Strong customer base in deposit, investment and

foreign remittance.

Upay	Positive brand image of parent company
	-
	United Commercial Bank
	Block Chain and QR code base innovative technology.
	Lower customer acquisition cost.

MFS

Company

Weakness

bKash	<p>High service charge.</p> <p>No security to the field agent.</p> <p>No ATM booth services like Rocket DBBL company.</p>
Rocket	<p>Failed to operate as a separate entity like bKash.</p> <p>Insufficient money in ATM.</p>

Nagad Significantly fewer agents and merchants compared to rival
Bkash

.

does not provide any kind of transaction service for online
shopping.

MCash Not enough agents across the

country.

Not adequate advertising.

Parent company IBBL has often been under fire for

allegedly

financing terrorism and political

violence.

Upay	Traditional mobile banking.
	Lower number of users.

Table 3.3: SWOT Analysis of top 5 MFS Companies (Weakness)

MFS	
Company	Opportunities

bKash Online shopping popularity is increasing more and more after COVID-19 situation. With major market share, online shoppers can be major target for

them.

As the company has joint ventures with two large international money transferring company, therefore, it can offer international transaction service in more extensive

way.

Adding

priyo

number facility can increase their customer

daily

transaction levels.

Rocket Focus on remittance service though mobile

banking.

Growth rate of mobile banking is increasing day by

day.

Nagad Low cost of service fuels new wave of

entrepreneurship.

Lowest transaction cost and easiest way to open an MFS account
can

lead to possess a remarkable share in the market

rapidly.

MCash	<p>Opportunity to avail the modern banking facilities to the rural area, where their MFS facilities does not reach till now.</p> <p>Lots of potential customer and profit growing opportunity through using religious sentiment.</p>
Upay	<p>Inclusion of Lifestyle payment in traditional mobile banking system.</p>

Table 3.4: SWOT Analysis of top 5 MFS Companies (Opportunities)

MFS

Company

Threats

Rapidly growing money

laundering.

Huge concern for terror

bKash

financing.

Increasing number of competitors with attractive and

challenging

offers.

Though ATM services are often available, but majority of the customers are not literate enough to access their

technological

ease for cash withdrawal services.

Number of inactive account holders are

increasing.

Nagad,

SureCash

Rocket

,

Surecash

,

MCash

are offering attractive

features

that may lead to lose of market

shares.

Low cost of service fuels new wave of

entrepreneurship.

Nagad

Lowest transaction cost and easiest way to open an MFS account can lead to possess a remarkable share in the market

rapidly.

Threat of cyber security risk.

MCash

Recent restructuring of different top post including the MD and chairman.

Cheaper rate of switching

cost.

Upay

Server hacking and money

laundering.

Table 3.5: SWOT Analysis of top 5 MFS Companies (Threats)

PESTEL

Analysis

In order to know about the general environment and to maximize the opportunities and to minimize threats of MFS industry, PESTEL Analysis is very important to do. The following PESTEL analysis covers the topics for this paper which have been presented below:

Political Environment:

In spite of the political instability of Bangladesh and internal disputes among the parties the MFS industry has been able to suppress the hindrance by the political irregularities and has obtained its mark in Bangladesh. On the basis of pro-active and forward looking approach, the vision of building a 'digital' nation of the Government and Bangladesh Bank has enforced and accelerated the technological advancement of MFS platform in Bangladesh. Above all else, VAT has been deducted by the Government for mobile banking platforms which is a positive attitude shown for this sector to grow.

Economic Environment:

There are nearly 168 million people in Bangladesh at current time. The available data that from 2017 to till this date Bangladesh has made a successful story of MFS. Moreover, the secondary data shows that 43% of the population are financially included, 33% have a mobile account. Moreover, the total number of registered accounts are only 9% and only 8% are the active users. Furthermore, 95% of user transaction is person-to-person (P2P) based and only 15% of the users using mobile apps for bill payments and loan activities. All of these data shows the impact of MFS on the economy of Bangladesh and how the industry is being grown by the time being towards the digitalization. Hence, the economic factor for MFS services is very positive.

A Research on Digital Financial Services of Bangladesh

Social Environment:

The social factor has strong and positive impact on the MFS industries. MFS can be used by anyone at any time and from anywhere via e-wallets and internet connection which eliminates the hassle of traditional banking activities. In addition to that, the

digital platform provides a secure and low cost services. For the usefulness and mass accessibility of MFS services, the attitude of people towards this industry is very positive. In a nutshell, the MFS industry is being attracted and accepted by the health, education, mobility and every sectors of the society.

Technological Environment:

The technological environment of MFS platform has positive impact on the industry. Each and every digital fund transaction companies have used almost same technology so far. On the flip side, technology requires innovation and advancement. Though bKash has been the leading players of all and has reached to its maturity level is still constantly trying to improve and update by innovation and diversification to be in the same place. On the other hand, iPay and SureCash are using cryptographically secured QR code based technology first ever in Bangladesh. Last but not the least, all these platforms are performing hard to hard competition for their better gain.

Legal Environment:

Legal environment for the industry is very positive. Certain laws and regulations have been developed and revised by the Government for MFS industry. In addition to this, in 2011 the Bangladesh Bank issued the “Guidelines on Mobile Financial Services (MFS) for the Banks” which has been revised and updated later in 2015.

3. 2 Comparison of Service Charges between MFS Providers:

Table 3.6: Comparison of Service charges between MFS Providers.

Mobile Financial Service	NagadUpay				mCash
	bKash	Rocket			
Account opening	Free	Free	Free	Free	Free
Cash-in at an agent	Free	Free	Free	Free	Free
Cash-in at the bank branch	N/A	BDT 10	N/A	Free	Free
Cash-out from an agent	1.85%	1.67%	1.45%	1.8%	1.80%
Cash-out from ATMs	1.49%	0.9%	N/A	N/A	Tk 5 or 1%
Cash-out from bank branches	N/A	0.9%	N/A	1.8%	Tk 5 or 1.80%

Transaction charges

I also noted how it is costly to operate an MFS account because of cash out charges which forces them to limit their usage:

At first, I used my account for paying bills, sending money, and cash in-out, but felt it charged a lot for these services. For 1000 cash out, Bkash charged me taka 17.50, so when the amount is large, the cash out charge is also higher. In addition, when I sent money for payment, the receiver often said to add cash-out charges to the actual amount. It costs me a lot after retirement (Respondent 8).

As a result, the respondents would prefer to not make cash transactions through the MFS. It is seen that in Bangladesh, MFS providers charge 1.8%–1.85% (previously 2%) cash-out charges on any Tk 1,000, and it is the highest in the world, which discourages customers from using the services (Islam, 2021). In Bangladesh, the high transaction cost for carrying cash-out transactions may discourage users from using MFS platforms (Hasan, 2021). Thus, extra charges for making payments may also discourage people from increasing MFS usage

Research

Framework:

Mobile Financial ServicesMeasurements of Satisfaction

ResponsivenessEase of useAssuranceCostReliabilityMobile PaymentMoney
TransferMobile Banking

Figure 3.1: Diagram of the Research Framework.

3.4 Development of Hypotheses:

This section discusses the theoretical basis and empirical evidence supporting each hypothesis. The proposed hypotheses were developed based on previous literature in service quality, customer satisfaction, and mobile financial service adoption. The five dimensions — Cost (Willingness to Pay), Security (Assurance), Responsiveness, Empathy, and Reliability — were selected because they represent critical factors that influence consumer satisfaction and loyalty in digital financial platforms.

H1: Cost / Willingness to Pay

Hypothesis:

People who are willing to pay higher service charges are usually more satisfied and more likely to keep using mobile financial services (MFS).

Perceived cost, or willingness to pay, reflects customers' evaluation of whether the price they pay for a service is fair and justified by the benefits received. According to Zeithaml (1988), perceived value is the customer's overall assessment of the utility of a service based on what is received and what is given. When users believe that the benefits of convenience, speed, and accessibility outweigh transaction fees, they perceive higher value, which leads to greater satisfaction and loyalty. Studies such as Chen & Dubinsky (2003) and Parasuraman et al. (1988) have found that fairness of price and perceived value have a direct positive effect on customer satisfaction in digital service contexts. Similarly, Rahman & Sloan (2019) observed that in Bangladesh's fintech market, users remain loyal to MFS platforms when they view charges as fair relative to service quality.

This hypothesis was chosen because price sensitivity is a key issue in the Bangladeshi market, where most MFS users belong to middle or lower-income groups. Understanding how willingness to pay influences satisfaction helps determine whether

service affordability remains a critical competitive factor.

H2: Security (Assurance)

Hypothesis:

When people feel that MFS is safe and trustworthy, they become more satisfied and willing to use it more often.

Security and assurance are among the most vital factors influencing trust and satisfaction in online financial systems. Yousafzai et al. (2003) and Kim et al. (2010) emphasize that perceived security — the belief that a digital system protects users' money and personal data — significantly enhances customer confidence and satisfaction. In mobile banking and MFS contexts, users are more likely to continue using services they perceive as safe from fraud or misuse. Flavián & Guinalú (2006) found that the perception of system reliability and data protection builds user trust, which directly contributes to satisfaction and repeated usage.

Security is a primary concern in Bangladesh's MFS industry, where cases of fraud or agent misconduct occasionally affect user confidence. Hence, including this variable allows assessment of how security assurance influences satisfaction and continued usage behavior.

H3: Responsiveness

Hypothesis:

If MFS agents or customer service respond quickly and helpfully, users become more satisfied and loyal.

Responsiveness refers to the willingness and ability of service providers to assist customers promptly and effectively. It is one of the core dimensions of the SERVQUAL model proposed by Parasuraman et al. (1988). According to Amin et al. (2012), responsiveness significantly influences satisfaction in online banking and mobile payment services because timely assistance builds trust and confidence among users. In the context of MFS, agents' quick problem-solving and courteous behavior enhance

user experience and reduce perceived service risk. Raza et al. (2020) also found that the responsiveness of service agents improves user satisfaction and encourages customers to continue using digital payment systems.

Responsiveness is included because MFS users in Bangladesh frequently interact with service agents for cash-in, cash-out, and complaint handling. Their perception of agent responsiveness plays a crucial role in determining their overall satisfaction with MFS services.

H4: Empathy

Hypothesis:

The simpler and more convenient the MFS app or system is, the more satisfied users become.

Empathy refers to the level of care and individual attention that a service provider offers to its customers. In digital services, it also extends to user convenience and accessibility. According to Dabholkar (1996) and Ladhari (2009), systems designed with user-friendliness and customer comfort in mind enhance satisfaction because they reduce frustration and make transactions easier. In mobile applications, empathy translates into an intuitive interface, multilingual support, and services designed for diverse customer needs. Koksai (2016) found that convenience and simplicity are strong predictors of satisfaction in mobile banking, particularly among users with limited digital literacy.

Empathy was selected because ease of use and accessibility remain essential for MFS adoption, especially in developing countries like Bangladesh, where users' technological familiarity varies widely. Measuring empathy helps assess whether customers feel understood and supported by the service design.

H5: Reliability

Hypothesis:

The more services and options an MFS provider offers (like bill payments, savings,

ticket booking, etc.), the higher the satisfaction.

Reliability is defined as the ability to deliver promised services dependably and accurately. In the SERVQUAL framework (Parasuraman et al., 1988), reliability consistently emerges as the strongest determinant of service satisfaction. Studies by Ayo et al. (2016) and Islam & Rahman (2019) confirm that when digital financial systems provide consistent, error-free, and comprehensive services, user satisfaction and trust increase substantially. In the MFS context, reliability includes not only system uptime and transaction success rates but also the breadth of services available. A platform that enables multiple functions — such as fund transfers, utility bill payments, airtime recharge, and ticket purchases — adds value to customers' experience and enhances loyalty.

This hypothesis was included because reliability and service breadth are critical success factors for MFS providers in Bangladesh. As competition intensifies, offering dependable and multifunctional services helps retain customers and strengthen satisfaction.

CHAPTER 4: METHODOLOGIES

The purpose of this study is to analyse customer's mindset regarding the MFS available for them. More than 150 million people of Bangladesh are using MFS. But majority of them are unaware of the ABC of MFS. Therefore, their perceptions and satisfaction levels are poor enough to be concerned. A poor perception leads to a weak level of satisfaction. To learn their reasons of dissatisfaction, at first their perceptions and context of knowledge should be understood. The measurement basis, through which they evaluate the MFS features, is required to be figured out. Hence, the purpose is to learn the recent situation of the competitive market of the MFS industry, so that

this information can bridge the gap of customer's knowledge and modify their perceptions to take full advantage of modern MFS features.

Research

Design:

A research design is a suitable framework or technique adopted by the researchers for the subject matter to be researched so as to set up a convenient way to get an efficient outcome.

Both the qualitative and quantitative research designs has been utilized for this study. Some essential independent variables such as Reliability, Responsiveness, Assurance, cost, empathy, quickness, accessibility, availability etc. correlated with each other are focused in details for a descriptive research. Also use inferential research by taking interviews. These variables are used as the basis of the dependent variable on customer's satisfaction with their perception. The data of the study have been collected from the customers through quantitative approach using MFS at a particular phase of time within the last three months, so the findings are applicable for the recent point of time and may not be applicable for other time period.

Research

Methods:

Since both of the qualitative and quantitative researches are included, the performance of the competitive market is measured on the basis of Porter's five forces model, PESTEL Analysis and SWOT Analysis. These methods played crucial role on the way of descriptive research to assess the recent performance of top five dominant MFS companies- bKash, Rocket, Nagad, MCash and Upay.

After developing these methods, customer's perceptions were measured through a structured questionnaire on the basis of some variables according to the research framework.

Development of a

questionnaire:

A structured questionnaire has been developed using appropriate scale and self-administered attempt to measure the variables under study.

After developing the research framework our next step is to set a number of questions based on the structure we proposed. Survey method of data collection offers some advantages over other methods as it can collect information from a wide range of participant within shortage possible time.

The measurement items used in the study is consistent with the study of other researchers as these are set after a rigorous analysis of the previous literatures. Some new measurement items are also be included in the questionnaire as these are validated based on the contextual validity analysis. An appropriate performance measurement scale is utilized to measure the operational performance of the MFS for all the constructs under study.

Sampling Technique and Collection of

Data:

To collect data, questionnaires was self-administered to the customers of MFS operating in Bangladesh. The respondents are people who have practical knowledge of taking service in any form from any of the MFS available in Bangladesh. So the citizens having one or more accounts in any of the MFS or taking services in any form of the MFS products are the total sampling frame for the study. The respondents in the sample were chosen using judgmental sampling technique and data were collected through survey with relevant questions and answers method. These surveys were conducted in the google form. I had planned to collect response from more than 150 respondents. In this study, 5 point Likert Scale technique is used along with rank questionnaire to analyze customer's level of satisfaction and perceptions while availing the MFS features.

4.5 DATA ANALYSIS TECHNIQUES

Data analysis is an essential stage in any research process, as it allows the researcher to transform raw data into meaningful insights that address the study's objectives. In this study, the data collected from 150 respondents were analyzed through both descriptive and inferential statistical techniques to test the proposed hypotheses and examine the relationships among the key variables affecting customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

Before analysis, all survey responses were carefully coded and cleaned. Non-numeric answers were converted into numerical scales to make the data suitable for statistical computation. For instance, the responses to the question "Charges you are willing to pay per Tk. 1000 transfer" were coded from 1 to 5, reflecting the level of willingness to pay. Similarly, statements related to assurance, responsiveness, and service features were averaged to form composite variables representing overall user perception in each area. Descriptive statistics, such as mean, standard deviation, minimum, and maximum, were calculated to summarize the main characteristics of the dataset. This provided a clear overview of users' general attitudes toward cost, security, responsiveness, ease of use, and overall satisfaction with MFS.

To test the hypotheses, inferential analyses were applied and used (Statistical Package for the Social Sciences) SPSS. Correlation analysis was used to explore the relationships among variables and ensure there was no high multicollinearity. Then, a multiple linear regression model was conducted to measure the impact of each independent variable on the dependent variable — customer satisfaction. Finally, the hypotheses (H1-H5) were tested using the regression results, with significance determined at the 5% level ($p < 0.05$).

CHAPTER 5: RESEARCH FINDINGS & ANALYSIS

By means of a structured questionnaire, the following information were retrieved from the respondents:

Demographic Features of the Respondents:

Age

Range	Frequency	Percentage
18-25	48	32
25-30	54	36
30-40	23	15
40-50	13	9
Above 50	12	8
Total	150	100
Occupation		
Occupation	Frequency	Percentage
Student	68	45
Service Holder	35	23
Businessman	17	11
Housewife	21	14
Laborer	9	7
Total	150	100
Monthly Income		
Income Range (BDT)	Frequency	Percentage
6000-10000	17	11

10000-20000	51	34
20000-30000	38	25
30000-40000	18	13
40000-50000	14	9
Above 50000	12	8
Total	150	100

Table 5.1: Demographic Features of Respondents.

Demographic: 5.1

From the above table, it can be interpreted that most of the MFS users in this survey were aged from 25 to 30 containing the frequency of 54 out of

150 and the percentage is approximately 36. It is clear that people from 18 to 30 years of age use mobile financial services more frequently than other age groups.

It is perceived from the participants that, people tend to save money to invest for a higher return after the age of 30. Therefore, after this age, they prefer a bank account rather continuing a mobile banking platform. Because MFS account provides limited or no return at all, moreover, it facilitates limited services than bank accounts.

The table shows, the highest number of respondents were the students having percentage of approximately 45. While, 23% were service holders, only 11% were businessman, 14% were housewives and 7% were the day laborers. MFS services are found more popular among students and the best method of financial service for day laborers.

The lowest monthly income was ranged from BDT 6000 to BDT 10000. And the highest range surveyed belonged above BDT 50000. According to the graph table, approximately 34% of the population had earnings ranged from BDT 10000 to 20000, which indicates that most respondents have an income level between Tk. 10000 to 20000 on monthly basis.

Portfolio and Popular Features of MFS:

Portfolio		
MFS	Frequency	Percentage
bKash	78	52
Rocket	31	21
Nagad	23	15
Upay	11	7
mCash	7	5
Total	150	100
Most Frequently Used Features		
Features	Frequency	Percentage
Cash in/ Out	152	76
Mobile Recharge	181	91
Send Money	89	44
Utility Bill Payment	63	32
Food Delivery Payment	52	26
Uber/ Pathao Rides Payment	34	17

Table 5.2: Portfolio and Popular Features of MFS

Portfolio MFS Graph: 5.2

It is clear from the survey again that the use of bKash is the highest amongst the respondents and as always, bKash is in the lead with having 78 frequencies and approximately 52% of users. The lowest responses were for the mcash with only 7 frequencies the survey could find and the percentage is only around 5%. It is found that the proportion of users using MFS other than bKash is quite same and remarkably less than bKash.

The table shows that, every 9 people out of 10 prefer their MFS for Mobile recharge services. That means the mostly used feature is mobile recharge for daily basis. The second most used feature is cash in or out facilities. Every 8 users out of 10 use this feature. Users tend to use MFS less for any ride or food payment.

The recent MFS system is widely accepted by the people of all range. However, there is some gaps that have been identified from the previous researches and need to be taken care of. The following points have been found while assessing customer's perception and research investigation for this paper:

Higher service

charge:

The service charge that are being cut for every transaction using mobile wallet has been reported to high by many people including the respondents for this research. For further information, the Government does not take any VAT from the MFS companies.

Safety**issues:**

Plenty of complaint can be found on this topic and it is obvious for the customers for their concerns on this fact. When it is about money, it is people's nature not to trust anyone. Similarly, there are cases that people have faced fraudulence due to the corruption of the authority or unsecured systems of payment. For this reason, MFS is trying to come up with a strong secure system.

Unsafe 4-digit PIN**system:**

Most of the MFS wallet is providing a simple 4 Digit PIN system which can easily be hacked and all the money and personal information a user can be leaked. This area needs to be improved.

Unexpected server

down

:

People often complain about the unexpected server down situation. The database of a company must be secured and connected with power supply for fast and better customer feed.

Issues of personal data

shared:

Almost all the MFS wallets asks for the personal data and documents including date of birth, NID, Driving license and passport. People of this country have trust issues regarding their personal data being shared with the company. Hence, transparency with the customers is needed.

Lack of

monitoring:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Following the customary

trend:

People tend to copy and follow the customary trends rather than making a difference. Same goes with the current MFS industries providing almost same features and services to the customers. Some of the most common features that every mobile banking apps provide are Cash in/ Cash out, Sending Money, Mobile recharge and bank payments. Whereas, a very few provides the services out of the boundary with still having some limitations. For instance, bKash is offering a diversified variety of services and others are following bKash.

Lack of understanding the concept of

MFS:

Although the MFS industry is booming very fast in Bangladesh, yet there are a lot of people who do not understand the concept of going cashless or E-money or the digital fund transferring process. Many of them as a consequence do not show any interest or bother to use MFS wallets for day to day transactions. Also, the people of rural area are not that much advanced or aware of this hassle free system. In addition, many cannot even operate a mobile phone properly except calling and answering to calls. As a result, MFS is not being able to include them in the system which is a crucial

problem in the country.

Lack of variation in features:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Generation

gap:

Generation gap is another problem or a challenge for the MFS companies as most of the people of this group is not technically advanced and have little knowledge over the current technology usage. Although companies are trying to solve this problem with various ways, the proper solution has not been found yet.

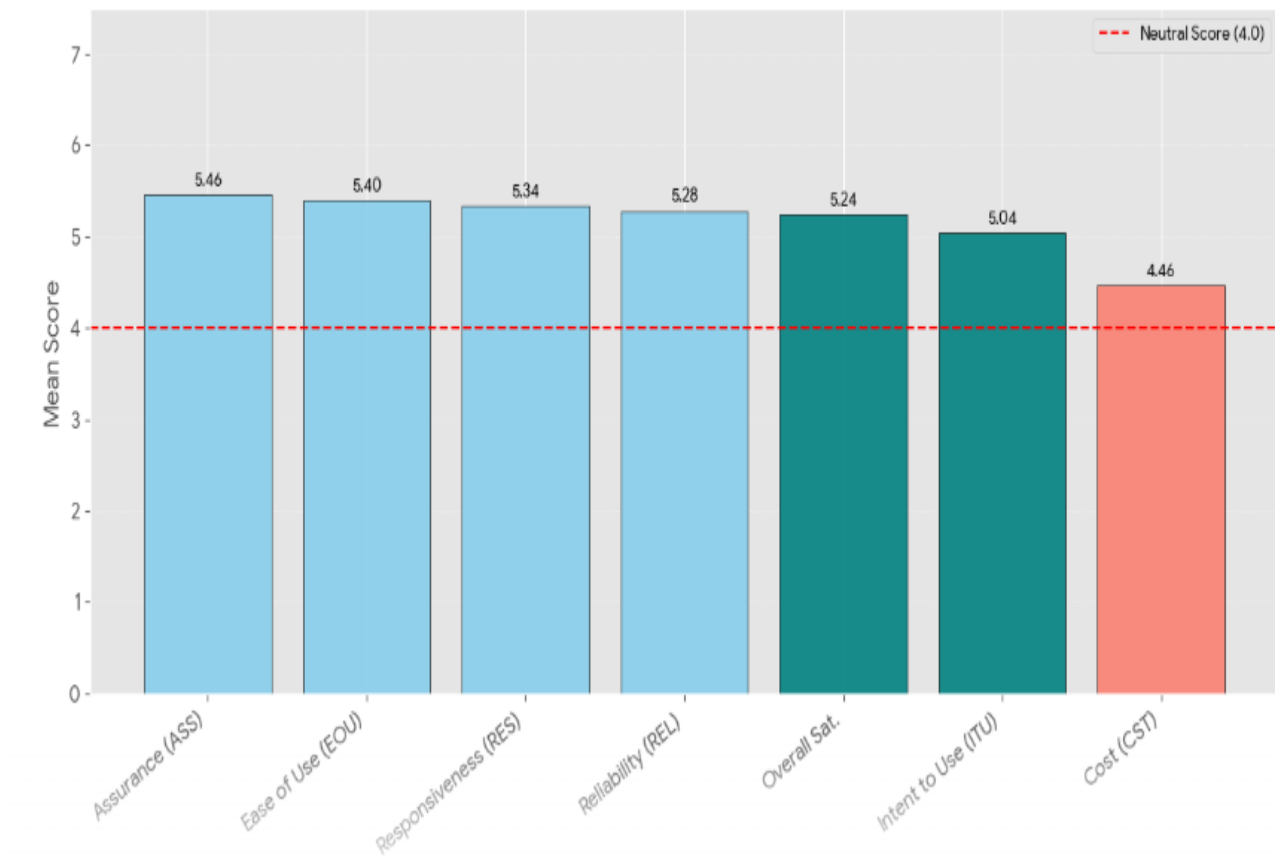
Interview/Survey Session

It designed to collect 50 structured responses to support your thesis on the determinants of customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

The questionnaire is developed to specifically measure the core determinants (REL, RES, ASS, EOU, CST) and the dependent variable (ITU) using a standardized scale. Interviews occurred in my university campus through my MBA Professional class. Where participants were my fellow members, classmates.

Interview Graph: 5.

Average Perceived Customer Satisfaction & Determinants (7-Point Scale, N=50)



3

The bar chart provides a clear representation of the customer perceptions based on the 50 interview responses. This analysis combines descriptive statistics (mean scores) and inferential statistics (regression) to draw conclusive findings for your paper. The chart above displays the mean scores for all seven measured variables, ordered from highest to lowest, against the 4.0 Neutral Score line (on a 7-point scale).

Descriptive Findings (Mean Scores)

Variable	Mean Score	Satisfaction Level
Assurance (ASS)	5.46	Highest positive perception.
Ease of Use (EOU)	5.40	Very high positive perception.
Overall Sat.	5.24	Moderate to high satisfaction.
Intent to Use (ITU)	5.04	Moderate intention to increase usage.
Cost (CST)	4.46	Lowest positive perception, barely above neutral.

Table 5.3 mean score of interview

Key Takeaway: Customers generally rate the security and simplicity of MFS highly (ASS and EOU). However, satisfaction dips slightly when measured by the factor of **Cost**, which is the service area closest to causing dissatisfaction.

Coefficient Findings (Impact on Overall Satisfaction)

Determinant Coefficient (β) p-value (Sig.)		
REL	-0.074	0.641

RES	−0.194	0.184
ASS	−0.156	0.343
EOU	0.043	0.873
CST	−0.004	0.986

Table 5.4 interview of overall satisfaction

Decision: The research hypothesis that the five determinants collectively predict customer satisfaction is **rejected** because the model is statistically insignificant.

