Internship Report

On

Performance Analysis of Mobile Financial Industries;

A comparative Analysis between bKash Limited and Dutch

Bangla Bank Rocket



BUS 400

Internship Report on

Performance Analysis of Mobile Financial Industries;

A comparative Analysis between bKash Limited and Dutch Bangla Bank Rocket

Submitted to

Riyashad Ahmed

Assistant Professor & Coordinator, EMBA Program

BRAC Business School

BRAC University

Submitted by

Lubna Ahmed

ID: 15104063

BRAC Business School

BRAC University

Date of Submission: 28th April 2019

Letter of Transmittal

28th April 2019

Riyashad Ahmed

Assistant Professor & Coordinator, EMBA Program

BRAC Business School

BRAC University

Subject: Submission of Internship Report on "Performance Analysis of Mobile Financial

Industries; A comparative Analysis between bKash Limited and Dutch Bangla Bank Rocket".

Dear Sir,

With due respect may I state that it is a great pleasure for me to finally complete the

internship report on "Performance Analysis of Mobile Financial Industries; A Comparative

Analysis between bKash and Rocket" to you which is a requirement of BUS 400 course.

I am glad to declare that I have prepared my report as per instruction and have implicated my

effort to make it as informative as I can. I have utilized my analytical abilities to analyze

collected data as well as represent them with visuals. Besides, my close observation while

working at bKash helped me to prepare the report along with achieved experiences.

I, therefore, sincerely hope that it will meet its standard and serve its purpose accordingly.

Yours obediently

Lubna Ahmed

ID: 15104063

BRAC Business School

BRAC University

Signature & Date

iii

Letter of Endorsement

This to certify that Lubna Ahmed ID-15104063, is a regular student of BRAC Business School, BRAC University and has successfully completed the internship report titled "Performance Analysis of Mobile Financial Industries; A comparative Analysis between bKash Limited and Dutch Bangla Bank Rocket" under my supervision. Her internship placement was at bKash Limited. I am pleased to state that she has worked hard during her internship tenure as well as preparing this report. Furthermore, she has been able to present a good picture of the report. The data and findings presented in the report seems to be authentic. The report can be used by others if any researchers want to work further on this topic.

I wish her every success in all of her endeavors.

With Regards,

Riyashad Ahmed

Assistant Professor & Coordinator, EMBA Program

BRAC Business School

BRAC University

Signature & Date

Acknowledgement

This internship report required a great deal of my attempt and ambition to complete the final requirement in attaining a Bachelor of Business Administration from BRAC University. However, I would not be able to complete it without the help of a host of people mentoring me. First of all, I would like to express my gratitude to Almighty Allah for giving me the strength and patience to complete this study. Thereafter,I would like to express my gratefulness to my honorable advisor of the internship, Mr. Riyashad Ahmed, Assistant Professor &Coordinator, EMBA Program, for constantly being supportive and providing guidance in this sort of complex study. His friendly behavior paved the way for making the report easily. Furthermore, I would also like to thank my supervisor Mr. Fuad Hasan, General manager, Finance and Accounts department, bKash Limited and Md. Saifur Rahman, Deputy General Manager, Finance and Accounts department, bKash Limited for helping me with a 4 month internship at Accounting and Finance Divison, bKash Limited and providing me all the necessary information for the internship report. Without their contribution and willingness, it would have been challenging for me to get all the required inputs. My endeavor will come true if the actual purpose of this study becomes fulfilled.

Executive Summary

Financial Technology is one of the most important concerns in the global economy. Almost every country in the world is somehow determined to introduce new technologies every moment to push the country's economy even further. The banking sector is the core of every country's economy. Thus, the digitalization of the banking sector is an utmost necessity. The discovery of the Mobile Financial Services is a result of the evolution of mobile-based banking or offering business services via mobile and that is called mobile-banking or M-Banking. The basis of the M-banking has been the intention of delivering banking at the doorsteps of the traditional banking customer. The time to time development of the Mbanking has emerged a whole new dimension called mobile financial services. MFS is focused on creating a cashless payment system where a person doesn't require carrying cash since he can operate the whole transacting operation over the mobile device. The more specific goal of mobile financial service providers is to create E-wallet containing encrypted money. In the economy of a developing country like Bangladesh, Mobile financial services have been growing significantly by focusing primarily in the delivery of the banking facility (Cash-In, Cash out, Bill payments etc.) to the unbanked population and this have been the key behind such rapid growth and magnificent customer acceptance. bKash and Rocket are the most influencing players of the industry among the 18 license holders.

In this report, I have analyzed the industry position regarding the Life cycle stage, Industry structure, Competitive status (Porter's Five-factor Model), Environmental status (PESTLE analysis), Growth Analysis and Growth Forecast and Customer Perception Analysis. I also intend to understand the prospect of the industry in Global and Country-specific (Bangladesh) aspect. In the case of the life cycle, the industry is in the growth stage and the industry is an oligopoly industry. The threat of New Entrants is low, Bargaining Power of Suppliers is high, Threat of Substitute Services is moderate, bargaining power of customer is moderate and Competitive Rivalry is high. The political situation is positive, Economic situation is moderate, Social situation is positive, Technology situation is negative, Legal situation is positive. In case of growth analysis, the growth of Number of Transactions is 7%, Average Daily Transaction is 7%, number of agents is 4%, Salary disbursement is 18%, Peer to Peer transaction is 6%, Payment of Utility bills is 13%. From the weighted average I have calculated and forecasted the growth will be 87% in Active Account, 42% in Total

transactions, 40% in Average daily transactions, 31% in Cash-in, 40% in Cash-out and 86% in Utility bill payments. While analyzing the potential reasons behind or the customer perceptions regarding the industry, which are hindering the expected growth of the industry I have found that 8% people have agreed strongly and 52% have agreed about not feeling secure,14% people strongly agreed and 42% agreed about still finding it complex,22% strongly agreed and 52% agreed about getting comparatively low return, 20% strongly agreed and 38% agreed regarding the continuous presence of rumors, 12% strongly agreed and 52% strongly agreed about not feeling as the first choice and 24% strongly agreed and 56% agreed regarding MFS not being the universal payment system. The customers think that Expansion of the Merchant Payment agreement and facility, Demonstrative advertisement increasing the Daily Transaction limit, More bank transfer agreements, Light version of apps, Reduction of cost/charge, Separate Statement for separate services, Electronic KYC, Increased return on saving and decreased saving time requirement may attract them more to consider MFS as the part and parcel of the life. While comparing between two key Industry players bKash and Rocket on various aspects, I have found that bKash is strong considering organizational structure, technological alliance, designing special offer strategies, and brand recognition and brand image, investor portfolio, subscriber and agent availability, interest on saving and so on. In the case of Rocket, it has a huge ATM network, strong banking backup because of being a banking strategic unit, the strong loyal customer base of traditional services and so on. From the study, I have understood that the industry has been growing significantly in the last five years and has a sublime potentiality to grow in the next five years. As it is still a growing industry and it is launching new services every now and then, it is difficult to forecast the exact numbers. The industry has immensely mentioned worthy prospect and future waiting. The entrance of Government-backed initiative "NAGAD" can have both a positive and negative impact on the industry and existing players. There are some concerns like – Privacy violation, Continuous presence of rumors, high charges, relatively low return (the only bKash pays though), being the unusual option and not being available at everywhere and in every possible transaction (which defines the longtime goal of MFS industry) should get sincere attention.