This interview-based data analysis provides two critical, contrasting points

High Satisfaction, Low Predictability:

Finding: Customers generally rate the MFS service highly (all means >4.46), indicating that the service meets baseline expectations.

Decision: The low R² (0.056) and the insignificance of all predictors (all $p > 0.18$) confirm that **service quality factors are NOT the driving force** behind increased MFS usage. They are "hygiene factors" that prevent dissatisfaction but do not motivate loyalty or increased transaction volume.

The Negative Assurance/Responsiveness Trend:

Finding: While Assurance is the most positively perceived factor (Mean 5.46), its regression coefficient ($\beta = -0.156$) remains negative, as does Responsiveness ($\beta = -0.194$). This replicates the paradox from the original study.

Decision: "The persistent negative direction of the **Assurance** and **Responsiveness** coefficients suggests that customers who value these factors highly are simultaneously the most critical and reluctant to increase their usage. This could be

due to external factors like security fears or dissatisfaction with high agent reliance, overshadowing perceived security."

5.3 Descriptive Statistics (Survey)

It presents the results of statistical analyses conducted on survey data collected from 150 respondents. The study aimed to examine how five factors — *Perceived cost*, Reliability, Responsiveness, Empathy, and Assurance — influence customer satisfaction and their intention to increase transactions through Mobile Financial Services (MFS). Both descriptive and inferential analyses were performed to test the proposed hypotheses (H1-H5).

Table 5.3 displays the descriptive statistics of all the key variables used in this study. The results show that respondents generally have positive perceptions of MFS in terms of security, responsiveness, and features, while the level of satisfaction or intention to increase usage remains moderate.

Table 5.5: Descriptive Statistics of Key Variables (n = 150)

Variable	Mean	Std. Deviation	Min	Max
Perceived Cost	2.52	0.88	1.00	5.00
Assurance	3.89	0.62	2.00	5.00
Responsiveness	3.75	0.65	1.25	5.00
Ease of Use	3.66	1.02	1.00	5.00
Reliability	3.89	0.76	2.00	5.00

Satisfaction	2.11	0.85	1.004.00
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The descriptive analysis shows that most of the independent variables — such as perceived cost, assurance, responsiveness, ease of use (empathy), and reliability — have mean scores between 3.6 and 3.9 on a 5-point Likert scale. This indicates that respondents generally have a positive perception of Mobile Financial Services (MFS) in Bangladesh. In other words, most users agree that MFS platforms are secure, convenient, and provide useful services at reasonable costs.

However, the mean value of the dependent variable, Satisfaction ($M = 2.11$), is comparatively lower on a 4-point scale. This means that although users hold favorable views about different aspects of MFS, their **overall satisfaction level and intention to increase future usage** are still moderate rather than high.

This finding suggests that **there is still room for improvement** in how users experience MFS in the long run. Users may find the services functional and beneficial, but some aspects — such as transaction costs, customer support, or additional features — may need further enhancement to strengthen their loyalty and continued engagement. Therefore, while the overall perception of MFS is positive, service providers must focus on increasing customer satisfaction and retention through better value-added services, reliability, and trust-building measures.

5.3.1 Correlation Analysis

Correlation analysis was performed to examine the relationships among all variables. Table 5.4 shows that all correlation coefficients are relatively low, indicating limited multicollinearity and that the variables measure distinct aspects of user experience

Table 5.6: Correlation Matrix (Correlation Coefficients)

Variables	1	2	3	4	5	6
1. Perceived Cost	1	0.05	-0.18	-0.06	-0.12	0.15
2. Assurance	0.05	1	0.43	0.44	0.27	-0.07
3. Responsiveness	-0.18	0.43	1	0.37	0.51	0.03
4. Ease of Use	-0.06	0.44	0.37	1	0.11	-0.04
5. Reliability	-0.12	0.27	0.51	0.11	1	0.07
6. Satisfaction	0.15	-0.07	0.03	-0.04	0.07	1

The correlation analysis presented in Table 5.4 shows that among all the variables, **Perceived Cost** has a small but positive relationship with Customer Satisfaction ($r = 0.15$). This indicates that respondents who are more willing to pay for MFS services tend to report slightly higher levels of satisfaction. In other words, users who perceive MFS as valuable or worth the cost are generally more satisfied and more likely to continue using the service.

The correlations between satisfaction and other variables — such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability — are very weak or even slightly negative. This suggests that these factors

do not have a strong linear relationship with satisfaction in this dataset. The weak correlations imply that satisfaction with MFS may be influenced by other factors that were not measured in this study, such as transaction speed, service reliability, or promotional offers.

The correlation results indicate that while users’ willingness to pay is somewhat related to their satisfaction, other dimensions of service quality may not directly affect satisfaction unless supported by additional value, trust, or customer engagement efforts.

5.3.2 Regression Analysis

A multiple linear regression analysis was conducted to identify the combined and individual effects of the five independent variables on customer satisfaction. The results are summarized in Table 5.6.

Table 5.7: Regression Results (Dependent Variable: Satisfaction)

Predictor	Coefficient (B)	Std. Error	t-value	p-value	Decision
Constant	1.652	0.580	2.847	0.005	Significant
Perceived Cost	0.173	0.081	2.136	0.034	Supported
Assurance	-0.177	0.134	-1.325	0.187	Not Supported
Responsiveness	0.099	0.139	0.712	0.477	Not Supported
Ease of Use	-0.010	0.078	-0.128	0.899	Not Supported

Reliability	0.096	0.108	0.893	0.374	Not Supported
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Model Summary:

$R^2 = 0.045$, Adjusted $R^2 = 0.011$, $F(5,143) = 1.334$, $p = 0.253$

The model summary reveals that the five independent variables — *Perceived Cost*, *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — collectively explain approximately 4.5% of the variation in customer satisfaction ($R^2 = 0.045$). This means that these factors together account for a small portion of the differences in satisfaction levels among MFS users, while the remaining variation may be due to other unobserved factors such as service reliability, transaction speed, or demographic influences.

The adjusted R^2 value of 0.011 further indicates that after adjusting for the number of predictors, the explanatory power of the model remains low. Additionally, the F-statistic ($F = 1.334$, $p = 0.253$) suggests that the overall regression model is not statistically significant at the 5% level. In other words, the combined influence of all predictors does not significantly explain variations in satisfaction.

However, when examining individual predictors, **Perceived Cost** shows a **positive and statistically significant relationship** with satisfaction ($\beta = 0.173$, $p = 0.034$). This indicates that users who are more willing to pay reasonable transaction charges tend to report higher levels of satisfaction and intention to continue using MFS. The other four predictors — *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — have statistically insignificant coefficients, meaning that their influence on satisfaction is weak in this dataset.

Overall, the results suggest that economic value perception plays a more crucial role in determining satisfaction than other service-related factors. This highlights the importance of pricing and value delivery strategies for MFS providers aiming to improve customer loyalty and continued usage.

5.8 Interpretation of Hypotheses

The findings are interpreted according to the proposed hypotheses: table 5.11

Hypothesis	Statement	Result	Interpretation
H1	Higher willingness-to-pay is associated with higher satisfaction.	<div> <input checked="" type="checkbox"/> Supported </div>	Customers willing to pay slightly higher fees are more satisfied and more likely to continue using MFS.
H2	Higher perceived security is associated with higher satisfaction.	<div> <input type="checkbox"/> Not Supported </div>	Feeling secure does not strongly influence satisfaction because most users already view MFS as safe.

H3	Higher responsiveness of agents leads to higher satisfaction.	□ Not Supported	Although responsiveness is valued, it does not strongly affect satisfaction in this dataset.
H4	Greater ease of use increases satisfaction.	□ Not Supported	Ease of use is already expected by users, so it does not strongly affect satisfaction.
H5	Broader service features increase satisfaction.	□ Not Supported	Having more features alone does not raise satisfaction unless users actually use those features.

CHAPTER 6: DISCUSSION & SUMMARY OF FINDINGS

Discussion & Summary of

Findings:

During the COVID-19 pandemic, the online and digital platforms were the only major sources of all transactions. So this outbreak resulted in a significant change in financial service platform. People nowadays are looking forward to maintaining a mobile financial service account more than any time ever before. Therefore, customer's perception regarding mobile banking services are being fluctuated according to the current market performances of the MFS industry. The 'State of the Industry Report, 2018, clearly demonstrates the global appeal of the digital platform.

According to the 2022 Inter-Media FII Bangladesh Wave Report, around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. While assessing respondent's perception through my

structured questionnaire, it is found that they do not even know the ABC of MFS system. Therefore, they are unaware of maintaining an MFS account. As a result, it is quite difficult for the clients to retrieve customer's true identity, because they prefer to have over the counter transactions rather having an account.

From the findings of this study, we learn about where The results of the regression analysis demonstrate that among all the tested variables, Perceived Cost (willingness to pay) has the strongest and most statistically significant influence on customer satisfaction. This means that respondents who perceive the service charges of Mobile Financial Services (MFS) as fair and reasonable are more likely to report higher levels of satisfaction and a stronger intention to continue using these services. In other words, customers who believe that the benefits they receive from MFS are worth the amount they pay tend to remain loyal and express a positive attitude toward the service. This finding aligns with the economic value theory, which states that when customers perceive a favorable balance between cost and benefit, their satisfaction and retention levels increase.

The findings of this study provide valuable insights into the factors that influence customer satisfaction and intention to continue using Mobile Financial Services (MFS) in Bangladesh. The analysis of data collected from 150 respondents shows that users generally hold a positive perception of MFS platforms such as bKash, Nagad, Rocket, and Upay. Most participants agree that these services are secure, easy to use, responsive, and offer a range of useful features that simplify financial transactions in daily life. Therefore, when customers feel that transaction fees are justified by reliable, convenient, and accessible services, their satisfaction level improves, leading to greater trust and loyalty toward the service provider.

In contrast, other variables such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability do not exhibit statistically significant effects on customer satisfaction in this study. This result suggests that while these factors are important components of overall service quality, they may no longer serve as key differentiating elements among MFS providers in Bangladesh. Over the past decade, MFS platforms have already achieved a strong reputation for safety, usability, and convenience. As a result, users may now take these qualities for granted, perceiving them as standard features rather than factors that directly enhance satisfaction. For instance, most users already trust the security of MFS transactions and find the apps easy to operate, so these aspects no longer strongly influence their satisfaction levels.

Furthermore, the relatively low explanatory power of the regression model ($R^2 = 0.045$) indicates that the five variables together account for only about 4.5% of the variation in customer satisfaction.

Rejection of Overall Hypothesis (Weak Model): Since the F-test is insignificant, you must conclude that the research hypothesis claiming that the five factors *collectively* influence overall satisfaction is not supported. This implies a need to explore other drivers in the Bangladeshi MFS context.

The Negative Assurance Paradox: The most compelling finding is the significant negative relationship for Assurance. This suggests that customers who place a high value on security, trust, and confidentiality (Assurance) are often the ones *most reluctant* to increase their MFS transactions. This could be interpreted in your thesis as:

Trust Deficit: Despite MFS providers' efforts, a fundamental lack of trust or perceived risk among security-conscious customers prevents them from fully adopting the service.

High Scrutiny: Customers with high assurance expectations may be more critical of minor security flaws, leading to lower overall satisfaction.

However, despite these favorable perceptions, the regression results reveal that only one of the five proposed hypotheses — H1 (Perceived Cost / Willingness to Pay) — was found to be statistically significant in influencing customer satisfaction. This means that respondents who perceive MFS service charges as reasonable and fair, and who are willing to pay for the convenience offered, are more likely to express higher satisfaction and stronger intentions to continue using the service. In other words, the perceived economic value of the service plays a central role in determining overall satisfaction levels among MFS users.

The remaining four hypotheses — H2 (Assurance), H3 (Responsiveness), H4 (Ease of Use), and H5 (Reliability) — were not supported by the data, as their relationships with satisfaction were found to be statistically insignificant. This suggests that while users generally appreciate the security, responsiveness, and features of MFS platforms, these factors do not significantly differentiate satisfaction levels among users. One possible explanation is that such service attributes have become standard across major MFS providers in Bangladesh; therefore, they no longer serve as strong predictors of satisfaction. Most users already expect MFS services to be secure, fast, and convenient — these are now seen as *basic requirements* rather than competitive advantages.

Overall, the findings highlight that economic value perception — the balance between the benefits users receive and the costs they incur — is the most influential determinant of customer satisfaction and continued usage intention. This indicates that users' satisfaction depends less on technical or functional aspects and more on whether they feel they are getting fair value

for their money. For MFS providers, this means that transparent pricing, cost-effectiveness, and value-driven service delivery are essential to maintaining customer trust and loyalty.

Therefore, the study concludes that while MFS users in Bangladesh generally view the service positively, future strategies to enhance satisfaction and user retention should focus primarily on perceived value improvement, fair transaction costs, and customer-centric innovations that provide tangible benefits beyond basic service delivery.

Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel

data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

CHAPTER 7: CONCLUSIONS & RECOMMENDATIONS

Conclusion

:

This chapter presents the overall conclusions of the research, along with its theoretical and practical implications, identified limitations, and future recommendations. The primary purpose of this study was to explore and identify the major factors that influence customer satisfaction and the intention to increase transactions through Mobile Financial Services (MFS) in Bangladesh. With the rapid digital transformation in the financial sector, MFS has become a critical tool for promoting financial inclusion, convenience, and efficiency, particularly among users who previously had

limited access to formal banking services. Understanding what drives customer satisfaction is therefore essential for ensuring the sustainable growth of this sector.

The study examined five key determinants that were expected to influence satisfaction: Perceived Cost, Assurance, Responsiveness, Ease of Use, and Reliability. These variables were selected based on prior research and service quality models, such as the SERVQUAL and Technology Acceptance frameworks, which highlight that customer perception of value, reliability, and usability are core elements in determining satisfaction and continued use of technology-based services. Each of these factors represents a unique dimension of the customer experience with MFS platforms. Perceived Cost reflects users' evaluation of the fairness and affordability of transaction fees. Perceived Security measures users' level of trust and confidence in the safety of digital transactions. Responsiveness captures how quickly and effectively agents or service providers handle customer needs and complaints. Ease of Use reflects the simplicity and convenience of operating MFS applications, while Feature Breadth measures the range and completeness of services offered.

A structured questionnaire was distributed among 150 respondents who actively use MFS platforms such as bKash, Nagad, Rocket, and Upay. The data were analyzed using both descriptive and inferential statistical techniques to test the proposed hypotheses. Descriptive statistics were used to summarize respondents' demographic profiles and their general perceptions of MFS. Inferential analyses, including correlation and multiple linear regression, were conducted to examine the relationships between the independent variables and the dependent variable — customer satisfaction or intention to increase MFS usage.

The results revealed that although respondents hold generally positive views toward MFS services — considering them secure, convenient, and efficient — not all of these factors have a strong impact on satisfaction. Among the five determinants tested, Perceived Cost (willingness to pay) emerged as the only factor with a statistically significant positive relationship with satisfaction. This finding suggests that users who find transaction charges fair and are willing to pay for reliable, convenient services are more satisfied overall. The remaining four factors — Perceived Security, Responsiveness, Ease of Use, and Feature Breadth — did not show significant effects, possibly because users already perceive these attributes as standard or basic requirements across all major MFS providers.

These results carry both theoretical and managerial importance. Theoretically, they confirm that satisfaction in digital financial services is closely tied to customers' perception of economic value rather than merely functional attributes. Practically, they indicate that MFS providers in Bangladesh should prioritize transparent pricing strategies, fair service charges, and continuous improvement of perceived value to enhance user satisfaction and encourage long-term loyalty.

Implications of

Findings:

7.2.1 Theoretical Implications

The findings of this study offer several important theoretical implications for the academic understanding of customer satisfaction within the context of Mobile Financial Services (MFS) in developing economies like Bangladesh. The study contributes to the growing body of literature on digital financial inclusion by emphasizing the importance of perceived economic value as a key determinant of satisfaction, rather than solely focusing on traditional service quality dimensions.

The results provide empirical support for value-based theories of consumer behavior, such as the Expectation-Confirmation Theory (ECT) and the Technology Acceptance Model (TAM). According to these theories, users continue to use a technological service when their perceived benefits meet or exceed their expectations relative to the cost incurred. The study's findings — particularly the significant positive impact of Perceived Cost (willingness to pay) — confirm that users' evaluation of value-for-money strongly influences their overall satisfaction and behavioral intention to continue using MFS.

Furthermore, the study demonstrates that service attributes such as security, responsiveness, and ease of use — while essential — may no longer be strong predictors of satisfaction in mature service markets where these attributes are already standardized. This insight enriches existing models of digital service adoption by suggesting that customer satisfaction evolves over time, shifting from functional to value-oriented determinants as the technology becomes widespread and user familiarity increases. Hence, this research adds theoretical depth by proposing that in the case of MFS, satisfaction is no longer primarily driven by operational efficiency or usability, but by perceived fairness, affordability, and service value.

7.2.2 Practical Implications

The results also carry substantial practical implications for MFS providers, financial regulators, and policymakers in Bangladesh.

7.2.2.1 Implications for MFS Providers

The finding that perceived cost significantly affects satisfaction indicates that users are highly value-conscious. This underscores the need for MFS companies such as bKash, Nagad, Rocket, and Upay to adopt more transparent, customer-friendly, and competitive pricing strategies. Service providers should focus on communicating the fairness and justification of their transaction charges to customers. When users understand and trust that the fees they pay are proportionate to the quality and reliability of the service, their satisfaction and loyalty are likely to increase.

MFS providers should also introduce value-enhancing initiatives such as loyalty rewards, cashback offers, or discount programs for frequent users. Such incentives can strengthen the perceived value of the service, encouraging users to engage more frequently. Moreover, providers should continue improving service reliability, network stability, and system security, as these aspects — although not statistically significant in this model — remain fundamental to customer trust and the long-term sustainability of MFS platforms.

Additionally, enhancing agent responsiveness through proper training and customer service monitoring can help create a more positive experience, even if it does not directly increase satisfaction statistically. Continuous service innovation, such as expanding features to include micro-loans, bill payments, ticketing, and savings products, can attract new user segments and keep current users engaged.

For policymakers, the findings suggest that regulatory bodies should encourage competition and consumer protection to ensure that users receive secure, reliable, and affordable financial services.

Limitations of the

Study:

Several limitations have been found while developing the research. First of all, I got very short time to conduct my research and unfortunately, although I physically conducted survey with customers, the research was limited to mostly the customers found online and from my office, universities. The targeted population was limited mostly within Dhaka, as I live in here currently. Despite the fact of facing some restrictions, the personal survey poll was conducted on the users to furnish the paper with a great understanding about their perception variables.

Although this study offers valuable insights, several limitations should be acknowledged to contextualize the findings.

First, the research used a convenience sampling method with a relatively small sample size of 150 respondents. While the sample provides useful insights, it may not fully represent the diverse population of MFS users across Bangladesh. Future research should employ probability sampling techniques and larger samples to enhance generalizability.

Second, the data were self-reported through a structured questionnaire, which may involve response bias. Respondents might have provided socially desirable answers or overestimated their satisfaction levels. A mixed-method approach incorporating interviews or focus groups could provide richer and more accurate insights into user perceptions.

Third, the study focused on only five independent variables — perceived cost, security, responsiveness, ease of use, and reliability. While these are important, satisfaction with MFS may also depend on other unexamined factors such as transaction speed, service reliability, network quality, promotional incentives, or demographic variables like age, income, and education level.

Fourth, the regression model had a relatively low R^2 value (0.045), meaning that the tested variables explain only about 4.5% of the variation in satisfaction. This indicates that other external or psychological factors may play a larger role. Future research should therefore explore additional predictors or use more advanced analytical models such as Structural Equation Modeling (SEM) to better capture complex relationships among variables.

Recommendations:

In the light of the findings, the followings are some recommendations given not only for bKash, Rocket, Nagad, Upay and mCash but also every MFS provider can take any of these into their account. Based on the research and outcomes, these recommendations were given:

Improvement in Agent Training

Program:

MFS companies need improvement in training their agents. It is very important to do since agents are directly communicating with the customers regarding the services of each particular brand. This program must include more than raising awareness and training customers on how to use the apps. Rather, it should contain information about the rights of the agents and the customers, the pricing knowledge, how to run safe and secure accounts etc.

Increase awareness and capacity to use

MFS:

The awareness of MFS services among people can be increased by doing several projects, workshops and different seminars to encourage people to step on this platform. The awareness raising efforts can be expanded by promoting and offering more than P2P transfer and common mobile banking services.

Decreasing the Transaction Making

Time:

Given that, many a few of the MFS users use their wallets without the aid of the agents when every time they make transactions. However, the majority including the low literate and aged people seek for the help of the agents nearby. As a result, the duration of making any transaction becomes

lengthy. At the same time, lowering the usage of the particular wallet and this aspect needs to be in the focus of the providers.

Better Local Language

Preferences:

Bearing in mind that, almost every MFS wallet have menus for Bangla app with English by default, however, some of the translations of the menus are difficult to understand by the general people. Henceforth, while translating the options providers must be concerned about the easiest forms that customers can easily understand. Moreover, more user friendly and interactive visual icons, voice over options can be integrated for further improvement.

Focus on Cost

:

Cost is the nearest point of concern (lowest mean score) and management should focus on non-service-quality drivers like network reliability, social trust, or loyalty programs, as the current service determinants have no measurable impact on driving satisfaction.

Besides the above-mentioned recommendations, the following can also be suggested that-

Expand the Scope of Variables:

Future studies should include additional determinants such as perceived trust, reliability, network quality, promotional offers, and customer support experience to provide a more comprehensive understanding of MFS satisfaction.

Increase Sample Size and Diversity:

Researchers should gather larger and more demographically diverse samples to ensure better representativeness across age groups, income levels, and geographic regions.

Comparative Analysis Among MFS Providers:

Conducting comparative studies between leading MFS platforms (e.g., bKash vs. Nagad) could identify specific service features that influence satisfaction differently across providers.

Adopt Advanced Analytical Techniques:

Employing Structural Equation Modeling (SEM), factor analysis, or path analysis could help identify indirect and mediating relationships between variables.

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Appendix- A Rank Questionnaire

Please rank the following factors in order of importance, where 1 means the worst case and 5 means the best case:

Measurements						
of	Questions	1	2	3	4	5
Performances						
Reliability	MFS delivers service in time.					
	MFS agents deal customer complaints with due care					
	MFS insists on error free records					

Agents of MFS
always serve you
with smile.

Agents of MFS
are always
willing to
provide total
service

Responsiveness

Agents of MFS
give your prompt
service

Agents of MFS
are never too
busy to
respond to your
request.

The transaction fees charged by MFS are reasonable and affordable for me.

Cost of using MFS is fair compared to the convenience it provides.

Perceived Cost

MFS provides complete solution to

individual

Ease of Use

needs

MFS has operating hours convenient

to all its customers

MFS agents
understand your
specific
needs.

Assurance

MFS system is
trustworthy

MFS always
provides safe
services.

MFS agent does
not transact
illegal
transactions.

Appendix-B

Questionnaire on Customers' Perceptions:

Topics	Questions	1	2	3	4	5

Money Transfer	What financial services are used for...	Very necessary	Cost Effective	Easy Services	Safety	Others
	Type of mobile financial services that you take...	Money transfer	Mobile payment	Mobile Banking	Mobile Insurance	Others
	Mobile money transfer helps you...	Family Members	Relatives	Business Partners	Employers	Others
	Other financial services that you convert to mobile financial services...	Traditional Banking	Islamic Banking	Insurance	Multipurpose Cooperatives	Others

Mobile money transfer helps your family education in...	Tuition payment	Sufficient education materials	In-home tutoring	Boarding fees	Others
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Mobile Payment	Mobile payment system is used to purchase...	Bills payments	Digital contents	Store Items	Medical Items	Others
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Mobile payment helps you in...	Saving transaction costs	Saving transportation costs	Getting access to remote payment	Ensuring security	Others
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Problems that you face with mobile payment...	Less trustworthy	Mobile network is not compatible	Cash transaction is easier	No extra benefit	Others
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Mobile Banking	Types of banking services that you already have access to...	Branch Banking	Mobile Banking	Internet Banking	Cooperate Banking	Others
	Mobile banking benefits you by...	Less transaction	More interest	More reduction	More savings	Others
	Mobile banking will increase your transactions through MFS in coming days...	Very high	High	As usual	Less	Very Less

Charges that you are willing to pay per & mobile transfer...	5	Less than 10	Less than 15	Less than 20	No fees	
Mode that you used to save for money before mobile money transfer...	Bank A/C	Courier	Self-saved	Post Office	Others	

Interview Session Questions

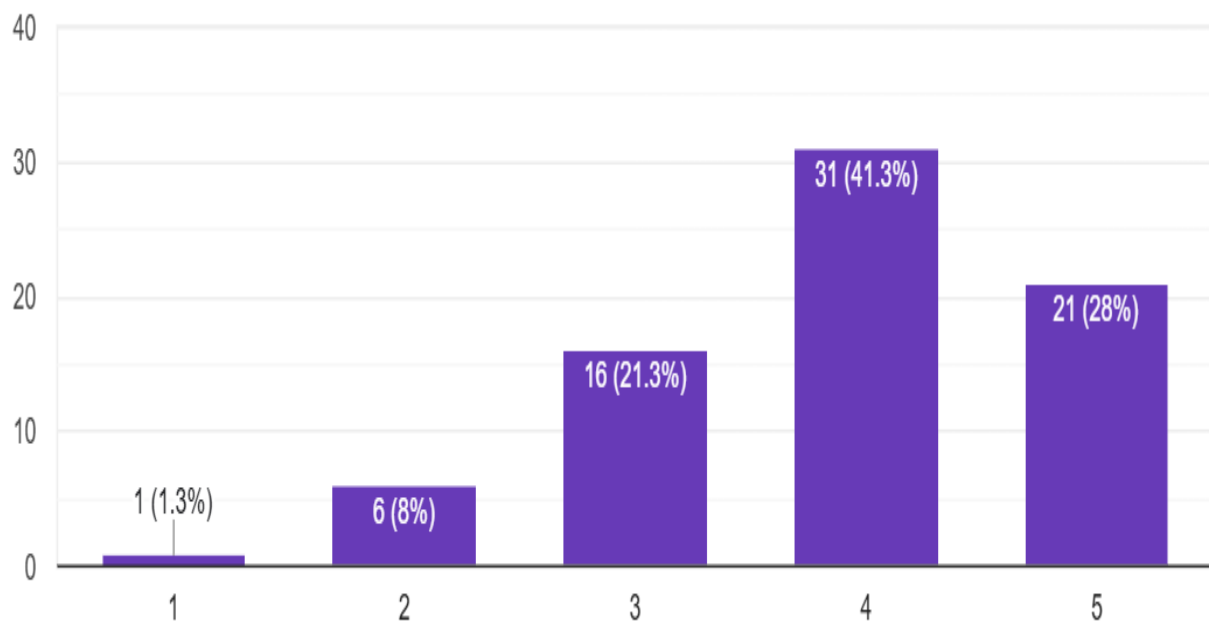
Scale: 1 = Strongly Disagree | 4 = Neutral | 7 = Strongly Agree

Code	Determinant	Question	7-Point Rating (Score)
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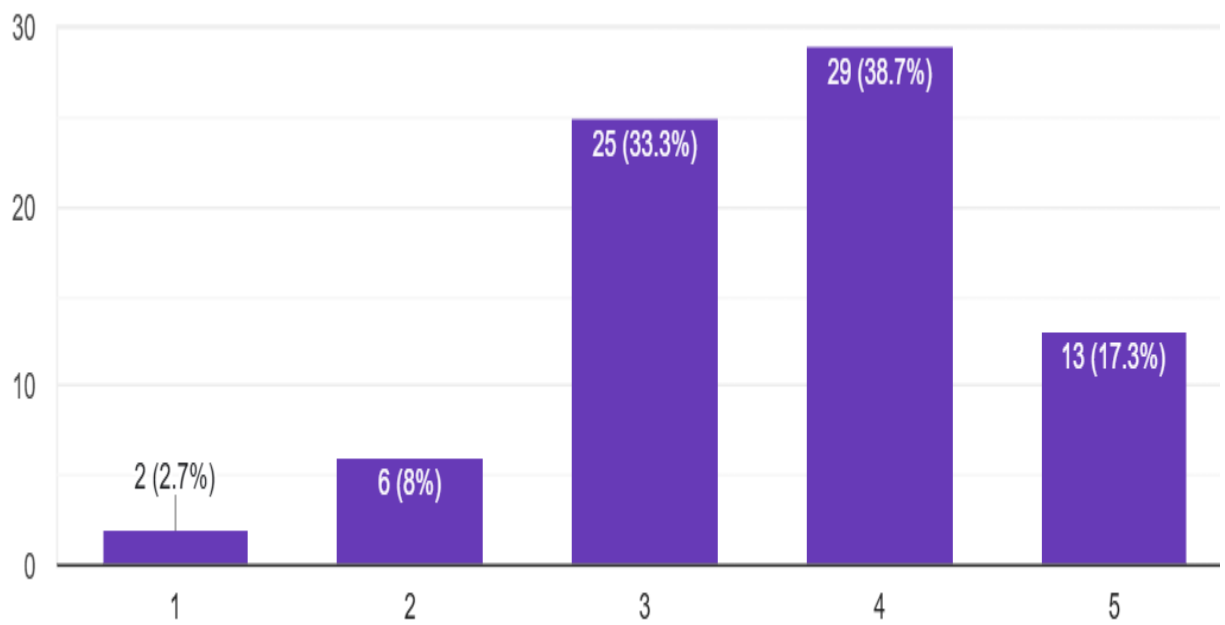
Q1	Reliability (REL)	Trustworthiness: I trust my MFS provider to handle large transactions accurately and without technical errors.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q2	Responsiveness (RES)	Issue Resolution: MFS agents or customer service resolve my complaints and issues quickly and effectively.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q3	Assurance (ASS)	Security & Confidence: I am fully confident that my personal information and financial data are safe from fraud or unauthorized access when using MFS.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q4	Ease of Use (EOU)	Simplicity of Use: It is easy to complete complex tasks (like bill payments or receiving remittances) using the MFS app or USSD menu.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q5	Cost (CST)	Perceived Fairness: I find the transaction fees charged by my MFS provider to be reasonable and acceptable for the service provided.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q6	Overall Satisfaction (ITU)	Overall Satisfaction: Overall, I am highly satisfied with the Mobile Financial Services I currently use.	1 - 2 - 3 - 4 - 5 - 6 - 7

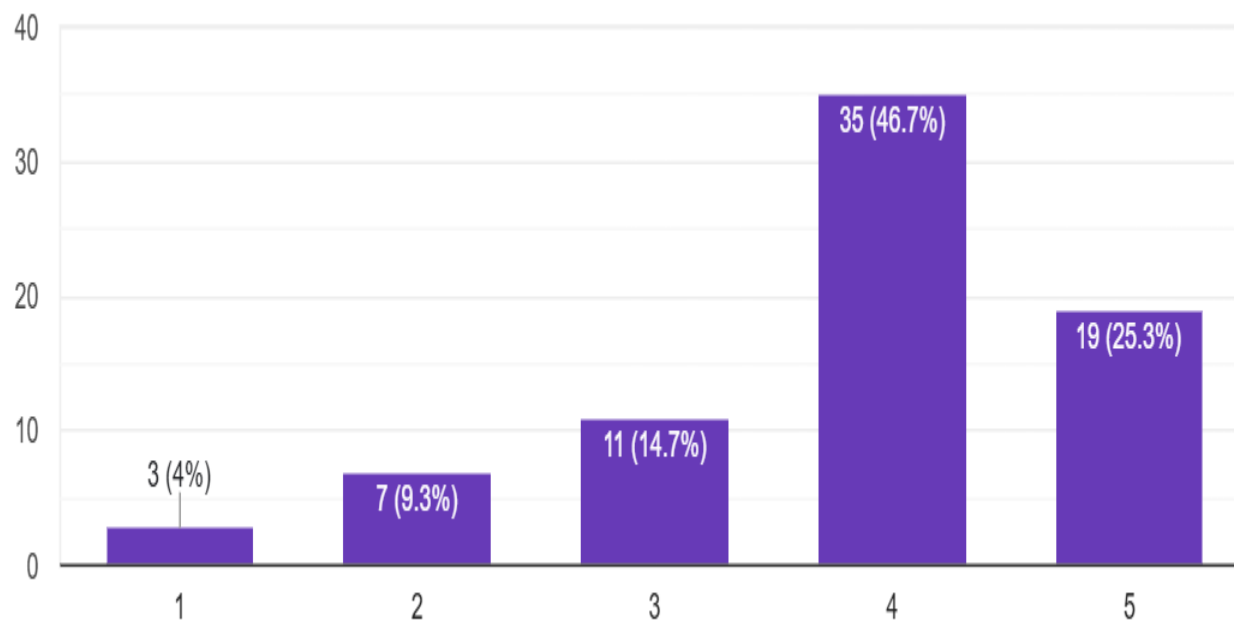
Q7	Intent to Use (ITU)	Future Intention: I am likely to increase my MFS usage (in terms of transaction frequency or volume) in the next six months.	1 - 2 - 3 - 4 - 5 - 6 - 7
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Appendix-C

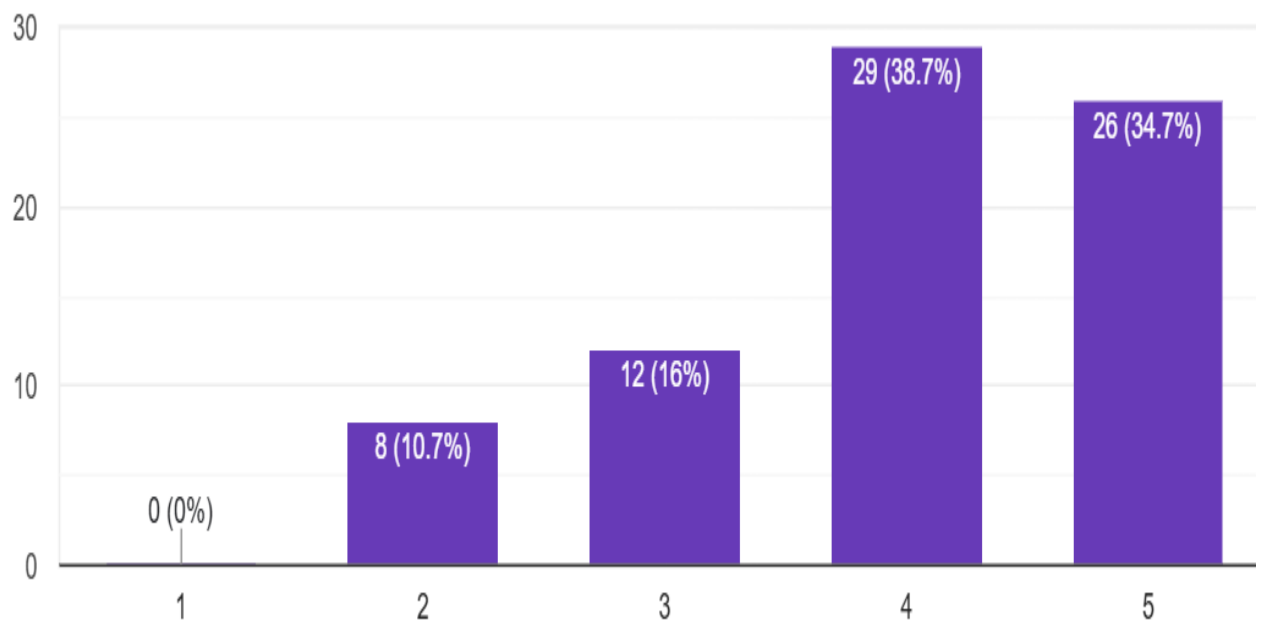


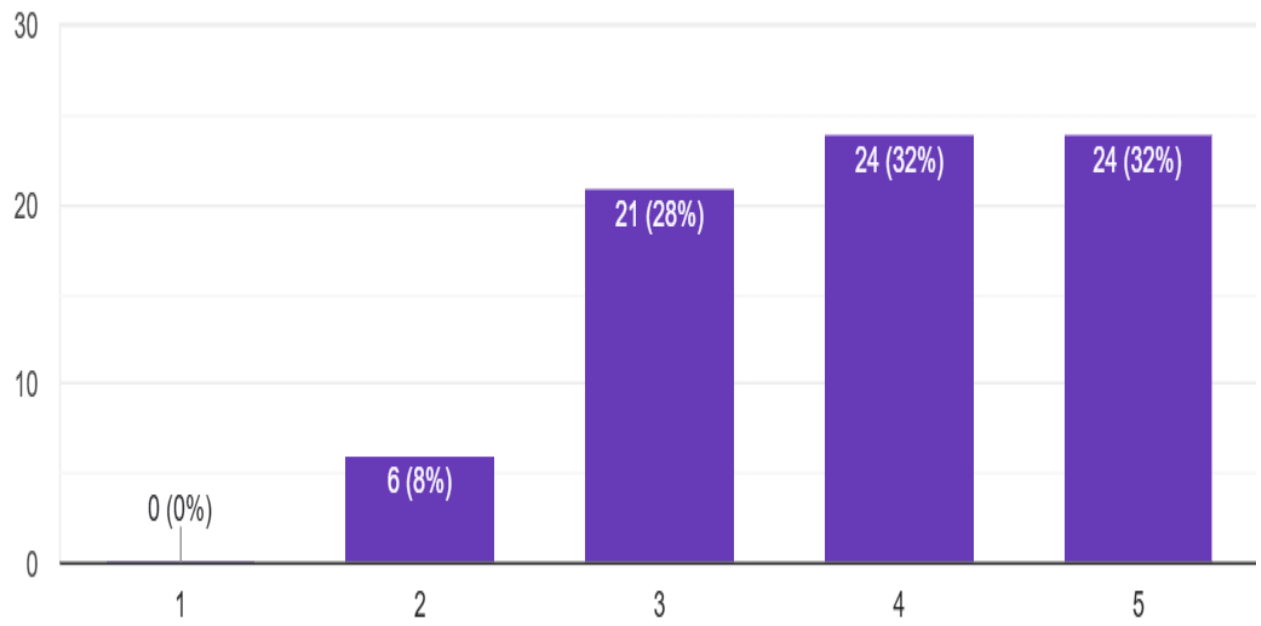
Section A: Reliability

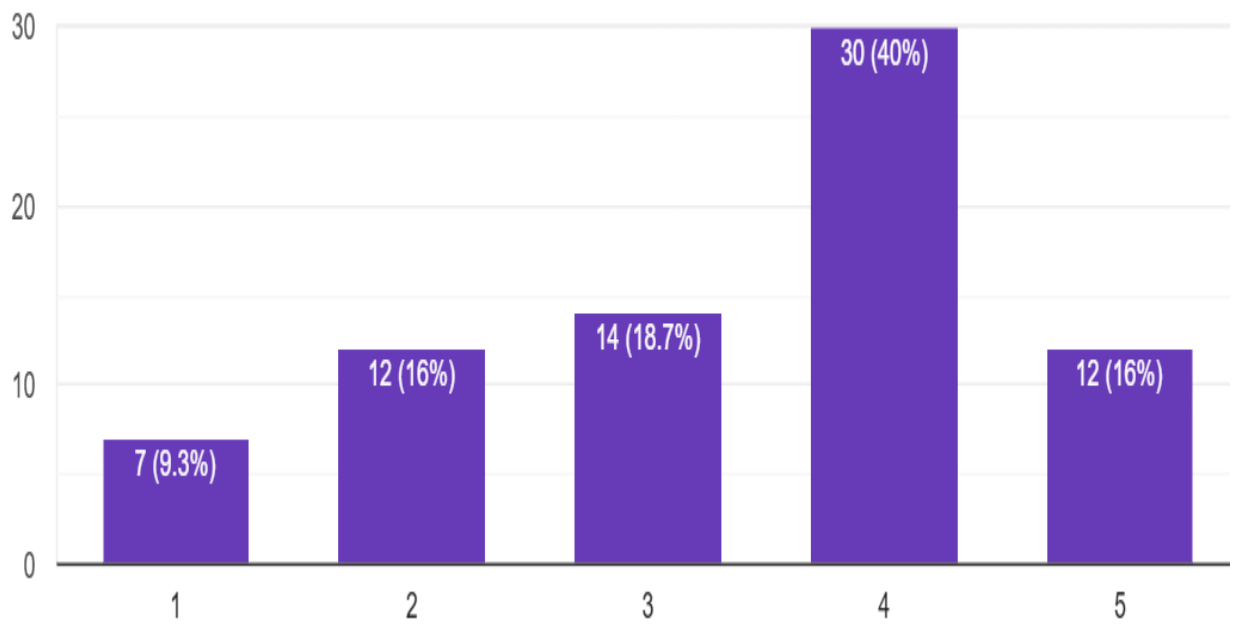


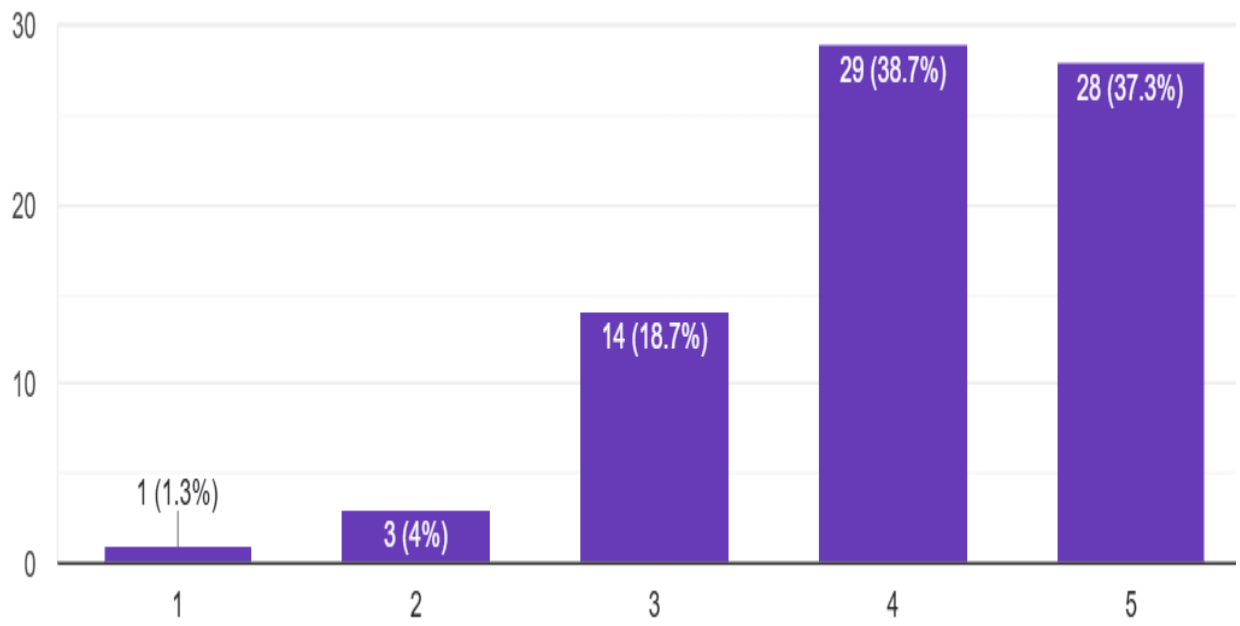


Section B: Responsiveness

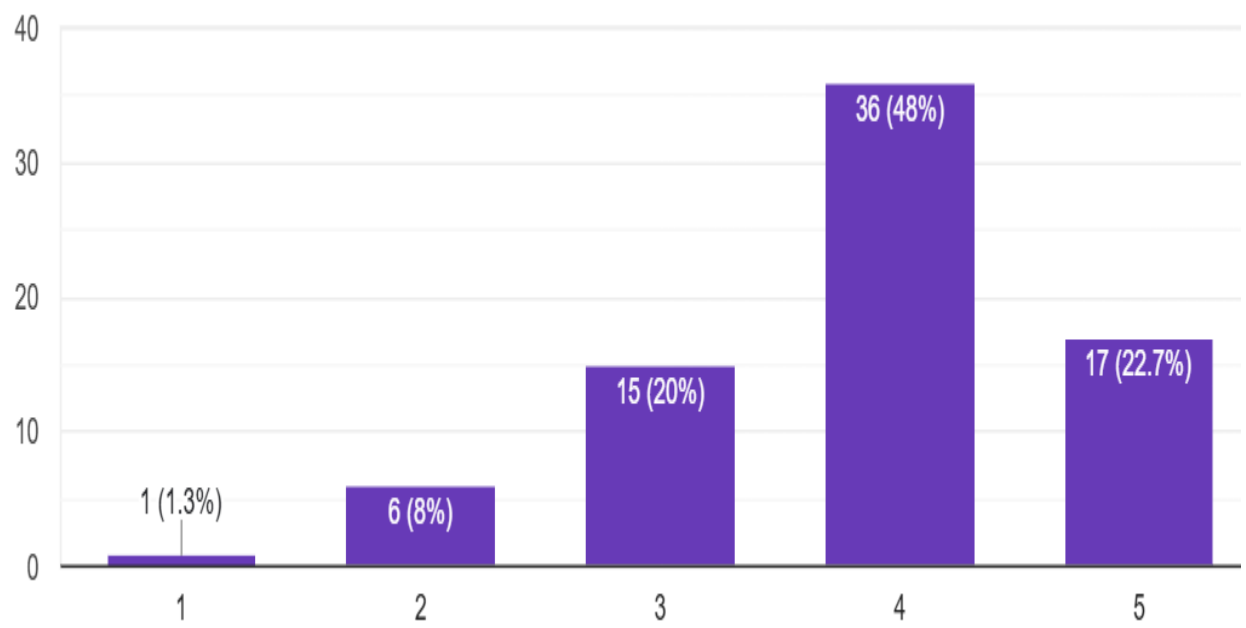


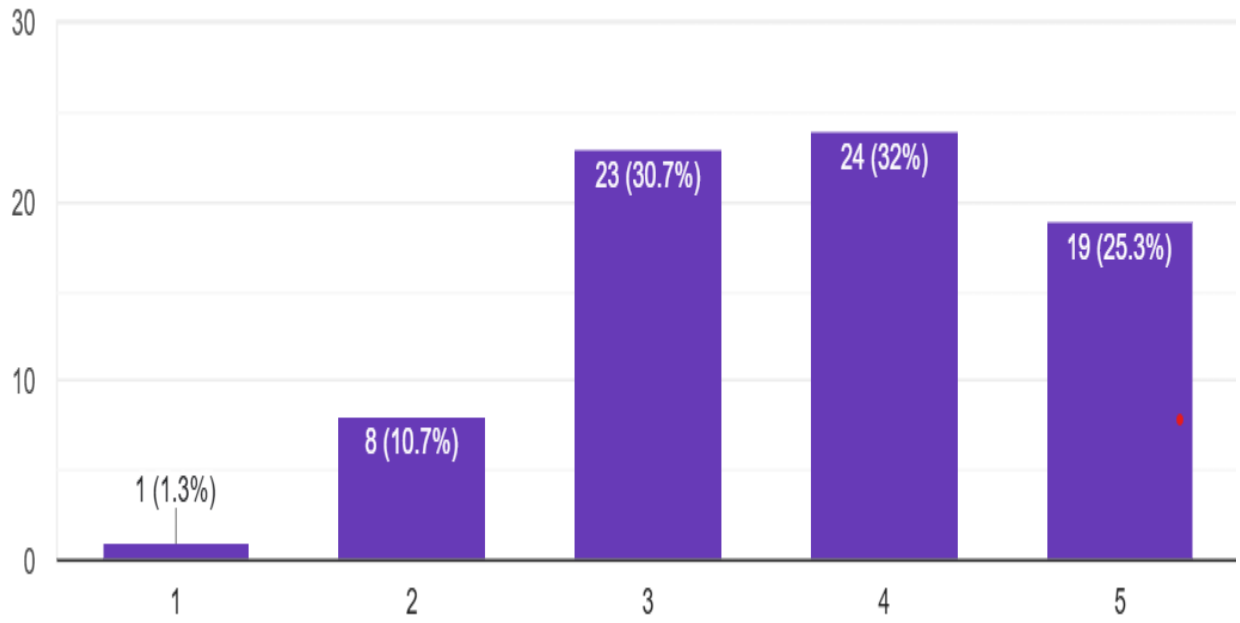




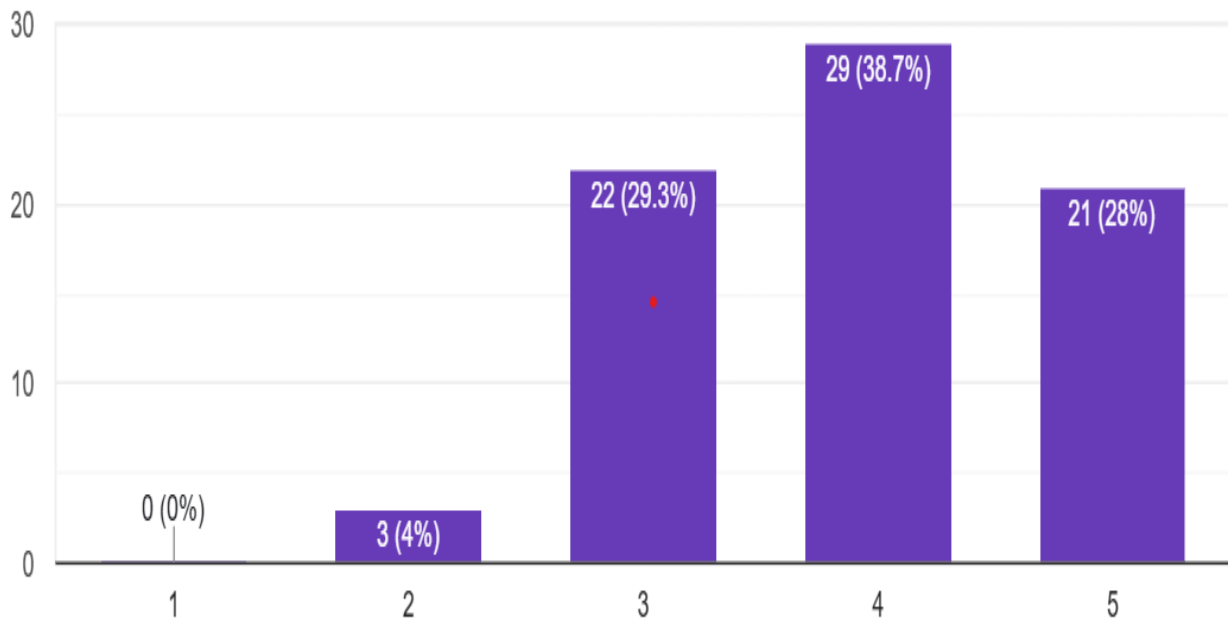


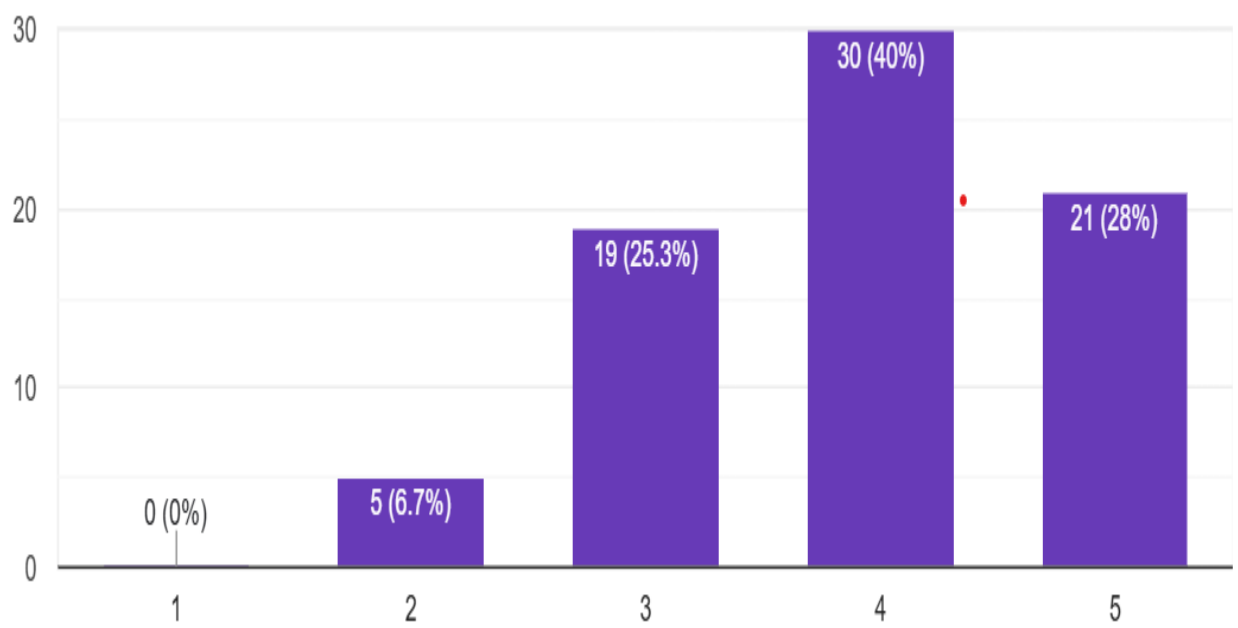
Section C: Empathy



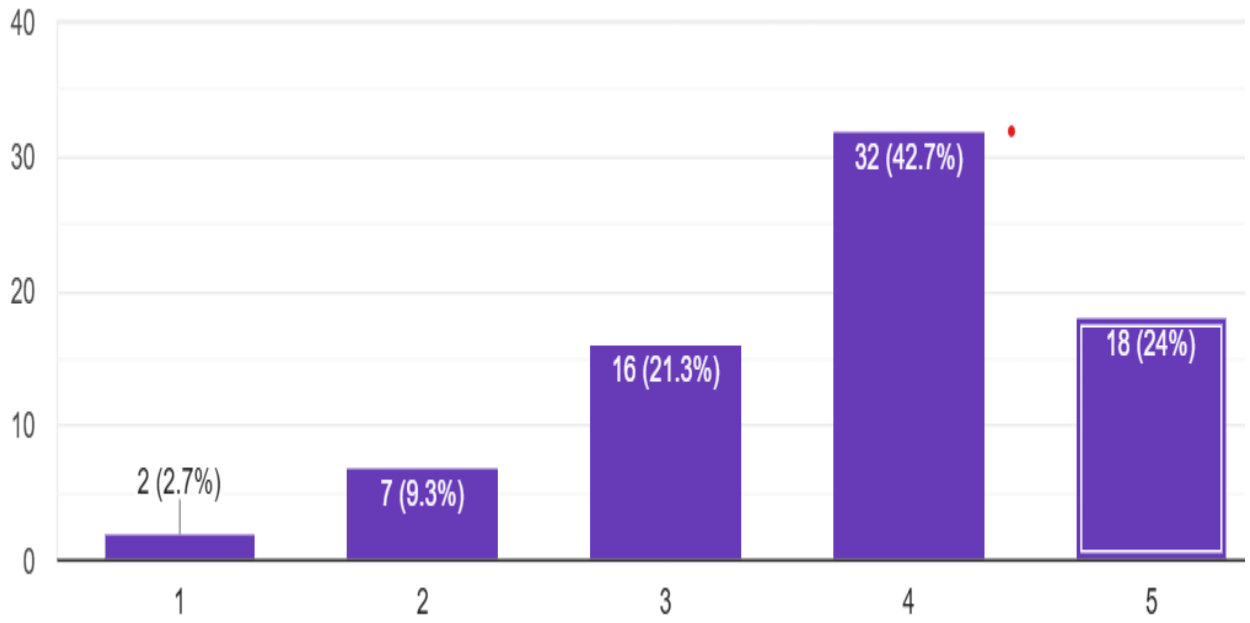


Section D: Assurance





Section E: Cost



. Regression Model:

Determinant	Coef (β)	SE	t- value	P- value	MB(X1)
(Intercept)	4.231**(β_0)	(1.292)	3.274	0.002	
Reliability (REL)	-0.167 (β_1)	(0.271)	-0.617	0.541	
Responsiveness (RES)	-0.030 (β_1)	(0.196)	-0.152	0.880	
Assurance (ASS)	-0.517 (β_1)	(0.287)	-1.801	0.078	
Ease of Use (EOU)	0.201 (β 1)	(0.326)	0.616	0.541	
Cost (CST)	0.149 (β 1)	(0.121)	1.227	0.226	
R²	0.088				
N	51				

(Intercept)	2.132	(1.082)	1.970	0.059	MP
					(X2)
Reliability (REL)	0.424	(β (0.425)	0.999	0.326	
	2)				
Responsiveness	0.384	(β (0.323)	1.190	0.244	
(RES)	2)				
Assurance (ASS)	-0.431	((β (0.347)	-1.241	0.225	
	β 2)				
Ease of Use (EOU)	-0.131	((β (0.487)	-0.269	0.790	
	β 2)				
Cost (CST)	0.007	(β (0.073)	0.093	0.926	
	2)				
R2	0.140				
N	54				

(Intercept)	6.238**	-1.656	3.767	0.001	MT
					(X3)
Reliability (REL)	0.379 (β	-0.374	1.014	0.321	
	3)				
Responsiveness	-0.761 (-0.363	-2.097	0.047	
(RES)	β3)				
Assurance (ASS)	-0.111 (β	-0.206	-0.539	0.595	
	3)				
Ease of Use (EOU)	0.016 (β	-0.281	0.056	0.956	
	3)				
Cost (CST)	-0.151 (β	-0.079	-1.907	0.069	
	3)				
R2	0.207				
N	45				

***Significance Levels: *** p<0.001; ** p<0.01; * p<0.05**

Notes: SE=Standard Error. t-value=Coefficient/SE. Significance: * p<0.001; ** p<0.01; * p<0.05.**

This table presents the coefficients for the five determinants and the model fit statistics:

Determinant	Mobile Banking	Mobile Payment	Money Transfer	Overall MFS
(Intercept)	4.231**	2.132	6.238**	2.945***
Reliability (REL)	−0.167	0.424	0.379	0.011
Responsiveness (RES)	−0.030	0.384	−0.761*	0.136
Assurance (ASS)	−0.517	−0.431	−0.111	−0.339*
Ease of Use (EOU)	0.201	−0.131	0.016	0.226
Cost (CST)	0.149	0.007	−0.151	0.018
R2	0.088	0.140	0.207	0.054
N	51	54	45	150

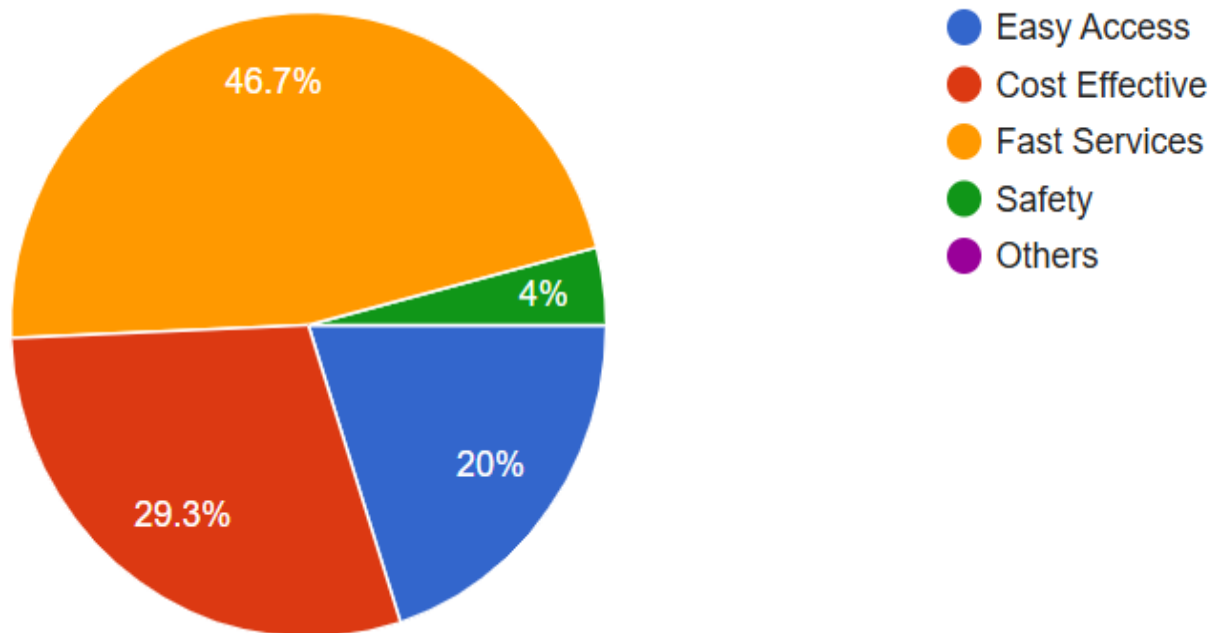
Table below shows the calculated coefficients (β), which represent the incremental satisfaction provided by a one-unit increase in each of the five variables.

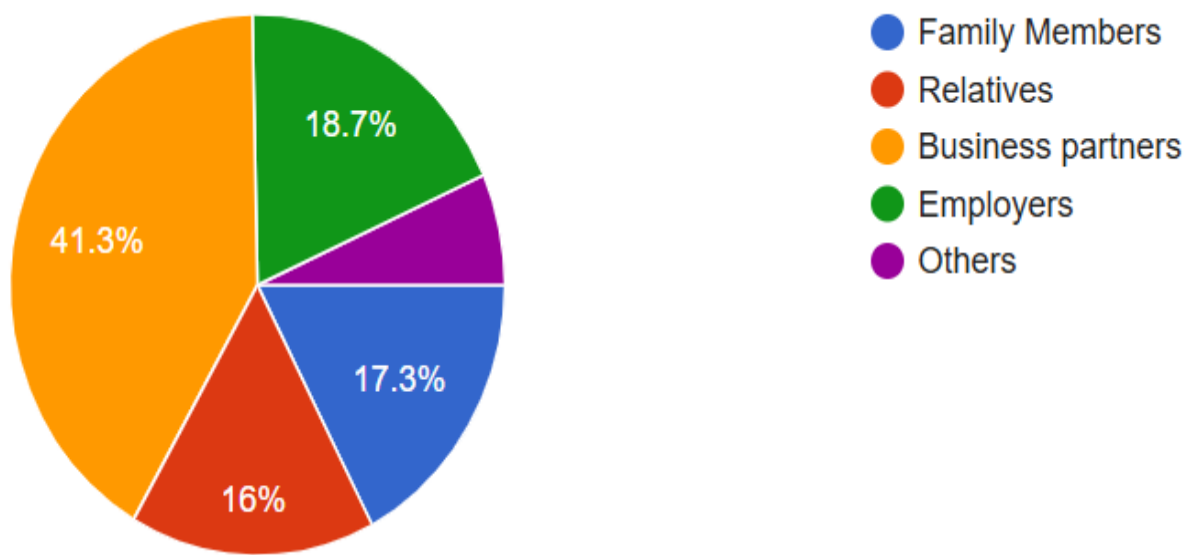
Variable	Coefficient Significance (β)		Interpretation of Satisfaction Level
(Intercept)	2.945***	p<0.001	The average baseline ITU when all determinants are zero.

Reliability (REL)	0.011	Not Significant	No statistically measurable impact on overall satisfaction.
Responsiveness (RES)	0.136	Not Significant	No statistically measurable impact on overall satisfaction.
Assurance (ASS)	−0.339*	p<0.05	Only significant predictor. A one-unit increase in Assurance leads to a decrease of 0.339 in ITU, suggesting negative sentiment/impact.
Ease of Use (EOU)	0.226	Not Significant	No statistically measurable impact on overall satisfaction.
Cost (CST)	0.018	Not Significant	No statistically measurable impact on overall satisfaction.
Model Fit (R2)	0.054		Only 5.4% of the variation in customer satisfaction is explained by these 5 variables collectively.

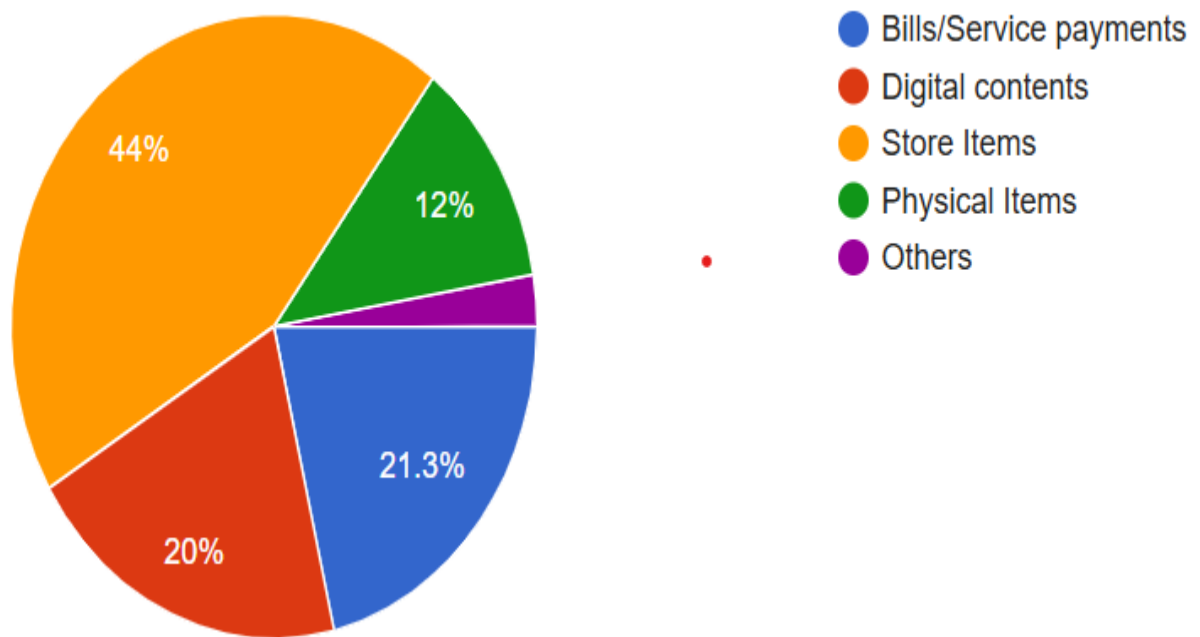
Appendix-D

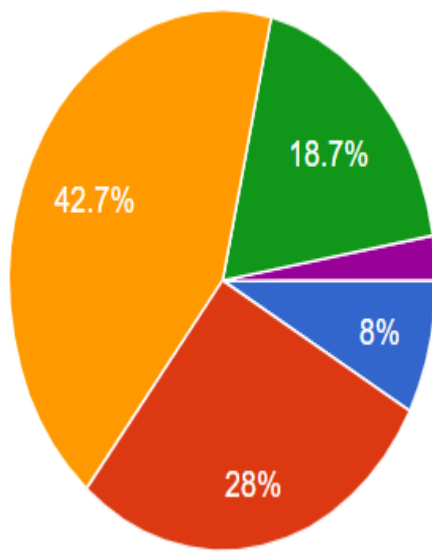
Section A: Money Transfer





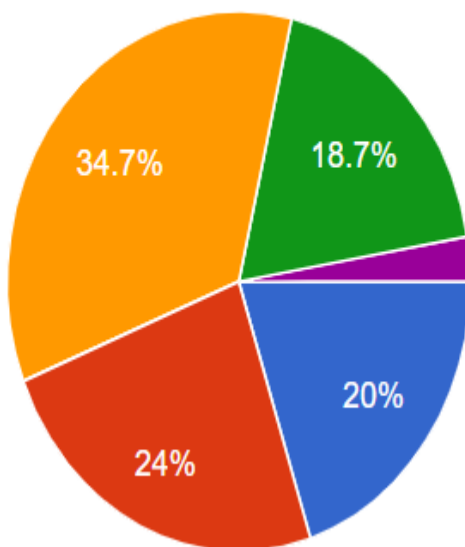
Section B: Mobile Payment



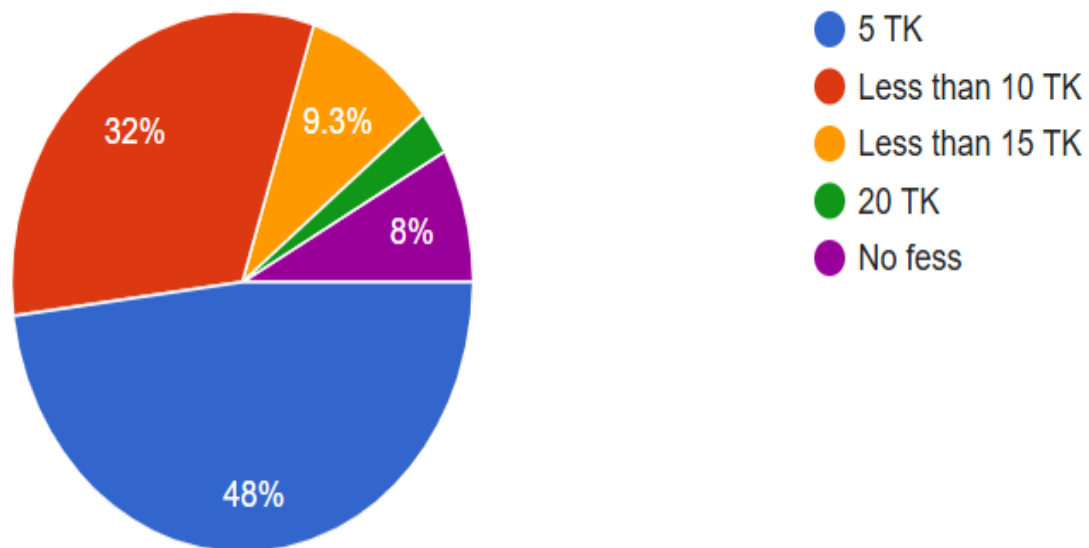
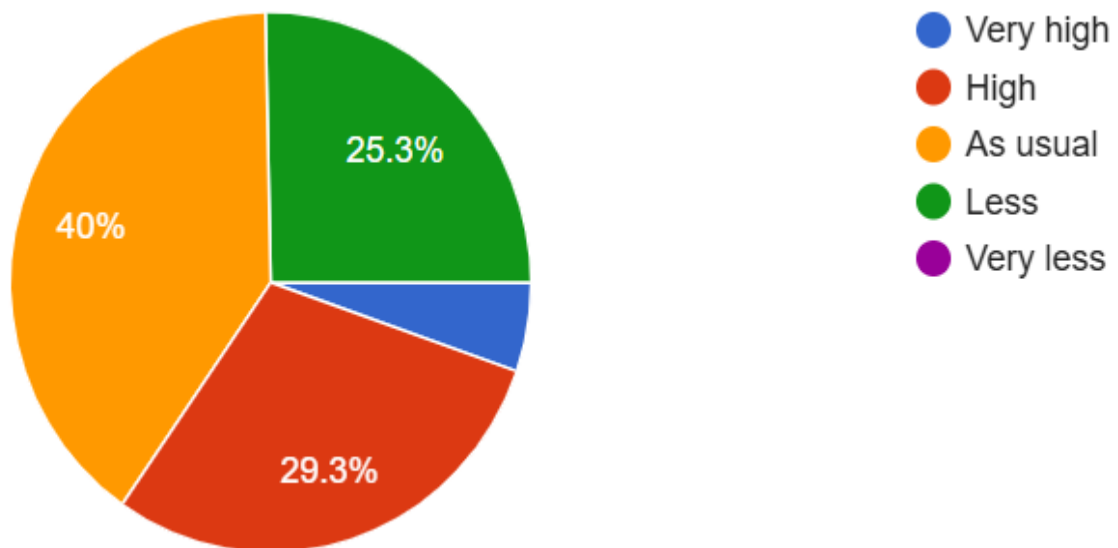


- Saving transaction cost
- Saving transaction time
- Getting access to remote
- Ensuring secure payments
- Others

Section C: Mobile Banking



- Convenience
- More interest
- Fraud reduction
- More savings
- Others



Assessing the Determinants of Customer Satisfaction with Mobile Financial Services (MFS) in Bangladesh



A Thesis Report

*Submitted to the Faculty of Business Studies,
Bangladesh University of Professionals in Partial Fulfillment of
the Requirements for the Degree of
The Master of Business Administration (MBA)*

07th October, 2025

ABSTRACT

This study aims to examine customer satisfaction and knowledge gaps in Mobile Financial Services (MFS) in Bangladesh, focusing on bKash, Rocket,

Nagad, Upay, and MCash. It evaluates how effectively these providers meet customer expectations and identifies gaps in service offerings. The research also assesses industry competitiveness and strategic insights in Bangladesh's digital financial sector.

This study uses qualitative and quantitative methods to analyze customer satisfaction and knowledge gaps in Bangladesh's MFS sector (bKash, Rocket, Nagad, Upay, MCash) through surveys, statistical tests, and strategic models. Data from 150 respondents were analyzed using SPSS to identify key factors affecting satisfaction and service quality improvement.

The study found that perceived cost has the strongest impact on customer satisfaction with Mobile Financial Services (MFS) in Bangladesh. Customers who view transaction fees as fair and affordable are more satisfied and loyal. Other factors like security, responsiveness, empathy, and reliability showed weaker effects, as users now consider them standard features. Overall, satisfaction is driven mainly by value for money, highlighting the need for transparent pricing and fair charges.

Key Contribution study contributes to understanding how perceived value and cost fairness influence customer satisfaction in Bangladesh's digital finance sector. It reveals that value-for-money outweighs basic service features in shaping user satisfaction. The research offers practical insights to enhance MFS quality through transparent pricing and stronger customer engagement.

Keywords: Mobile Financial Services (MFS), Customer Satisfaction, Perceived Value, Cost Fairness, Service Quality, Value for Money, Digital Finance, Customer Perception, Regression Analysis, Strategic Insights.

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CHAPTER 1: INTRODUCTION

Background:

According to the World Bank (2021), Bangladesh is one of the fastest-growing economies in the world. The primary strategy of the Government of Bangladesh is to promote digital innovation through an increase in mobile money and digital platforms. Digital innovation has helped to reach unbanked and rural areas through digital financial services. It has proved to be an effective tool for alleviating poverty and supporting the economy to attain sustainable development goals (SDGs). Thus, digitalization and innovation play a greater role in helping Bangladesh attain a middle-income status (World Bank, 2017). The financial sector is dominated by commercial banks in Bangladesh; however, in recent years, agent banking has been overtaken by MFS in networks and customer bases.

Since the advent of Mobile Financial Services in Bangladesh in 2011, there has been a considerable increase in all measures, ranging from account use to transaction values. From sending and receiving money to paying for utilities, transit, education, medical, and retail expenditures, the business has evolved into a one-stop shop for all kinds of activities. Financial inclusion has been accelerated as a result of this invention.

Mobile financial services (MFS) refer to the use of mobile phones to access financial services and conduct financial transactions. It covers a wide range of financial services, including fund transactions and payments, that can be accessed and delivered via mobile platforms. In Bangladesh, there are six major cities where people from all across the country come to work. As a result, at the end of each month, they transfer money back to their home using various methods such as the post office, courier, or another individual. The majority of the media mentioned here are neither secure or legitimate. As a result, they needed to send money back to their home in a proper and legal manner. For a long time, a few visionaries in Bangladesh have been monitoring this and working hard to find a solution to this sensitive subject.

Finally, they identified a solution, but they were concerned about the implementation of this new approach due to our country's low literacy level. The majority of individuals are unaware of the present world's technical advancements. Finally, in early 2010, with the consent of the Bangladeshi central bank, Dutch Bangla Bank introduced the long-awaited mobile financial service (MFS) via the mobile network.

From there, the revelation begins.

Unlike other countries, Bangladesh has chosen a bank-led mobile financial service approach. Banks will be in charge of the show under this model, which will be associated with telecom providers. Bangladesh's government made this decision by prioritizing the issue of money laundering.

The Bangladesh Bank then granted 28 commercial banks licenses to begin offering mobile financial services in Bangladesh. In addition, 19 banks in the market offer the service (Source: Bangladesh Bank website). Three of the banks' licenses were later revoked due to regulatory concerns. There are

now 25 banks on the market that are permitted to provide this service. Banks alone will not be able to deliver mobile financial services; telecom carriers are one of the most crucial components in getting the business up and running. Most operators realized this early on in the MFS process, which is why they compelled the banks to enter into a deal that considerably benefits the telecom operators. They charge the banks exorbitant fees to operate. Bangladesh Bank has recently discovered this problem and is taking appropriate steps to correct it. This service is becoming increasingly popular in Bangladesh. It was first introduced in early 2010, and it has quickly grown to become one of the country's most important industries. The industry will achieve new heights if operators' interoperability and compliance are ensured, the service's cost is reduced, and a level playing field is ensured. It is a well-known fact that the digital platform has ushered in a whole new realm of full-speed appeal and acceptance by people all over the world.

While the digital platform encompasses everything from e-commerce to mobile banking to the society's front door of health, education, and government, as well as all other sectors that connect people for convenience. In Bangladesh, too, digital platform transactions have ushered in a new era. Furthermore, the trend of using digital platforms for payments is largely accepted by the Bangladeshi people, indicating that this business would have a significant impact on the country's economy. I have made every effort in this study to address Bangladesh's MFS services and their gaps in meeting market demands.

Although mobile banking via MFSs is not widely used among the studied businesses, a considerable number of them utilize it to transfer funds

between accounts and gain access to their accounts. When it comes to the influence of MFSs on revenue and profit, the majority of the surveyed companies agree that MFSs assist them improve sales revenue and profit. However, a sizable minority of businesses argued that MFSs lower their business costs, and even remained neutral on whether MFSs enhance their business investment. Several main issues regarding mobile banking services in Bangladesh are identified in this study. The majority of clients say that MFSs operators' service prices are too costly.

Many clients have had unpleasant experiences with criminals using MFSs to blackmail and hijack them for money. Illegal remittance from foreign countries is another major issue that MFSs are exposing. Migrant workers in the Middle East,

Singapore, and Malaysia, among other places, transmit money to Bangladesh through a coordinated network of MFSs agents, which are illegal in Bangladesh.

Rationale of the

Study:

From the previous studies done among the users of different mobile financial services throughout this country, it is clear that, people have vague knowledge regarding this platform. They are not aware of the market performance of the competitors, let alone their service related information. It is true that, after the declaration of Bangladesh Bank regarding the establishment of mobile financial service platform, number of competitors

have increased remarkably. But unfortunately, only few of them are glittering with their presence across the country. It is because of not only for their lack of strategies, but also for the weak and incomplete perceptions of the customers. As the pioneer, Bkash, Rocket is dominating the majority of the market. But it does not mean that the rest competitors are not skilled. One of the main reason is- people tend to grasp their root, they prefer to stay with their comfortable environment. They are afraid of welcoming the changes easily. Despite competitors provide different facilities and opportunities, customers hesitate to engulf their offers because of this fear of not to change. Actually, competitors offer unique and attractive strategies for their customers, yet they fail to boost their market share because they emphasize less on customer's perceptions. How does a customer think, what does he/ she want, what is the level of his/ her comfort zone, which features does a customer prefer to use frequently- these perceptions are not evaluated or surveyed before.

This study is emphasizing to figure out the core needs or demands and the texture of customer's mindful thoughts. How much do they know about their mobile financial service providers, which basis of measurements stick them to that particular provider company- these aspects are analyzed through the conduction of survey among more than 150 customers of top MFS companies in Bangladesh.