Table of Contents

1. Intr	oduction	1
1.1	Rationale of the study	1
1.2	Problem Statement	1
1.3	Scope of the Study	1
1.4	Objective of the study	2
1.5	Methodology of the study	2
1.6	Limitations of the study	3
2. Lite	erature Review	5
2.1 I	Literature Gap	7
3. Indu	ustry Overview	<u>c</u>
4. Org	ganizational Overview	14
4.1bKa	ash limited	14
4.2 I	Dutch Bangla bank Rocket	16
5. Indu	ustry Analysis	20
5.1 8	Stages in the industry life cycle	20
5.2 I	Industry Structure	21
O	Oligopoly	21
Co	ontrolling force for the profitability and industry profitability	21
5.3 (Competitive Analysis	22
Po	orter's Five Forces Model	23
5.4 I	Environmental Analysis	28
P	ESTEL Analysis	28
5.5 (Growth Analysis	31
5.6 (Customer Perception Analysis	39
6. Cor	mparative Analysis	47
Findin	ngs	59
Recom	nmendations	61
Conclu	usion	63
Refere	ence	64
Appen	ndix	65
App	oendix-A: Calculation of Weighted Average Growth	65
App	oendix-B: Calculation of Expected Growth	66
App	oendix-C: Customer Perception Survey Questionnaire	67
App	oendix-D: SPSS Calculation	72

Chapter 1

Introduction to the Report

1. Introduction

1.1 Rationale of the study

Access to formal financial services is significantly low especially for those people who live in the remote corner of the country. These people are contributing to the rural economy by engaging in different financial activities. By bringing them under the formal banking network, we can strengthen our national economy. The percentage of people who are connected to the formal banking system is less than 15% whereas 68% have mobile phones as stated on the bKash website. The number of the total mobile subscriber in Bangladesh has reached 152 million at the end of July 2018 according to Bangladesh Telecommunication Regulatory Commission (BTRC). Undoubtedly, the number will increase in the upcoming days. Mobile Financial Service providers have taken the opportunity to flourish. People can send and receive money, recharge mobile balance, make payment and get other benefits by using their bKash. In our study, I intend to focus on the stage and structure of the industry. I have tried to find out the competitive status, environmental situation and the trend of the growth. I have also considered customers perception and suggestions towards the industry players. Comparative analysis of the two key players has helped us to understand the industry even broadly.

1.2 Problem Statement

What is the Mobile financial service industry growth in Bangladesh? What is the industry stage and structure? What is the current growth status and what will be its future growth like? Does the Industry have any prospect for the future? What are the comparative differences between bKash and Rocket-the two key players of the industry?

1.3 Scope of the Study

The study has been based on publicly available data. The purpose of the study is to focus on the growth of the industry and customer perception regarding the industry. The study also considers the comparative status between the two industry player- Rocket and bKash.

1.4 Objective of the study

- → Broad: To learn about the overall industry position both in macro and micro centric aspect.
- → Specific: To have specific knowledge regarding
 - > Industry performance and the growth trend
 - > Customer perception and demand from the industry
 - ➤ Company-specific differences between Rocket and bKash

1.5 Methodology of the study

I collected data from the various sources and those have been categorized under

Primary Sources

- 1. Desk job during the internship
- 2. Observing Internal procedure and policies
- 3. Interviewing and interaction with the responsible officers
- 4. Survey on customer perception

Secondary Sources

- 1. Annual Reports of bKash Limited
- 2. Official Records of bKash Limited.
- 3. Websites
- 4. Various reports and articles related to the study.

1.5.3 Method of the Analysis

In the case of industry analysis, I considered the publicly available data from the government databases and Bangladesh bank websites and publications. I analyzed the existing characteristics of the industry to consider the life cycle stage, industry structure, Porter's five forces model and PESTLE analysis. I calculated the weighted average of the available properties and found the growth rate of the last five years. I then forecast the potential growth percentage of the 2018- 2023 interval by the formula "(Present Amount – Past Amount)/Past Amount". I prepared a questionnaire and performed survey (sample size-50) to find out the customer perception. From the customer responses, I have found out the weight of concern regarding the existing issues of the Mobile Financial Service industry. I also considered the suggestions and demands of the customers while arriving at the conclusion.

In order to get an in-depth understanding of the industry, I have performed a comparative analysis of bKash and Rocket. It helped us to gather company-specific knowledge and their contribution to the industry in qualitative viewpoints.

1.6 Limitations of the study

- Infant Industry, less structured data
- No access to the primary data sources
- No company-specific data available from the competitors
- Competitors don't even have separate financial statements. So I couldn't comparative analysis from quantitative viewpoints.

Chapter 2

Review of Related Literature

2. Literature Review

Bangladesh banking industry introduced mobile financial service (MFS) in 2011 which allowed a vast segment of the population, especially the underprivileged section in an urban area and rural people to enjoy different financial service, despite direct access to financial institutions, suitable financial products, and high operational costs.

Globally mobile financial services have proven to be an effective and efficient way of providing enabling financial products and services, especially among the unbanked population. At present, the financial institutions are more focusing on data analytics and mobile technology, where the FinTech companies are focusing on developing technology to excel the digital customer services. Mobile financial services, cash-in, cash-out, mobile recharge, payment, and remittance are gaining popularity as recognized FinTech in Bangladesh because of the regulated environment, corporate culture and governance, USSD driven technology, automation, data security population demographics and attracting an investor. However, IT security, regulatory limitations, and the difference in culture are still playing the role of key challenges to sustain digital financial operation in Bangladesh. FinTech companies create an ecosystem that fosters the collection of vast amounts of data and builds trusted relationships with clientele. Financial institutions have realized the importance of these ecosystems and are attempting to engage with and bring innovation inside their companies (Global FinTech Report, 2017).

The central bank issued guidelines on "Mobile Financial Services for Banks" in September 2011 clearly stating a choice to make the market bank-led (Dona.P.D, Mouri.S.I, Hasan.M, Abedin.Z, Significance of Exponential uses of Mobile Financial Services (MFS) in Bangladesh, 2014). Since the inception of MFS in 2011, Bangladesh experienced robust growth in a number of account holders, volume and amount of transactions in MFS. With a view to providing an orderly, enabling and competitive environment for optimal utilization of the new windows of opportunity for extension of the traditional financial services, the Board of Directors of Bangladesh Bank (BB), in terms of Section 7A(e) and section 82 of the

Bangladesh Bank Order 1972, and in terms of Section 26 (cha) of Bank Companies Act ,1991 (amended in 2013), has decided to issue Bangladesh MFS Regulations 2018 replacing theGuidelines on MFS for Banks, issued in September 2011 and its subsequent amendments (Rashid.L, Bangladesh Mobile Financial Service Regulations, 2018).

A good number of empirical pieces of literature reveal that finance contributes to growth by allowing the efficient intermediation of resources among savers and investors (Beck and de la Torre, 2006; Beck, Demirgüç-Kunt, and Levine, 2004). However, banks are unable to include a great portion of our population due to lack of direct access in the product and services and high charges. This population, deprived of traditional banking service enjoys the benefits of mobile financial service the most for the absence of critical infrastructure and easy access. MFS has now become a strong tool for building digital Bangladesh. Since inception, the growth of mobile financial services (MFS) is encouraging and it now provides services among 41.9 million customers. However, much effort needs to expand the MFS market with customized services which include encouraging users to use personal account in transactions, concerted efforts for removing insecurity problems of agents in handling big amount, coordinated steps to lower transaction cost and monitoring ML and TF issues in MFS closely (Nabi.G, Sarder.M.R, Moula.G, Sarder.W, Do Mobile Financial Services Promote Ethical Banking In Bangladesh, 2016). The main issue that should be taken care of for electronic payments system is Authentication which identifies the buyer and also makes sure that the person is who he/she claims to be. Used methods are i.e. digital signature, fingerprints, two steps verification (like Gmail), password or smartcards etc. Data integrity which means, that there must be a way to verify that data is not changed during the transactions. Confidentially must also be preserved.

bKash is the first complete and successful mobile financial service provider in Bangladesh affiliated with four telecom operators. The bKash mobile wallet is a VISA technology platform which is fully encrypted to ensure most secure transactions, will be the customer account into which money can be deposited and out of which money can be withdrawn or used for various services. Customers will be able to receive electronic money into their bKash accounts through salary, loan, domestic remittance, and other disbursements and

eventually will cash out the electronic money from bKash authorized agents/ATM (Uddin.M.S and Akhi.A.Y, 2014).

The factors that have facilitated the speedy growth of bKash are- a specialized organization built to deliver mobile financial services; a shared vision for scale among a diverse investorgroup; and an enabling and flexible regulatory environment (Chen and Rasmussen, 2014). Total registered MFS customer account is 28.64 million; the total number of the agent is 0.53 million, and average transaction per day is BDT 4.32 billion (BB Annual Report, 2014-15). Although a good number of banks are operating MFS, a significant market share (number of customer) is captured by bKash of BRAC Bank Limited (58%), followed by Rocket of Dutch-Bangla Bank Limited (16.6%), UCash of United Commercial bank Limited (7.7%) (Parvez, et al., 2015, p.14). (Islam.R and Hossain. S.Z, 2018).

2.1 Literature Gap

While reviewing available pieces of literature, we didn't found any published journal or articles or any relevant study regarding the Industry analysis specifically on growth analysis on the study. There is no study available regarding the comparative analysis of the industry players as well.

Chapter-3

Mobile Financial Services Industry in Bangladesh

3. Industry Overview

In this era of digital revolution, technology and its services have become constant companion in our day to day lives. In particular, invention of mobile phone made our lives easier not only because it brought revolutionary changes in communication system but also it offers various services such as online purchase, social interaction, and mobile application cloud storage etc. Digitalization offered telecom companies the opportunity to rebuild their market position and create innovative customer services among which Mobile Banking has become an extraordinary tool applied to connect unbanked and underprivileged population into formal financial services. Following that, mobile banking started more secure money transaction by encrypting all the information and transferring e-money through digital wallet or e-wallet instead of cash. As a result, mobile banking converted into mobile financial services (MFS) which increasingly gained popularity especially among the low-income group of people due to wide reach of mobile network around the country, developed IT infrastructure in payment system and increased mobile phone users. At present, a large number of total population in Bangladesh are taking Mobile Financial services as the cost is affordable and the transaction is hassle free. bKash and Dutch Bangla Bank Rocket are two leading Mobile Financial Service providers in the industry which are actively covering almost 100% area of Bangladesh.

Bangladesh has recently flourished for digital innovation in financial sector as well as for including remote pockets to widen the coverage all over the country. Digital financial services have proved to be one of the effective weapons to extract poverty and secure the sustainable development goals (SDGs) rescuing millions of Bangladeshis out of poverty. According to the World Bank Report 2015, 66% of Bangladeshis of total population living in rural areas do not hold any formal banking access. On the other hand, establishing bank branches across rural Bangladesh is not an appropriate option as Bangladesh Bank the Central Bank of Bangladesh only grants new branch opening licenses for a maximum number of 15 branches a year. As a result, the financial sector in Bangladesh is unable to reach low income rural as well as urban population with adequate financial service despite having a booming economy. To fulfill this gap, Bangladesh bank introduced Bank lead Mobile

Financial services (MFS) model with a supported guideline in the year 2011 with the intention to promote financial inclusion all around the country and to reach people deprived of banking services. The objectives were:

- To allow women and poor population avail the financial services in the most convenient way
- To formalize financial services by promoting the registered transaction

Fact	Description		
Inception	31st January,2011 by DBBL		
Primary Goal	To reach the unbanked people		
Secondary Goal	Creation of E-wallet		
	18		
Total licensed Banks (Active)	Subsidiary	1	
	SBUs	17	
Most Popular Service	bKash, Rocket, mCash, Surecash, Ucash, MyCash		
Providers			
Policy and Regulation	Mobile Financial Services Guideline, 2018		
Policy Restriction	Mobile Network Operators are not allowed		

Table-1: Industry at a glance

According to the Bangladesh MFS Regulations, 2018, Mobile Financial Service will be led by banks as a bank product or a bank may form an MFS providing subsidiary with at least 51% of the share held by the bank with control of the board. With a view to providing an orderly, enabling and competitive environment for optimal utilization of the new windows of opportunity for extension of the traditional financial services, the Board of Directors of Bangladesh Bank (BB), in terms of Section 7A(e) and section 82 of the Bangladesh Bank Order 1972, and in terms of Section 26 (cha) of Bank Companies Act ,1991 (amended in 2013), has decided to issue Bangladesh MFS Regulations 2018 replacing the Guidelines on MFS for Banks, issued in September 2011 and its subsequent amendments. The new MFS Regulations will be in effect along with the Bangladesh Payment and Settlement Systems Regulations, 2014 or any other law(s) shall come into effect regarding these regulations.