Therefore, this report will undoubtedly help the MFS providers to improve or modify their strategies. It will identify the degree of the least knowledge gap of the customers. The breakdown of the recent performance of top leading MFS companies through several methods will ease the opportunity for customers to bridge that gap within very short time, which will ultimately shape their perception about MFS utilization.

1.3 Problem Statement:

Several factors, including technical and security standards, regulatory and supervisory issues, as well as business and legal issues, have been identified as potential roadblocks to the introduction of mobile financial services in Bangladesh. The following issues have been identified as key challenges in mobile financial service systems around the country:

People are unaware of the distinction between having an MFS account and conducting an over-the-counter transaction. Because the majority of customers have access to mobile financial services but only a small percentage of them have an ownership account, there is no way to identify customers who send and receive money over the

counter.

People who live in remote areas have limited access to technology. As a result, they have a low level of trust in technology. Acceptance of virtual money rather than physical currency in this case is a tricky

issue.

Some MFS providers are seeking to spur innovation, such as by introducing Deposit Pension Scheme (DPS) accounts, however they are hampered by low investment and low uptake. Mobile Financial Services have primarily been utilized for peer-to-peer (P2P) transfers, rather than for other purposes such as savings or bill

payment.

Customers, agents, and distributors in Bangladesh have recently been the victims of a series of high-profile robberies. If one person gives money to another person in error, that person will not be able to recover the funds unless the other person returns the funds to him. Because the majority of people who use MFS are uneducated, the chances of making a typing error are great.

Absence of supportive policies, guidelines, rules and regulations relating to e- transactions are barrier to development in MFS. Considering this scenario, the performance of MFS are mainly dependent on the customer's confidence in terms of security and cost effectiveness.

Research

Objective

Broad Objective:

To explore the gap of customers' knowledge regarding MFS by analyzing the measurements of their satisfaction and recent performances of the top 5 leading MFS companies.

Specific Objective:

To review and analyze the present MFS market situation, with an emphasis on bKash, Rocket, Nagad, Upay, and mCash, based on the values provided by companies. This analysis aims to determine market competitiveness by analyzing each company's strengths, weaknesses, and external environmental factors that affect the MFS industry. The specific objectives include-

To measure the effectiveness of the current value propositions of bKash, Rocket, Nagad,

Upay

and

MCash

.

To analyze the companies' external environment and future

growth.

To know companies' internal strengths and

weaknesses.

To find out
the gaps of companies' offering services
to their

customers.

To analyze the competitive performance of top MFS providers (bKash,
Rocket, Nagad,

Upay

, and

MCash

) based on customer perception and service quality dimensions.

CHAPTER 2: LITERATURE REVIEW

According to the 'State of the Industry Report, 2018, mobile money has facilitated 79 percent of Ecommerce transactions, and global mobile penetration has increased from 29 percent to 43 percent between 2013 and 2017. These figures clearly demonstrate the global appeal of the digital platform. According to the 2015 Inter-Media FII Bangladesh Wave Report,

around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. This is due to a misunderstanding of the differences between having an MFS account and transacting over the counter. As a result, clients who send and receive payments using OTC have no way of knowing who they are. MFS suppliers have yet to develop unique products or services that will turn MFS into a daily requirement for clients. Adults are very aware of MFS (92 percent), yet just one-third of those who are aware use it. Adults are not signing up for MFS for the second most important reason: "Using an MFS account is tough." According to Cheston et al. (2016), new technology, enabling legislation, communications, infrastructure, and business prospects, are currently fueling the growth of financial inclusion.

According to Hossain and Ahmed (2012), mobile financial services have created a significant power in providing financial services to the poor and disadvantaged. Financial inclusion is a top objective, and there is a policy in place to ensure that emerging and developed countries have equal access to financial development (Islam & Mamun, 2011).

Bangladesh's central bank has taken the lead in promoting financial inclusion, and MFS has emerged as a vital tool for doing so (Chowdhury, 2014). Bangladesh's financial inclusion is being aided through environmentally friendly, long-term bank financing to the agriculture industry (Sarker et.al, 2015). MFS frauds and occurrences are increasing by the day, according to IT and MFS specialists, who say that some MFS providers have recently caused problems in this sector by illegal situations. They are opening consumers' accounts in a rushed manner, disregarding all norms and regulations (Azad, 2021). Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main

problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The most difficult duties are maintaining financial security in rural settlements and sending financial information. Wireless network service providers, mobile application developers, and bank IT divisions must all work together to resolve the challenges. Shortages or problems in mobile banking caused by wireless connections of mobile phones will result in losses, and restricted battery life may limit the usage of mobile services (Kuismaa et al. 2007). One of the best technological stories of the previous decade is the spread of mobile phones in developing countries. Indeed, there are probably more people with mobile phones than bank accounts in the developing world (Porteous, 2006). In 2012, Bangladesh had a population of roughly 16 million people, with only 13% having bank accounts and more than 95% having mobile phones (ADB 2013). As a result of this circumstance, the Bangladesh Bank decided to allow commercial banks to provide financial services to "the banked and the unbanked" over mobile networks, which are known as mobile banking, mobile transfers, and mobile payments.

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

In 2011, the Boston Consulting Group conducted a research on the socioeconomic impact of mobile banking services, which included an analysis of Pakistan, Bangladesh, India, Serbia, and Malaysia. According to this survey, mobile banking is widely utilized in Bangladesh for bill payment, savings, and remittance, but not so much for credit and insurance. Several other researchers (e.g. Shibli and Tareq (2016), Khan et al.(2016), Islam,S. (2013); Parvin, A. (2013) also conduct study on different aspects of mobile financial services in Bangladesh. As previously mentioned, Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

Research

Gap:

Especially after the COVID-19 outbreak, mobile financial services are getting more popularity in Bangladesh. That is why, it is important to measure the customer satisfaction with this service. Although the literature on Mobile Financial Services is becoming rich very fast, so far, no comprehensive study has been undertaken to figure out the satisfaction and convenience level of the customers while accessing MFS.

From the available literatures it is evident that, some studies have been conducted in Bangladesh regarding customers' attitude towards mobile banking services, problem and prospects of mobile banking services. But, no major study is conducted till now that measure customer satisfaction level with mobile financial services.

The present study is devoted to fulfill this gap and also to propose some suggestions for further development of mobile banking in the country. So in this study, customers' satisfaction determinants for mobile banking services and their degree of fruitfulness will be identified and analyzed.

CHAPTER 3: THEORETICAL DISCUSSIONS

From the last 5 years, the competitive environment in MFS platforms has become very intensely competitive. bKash has always been in the lead whilst other new entrants have also emerged in this sector to interfere the monopoly market of bKash. For this research, the report tries to cover the industries of bKash, Rocket, Nagad, Upay and mCash.

In order to examine the market environment and the degree of competition among the rivals, for this paper the Porter's Five Forces model and PESTEL Analysis have been done for bKash, Rocket, Nagad, Upay and mCash separately. In addition to that, Competitive Strength Assessment (CSA) Analysis and Strategic Group Mapping are presented for better understanding of the current situation and rivals of above mentioned industries through these analyses. Not only that, after having done with all the theoretical analysis matters, the SWOT analysis in the last tries to cover the industries' strength and weaknesses, what could be their opportunities and threats or challenges.

The theoretical framework is also included, which is a model to assess the customer's perceptions on the basis of some variables like reliability, responsiveness, assurance, ease of use, and cost tangibles, which are perceived as the determining factors of their customers core satisfactions.

Yet again, to mention, this is an experimental research and henceforth, all the analytical matters have been done based on the theories and collected information.

3.1 Conceptual Model Components

For this study, the following constructs are included as independent variables:

Porter's Five Forces

Model:

Forces	Effects
Intensity of Rivalry (High)	Though bKash and Rocket are dominating in the market, Nagad performing significantly. Islami Bank's MCash or United Commercial Bank's Upay may be major competitors of them. With other banks' inclusion in MFS industry, the rivalry among existing competitors is High.
Threat of New Entrants (Moderate)	After the declaration of Bangladesh Bank for a new rule of every bank having mobile banking service, it is not that much hard to enter in this industry. But existing companies have already created brand positioning and economies of scale in coverage, which act as entry barriers. Therefore, threat of new entrants is moderate.
Substitute Product (Weak)	The substitute products of MFS industry are credit card, ATM card, government post office money order, which are either nearly obsolete or in embryonic phase. Hence threat of substitute product is very little.

Bargaining Power of Buyers (Majorly Moderate)	At least six or seven mobile financial service providing companies are performing fruitfully across this country. All of them provide almost same services. So, the bargaining power of buyers in this industry is Moderate, except the buyers in the remote areas, where fewer alternative providers are available.
Bargaining Power of Sellers (High or Moderate)	MFS depends on fewer telecommunication network suppliers such as Grameenphone, Banglalink, Robi and Teletalk. As a result, these suppliers have strong bargaining power. But the agents, who are an important source of suppliers in providing core transactional services like deposit or withdrawal of cash are increasing in number. Therefore, these suppliers bargaining power is moderate.

Table 3.1: Porter's Five Forces Model for MFS Performance Assessment.

SWOT

Analysis:

Table 3.2: SWOT Analysis of top 5 MFS Companies (Strength)

MFS

Company

Strengths

bKash Holds 80% of the Market

Share.

Having agents in every corner of the

streets.

Brand image and reputation in across the

country.

Rocket Strong Agent

Network.

Very Low account operation cost.

Largest ATM network to facilitate cash out service to its

clients.

Nagad Lesser regulatory restrictions in contrast to the private sectors

as backed

up by

government.

Enjoys higher transaction limit as it does not fall

under the

reach of central

bank.

Tuition

fees, bills or payments are free of

cost.

MCash Religious

Sentiment.

Adequate finance and reserve for

development.

Strong customer base in deposit, investment and

foreign remittance.

Upay	Positive brand image of parent company
	-
	United Commercial Bank
	Block Chain and QR code base innovative technology.
	Lower customer acquisition cost.

MFS

Company

Weakness

bKash	<p>High service charge.</p> <p>No security to the field agent.</p> <p>No ATM booth services like Rocket DBBL company.</p>
Rocket	<p>Failed to operate as a separate entity like bKash.</p> <p>Insufficient money in ATM.</p>

Nagad Significantly fewer agents and merchants compared to rival
Bkash

.

does not provide any kind of transaction service for online
shopping.

MCash Not enough agents across the

country.

Not adequate advertising.

Parent company IBBL has often been under fire for

allegedly

financing terrorism and political

violence.

Upay	Traditional mobile banking.
	Lower number of users.

Table 3.3: SWOT Analysis of top 5 MFS Companies (Weakness)

MFS	
Company	Opportunities

bKash Online shopping popularity is increasing more and more after COVID-19 situation. With major market share, online shoppers can be major target for

them.

As the company has joint ventures with two large international money transferring company, therefore, it can offer international transaction service in more extensive

way.

Adding

priyo

number facility can increase their customer

daily

transaction levels.

Rocket Focus on remittance service though mobile

banking.

Growth rate of mobile banking is increasing day by

day.

Nagad Low cost of service fuels new wave of

entrepreneurship.

Lowest transaction cost and easiest way to open an MFS account
can

lead to possess a remarkable share in the market

rapidly.

MCash	<p>Opportunity to avail the modern banking facilities to the rural area, where their MFS facilities does not reach till now.</p> <p>Lots of potential customer and profit growing opportunity through using religious sentiment.</p>
Upay	<p>Inclusion of Lifestyle payment in traditional mobile banking system.</p>

Table 3.4: SWOT Analysis of top 5 MFS Companies (Opportunities)

MFS

Company

Threats

Rapidly growing money

laundering.

Huge concern for terror

bKash

financing.

Increasing number of competitors with attractive and

challenging

offers.

Though ATM services are often available, but majority of the customers are not literate enough to access their

technological

ease for cash withdrawal services.

Number of inactive account holders are

increasing.

Nagad,

SureCash

Rocket

,

Surecash

,

MCash

are offering attractive

features

that may lead to lose of market

shares.

Low cost of service fuels new wave of

entrepreneurship.

Nagad

Lowest transaction cost and easiest way to open an MFS account can lead to possess a remarkable share in the market

rapidly.

Threat of cyber security risk.

MCash

Recent restructuring of different top post including the MD and chairman.

Cheaper rate of switching

cost.

Upay

Server hacking and money

laundering.

Table 3.5: SWOT Analysis of top 5 MFS Companies (Threats)

PESTEL

Analysis

In order to know about the general environment and to maximize the opportunities and to minimize threats of MFS industry, PESTEL Analysis is very important to do. The following PESTEL analysis covers the topics for this paper which have been presented below:

Political Environment:

In spite of the political instability of Bangladesh and internal disputes among the parties the MFS industry has been able to suppress the hindrance by the political irregularities and has obtained its mark in Bangladesh. On the basis of pro-active and forward looking approach, the vision of building a 'digital' nation of the Government and Bangladesh Bank has enforced and accelerated the technological advancement of MFS platform in Bangladesh. Above all else, VAT has been deducted by the Government for mobile banking platforms which is a positive attitude shown for this sector to grow.

Economic Environment:

There are nearly 168 million people in Bangladesh at current time. The available data that from 2017 to till this date Bangladesh has made a successful story of MFS. Moreover, the secondary data shows that 43% of the population are financially included, 33% have a mobile account. Moreover, the total number of registered accounts are only 9% and only 8% are the active users. Furthermore, 95% of user transaction is person-to-person (P2P) based and only 15% of the users using mobile apps for bill payments and loan activities. All of these data shows the impact of MFS on the economy of Bangladesh and how the industry is being grown by the time being towards the digitalization. Hence, the economic factor for MFS services is very positive.

A Research on Digital Financial Services of Bangladesh

Social Environment:

The social factor has strong and positive impact on the MFS industries. MFS can be used by anyone at any time and from anywhere via e-wallets and internet connection which eliminates the hassle of traditional banking activities. In addition to that, the

digital platform provides a secure and low cost services. For the usefulness and mass accessibility of MFS services, the attitude of people towards this industry is very positive. In a nutshell, the MFS industry is being attracted and accepted by the health, education, mobility and every sectors of the society.

Technological Environment:

The technological environment of MFS platform has positive impact on the industry. Each and every digital fund transaction companies have used almost same technology so far. On the flip side, technology requires innovation and advancement. Though bKash has been the leading players of all and has reached to its maturity level is still constantly trying to improve and update by innovation and diversification to be in the same place. On the other hand, iPay and SureCash are using cryptographically secured QR code based technology first ever in Bangladesh. Last but not the least, all these platforms are performing hard to hard competition for their better gain.

Legal Environment:

Legal environment for the industry is very positive. Certain laws and regulations have been developed and revised by the Government for MFS industry. In addition to this, in 2011 the Bangladesh Bank issued the “Guidelines on Mobile Financial Services (MFS) for the Banks” which has been revised and updated later in 2015.

3. 2 Comparison of Service Charges between MFS Providers:

Table 3.6: Comparison of Service charges between MFS Providers.

Mobile Financial Service	NagadUpay				mCash
	bKash	Rocket			
Account opening	Free	Free	Free	Free	Free
Cash-in at an agent	Free	Free	Free	Free	Free
Cash-in at the bank branch	N/A	BDT 10	N/A	Free	Free
Cash-out from an agent	1.85%	1.67%	1.45%	1.8%	1.80%
Cash-out from ATMs	1.49%	0.9%	N/A	N/A	Tk 5 or 1%
Cash-out from bank branches	N/A	0.9%	N/A	1.8%	Tk 5 or 1.80%

Transaction charges

I also noted how it is costly to operate an MFS account because of cash out charges which forces them to limit their usage:

At first, I used my account for paying bills, sending money, and cash in-out, but felt it charged a lot for these services. For 1000 cash out, Bkash charged me taka 17.50, so when the amount is large, the cash out charge is also higher. In addition, when I sent money for payment, the receiver often said to add cash-out charges to the actual amount. It costs me a lot after retirement (Respondent 8).

As a result, the respondents would prefer to not make cash transactions through the MFS. It is seen that in Bangladesh, MFS providers charge 1.8%–1.85% (previously 2%) cash-out charges on any Tk 1,000, and it is the highest in the world, which discourages customers from using the services (Islam, 2021). In Bangladesh, the high transaction cost for carrying cash-out transactions may discourage users from using MFS platforms (Hasan, 2021). Thus, extra charges for making payments may also discourage people from increasing MFS usage

Research

Framework:

Mobile Financial ServicesMeasurements of Satisfaction

ResponsivenessEase of useAssuranceCostReliabilityMobile PaymentMoney
TransferMobile Banking

Figure 3.1: Diagram of the Research Framework.

3.4 Development of Hypotheses:

This section discusses the theoretical basis and empirical evidence supporting each hypothesis. The proposed hypotheses were developed based on previous literature in service quality, customer satisfaction, and mobile financial service adoption. The five dimensions — Cost (Willingness to Pay), Security (Assurance), Responsiveness, Empathy, and Reliability — were selected because they represent critical factors that influence consumer satisfaction and loyalty in digital financial platforms.

H1: Cost / Willingness to Pay

Hypothesis:

People who are willing to pay higher service charges are usually more satisfied and more likely to keep using mobile financial services (MFS).

Perceived cost, or willingness to pay, reflects customers' evaluation of whether the price they pay for a service is fair and justified by the benefits received. According to Zeithaml (1988), perceived value is the customer's overall assessment of the utility of a service based on what is received and what is given. When users believe that the benefits of convenience, speed, and accessibility outweigh transaction fees, they perceive higher value, which leads to greater satisfaction and loyalty. Studies such as Chen & Dubinsky (2003) and Parasuraman et al. (1988) have found that fairness of price and perceived value have a direct positive effect on customer satisfaction in digital service contexts. Similarly, Rahman & Sloan (2019) observed that in Bangladesh's fintech market, users remain loyal to MFS platforms when they view charges as fair relative to service quality.

This hypothesis was chosen because price sensitivity is a key issue in the Bangladeshi market, where most MFS users belong to middle or lower-income groups. Understanding how willingness to pay influences satisfaction helps determine whether

service affordability remains a critical competitive factor.

H2: Security (Assurance)

Hypothesis:

When people feel that MFS is safe and trustworthy, they become more satisfied and willing to use it more often.

Security and assurance are among the most vital factors influencing trust and satisfaction in online financial systems. Yousafzai et al. (2003) and Kim et al. (2010) emphasize that perceived security — the belief that a digital system protects users' money and personal data — significantly enhances customer confidence and satisfaction. In mobile banking and MFS contexts, users are more likely to continue using services they perceive as safe from fraud or misuse. Flavián & Guinalíu (2006) found that the perception of system reliability and data protection builds user trust, which directly contributes to satisfaction and repeated usage.

Security is a primary concern in Bangladesh's MFS industry, where cases of fraud or agent misconduct occasionally affect user confidence. Hence, including this variable allows assessment of how security assurance influences satisfaction and continued usage behavior.

H3: Responsiveness

Hypothesis:

If MFS agents or customer service respond quickly and helpfully, users become more satisfied and loyal.

Responsiveness refers to the willingness and ability of service providers to assist customers promptly and effectively. It is one of the core dimensions of the SERVQUAL model proposed by Parasuraman et al. (1988). According to Amin et al. (2012), responsiveness significantly influences satisfaction in online banking and mobile payment services because timely assistance builds trust and confidence among users. In the context of MFS, agents' quick problem-solving and courteous behavior enhance

user experience and reduce perceived service risk. Raza et al. (2020) also found that the responsiveness of service agents improves user satisfaction and encourages customers to continue using digital payment systems.

Responsiveness is included because MFS users in Bangladesh frequently interact with service agents for cash-in, cash-out, and complaint handling. Their perception of agent responsiveness plays a crucial role in determining their overall satisfaction with MFS services.

H4: Empathy

Hypothesis:

The simpler and more convenient the MFS app or system is, the more satisfied users become.

Empathy refers to the level of care and individual attention that a service provider offers to its customers. In digital services, it also extends to user convenience and accessibility. According to Dabholkar (1996) and Ladhari (2009), systems designed with user-friendliness and customer comfort in mind enhance satisfaction because they reduce frustration and make transactions easier. In mobile applications, empathy translates into an intuitive interface, multilingual support, and services designed for diverse customer needs. Koksai (2016) found that convenience and simplicity are strong predictors of satisfaction in mobile banking, particularly among users with limited digital literacy.

Empathy was selected because ease of use and accessibility remain essential for MFS adoption, especially in developing countries like Bangladesh, where users' technological familiarity varies widely. Measuring empathy helps assess whether customers feel understood and supported by the service design.

H5: Reliability

Hypothesis:

The more services and options an MFS provider offers (like bill payments, savings,

ticket booking, etc.), the higher the satisfaction.

Reliability is defined as the ability to deliver promised services dependably and accurately. In the SERVQUAL framework (Parasuraman et al., 1988), reliability consistently emerges as the strongest determinant of service satisfaction. Studies by Ayo et al. (2016) and Islam & Rahman (2019) confirm that when digital financial systems provide consistent, error-free, and comprehensive services, user satisfaction and trust increase substantially. In the MFS context, reliability includes not only system uptime and transaction success rates but also the breadth of services available. A platform that enables multiple functions — such as fund transfers, utility bill payments, airtime recharge, and ticket purchases — adds value to customers' experience and enhances loyalty.

This hypothesis was included because reliability and service breadth are critical success factors for MFS providers in Bangladesh. As competition intensifies, offering dependable and multifunctional services helps retain customers and strengthen satisfaction.

CHAPTER 4: METHODOLOGIES

The purpose of this study is to analyse customer's mindset regarding the MFS available for them. More than 150 million people of Bangladesh are using MFS. But majority of them are unaware of the ABC of MFS. Therefore, their perceptions and satisfaction levels are poor enough to be concerned. A poor perception leads to a weak level of satisfaction. To learn their reasons of dissatisfaction, at first their perceptions and context of knowledge should be understood. The measurement basis, through which they evaluate the MFS features, is required to be figured out. Hence, the purpose is to learn the recent situation of the competitive market of the MFS industry, so that

this information can bridge the gap of customer's knowledge and modify their perceptions to take full advantage of modern MFS features.

Research

Design:

A research design is a suitable framework or technique adopted by the researchers for the subject matter to be researched so as to set up a convenient way to get an efficient outcome.

Both the qualitative and quantitative research designs has been utilized for this study. Some essential independent variables such as Reliability, Responsiveness, Assurance, cost, empathy, quickness, accessibility, availability etc. correlated with each other are focused in details for a descriptive research. Also use inferential research by taking interviews. These variables are used as the basis of the dependent variable on customer's satisfaction with their perception. The data of the study have been collected from the customers through quantitative approach using MFS at a particular phase of time within the last three months, so the findings are applicable for the recent point of time and may not be applicable for other time period.

Research

Methods:

Since both of the qualitative and quantitative researches are included, the performance of the competitive market is measured on the basis of Porter's five forces model, PESTEL Analysis and SWOT Analysis. These methods played crucial role on the way of descriptive research to assess the recent performance of top five dominant MFS companies- bKash, Rocket, Nagad, MCash and Upay.

After developing these methods, customer's perceptions were measured through a structured questionnaire on the basis of some variables according to the research framework.

Development of a

questionnaire:

A structured questionnaire has been developed using appropriate scale and self-administered attempt to measure the variables under study.

After developing the research framework our next step is to set a number of questions based on the structure we proposed. Survey method of data collection offers some advantages over other methods as it can collect information from a wide range of participant within shortage possible time.

The measurement items used in the study is consistent with the study of other researchers as these are set after a rigorous analysis of the previous literatures. Some new measurement items are also be included in the questionnaire as these are validated based on the contextual validity analysis. An appropriate performance measurement scale is utilized to measure the operational performance of the MFS for all the constructs under study.

Sampling Technique and Collection of

Data:

To collect data, questionnaires was self-administered to the customers of MFS operating in Bangladesh. The respondents are people who have practical knowledge of taking service in any form from any of the MFS available in Bangladesh. So the citizens having one or more accounts in any of the MFS or taking services in any form of the MFS products are the total sampling frame for the study. The respondents in the sample were chosen using judgmental sampling technique and data were collected through survey with relevant questions and answers method. These surveys were conducted in the google form. I had planned to collect response from more than 150 respondents. In this study, 5 point Likert Scale technique is used along with rank questionnaire to analyze customer's level of satisfaction and perceptions while availing the MFS features.

4.5 DATA ANALYSIS TECHNIQUES

Data analysis is an essential stage in any research process, as it allows the researcher to transform raw data into meaningful insights that address the study's objectives. In this study, the data collected from 150 respondents were analyzed through both descriptive and inferential statistical techniques to test the proposed hypotheses and examine the relationships among the key variables affecting customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

Before analysis, all survey responses were carefully coded and cleaned. Non-numeric answers were converted into numerical scales to make the data suitable for statistical computation. For instance, the responses to the question "Charges you are willing to pay per Tk. 1000 transfer" were coded from 1 to 5, reflecting the level of willingness to pay. Similarly, statements related to assurance, responsiveness, and service features were averaged to form composite variables representing overall user perception in each area. Descriptive statistics, such as mean, standard deviation, minimum, and maximum, were calculated to summarize the main characteristics of the dataset. This provided a clear overview of users' general attitudes toward cost, security, responsiveness, ease of use, and overall satisfaction with MFS.

To test the hypotheses, inferential analyses were applied and used (Statistical Package for the Social Sciences) SPSS. Correlation analysis was used to explore the relationships among variables and ensure there was no high multicollinearity. Then, a multiple linear regression model was conducted to measure the impact of each independent variable on the dependent variable — customer satisfaction. Finally, the hypotheses (H1-H5) were tested using the regression results, with significance determined at the 5% level ($p < 0.05$).

CHAPTER 5: RESEARCH FINDINGS & ANALYSIS

By means of a structured questionnaire, the following information were retrieved from the respondents:

Demographic Features of the Respondents:

Age

Range	Frequency	Percentage
18-25	48	32
25-30	54	36
30-40	23	15
40-50	13	9
Above 50	12	8
Total	150	100
Occupation		
Occupation	Frequency	Percentage
Student	68	45
Service Holder	35	23
Businessman	17	11
Housewife	21	14
Laborer	9	7
Total	150	100
Monthly Income		
Income Range (BDT)	Frequency	Percentage
6000-10000	17	11

10000-20000	51	34
20000-30000	38	25
30000-40000	18	13
40000-50000	14	9
Above 50000	12	8
Total	150	100

Table 5.1: Demographic Features of Respondents.

Demographic: 5.1

From the above table, it can be interpreted that most of the MFS users in this survey were aged from 25 to 30 containing the frequency of 54 out of

150 and the percentage is approximately 36. It is clear that people from 18 to 30 years of age use mobile financial services more frequently than other age groups.