The purposes of these Regulations are to:

- i. Provide a regulatory framework to create an enabling and competitive environment to cater to cost-efficient and prompt MFS;
- ii. Promote access to formal financial services at an affordable cost, especially for the poor and unbanked population segments; and
- iii. Ensure compliance with Anti Money Laundering and Combating Financing of Terrorism (AML/CFT) standards set by AML/CFT rules, regulations, guidelines and instruction issued by Bangladesh Financial Intelligence Unit (BFIU).

The journey of mobile financial service in Bangladesh started with the launching of Dutch Bangla Bank Mobile Banking. They got permission from Bangladesh Bank in early 2010 and started its operation on 31st March 2011. At that time the concept was really new but people embraced it quickly because of the benefits of the service. Right after Dutch Bangla Bank, bKash; a subsidiary of BRAC Bank started its journey with a value proposition of simple, safe, convenient place to store money, a safe and easy way to make payments and money transfers which changed the scenario of mobile financial service and helped it to establish as one of the biggest MFS service provider around the nation within a very short period of time. Bangladesh Bank issued the license to 28 commercial banks to launch mobile financial services in the country and later canceled the license of three of the banks. Now there are 25 banks have the authority to provide mobile financial service among which 18 banks are active in providing the service in the market.

Mobile Financial Service (MFS) comparative summary statement of November, 2018							
and December, 2018							
Seria l no.	Description	Amount in November, 2018	Amount in December, 2018	% change (Novemb er, 2018 to Decembe r 2018)			
1	No. of Banks currently providing the Services	18	18				
2	No. of agents	879,727	886,473	0.8%			

3	No. of registered clients in Lac	670.61	675.20	0.7%
4	No. of active accounts in Lac*	355.73	373.13	4.9%
5	No. of total transaction	196,134,91	210,087,150	7.1%
		0		
6	Total transaction in taka(in crore BDT)	31,527.39	32,105.57	1.8%
7	No. of daily average transaction	6,537,830	6,777,005	3.7%
8	Average daily transaction (in crore BDT)	1,050.91	1,035.66	-1.5%
9	Product wise information	Amount (in	Amount (in	
		crore BDT)	crore BDT)	
a.	Inward Remittance	78.83	63.51	-19.4%
b.	Cash In transaction	12,578.10	12,261.53	-2.5%
c.	Cash Out Transaction	11,945.93	12,213.83	2.2%
d.	P2P transaction	5,119.48	5,073.65	-0.9%
e.	Salary Disbursement (B2P)	586.60	613.19	4.5%
f.	Utility Bill Payment (P2B)	301.69	284.76	-5.6%
g.	Merchant Payment	341.54	424.90	24.4%
h.	Government Payment	88.88	657.48	639.7%
i.	Others	486.33	512.71	5.4%

[1 lac = 0.10 million and 1 crore = 10 million]

Table-2: Current overview of the industry (source: Bangladesh Bank website)

Chapter 4

Organizational overview

4. Organizational Overview

4.1bKash limited

bKash limited is the leading provider of Mobile Financial Services in Bangladesh holding 23rd rank in Fortune's third annual "Change the World" list of 50 recognized companies which have positive social impact of their activities. Where banks failed to reach the unbanked population due to limitations, bKash Limited successfully took the advantage of drastically increased mobile subscribers to provide mobile banking services to both bank account holders and non-bank account holders. At present, there is almost 22% of adult population in Bangladesh use bKash for multiple financial purposes and the amount of daily transaction through bkash is more than 4.5 million.

bKash limited was established on 1st March 2010 and started its journey as a joint venture between BRAC Bank Limited, Bangladesh and Money in Motion LLC, USA in 2st July 2011. In April 2013, the international Financial Corporation (IFC), a member of World Bank Group became an equity partner and in April 2014, Bill & Melinda Gates Foundation became the investor of the company. Recently in April 2018, Ant Financial Service Group, operator of Alipay became the strategic partner of bKash Limited to promote financial inclusion for both unbanked and underbanked communities in Bangladesh. The Mobile Network Operator (MNO) partners of bKash are Grameenphone, Robil, Banglalink, Airtel and Teletalk.bKash has launched its remittance service through Western Union on January, 2018 to receive money directly in receivers' bKash account from more than 200 countries. bKash has also collaborated with companies like Index, Valyou, TransferTo, and NEC to bring remittance money from countries like UAE, Malaysia, Italy etc. it will enable Bangladeshi people living in abroad to send money to their home country which is a huge contribution to earning foreign exchange. Moreover, bKash has launched a mobile application in April 2018 which enables bKash account holders to send money, buy airtime, withdraw cost, make payment, request for money through app except for remittance service. The company is also working to start e-commerce to facilitate online shopping and government bill payment services. Every year bKash is expanding its market leadership position by 20% and continue

expanding by introducing new technology developments, introducing new products and networking with strong and growing business partners and customers.

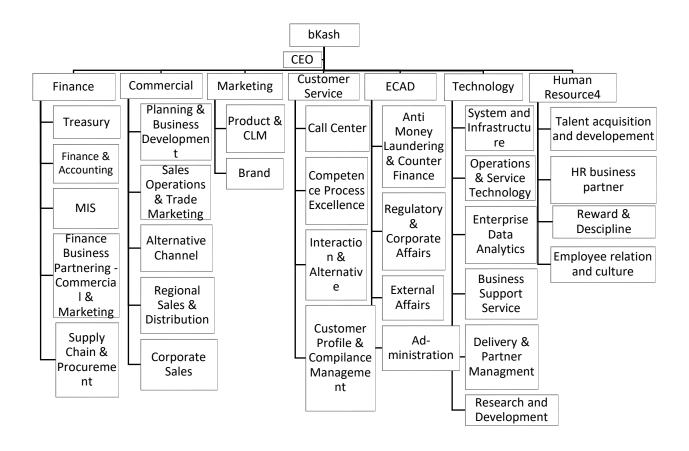
bKash offers mobile wallet which is a VISA technology platform used as a customer's financial account. Customers can deposit or withdraw cash and perform other financial services via the mobile wallet they register for. The transaction is safe and secure as all the information are fully encrypted. Moreover, management of bKash is committed to denouncing all sort of money laundering and terrorist financing. In addition, bKash is committed to announce its planning, implementation, monitoring and controlling tools in accordance with the prescribed rules and regulations of Bangladesh Bank and other regulatory bodies.