It is perceived from the participants that, people tend to save money to invest for a higher return after the age of 30. Therefore, after this age, they prefer a bank account rather continuing a mobile banking platform. Because MFS account provides limited or no return at all, moreover, it facilitates limited services than bank accounts.

The table shows, the highest number of respondents were the students having percentage of approximately 45. While, 23% were service holders, only 11% were businessman, 14% were housewives and 7% were the day laborers. MFS services are found more popular among students and the best method of financial service for day laborers.

The lowest monthly income was ranged from BDT 6000 to BDT 10000. And the highest range surveyed belonged above BDT 50000. According to the graph table, approximately 34% of the population had earnings ranged from BDT 10000 to 20000, which indicates that most respondents have an income level between Tk. 10000 to 20000 on monthly basis.

Portfolio and Popular Features of MFS:

Portfolio		
MFS	Frequency	Percentage
bKash	78	52
Rocket	31	21
Nagad	23	15
Upay	11	7
mCash	7	5
Total	150	100
Most Frequently Used Features		
Features	Frequency	Percentage
Cash in/ Out	152	76
Mobile Recharge	181	91
Send Money	89	44
Utility Bill Payment	63	32
Food Delivery Payment	52	26
Uber/ Pathao Rides Payment	34	17

Table 5.2: Portfolio and Popular Features of MFS

Portfolio MFS Graph: 5.2

It is clear from the survey again that the use of bKash is the highest amongst the respondents and as always, bKash is in the lead with having 78 frequencies and approximately 52% of users. The lowest responses were for the mcash with only 7 frequencies the survey could find and the percentage is only around 5%. It is found that the proportion of users using MFS other than bKash is quite same and remarkably less than bKash.

The table shows that, every 9 people out of 10 prefer their MFS for Mobile recharge services. That means the mostly used feature is mobile recharge for daily basis. The second most used feature is cash in or out facilities. Every 8 users out of 10 use this feature. Users tend to use MFS less for any ride or food payment.

The recent MFS system is widely accepted by the people of all range. However, there is some gaps that have been identified from the previous researches and need to be taken care of. The following points have been found while assessing customer's perception and research investigation for this paper:

Higher service

charge:

The service charge that are being cut for every transaction using mobile wallet has been reported to high by many people including the respondents for this research. For further information, the Government does not take any VAT from the MFS companies.

Safety**issues:**

Plenty of complaint can be found on this topic and it is obvious for the customers for their concerns on this fact. When it is about money, it is people's nature not to trust anyone. Similarly, there are cases that people have faced fraudulence due to the corruption of the authority or unsecured systems of payment. For this reason, MFS is trying to come up with a strong secure system.

Unsafe 4-digit PIN**system:**

Most of the MFS wallet is providing a simple 4 Digit PIN system which can easily be hacked and all the money and personal information a user can be leaked. This area needs to be improved.

Unexpected server

down

:

People often complain about the unexpected server down situation. The database of a company must be secured and connected with power supply for fast and better customer feed.

Issues of personal data

shared:

Almost all the MFS wallets asks for the personal data and documents including date of birth, NID, Driving license and passport. People of this country have trust issues regarding their personal data being shared with the company. Hence, transparency with the customers is needed.

Lack of

monitoring:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Following the customary

trend:

People tend to copy and follow the customary trends rather than making a difference. Same goes with the current MFS industries providing almost same features and services to the customers. Some of the most common features that every mobile banking apps provide are Cash in/ Cash out, Sending Money, Mobile recharge and bank payments. Whereas, a very few provides the services out of the boundary with still having some limitations. For instance, bKash is offering a diversified variety of services and others are following bKash.

Lack of understanding the concept of

MFS:

Although the MFS industry is booming very fast in Bangladesh, yet there are a lot of people who do not understand the concept of going cashless or E-money or the digital fund transferring process. Many of them as a consequence do not show any interest or bother to use MFS wallets for day to day transactions. Also, the people of rural area are not that much advanced or aware of this hassle free system. In addition, many cannot even operate a mobile phone properly except calling and answering to calls. As a result, MFS is not being able to include them in the system which is a crucial

problem in the country.

Lack of variation in features:

Every MFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

Generation

gap:

Generation gap is another problem or a challenge for the MFS companies as most of the people of this group is not technically advanced and have little knowledge over the current technology usage. Although companies are trying to solve this problem with various ways, the proper solution has not been found yet.

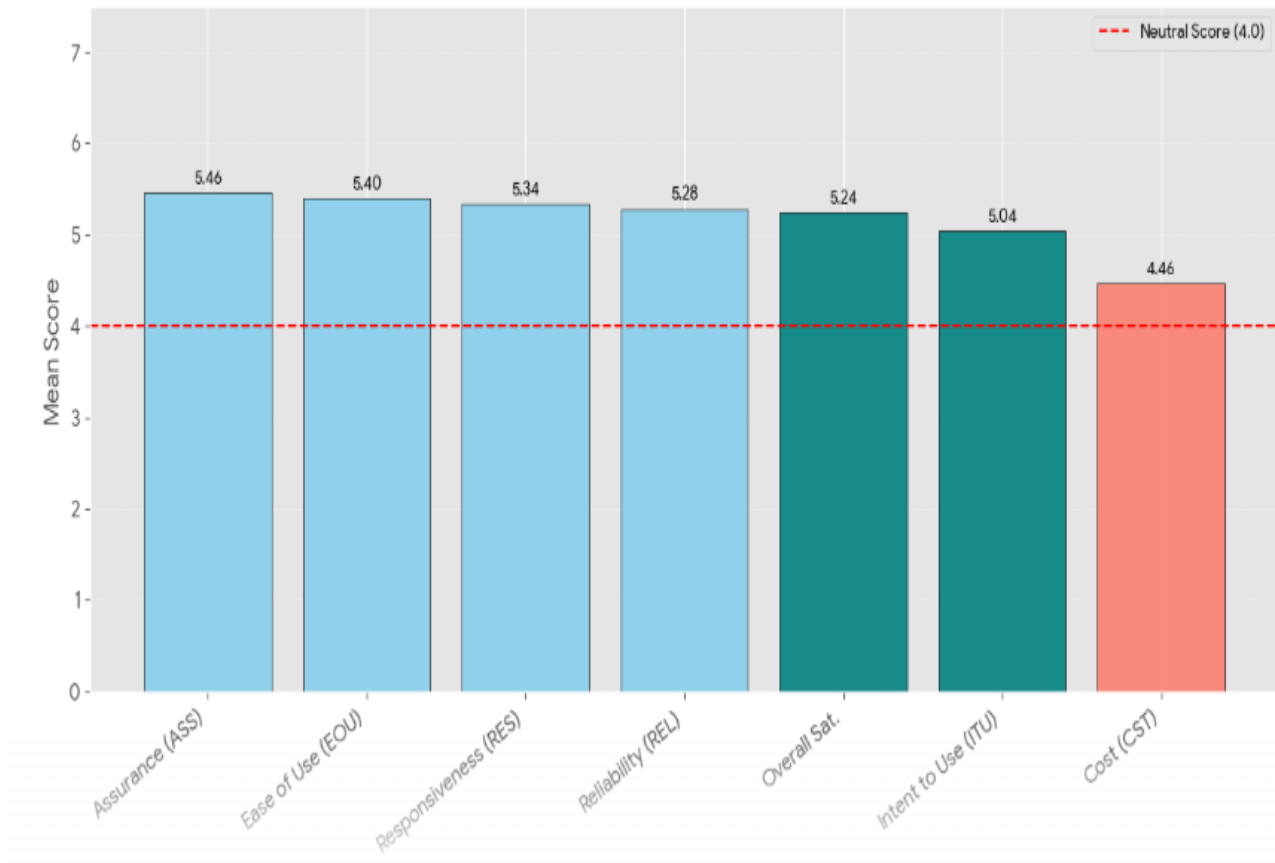
Interview/Survey Session

It designed to collect 50 structured responses to support your thesis on the determinants of customer satisfaction with Mobile Financial Services (MFS) in Bangladesh.

The questionnaire is developed to specifically measure the core determinants (REL, RES, ASS, EOU, CST) and the dependent variable (ITU) using a standardized scale. Interviews occurred in my university campus through my MBA Professional class. Where participants were my fellow members, classmates.

Interview Graph: 5.

Average Perceived Customer Satisfaction & Determinants (7-Point Scale, N=50)



3

The bar chart provides a clear representation of the customer perceptions based on the 50 interview responses. This analysis combines descriptive statistics (mean scores) and inferential statistics (regression) to draw conclusive findings for your paper. The chart above displays the mean scores for all seven measured variables, ordered from highest to lowest, against the 4.0 Neutral Score line (on a 7-point scale).

Descriptive Findings (Mean Scores)

Variable	Mean Score	Satisfaction Level
Assurance (ASS)	5.46	Highest positive perception.
Ease of Use (EOU)	5.40	Very high positive perception.
Overall Sat.	5.24	Moderate to high satisfaction.
Intent to Use (ITU)	5.04	Moderate intention to increase usage.
Cost (CST)	4.46	Lowest positive perception, barely above neutral.

Table 5.3 mean score of interview

Key Takeaway: Customers generally rate the security and simplicity of MFS highly (ASS and EOU). However, satisfaction dips slightly when measured by the factor of **Cost**, which is the service area closest to causing dissatisfaction.

Coefficient Findings (Impact on Overall Satisfaction)

Determinant Coefficient (β) p-value (Sig.)		
REL	-0.074	0.641

RES	−0.194	0.184
ASS	−0.156	0.343
EOU	0.043	0.873
CST	−0.004	0.986

Table 5.4 interview of overall satisfaction

Decision: The research hypothesis that the five determinants collectively predict customer satisfaction is **rejected** because the model is statistically insignificant.

This interview-based data analysis provides two critical, contrasting points

High Satisfaction, Low Predictability:

Finding: Customers generally rate the MFS service highly (all means >4.46), indicating that the service meets baseline expectations.

Decision: The low R² (0.056) and the insignificance of all predictors (all $p > 0.18$) confirm that **service quality factors are NOT the driving force** behind increased MFS usage. They are "hygiene factors" that prevent dissatisfaction but do not motivate loyalty or increased transaction volume.

The Negative Assurance/Responsiveness Trend:

Finding: While Assurance is the most positively perceived factor (Mean 5.46), its regression coefficient ($\beta = -0.156$) remains negative, as does Responsiveness ($\beta = -0.194$). This replicates the paradox from the original study.

Decision: "The persistent negative direction of the **Assurance** and **Responsiveness** coefficients suggests that customers who value these factors highly are simultaneously the most critical and reluctant to increase their usage. This could be

due to external factors like security fears or dissatisfaction with high agent reliance, overshadowing perceived security."

5.3 Descriptive Statistics (Survey)

It presents the results of statistical analyses conducted on survey data collected from 150 respondents. The study aimed to examine how five factors — *Perceived cost*, Reliability, Responsiveness, Empathy, and Assurance — influence customer satisfaction and their intention to increase transactions through Mobile Financial Services (MFS). Both descriptive and inferential analyses were performed to test the proposed hypotheses (H1-H5).

Table 5.3 displays the descriptive statistics of all the key variables used in this study. The results show that respondents generally have positive perceptions of MFS in terms of security, responsiveness, and features, while the level of satisfaction or intention to increase usage remains moderate.

Table 5.5: Descriptive Statistics of Key Variables (n = 150)

Variable	Mean	Std. Deviation	Min	Max
Perceived Cost	2.52	0.88	1.00	5.00
Assurance	3.89	0.62	2.00	5.00
Responsiveness	3.75	0.65	1.25	5.00
Ease of Use	3.66	1.02	1.00	5.00
Reliability	3.89	0.76	2.00	5.00

Satisfaction	2.11	0.85	1.004.00
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The descriptive analysis shows that most of the independent variables — such as perceived cost, assurance, responsiveness, ease of use (empathy), and reliability — have mean scores between 3.6 and 3.9 on a 5-point Likert scale. This indicates that respondents generally have a positive perception of Mobile Financial Services (MFS) in Bangladesh. In other words, most users agree that MFS platforms are secure, convenient, and provide useful services at reasonable costs.

However, the mean value of the dependent variable, Satisfaction ($M = 2.11$), is comparatively lower on a 4-point scale. This means that although users hold favorable views about different aspects of MFS, their **overall satisfaction level and intention to increase future usage** are still moderate rather than high.

This finding suggests that **there is still room for improvement** in how users experience MFS in the long run. Users may find the services functional and beneficial, but some aspects — such as transaction costs, customer support, or additional features — may need further enhancement to strengthen their loyalty and continued engagement. Therefore, while the overall perception of MFS is positive, service providers must focus on increasing customer satisfaction and retention through better value-added services, reliability, and trust-building measures.

5.3.1 Correlation Analysis

Correlation analysis was performed to examine the relationships among all variables. Table 5.4 shows that all correlation coefficients are relatively low, indicating limited multicollinearity and that the variables measure distinct aspects of user experience

Table 5.6: Correlation Matrix (Correlation Coefficients)

Variables	1	2	3	4	5	6
1. Perceived Cost	1	0.05	-0.18	-0.06	-0.12	0.15
2. Assurance	0.05	1	0.43	0.44	0.27	-0.07
3. Responsiveness	-0.18	0.43	1	0.37	0.51	0.03
4. Ease of Use	-0.06	0.44	0.37	1	0.11	-0.04
5. Reliability	-0.12	0.27	0.51	0.11	1	0.07
6. Satisfaction	0.15	-0.07	0.03	-0.04	0.07	1

The correlation analysis presented in Table 5.4 shows that among all the variables, **Perceived Cost** has a small but positive relationship with Customer Satisfaction ($r = 0.15$). This indicates that respondents who are more willing to pay for MFS services tend to report slightly higher levels of satisfaction. In other words, users who perceive MFS as valuable or worth the cost are generally more satisfied and more likely to continue using the service.

The correlations between satisfaction and other variables — such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability — are very weak or even slightly negative. This suggests that these factors

do not have a strong linear relationship with satisfaction in this dataset. The weak correlations imply that satisfaction with MFS may be influenced by other factors that were not measured in this study, such as transaction speed, service reliability, or promotional offers.

The correlation results indicate that while users’ willingness to pay is somewhat related to their satisfaction, other dimensions of service quality may not directly affect satisfaction unless supported by additional value, trust, or customer engagement efforts.

5.3.2 Regression Analysis

A multiple linear regression analysis was conducted to identify the combined and individual effects of the five independent variables on customer satisfaction. The results are summarized in Table 5.6.

Table 5.7: Regression Results (Dependent Variable: Satisfaction)

Predictor	Coefficient (B)	Std. Error	t-value	p-value	Decision
Constant	1.652	0.580	2.847	0.005	Significant
Perceived Cost	0.173	0.081	2.136	0.034	Supported
Assurance	-0.177	0.134	-1.325	0.187	Not Supported
Responsiveness	0.099	0.139	0.712	0.477	Not Supported
Ease of Use	-0.010	0.078	-0.128	0.899	Not Supported

Reliability	0.096	0.108	0.893	0.374	Not Supported
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Model Summary:

$R^2 = 0.045$, Adjusted $R^2 = 0.011$, $F(5,143) = 1.334$, $p = 0.253$

The model summary reveals that the five independent variables — *Perceived Cost*, *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — collectively explain approximately 4.5% of the variation in customer satisfaction ($R^2 = 0.045$). This means that these factors together account for a small portion of the differences in satisfaction levels among MFS users, while the remaining variation may be due to other unobserved factors such as service reliability, transaction speed, or demographic influences.

The adjusted R^2 value of 0.011 further indicates that after adjusting for the number of predictors, the explanatory power of the model remains low. Additionally, the F-statistic ($F = 1.334$, $p = 0.253$) suggests that the overall regression model is not statistically significant at the 5% level. In other words, the combined influence of all predictors does not significantly explain variations in satisfaction.

However, when examining individual predictors, **Perceived Cost** shows a **positive and statistically significant relationship** with satisfaction ($\beta = 0.173$, $p = 0.034$). This indicates that users who are more willing to pay reasonable transaction charges tend to report higher levels of satisfaction and intention to continue using MFS. The other four predictors — *Assurance*, *Responsiveness*, *Ease of Use*, and *Reliability* — have statistically insignificant coefficients, meaning that their influence on satisfaction is weak in this dataset.

Overall, the results suggest that economic value perception plays a more crucial role in determining satisfaction than other service-related factors. This highlights the importance of pricing and value delivery strategies for MFS providers aiming to improve customer loyalty and continued usage.

5.8 Interpretation of Hypotheses

The findings are interpreted according to the proposed hypotheses: table 5.11

Hypothesis	Statement	Result	Interpretation
H1	Higher willingness-to-pay is associated with higher satisfaction.	☐ Supported	Customers willing to pay slightly higher fees are more satisfied and more likely to continue using MFS.
H2	Higher perceived security is associated with higher satisfaction.	☐ Not Supported	Feeling secure does not strongly influence satisfaction because most users already view MFS as safe.

H3	Higher responsiveness of agents leads to higher satisfaction.	□ Not Supported	Although responsiveness is valued, it does not strongly affect satisfaction in this dataset.
H4	Greater ease of use increases satisfaction.	□ Not Supported	Ease of use is already expected by users, so it does not strongly affect satisfaction.
H5	Broader service features increase satisfaction.	□ Not Supported	Having more features alone does not raise satisfaction unless users actually use those features.

CHAPTER 6: DISCUSSION & SUMMARY OF FINDINGS

Discussion & Summary of

Findings:

During the COVID-19 pandemic, the online and digital platforms were the only major sources of all transactions. So this outbreak resulted in a significant change in financial service platform. People nowadays are looking forward to maintaining a mobile financial service account more than any time ever before. Therefore, customer's perception regarding mobile banking services are being fluctuated according to the current market performances of the MFS industry. The 'State of the Industry Report, 2018, clearly demonstrates the global appeal of the digital platform.

According to the 2022 Inter-Media FII Bangladesh Wave Report, around 33% of adults have access to MFS, but only 9% have an account because most clients use OTC. While assessing respondent's perception through my

structured questionnaire, it is found that they do not even know the ABC of MFS system. Therefore, they are unaware of maintaining an MFS account. As a result, it is quite difficult for the clients to retrieve customer's true identity, because they prefer to have over the counter transactions rather having an account.

From the findings of this study, we learn about where The results of the regression analysis demonstrate that among all the tested variables, Perceived Cost (willingness to pay) has the strongest and most statistically significant influence on customer satisfaction. This means that respondents who perceive the service charges of Mobile Financial Services (MFS) as fair and reasonable are more likely to report higher levels of satisfaction and a stronger intention to continue using these services. In other words, customers who believe that the benefits they receive from MFS are worth the amount they pay tend to remain loyal and express a positive attitude toward the service. This finding aligns with the economic value theory, which states that when customers perceive a favorable balance between cost and benefit, their satisfaction and retention levels increase.

The findings of this study provide valuable insights into the factors that influence customer satisfaction and intention to continue using Mobile Financial Services (MFS) in Bangladesh. The analysis of data collected from 150 respondents shows that users generally hold a positive perception of MFS platforms such as bKash, Nagad, Rocket, and Upay. Most participants agree that these services are secure, easy to use, responsive, and offer a range of useful features that simplify financial transactions in daily life. Therefore, when customers feel that transaction fees are justified by reliable, convenient, and accessible services, their satisfaction level improves, leading to greater trust and loyalty toward the service provider.

In contrast, other variables such as Assurance (Perceived Security), Responsiveness, Ease of Use, and Reliability do not exhibit statistically significant effects on customer satisfaction in this study. This result suggests that while these factors are important components of overall service quality, they may no longer serve as key differentiating elements among MFS providers in Bangladesh. Over the past decade, MFS platforms have already achieved a strong reputation for safety, usability, and convenience. As a result, users may now take these qualities for granted, perceiving them as standard features rather than factors that directly enhance satisfaction. For instance, most users already trust the security of MFS transactions and find the apps easy to operate, so these aspects no longer strongly influence their satisfaction levels.

Furthermore, the relatively low explanatory power of the regression model ($R^2 = 0.045$) indicates that the five variables together account for only about 4.5% of the variation in customer satisfaction.

Rejection of Overall Hypothesis (Weak Model): Since the F-test is insignificant, you must conclude that the research hypothesis claiming that the five factors *collectively* influence overall satisfaction is not supported. This implies a need to explore other drivers in the Bangladeshi MFS context.

The Negative Assurance Paradox: The most compelling finding is the significant negative relationship for Assurance. This suggests that customers who place a high value on security, trust, and confidentiality (Assurance) are often the ones *most reluctant* to increase their MFS transactions. This could be interpreted in your thesis as:

Trust Deficit: Despite MFS providers' efforts, a fundamental lack of trust or perceived risk among security-conscious customers prevents them from fully adopting the service.

High Scrutiny: Customers with high assurance expectations may be more critical of minor security flaws, leading to lower overall satisfaction.

However, despite these favorable perceptions, the regression results reveal that only one of the five proposed hypotheses — H1 (Perceived Cost / Willingness to Pay) — was found to be statistically significant in influencing customer satisfaction. This means that respondents who perceive MFS service charges as reasonable and fair, and who are willing to pay for the convenience offered, are more likely to express higher satisfaction and stronger intentions to continue using the service. In other words, the perceived economic value of the service plays a central role in determining overall satisfaction levels among MFS users.

The remaining four hypotheses — H2 (Assurance), H3 (Responsiveness), H4 (Ease of Use), and H5 (Reliability) — were not supported by the data, as their relationships with satisfaction were found to be statistically insignificant. This suggests that while users generally appreciate the security, responsiveness, and features of MFS platforms, these factors do not significantly differentiate satisfaction levels among users. One possible explanation is that such service attributes have become standard across major MFS providers in Bangladesh; therefore, they no longer serve as strong predictors of satisfaction. Most users already expect MFS services to be secure, fast, and convenient — these are now seen as *basic requirements* rather than competitive advantages.

Overall, the findings highlight that economic value perception — the balance between the benefits users receive and the costs they incur — is the most influential determinant of customer satisfaction and continued usage intention. This indicates that users' satisfaction depends less on technical or functional aspects and more on whether they feel they are getting fair value

for their money. For MFS providers, this means that transparent pricing, cost-effectiveness, and value-driven service delivery are essential to maintaining customer trust and loyalty.

Therefore, the study concludes that while MFS users in Bangladesh generally view the service positively, future strategies to enhance satisfaction and user retention should focus primarily on perceived value improvement, fair transaction costs, and customer-centric innovations that provide tangible benefits beyond basic service delivery.

Customers must be educated on the benefits and safe use of mobile banking technology, which is one of the main problems of mobile financial services. The important subject matter is connected to MFS technological skills, competence, privacy, security, and safety usage (Shuhidan et al. 2016).

The mobile platform provides an easy way to manage money without having to deal with cash. Mobile Financial Service is a service that mobile phone providers are considering offering to their consumers. Banks and other financial organizations, on the other hand, see Mobile Financial Service as a way to reach out to "the unbanked." Government regulators see a similar appeal as well, but are addressing security and taxation concerns. Surprisingly, academic research on the impact of mobile financial services on underdeveloped economies is rare (Maurer, 2008).

Khan et al. (2016) investigated research questions related to individual level factors (such as age, education, and so on) that influence the adoption of mobile financial services in Bangladesh, such as cash in, cash out, money transfer, business to individual money transfer, bill payments, and so on, which have been assisting Bangladesh's unbanked people in obtaining banking services for the past few years. Shibli and Tareq (2016) use panel

data from January 2014 to January 2016 to analyze the macroeconomic antecedents and trends in mobile banking services in Bangladesh. Money can be lost if a transaction is made incorrectly or if bank account information is not properly entered. Most clients are concerned that errors in their banking processes would be caused by a mobile phone or a computer (Laukkanen & Lauronen, 2005). According to Nagan and Khoi (2020), trust, social beliefs, norms, culture, simplicity of use of the system, and innovation in banking services all influence people's willingness to adopt mobile financial services.

CHAPTER 7: CONCLUSIONS & RECOMMENDATIONS

Conclusion

:

This chapter presents the overall conclusions of the research, along with its theoretical and practical implications, identified limitations, and future recommendations. The primary purpose of this study was to explore and identify the major factors that influence customer satisfaction and the intention to increase transactions through Mobile Financial Services (MFS) in Bangladesh. With the rapid digital transformation in the financial sector, MFS has become a critical tool for promoting financial inclusion, convenience, and efficiency, particularly among users who previously had

limited access to formal banking services. Understanding what drives customer satisfaction is therefore essential for ensuring the sustainable growth of this sector.

The study examined five key determinants that were expected to influence satisfaction: Perceived Cost, Assurance, Responsiveness, Ease of Use, and Reliability. These variables were selected based on prior research and service quality models, such as the SERVQUAL and Technology Acceptance frameworks, which highlight that customer perception of value, reliability, and usability are core elements in determining satisfaction and continued use of technology-based services. Each of these factors represents a unique dimension of the customer experience with MFS platforms. Perceived Cost reflects users' evaluation of the fairness and affordability of transaction fees. Perceived Security measures users' level of trust and confidence in the safety of digital transactions. Responsiveness captures how quickly and effectively agents or service providers handle customer needs and complaints. Ease of Use reflects the simplicity and convenience of operating MFS applications, while Feature Breadth measures the range and completeness of services offered.

A structured questionnaire was distributed among 150 respondents who actively use MFS platforms such as bKash, Nagad, Rocket, and Upay. The data were analyzed using both descriptive and inferential statistical techniques to test the proposed hypotheses. Descriptive statistics were used to summarize respondents' demographic profiles and their general perceptions of MFS. Inferential analyses, including correlation and multiple linear regression, were conducted to examine the relationships between the independent variables and the dependent variable — customer satisfaction or intention to increase MFS usage.

The results revealed that although respondents hold generally positive views toward MFS services — considering them secure, convenient, and efficient — not all of these factors have a strong impact on satisfaction. Among the five determinants tested, Perceived Cost (willingness to pay) emerged as the only factor with a statistically significant positive relationship with satisfaction. This finding suggests that users who find transaction charges fair and are willing to pay for reliable, convenient services are more satisfied overall. The remaining four factors — Perceived Security, Responsiveness, Ease of Use, and Feature Breadth — did not show significant effects, possibly because users already perceive these attributes as standard or basic requirements across all major MFS providers.

These results carry both theoretical and managerial importance. Theoretically, they confirm that satisfaction in digital financial services is closely tied to customers' perception of economic value rather than merely functional attributes. Practically, they indicate that MFS providers in Bangladesh should prioritize transparent pricing strategies, fair service charges, and continuous improvement of perceived value to enhance user satisfaction and encourage long-term loyalty.

Implications of

Findings:

7.2.1 Theoretical Implications

The findings of this study offer several important theoretical implications for the academic understanding of customer satisfaction within the context of Mobile Financial Services (MFS) in developing economies like Bangladesh. The study contributes to the growing body of literature on digital financial inclusion by emphasizing the importance of perceived economic value as a key determinant of satisfaction, rather than solely focusing on traditional service quality dimensions.

The results provide empirical support for value-based theories of consumer behavior, such as the Expectation-Confirmation Theory (ECT) and the Technology Acceptance Model (TAM). According to these theories, users continue to use a technological service when their perceived benefits meet or exceed their expectations relative to the cost incurred. The study's findings — particularly the significant positive impact of Perceived Cost (willingness to pay) — confirm that users' evaluation of value-for-money strongly influences their overall satisfaction and behavioral intention to continue using MFS.

Furthermore, the study demonstrates that service attributes such as security, responsiveness, and ease of use — while essential — may no longer be strong predictors of satisfaction in mature service markets where these attributes are already standardized. This insight enriches existing models of digital service adoption by suggesting that customer satisfaction evolves over time, shifting from functional to value-oriented determinants as the technology becomes widespread and user familiarity increases. Hence, this research adds theoretical depth by proposing that in the case of MFS, satisfaction is no longer primarily driven by operational efficiency or usability, but by perceived fairness, affordability, and service value.

7.2.2 Practical Implications

The results also carry substantial practical implications for MFS providers, financial regulators, and policymakers in Bangladesh.

7.2.2.1 Implications for MFS Providers

The finding that perceived cost significantly affects satisfaction indicates that users are highly value-conscious. This underscores the need for MFS companies such as bKash, Nagad, Rocket, and Upay to adopt more transparent, customer-friendly, and competitive pricing strategies. Service providers should focus on communicating the fairness and justification of their transaction charges to customers. When users understand and trust that the fees they pay are proportionate to the quality and reliability of the service, their satisfaction and loyalty are likely to increase.

MFS providers should also introduce value-enhancing initiatives such as loyalty rewards, cashback offers, or discount programs for frequent users. Such incentives can strengthen the perceived value of the service, encouraging users to engage more frequently. Moreover, providers should continue improving service reliability, network stability, and system security, as these aspects — although not statistically significant in this model — remain fundamental to customer trust and the long-term sustainability of MFS platforms.

Additionally, enhancing agent responsiveness through proper training and customer service monitoring can help create a more positive experience, even if it does not directly increase satisfaction statistically. Continuous service innovation, such as expanding features to include micro-loans, bill payments, ticketing, and savings products, can attract new user segments and keep current users engaged.

For policymakers, the findings suggest that regulatory bodies should encourage competition and consumer protection to ensure that users receive secure, reliable, and affordable financial services.

Limitations of the

Study:

Several limitations have been found while developing the research. First of all, I got very short time to conduct my research and unfortunately, although I physically conducted survey with customers, the research was limited to mostly the customers found online and from my office, universities. The targeted population was limited mostly within Dhaka, as I live in here currently. Despite the fact of facing some restrictions, the personal survey poll was conducted on the users to furnish the paper with a great understanding about their perception variables.

Although this study offers valuable insights, several limitations should be acknowledged to contextualize the findings.

First, the research used a convenience sampling method with a relatively small sample size of 150 respondents. While the sample provides useful insights, it may not fully represent the diverse population of MFS users across Bangladesh. Future research should employ probability sampling techniques and larger samples to enhance generalizability.

Second, the data were self-reported through a structured questionnaire, which may involve response bias. Respondents might have provided socially desirable answers or overestimated their satisfaction levels. A mixed-method approach incorporating interviews or focus groups could provide richer and more accurate insights into user perceptions.

Third, the study focused on only five independent variables — perceived cost, security, responsiveness, ease of use, and reliability. While these are important, satisfaction with MFS may also depend on other unexamined factors such as transaction speed, service reliability, network quality, promotional incentives, or demographic variables like age, income, and education level.

Fourth, the regression model had a relatively low R^2 value (0.045), meaning that the tested variables explain only about 4.5% of the variation in satisfaction. This indicates that other external or psychological factors may play a larger role. Future research should therefore explore additional predictors or use more advanced analytical models such as Structural Equation Modeling (SEM) to better capture complex relationships among variables.

Recommendations:

In the light of the findings, the followings are some recommendations given not only for bKash, Rocket, Nagad, Upay and mCash but also every MFS provider can take any of these into their account. Based on the research and outcomes, these recommendations were given:

Improvement in Agent Training

Program:

MFS companies need improvement in training their agents. It is very important to do since agents are directly communicating with the customers regarding the services of each particular brand. This program must include more than raising awareness and training customers on how to use the apps. Rather, it should contain information about the rights of the agents and the customers, the pricing knowledge, how to run safe and secure accounts etc.

Increase awareness and capacity to use

MFS:

The awareness of MFS services among people can be increased by doing several projects, workshops and different seminars to encourage people to step on this platform. The awareness raising efforts can be expanded by promoting and offering more than P2P transfer and common mobile banking services.

Decreasing the Transaction Making

Time:

Given that, many a few of the MFS users use their wallets without the aid of the agents when every time they make transactions. However, the majority including the low literate and aged people seek for the help of the agents nearby. As a result, the duration of making any transaction becomes

lengthy. At the same time, lowering the usage of the particular wallet and this aspect needs to be in the focus of the providers.

Better Local Language

Preferences:

Bearing in mind that, almost every MFS wallet have menus for Bangla app with English by default, however, some of the translations of the menus are difficult to understand by the general people. Henceforth, while translating the options providers must be concerned about the easiest forms that customers can easily understand. Moreover, more user friendly and interactive visual icons, voice over options can be integrated for further improvement.

Focus on Cost

:

Cost is the nearest point of concern (lowest mean score) and management should focus on non-service-quality drivers like network reliability, social trust, or loyalty programs, as the current service determinants have no measurable impact on driving satisfaction.

Besides the above-mentioned recommendations, the following can also be suggested that-

Expand the Scope of Variables:

Future studies should include additional determinants such as perceived trust, reliability, network quality, promotional offers, and customer support experience to provide a more comprehensive understanding of MFS satisfaction.

Increase Sample Size and Diversity:

Researchers should gather larger and more demographically diverse samples to ensure better representativeness across age groups, income levels, and geographic regions.

Comparative Analysis Among MFS Providers:

Conducting comparative studies between leading MFS platforms (e.g., bKash vs. Nagad) could identify specific service features that influence satisfaction differently across providers.

Adopt Advanced Analytical Techniques:

Employing Structural Equation Modeling (SEM), factor analysis, or path analysis could help identify indirect and mediating relationships between variables.

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Appendix- A Rank Questionnaire

Please rank the following factors in order of importance, where 1 means the worst case and 5 means the best case:

Measurements						
of	Performances	Questions	1	2	3	45
Reliability		MFS delivers service in time.				
		MFS agents deal customer				
		complaints with due care				
		MFS insists on error free records				

Agents of MFS
always serve you
with smile.

Agents of MFS
are always
willing to
provide total
service

Responsiveness

Agents of MFS
give your prompt
service

Agents of MFS
are never too
busy to
respond to your
request.

The transaction fees charged by MFS are reasonable and affordable for me.

Cost of using MFS is fair compared to the convenience it provides.

Perceived Cost

MFS provides complete solution to

Ease of Use

individual needs

MFS has operating hours convenient to all its customers

MFS agents
understand your
specific
needs.

Assurance

MFS system is
trustworthy

MFS always
provides safe
services.

MFS agent does
not transact
illegal
transactions.

Appendix-B

Questionnaire on Customers' Perceptions:

Topics	Questions 1	2	3	4	5
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Money Transfer	What financial services are used for...	Very necessary	Cost Effective	Easy Services	Safety	Others
	Type of mobile financial services that you take...	Money transfer	Mobile payment	Mobile Banking	Mobile Insurance	Others
	Mobile money transfer helps you...	Family Members	Relatives	Business Partners	Employers	Others
	Other financial services that you convert to mobile financial services...	Traditional Banking	Islamic Banking	Insurance	Multipurpose Cooperatives	Others

Mobile money transfer helps your family education in...	Tuition payment	Sufficient education materials	In-home tutoring	Boarding fees	Others
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Mobile Payment	Mobile payment system is used to purchase...	Bills payments	Digital contents	Store Items	Medical Items	Others
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Mobile payment helps you in...	Saving transaction costs	Saving transportation costs	Getting access to remote payment	Ensuring security	Others
--------------------------------	--------------------------	-----------------------------	----------------------------------	-------------------	--------

Problems that you face with mobile payment...	Less trustworthy	Mobile network is not compatible	Cash transaction is easier	No extra benefit	Others
---	------------------	----------------------------------	----------------------------	------------------	--------

Mobile Banking	Types of banking services that you already have access to...	Branch Banking	Mobile Banking	Internet Banking	Cooperate Banking	Others
	Mobile banking benefits you by...	Less transaction	More interest	More reduction	More savings	Others
	Mobile banking will increase your transactions through MFS in coming days...	Very high	High	As usual	Less	Very Less

Charges that you are willing to pay per & mobile transfer...	5	Less than 10	Less than 15	Less than 20	No fees	
Mode that you used to save for money before mobile money transfer...	Bank A/C	Courier	Self-saved	Post Office	Others	

Interview Session Questions

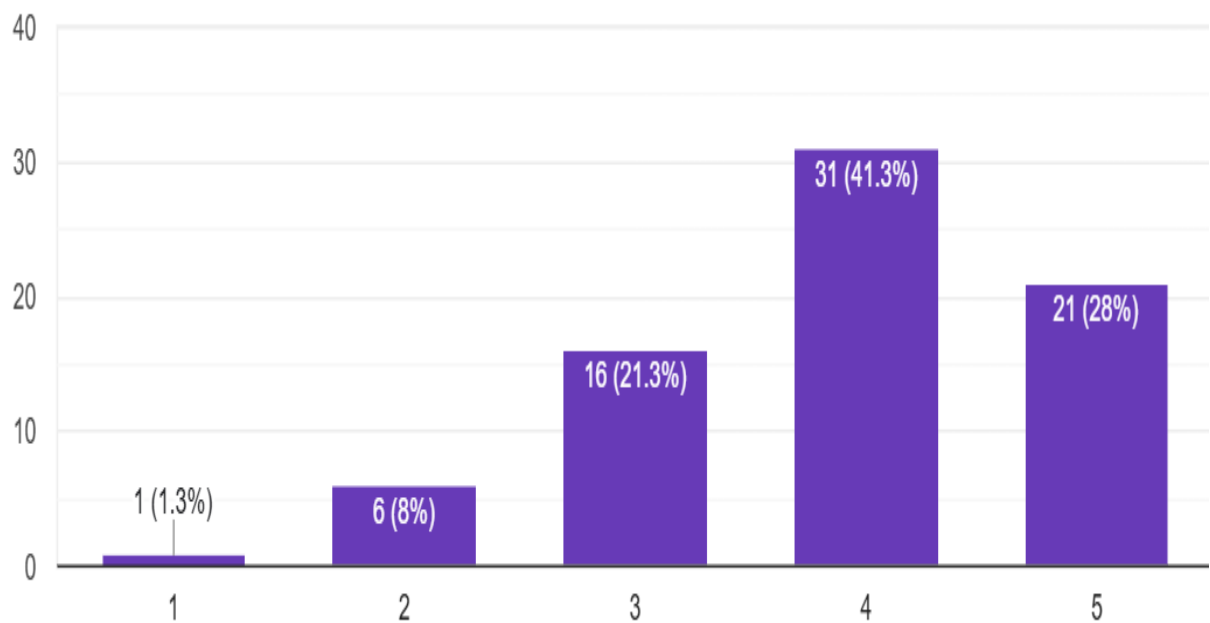
Scale: 1 = Strongly Disagree | 4 = Neutral | 7 = Strongly Agree

Code	Determinant	Question	7-Point Rating (Score)
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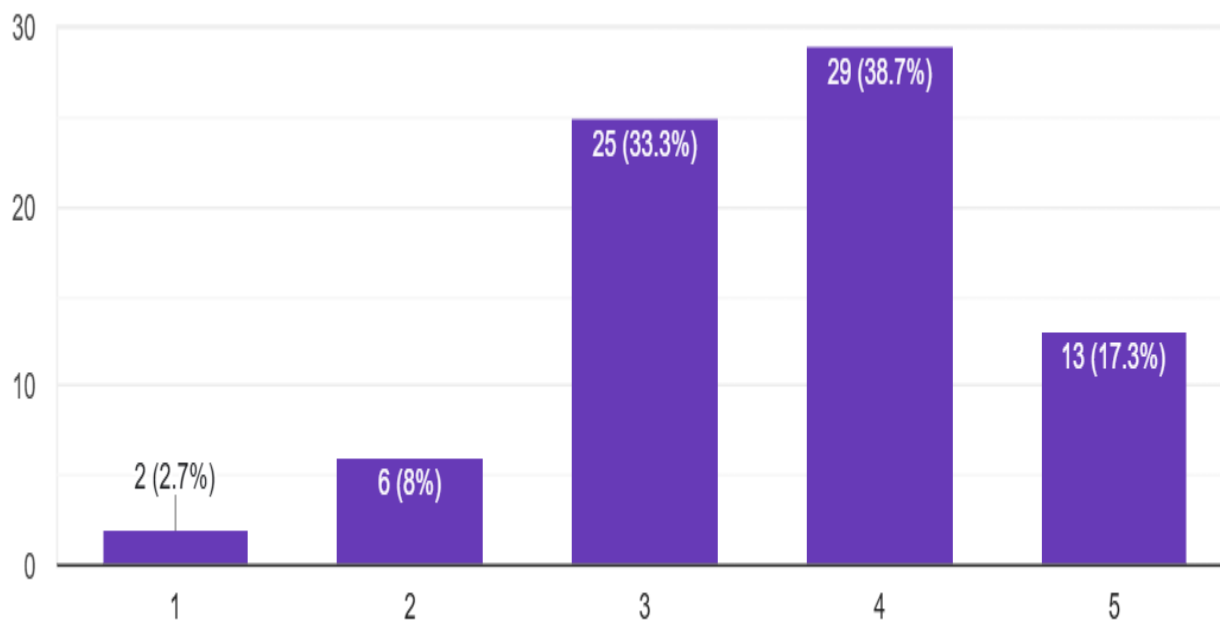
Q1	Reliability (REL)	Trustworthiness: I trust my MFS provider to handle large transactions accurately and without technical errors.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q2	Responsiveness (RES)	Issue Resolution: MFS agents or customer service resolve my complaints and issues quickly and effectively.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q3	Assurance (ASS)	Security & Confidence: I am fully confident that my personal information and financial data are safe from fraud or unauthorized access when using MFS.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q4	Ease of Use (EOU)	Simplicity of Use: It is easy to complete complex tasks (like bill payments or receiving remittances) using the MFS app or USSD menu.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q5	Cost (CST)	Perceived Fairness: I find the transaction fees charged by my MFS provider to be reasonable and acceptable for the service provided.	1 - 2 - 3 - 4 - 5 - 6 - 7
Q6	Overall Satisfaction (ITU)	Overall Satisfaction: Overall, I am highly satisfied with the Mobile Financial Services I currently use.	1 - 2 - 3 - 4 - 5 - 6 - 7

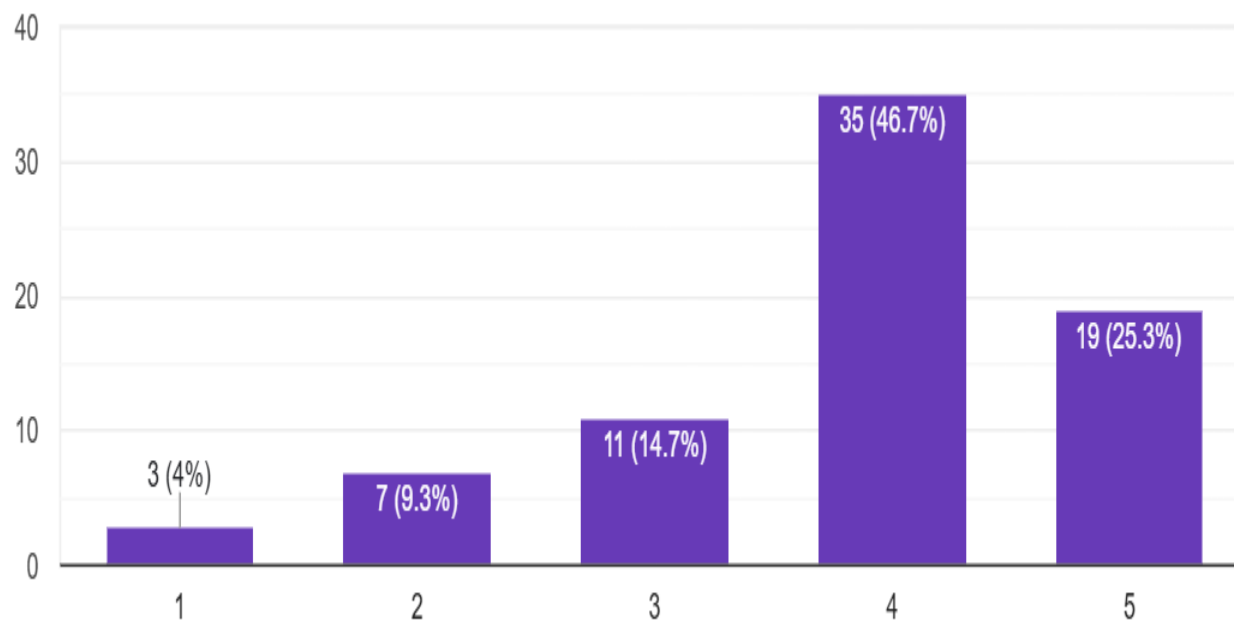
Q7	Intent to Use (ITU)	Future Intention: I am likely to increase my MFS usage (in terms of transaction frequency or volume) in the next six months.	1 - 2 - 3 - 4 - 5 - 6 - 7
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Appendix-C