Mission:

By providing financial services that are convenient, affordable and reliable, bKash aims to widen the net of financial inclusion. bKash wants to provide a solution for Mobile Financial Services, built on a highly scalable Mobile Money platform, allowing the people of Bangladesh to safely send and receive money via mobile devices.

Objective:

The ultimate objective of bKash is to ensure access to a broader range of financial services for the people of Bangladesh. It has a special focus to serve the low-income masses of the country to achieve broader financial inclusion by providing services that are convenient, affordable and reliable.



4.2 Dutch Bangla bank Rocket

Rocket is the rebranded name of Dutch Bangla Bank Mobile Banking Service taking the position as the second largest mobile Financial Service (MFS) in Bangladeshi Market. This mobile banking system of DBBL was first inaugurated on May 31, 2011. It was Bangladesh's first initiative to support financial inclusion by the Government of Central Bank of Bangladesh. Rocket is the first banking process offering financial facilities to unbanked communities efficiently and at an affordable cost. Numerous charges in traditional banking and maintaining a minimum balance in the account tend to be difficult for rural customers. Moreover, most of the rural people are incapable of writing cheques or signing them. These barriers have been bypassed by DBBL's Mobile Banking through which the customer can use their mobile phone to authenticate a transaction if the PIN and the mobile number are not incorrect.

According to Rocket there is only 24% adult population in Bangladesh hold bank accounts where 60% are using mobile phones. Dutch Bangla Bank Rocket is based on a Bank-led model to serve both account holders and not account holders using a mobile phone. Population holding a bank account may not need to take basic banking activities using mobile phones; however, it becomes more convenient for them when banks discharge conventional banking services using mobile phones. Therefore, Dutch Bangla Bank started its mobile banking service based on the bank-led model and did not consider establishing a subsidiary company. In addition, DBBL Rocket does not consider the customers' deposit as electronic money or wallet rather all the deposits are shown as balance in the Rocket account just like savings or current accounts.

There are four parties involved with Dutch Bangla Bank Rocket –

- Bank
- Mobile Network Operator (MNO)
- Agents
- Customers

Among these four parties, customers and agents get the top priority from Rocket. It charges an acceptable commission to the customers and at the same time motivates the bank, MNO, and agents to run the business successfully. All the cash are deposited at a bank branch. Customers can cash-in or cash-out at agents, agents at super agents and super agents at bank branches. The agents and customers can also perform the transaction directly at bank branches/ ATM which made it more convenient for them.

Vision:

The vision of the Dutch-Bangla Bank Rocket is to promote Banking to the unbanked (unlike other models in developing countries which promote P2P or 'Send Money') and to develop savings habit among the unbanked. Accordingly, Dutch-Bangla Bank Rocket started with and

providing the highest importance to the registration with proper KYC, Cash-in and Cash-out activities. Other activities like P2P, disbursement of foreign remittance, salary/wages, government's/other allowances, air-time top-up, buying goods and services etc are considered as the by-product of the basic banking services.

Product and Services:

- Customer Registration
- Cash-in
- Cash-out
- ATM withdrawal
- Mobile Top-up
- Person to Person transfer
- Bank A/C- Mobile Bank A/C transfer
- Foreign Remittance
- Salary Disbursement
- Balance inquiry
- Bill payment
- Merchant payment

Chapter 5

Industry Analysis

5. Industry Analysis

5.1 Stages in the industry life cycle

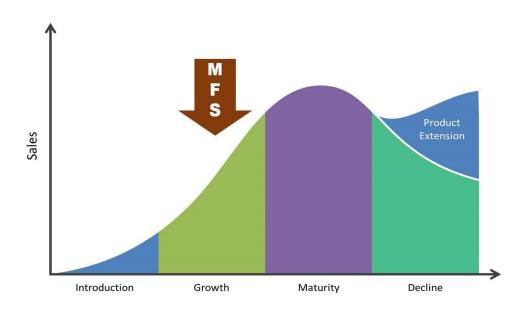


Figure-1: Industry life cycle

There are a lot of potential opportunities for the organizations of MFS industries in the market place which indicates that the industry is passing through the Growth stage. According to Bangladesh Telecommunication Regulatory commission (BTRC), there were total 156.989 million mobile phone subscribers and total 91.348 million internet subscribers at December 2018. In 2018 more than 46% of financial transactions were conducted through mobile banking which indicates a growth in the number of Mobile Financial Services holders who are using mobile banking for various financial purposes.

Furthermore, in 2017 there were approximately 42 million registered and more than 16.5 million active MFS accounts made the industry to reach a peak. Another significant source, inward remittance introduced by Mobile Financial Services the country is earning foreign exchanges from various foreign countries. Inward remittance using Mobile Financial services (MFS) has increased by 20.8% to BDT 6.62 crore in March from BDT 5.48 crore in February (Bangladesh Bank, 23rd May, 2018).

5.2 Industry Structure



Figure-2: Industry Structure

Oligopoly

At present we can notice that the Mobile Financial Services industry is following the oligopoly industry structure for-

- Limited number of service providers
- High entry barrier
- Little scope of differentiation

Bangladesh Bank is centrally controlling all the Mobile Financial Services providers and has limited the number by providing approval to only some of the powerful banking corporations with strong financial background. Besides, huge capital requirements, strict rules & regulations, incumbency advantage, unequal access to the distribution channel, economies of scale and retaliation from existing firms have made it difficult for new firms to enter the industry. Moreover, the insignificant scope of product differentiation for mobile financial services has made this industry to follow oligopoly structure recently.

Controlling force for the profitability and industry profitability

Controlling forces for profitability of the Mobile Financial Services industry in Bangladesh are:

• Network Quality of Telecom Companies

- Usages of services
- Efficient Banking Service
- Value added services
- Customer satisfaction
- Cost and time Efficient
- Government rules and regulation

Forces for Industry profitability of Mobile Financial Services industry in Bangladesh are:

- Customer base
- Growth of the country
- Customer demand and usage
- Government rules and regulations
- Role of network providers (suppliers)
- Advancement of technology in the country

5.3 Competitive Analysis

Industry and competitive analysis (ICA) is a part of any strategy development in firms and other organizations. The purpose of ICA is to understand factors that impact on the performance of the industry, and as well the performance of firms within the industry.

Porter's Five Forces Model



Figure 3: Porter's Five Forces Model

Threat of New Entrants - Low (Positive/Favorable)

The threat of new entrants for Mobile Financial Services industry is low or favorable as it is a newly introduced concept in the financial service system and it is passing the growing stage. The following reasons are minimizing the threat of New Entrants in the MFS industry.

a)Barriers to Entry (High)

The mobile Financial Service Industry is a part of financial system, therefore, there are plenty of legal and regulatory pressures which create barriers from the existing market players on new entrants. There are various factors that restrict or discourage others to enter the market, such as:

I. **Huge Capital Requirement:** To provide mobile financing service an organization must maintain required capital adequacy and cash adequacy ratio and must be well capitalized.

- II. **Strict Conditions, Regulation, and Policies:** Bangladesh Bank the Central Bank of Bangladesh has the sole authority to provide a license to a new company. There are specific conditions of Bangladesh Bank strictly needed to maintain before entering MFS industry.
- III. **Incumbency Advantage:** Existing companies in this industry enjoys incumbency advantage because of their experience, technology, management, agent pool, wide networks, favorable geographic locations, Know Your Customer (KYC) practice and customer base financing. It is difficult for a new company to negotiate with mobile network operators (MNO), IT vendors and most importantly building an agent pool.
- IV. Unequal Access to Distribution Channel: The Mobile financial service is provided through a sophisticated and trained agent network to successfully reach every corner of the country. Thus it requires a different and sophisticated distribution channel.
- V. **Economies of Scale:** It has been noticed from researches that the economies of scale of Financial Service Industry remains among large financial organizations and these organizations are more capable to operate services more efficiently than small banks and financial institutions.

b) Expected Retaliation (High)

There are many strong and powerful banks involved which are continuously trying to hamper new entrants to enter the industry. Besides, they influence the government or regulatory bodies and keep increasing the expected retaliation for new companies.

Bargaining Power of Suppliers - High (Unfavorable/Negative)

In mobile financial service industry key suppliers are Mobile Network Operators (MNO) and IT vendors.

- a. Bargaining Power of Mobile Network Operator (Very high): Mobile financial services are entirely dependent on mobile network operators as this service is unable to run without their partnership. The MNO industry has robust bargaining power over the industry as there are only six mobile network operators in Bangladesh who dominate the market, as there is no alternative option to this service and mobile network operators have many other services to perform. Therefore, MFS operators must involve MNO partnership to reach the target customers.
- b. Bargaining Power of IT vendors (Moderate): A safe, efficient and effective IT system is a primary requirement for mobile financial service. In the industry, there are both foreign and local IT vendors providing services to the mobile financial service providers. Since there are large numbers of vendors available, bargaining power is comparatively lower. However, mobile financial service is a very sophisticated system hence the quality of the system and security are very important factors, Moreover, the IT system should be designed according to MFS providers' operation method and structure. Therefore well-known and experienced IT vendors have higher bargaining power over the industry.
- c. Bargaining Power of the Investor (High): Investor's interest is very important in MFS industry as a fund is one of the major factors to sustain and compete successfully. As higher return drives investment decision and there are more scopes and opportunities available to invest in, investors of this industry have higher power over the MSF operators.

Threat of Substitute Services – Moderate

Before Mobile Financial Services, banks and other Microfinance Service providing institutions offered traditional payment and money transfer services, microfinance services; inward remittance services those stands as substitute services to Mobile Financial services.

- a) Threat of Traditional Banking Service (High): Threat from traditional banking service is high because people rely on and prefer banks as a medium of transaction. Transaction services such as debit/credit card, checks, bank draft, money transfer, remittance service and services offered by banks are also strong substitute of the mobile financial service industry.
- **b)** Threat from Microfinance (Moderate): The core target market of Mobile Financial Services consist of rural population and unbanked urban population. Microfinance aims at providing a financial loan at a small scale to the people from remote areas which makes it a potential substitute for mobile financial services.
- c) Cross Boarder inward/outward Remittance Service (Moderate): Some organizations are proficient in cross-border transfers such as (Western Money Union). These organizations play vital role as potential substitute to Remittance Services of Mobile Financial Services Industry.

Bargaining Power of Buyers – Moderate

The primary service holders of MFS industry are general public as well as small and large business organizations, who use mobile financing to transfer money or make payments both to customers and other businesses.

- a) Bargaining Power of general Public (Low): The bargaining power of general people, especially in rural areas is not high because banks located in rural areas do not have the ability to facilitate cross border remittance flow and many rural area people only have access to bKash as other operators are yet to reach the bKash's coverage level. As a result, general people, especially in remote areas are unable to bargain due to lack of alternate Mobile Financial Services.
- b) Bargaining Power of Business Organizations (Moderate): Bangladesh Telecommunication Regulatory Commission (BTRC) has set the charge at 2.0% for each transaction for 'cash-in' and 'cash-out' purposes and Tk. 5.0 for the lowest

amount of transactions in mobile banking. This fixed transaction cost gives mobile financing operators no leeway to make profit, but business organizations have great power over which operator to choose to do their transactions. According to the guidelines of Bangladesh Bank, the transaction limit for the account holders of mobile financial services has been fixed at a maximum amount of Tk. 10,000 on a daily basis and a total of Tk. 25,000 on a monthly basis. The limit is applicable to any number of transactions. So, any business that has monthly revenue/ costs they pay through mobile banking exceeding Tk. 25,000 will be required to hold multiple accounts, preferably with one of the 3 aforementioned operators, which will increase their switching costs.

Competitive Rivalry – High

The intensity of rivalry is influenced by the following industry characteristics:

- a. **Number of firms (fair):** There is a large number of firms involved in the mobile banking sector. As a result, there is a high chance in the future that the customer base can be divided.
- b. **Market growth (High):** The market growth indicators are very high which are around a double-digit growth rate. As result, firms are able to improve revenues simply because of the expanding market. So there is less fight among the competitors for capturing the market share
- c. Fixed cost (High): Capital costs in this industry are quite high because companies spend a great deal of money on technology to provide customers with better services.
 On the other hand, companies had to train several employees to provide customer services at the highest level. So overall the sunk cost is high.
- d. **Switching cost (Low):** The customers of this industry can easily switch from one company to another as the switching charge is near zero. As a result the companies struggle to capture and sustain permanent customers.

e. **Product differentiation (Low):** In the field of Mobile Financial Services, there is very litted scope for product differentiation which leads to high competitive rivalry. In this case, brand identification is the only effective option to constrain rivalry.