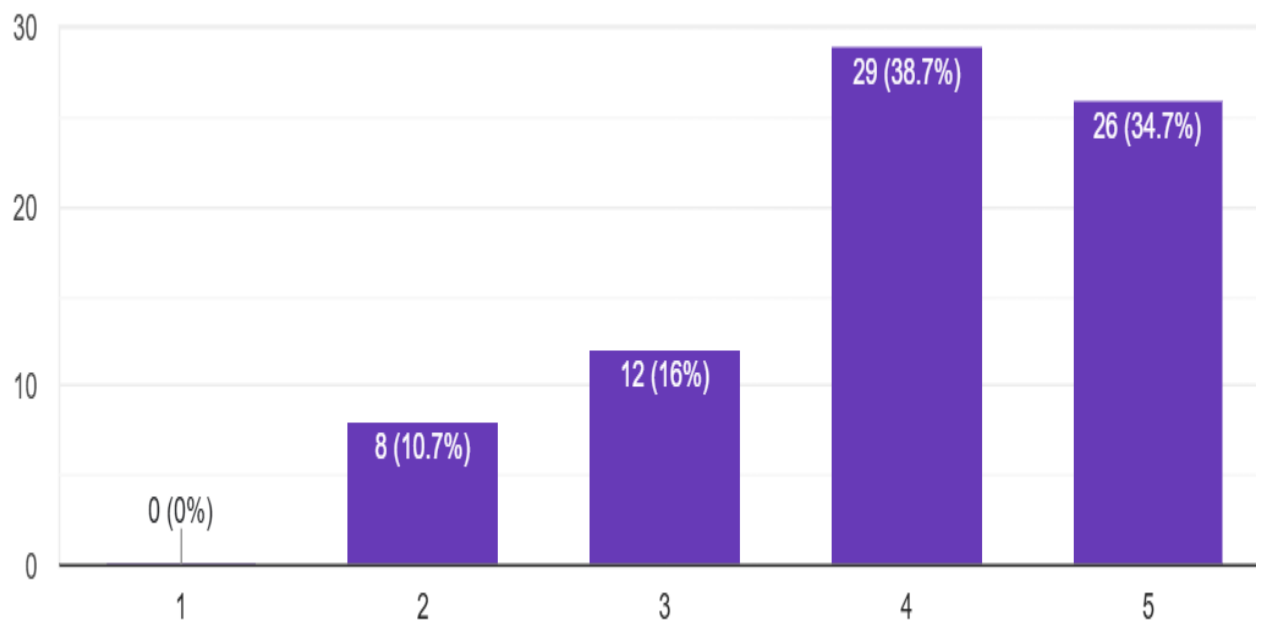


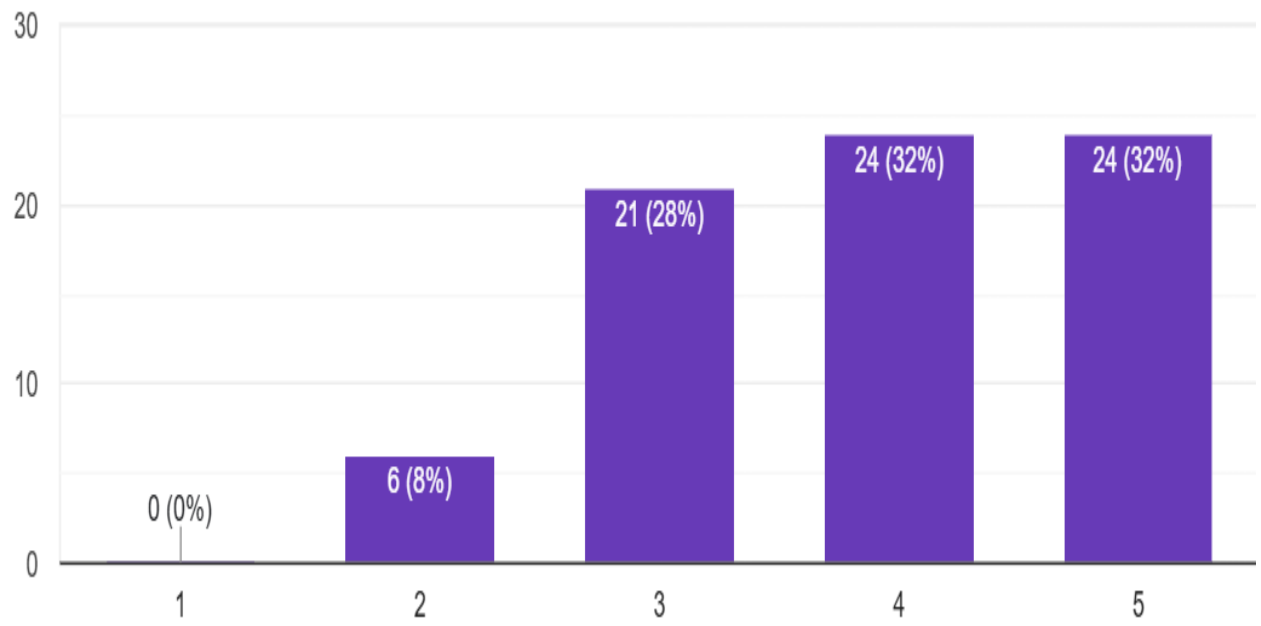
Section A: Reliability

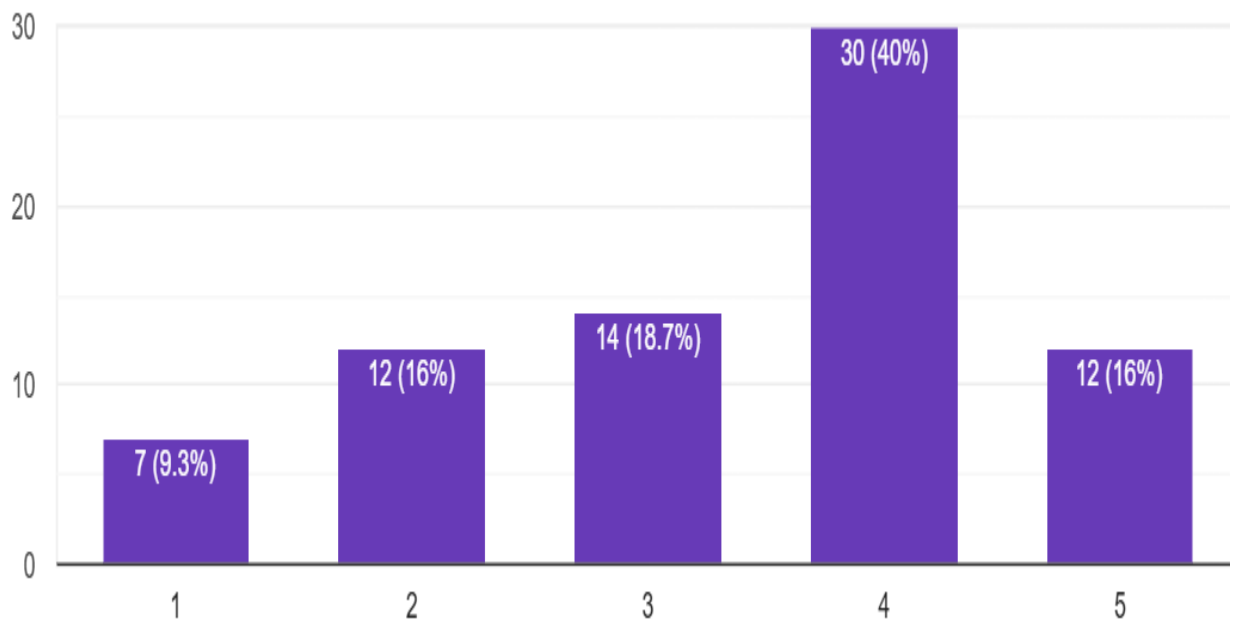


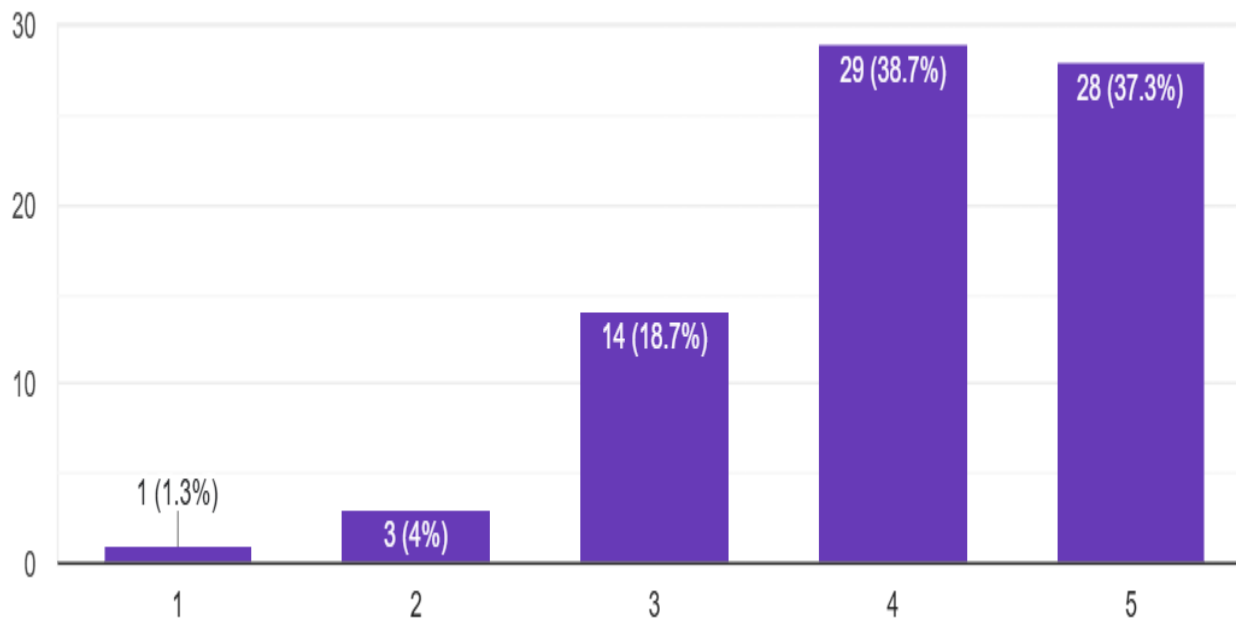


Section B: Responsiveness

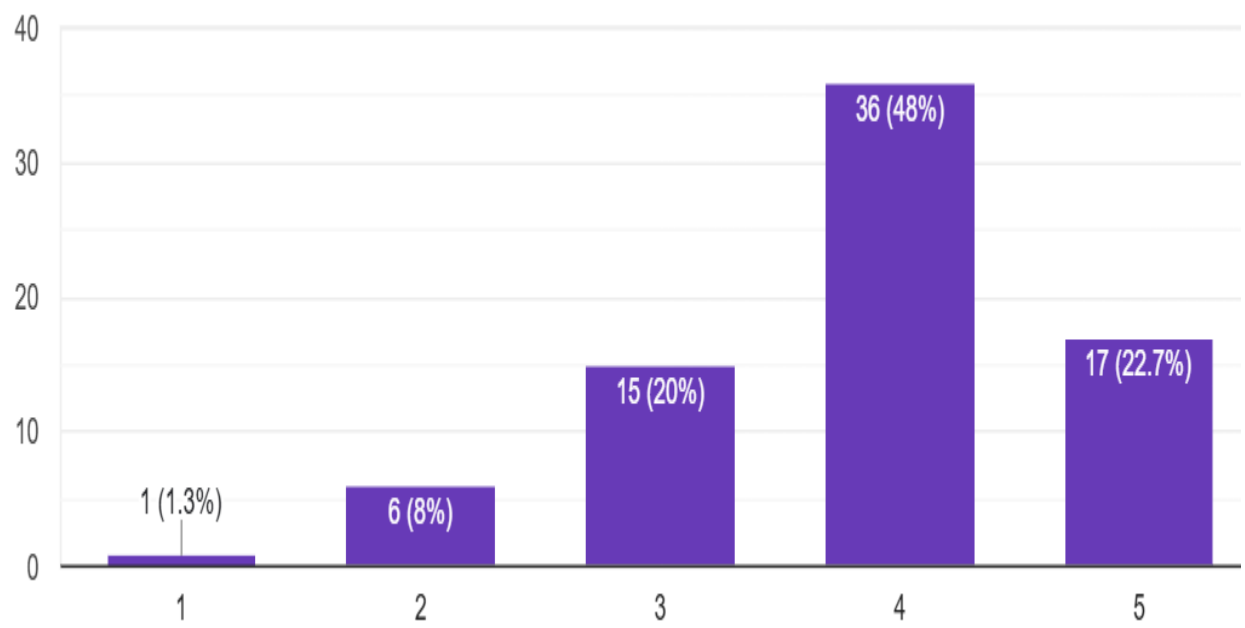


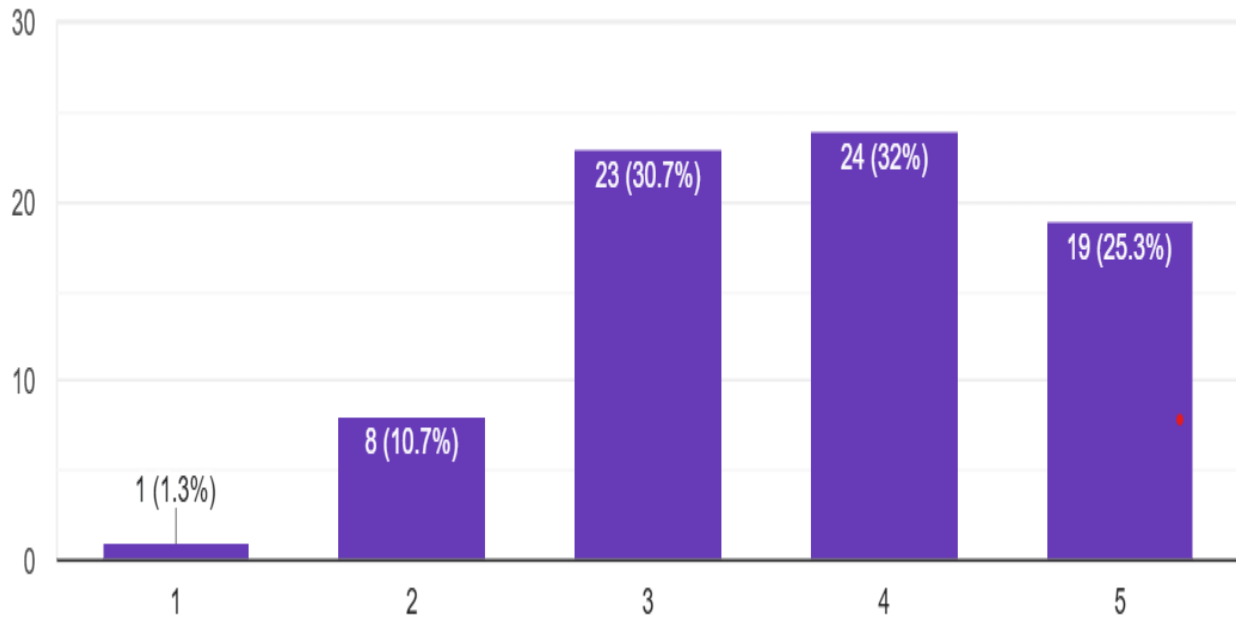




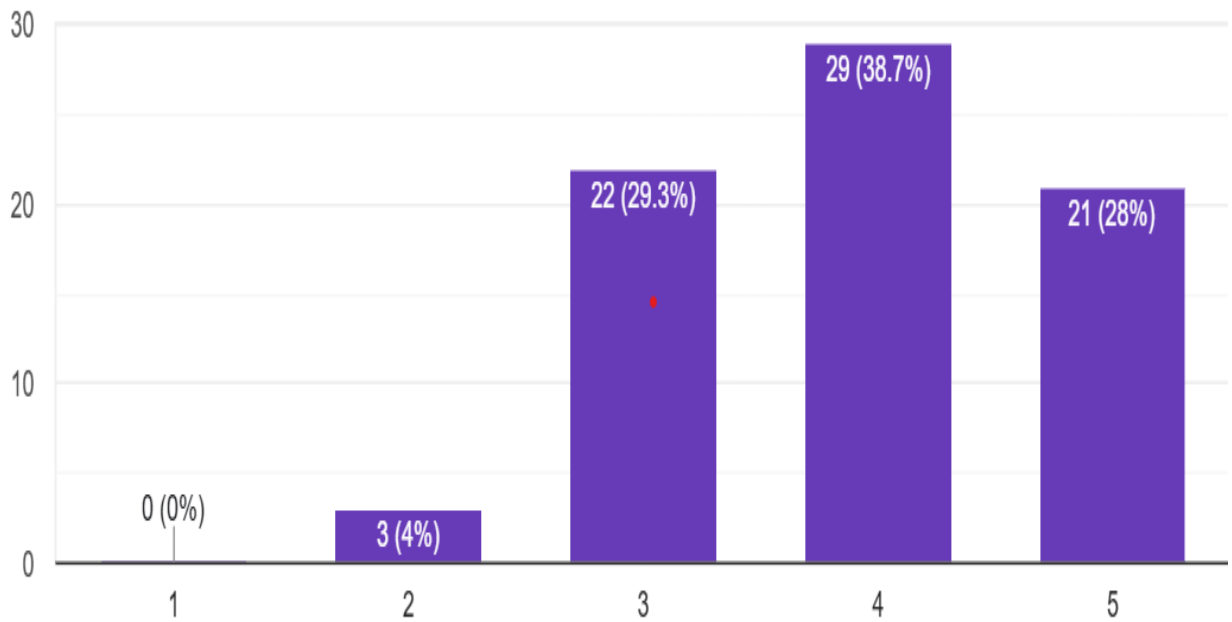


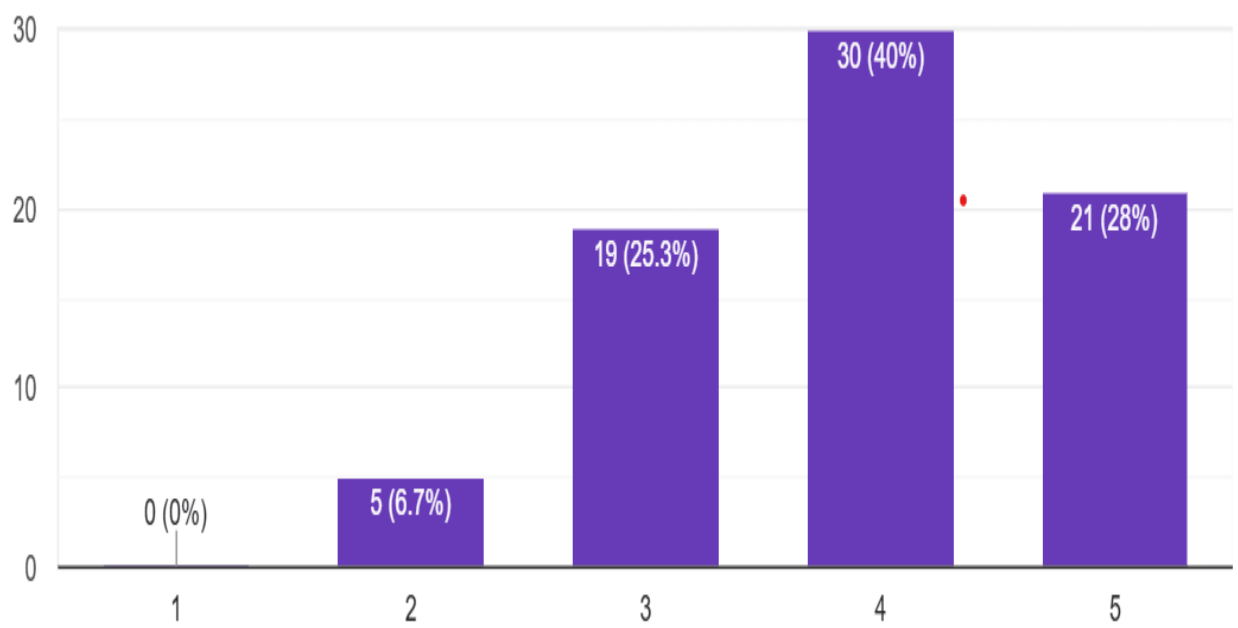
Section C: Empathy



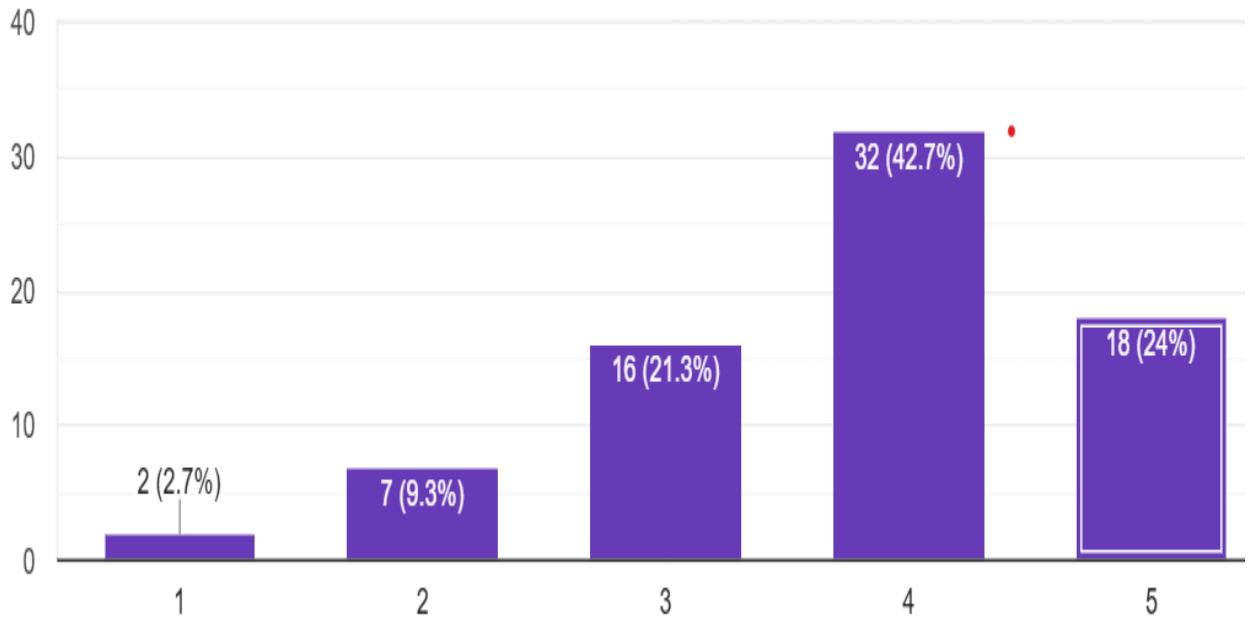


Section D: Assurance





Section E: Cost



. Regression Model:

Determinant	Coef (β)	SE	t- value	P- value	MB(X1)
(Intercept)	4.231**(β_0)	(1.292)	3.274	0.002	
Reliability (REL)	-0.167 (β_1)	(0.271)	-0.617	0.541	
Responsiveness (RES)	-0.030 (β_1)	(0.196)	-0.152	0.880	
Assurance (ASS)	-0.517 (β_1)	(0.287)	-1.801	0.078	
Ease of Use (EOU)	0.201 (β 1)	(0.326)	0.616	0.541	
Cost (CST)	0.149 (β 1)	(0.121)	1.227	0.226	
R²	0.088				
N	51				

(Intercept)	2.132	(1.082)	1.970	0.059	MP
					(X2)
Reliability (REL)	0.424	(β (0.425)	0.999	0.326	
	2)				
Responsiveness	0.384	(β (0.323)	1.190	0.244	
(RES)	2)				
Assurance (ASS)	-0.431	((β 2) (0.347)	-1.241	0.225	
Ease of Use (EOU)	-0.131	((β 2) (0.487)	-0.269	0.790	
Cost (CST)	0.007	(β (0.073)	0.093	0.926	
	2)				
R2	0.140				
N	54				

(Intercept)	6.238**	-1.656	3.767	0.001	MT
					(X3)
Reliability (REL)	0.379 (β	-0.374	1.014	0.321	
	3)				
Responsiveness	-0.761 (-0.363	-2.097	0.047	
(RES)	β3)				
Assurance (ASS)	-0.111 (β	-0.206	-0.539	0.595	
	3)				
Ease of Use (EOU)	0.016 (β	-0.281	0.056	0.956	
	3)				
Cost (CST)	-0.151 (β	-0.079	-1.907	0.069	
	3)				
R2	0.207				
N	45				

***Significance Levels: *** p<0.001; ** p<0.01; * p<0.05**

Notes: SE=Standard Error. t-value=Coefficient/SE. Significance: * p<0.001; ** p<0.01; * p<0.05.**

This table presents the coefficients for the five determinants and the model fit statistics:

Determinant	Mobile Banking	Mobile Payment	Money Transfer	Overall MFS
(Intercept)	4.231**	2.132	6.238**	2.945***
Reliability (REL)	−0.167	0.424	0.379	0.011
Responsiveness (RES)	−0.030	0.384	−0.761*	0.136
Assurance (ASS)	−0.517	−0.431	−0.111	−0.339*
Ease of Use (EOU)	0.201	−0.131	0.016	0.226
Cost (CST)	0.149	0.007	−0.151	0.018
R2	0.088	0.140	0.207	0.054
N	51	54	45	150

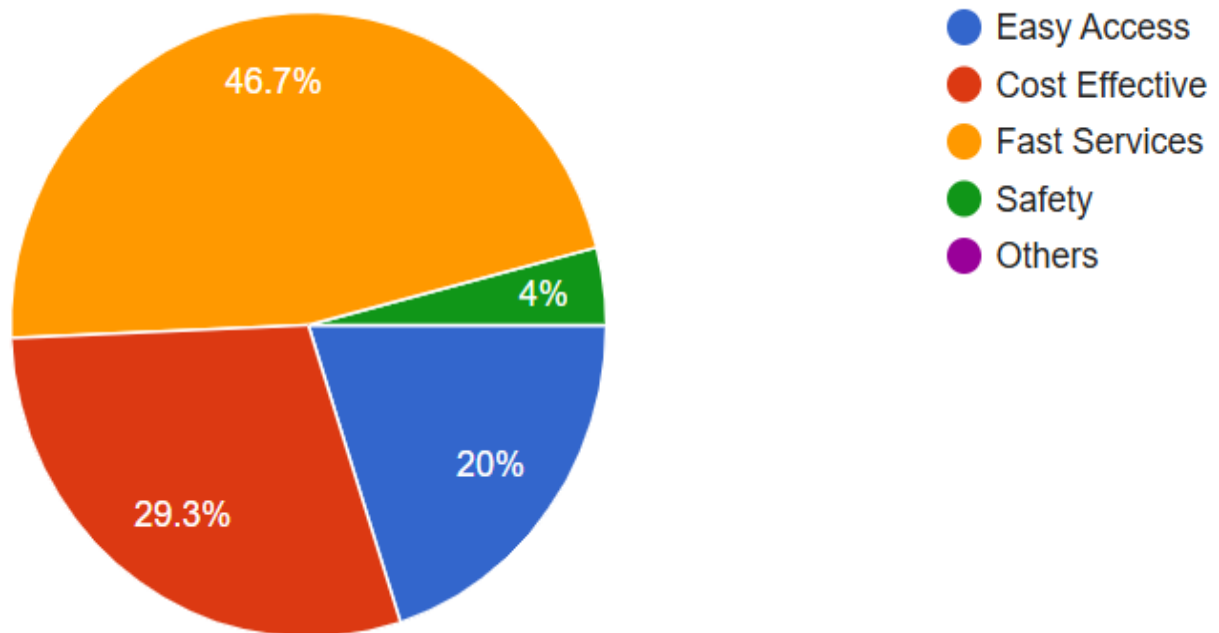
Table below shows the calculated coefficients (β), which represent the incremental satisfaction provided by a one-unit increase in each of the five variables.

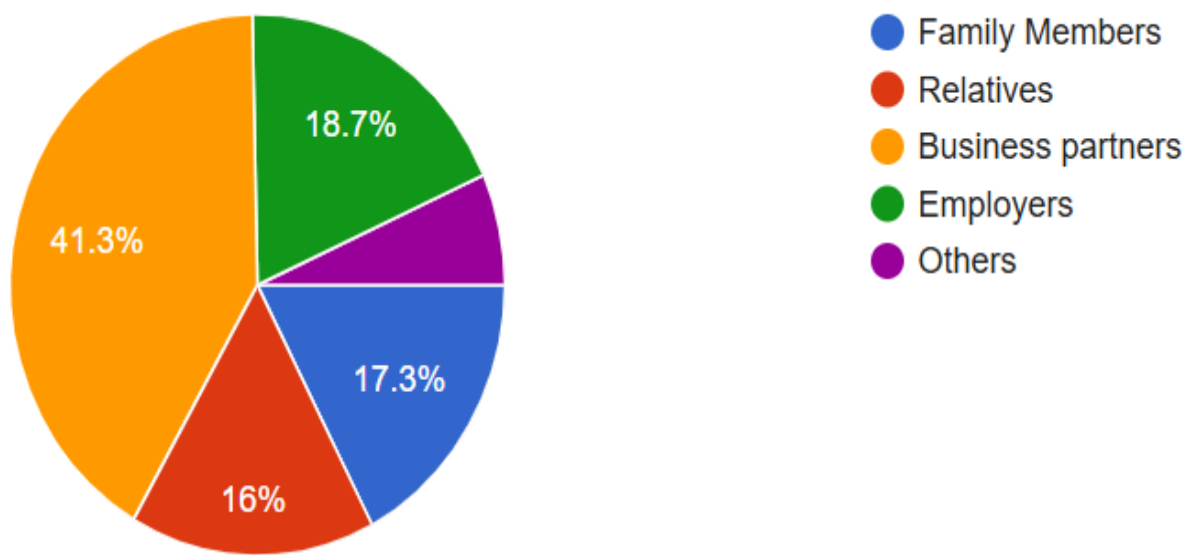
Variable	Coefficient Significance (β)		Interpretation of Satisfaction Level
(Intercept)	2.945***	p<0.001	The average baseline ITU when all determinants are zero.

Reliability (REL)	0.011	Not Significant	No statistically measurable impact on overall satisfaction.
Responsiveness (RES)	0.136	Not Significant	No statistically measurable impact on overall satisfaction.
Assurance (ASS)	-0.339*	p<0.05	Only significant predictor. A one-unit increase in Assurance leads to a decrease of 0.339 in ITU, suggesting negative sentiment/impact.
Ease of Use (EOU)	0.226	Not Significant	No statistically measurable impact on overall satisfaction.
Cost (CST)	0.018	Not Significant	No statistically measurable impact on overall satisfaction.
Model Fit (R2)	0.054		Only 5.4% of the variation in customer satisfaction is explained by these 5 variables collectively.

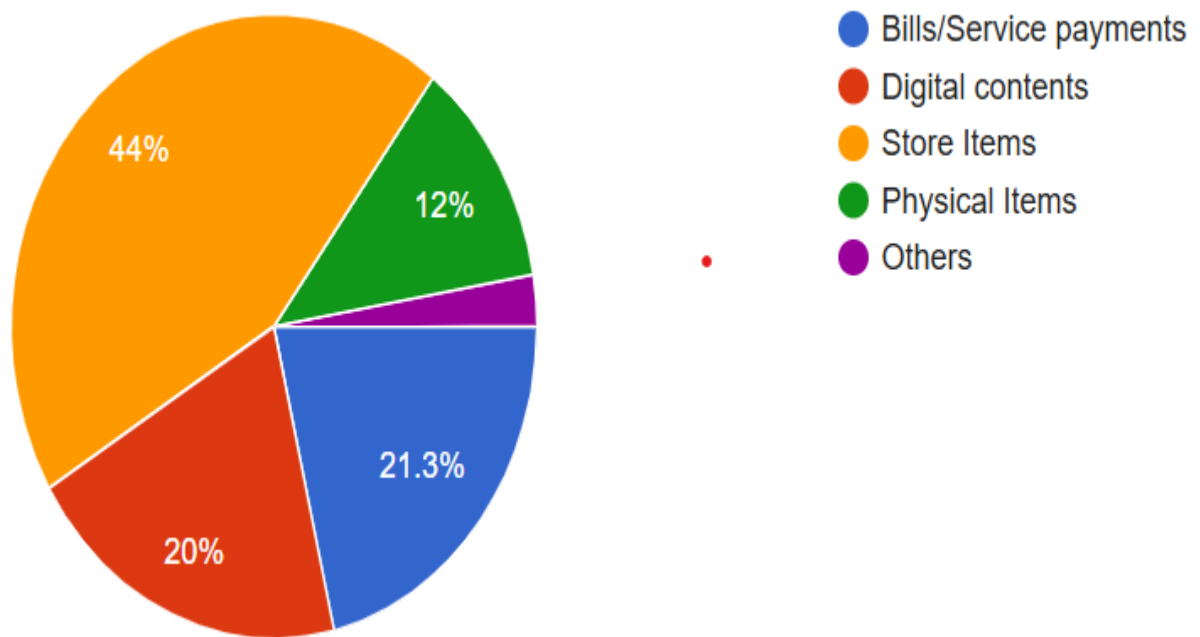
Appendix-D

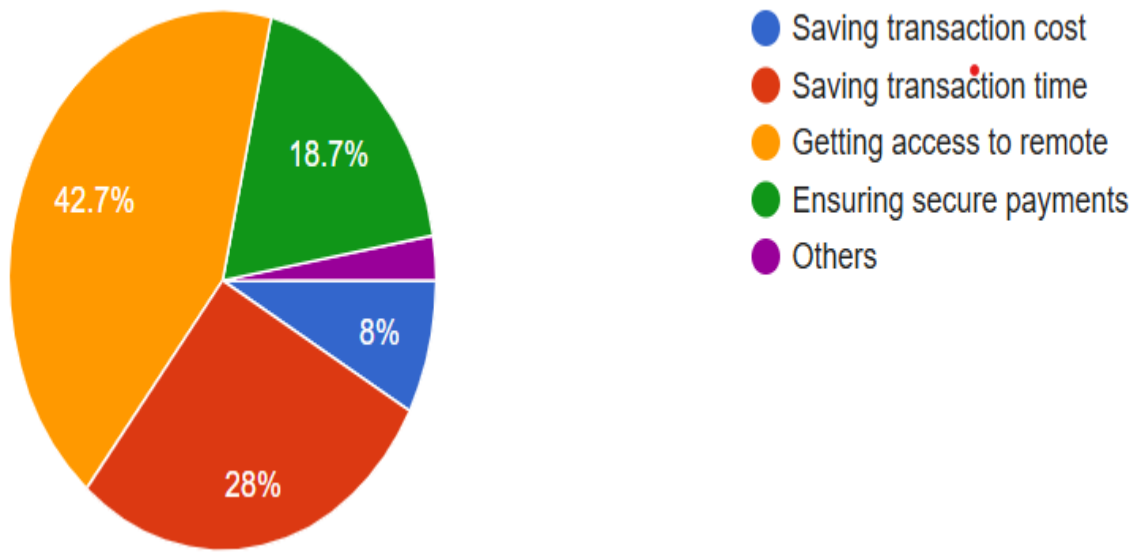
Section A: Money Transfer





Section B: Mobile Payment





Section C: Mobile Banking