Market Forces	Degree of Threats	Condition
Threat of New Entrants	High	Favorable
Bargaining Power of Suppliers	Low	Unfavorable
Threat of Substitute Services	Moderate	Favorable
Bargaining Power of Buyers	Moderate	Favorable
Competitive Rivalry	High	Unfavorable

Table-3: Summary of Porter's Five Force Model

5.4 Environmental Analysis

PESTEL Analysis

PESTLE stands for "Political, Economic, Social, Technological, Legal and Environmental" analysis and is used for business and strategic planning, market planning, organizational change, business and product development and research reports. By understanding these external environments, organizations can maximize the opportunities and minimize the threats of the organization.

Political

Political factors have a positive effect on the industry. Political stability is rare in Bangladesh. Internal disputes between political parties continuously produce pressure on the economy whereas halting the expansion rate in each sector of Mobile Financial Services (MFS) sector will never be an exception. Despite the unfortunate condition, the mobile banking system has

surpassed the hindrance by the political irregularities and has been ready to create its mark within the market by the running fourth year. Because of the pro-active and modern approach of the Bangladesh Bank and Government, the mobile banking system has experienced noteworthy progress in a few years. Bangladesh government's motive in building a "digital" nation has implemented the technological advancement and so encouraging mobile banking system to prosper and exhibiting it as a pretty one within the market.

Economic

Economic factors have a Positive effect on the industry as the current economy of Bangladesh is being unstable. Despite being a country with political instability, poor infrastructure, corruption, insufficient power provides, and slow implementation of economic reforms, the economy of Bangladesh has grown within the past year for 2010 and 2011 however followed by a declining rate in 2012 and in 2013, per Bangladesh Economy Profile 2013. The outgoing year has been one in all the most distressing years for Bangladesh in the recent past in terms of domestic political instability caused by hartals, blockades, and deadly violence for months. As a result, the economy had up-to-date its strength in some ways. The planet Bank International money, Bangladesh Bank (BB) and plenty of specialists have projected the gross domestic product (GDP) to be under 6th that is far below the target of 7.2% for Fiscal Year 2014. Some even apprehend it's going to be under fifth. Poor economy implies less employment generation and low financial gain that successively has poorness implications. Although the disposal financial gain reached an incomparable high of 31079.56 BDT in 2013 if the poor economic state of affairs continues Mobile monetary Services (MFS) might represent a less attractive sector.

Social

Social factors have a positive effect on the industry. Mobile financial services' basic qualities will facilitate the unbanked overcome barriers and reap the advantages of financial services. MFS is often utilized by nearly everybody at any time of day or night and from anywhere, eliminating the accessibility problems conferred by traditional banking. Additionally, MFS provides secure services at a low value. Through M-banking one will avail varied services

i.e.; utility bill payment, fund Transfer, shopping, money withdrawn from chosen ATM or money point and many more exciting facilities. The preference for MFS is high among individuals because it facilitates time-saving, low cost, security, and trustworthiness. It's been elaborated that the adoption and use of MFS are embedded in social practice. These days millions of inhabitants of Bangladesh are transferring funds inside a network through mobile network coverage, therefore creating it an attractive business. Peoples' attitude towards MFS is positive because of its quality and increased flexibility in operation. The society's health, education, and quality are heading towards a positive direction and this features a positive impact on MFS as well.

Technological

Technological factors have a negative effect on the industry. Technological factors are relevant to innovations in technology that will have an effect on the operations of the business and therefore the market constructively or unconstructively. This refers to automation, research, and progress and therefore the amount of technological responsiveness that a marketplace possesses. Mobile banking technology, the latest generation of electronic banking transactions has become one amongst the most acquainted banking features, unfolded new window of chance to the present banks and financial institutions. Therefore, in the banking sector, m-banking technology has brought banking facilities in hand's grip that has created life easier, sturdy and versatile. As all most, each bank is up to adopting m-banking technology with the most advanced manner, in order to beat the competition it needs innovation. The MFS market is at an early stage of development because the newest suppliers are seeking to stabilize their technology.

Legal

Legal factors have a positive effect on the industry. These factors have each external and internal side. There are certain laws that have an effect on the business environment during a certain country whereas there are certain policies that corporations maintain for themselves. The legal analysis takes under consideration each of those angles and so charts out the ways in light of those legislations. As an example, shopper laws, safety standards, labor laws etc.

Factors	Status
Political	Positive
Economic	Moderate
Social	Positive
Technological	Negative
Legal	Positive

Table-4: Summary of PESTEL Analysis

With the help of the PESTLE analysis, it is evident that the Mobile Financial Services or Mobile Banking industry of Bangladesh is an attractive sector. Environmental factors need not be considered in this industry.

5.5 Growth Analysis



Figure-4: Trend of Number of transactions over the last 5 years (Appendix-A)

It is clearly visible on the graph that the number of total transactions notably increased since last five years. In 2014, number total transaction was 74,473,558 and it raised to 210,087,150 in 2018. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015= .01) since 2014-2018 is 7%.

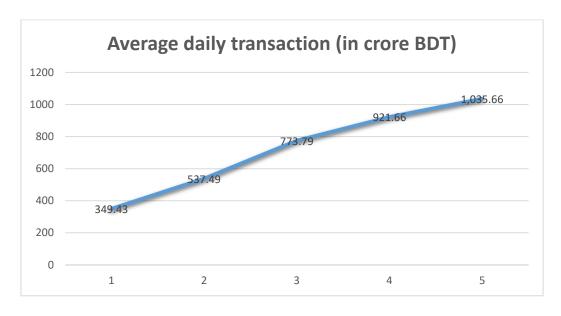


Figure-5: Trend of Average Daily Transaction volume over the last 5 years (Appendix- A)

The graph shows that the average daily transaction volume increased significantly since last five years. In 2014, it was BDT 349.43 crore and in 2018 it increased to BDT 1035.66 crore.

The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015=.01) since 2014-2018 is 7%.



Figure-6 Trend of Number of Agents over the last 5 years (Appendix-A)

It is noticeable from the graph that the number of agents increased from 540,984 to 886,473 within 2014-2018. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015= .01) since 2014-2018 is 4%.

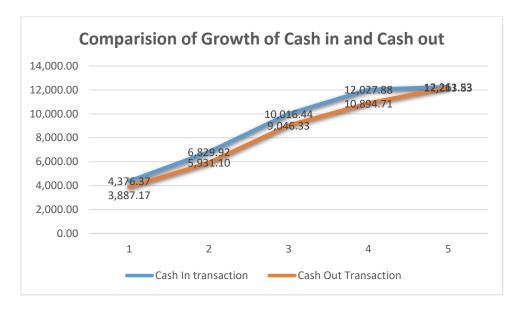


Figure-7 Trend of Cash-In and Cash-Out over last 5 years (Appendix- A)

The industry has reached the breakeven point of cash-in and cash-out in 2018. Until 2019, the main focus of the industry was to increase the transaction rate and transfer volume, however, currently its target is to increase the cash-in rate and keep the cash-out rate stable.

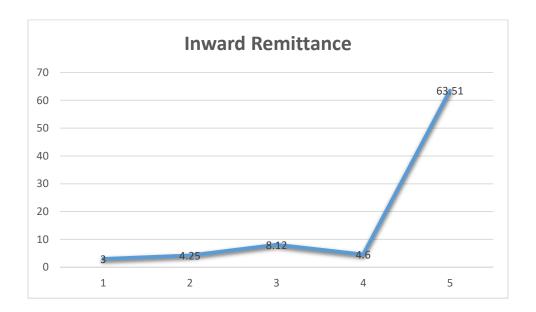


Figure-8 Trend of Inward Remittance volume over the last 5 years (Appendix- A)

During the interval of 2017-2018 the volume of inward transaction has experienced a steep rise. The main reason of this rise is the mammoth array of proactive and concentrated actions for development of service.

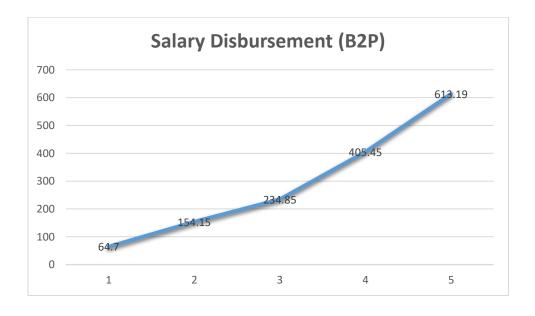


Figure-9 Trend of Salary Disbursement volume over the last 5 years (Appendix- A)

Starting from 64.7 crore of salary disbursement through MFS platform in 2014, it has reached 613.19 crore in 2018. This is the highest volume in the last five years. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015= .01) since 2014-2018 is 18%.

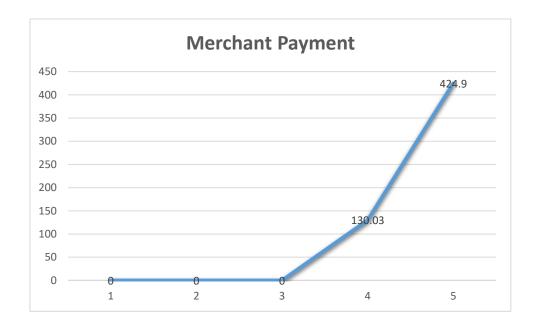


Figure-10 Trend of Merchant Payment volume over the last 5 years (Appendix- A)

During the interval of 2014-2015 and 2015-2016, MFS industry had no Merchant payment services. After starting the Merchant Payment services the volume of the merchant payment was 130.03 crore in 2017 and during the 2017-18 interval, it rose till 424.9 crore. The weighted average of the growth (Weight given 2017-18 =.05, 2016-2017=.03, 2016-2015=.02, 2014-2015=.01) since 2014-2018 is 113%.

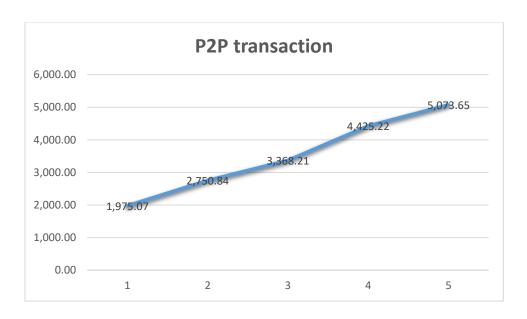


Figure-11 Trend of P2P transaction volume over the last 5 years (Appendix- A)

Peer to Peer transaction has seen a pretty notable rise since last five years. It was BDT 1975.07 crore in 2014 and it is 5073.65 crore now. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015= .01) since 2014-2018 is 6%.

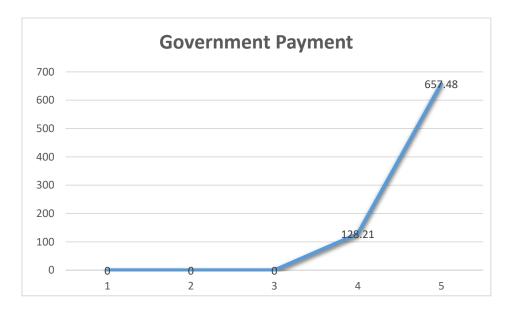


Figure-12 Trend of Government Payment volume over the last 5 years (Appendix- A)

During the past two intervals before 2016, MFS industry had no Government payment services. After starting the Government Payment services the volume of the merchant

payment was 128.21 crore during the 2016-17 interval and during the 2017-18 interval, it has faced an acute steep rise till BDT 657.48 crore. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015= .01) since 2014-2018 is 206%.

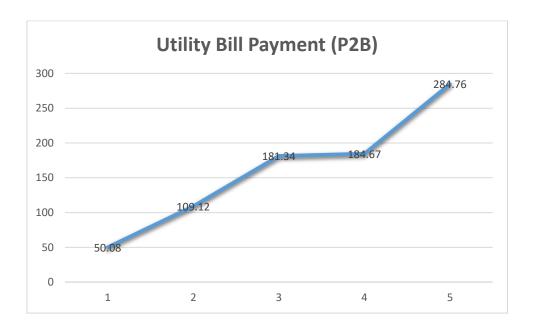


Figure-13 Trend of Utility bill payment volume over the last 5 years (Appendix- A)

Payment of Utility bills through MFS platform notably increased from 50.8 crore to 109.12 crore during the 2014-2015 interval. It reached 181.34 crore in 2016 and did not increase significantly during the interval of 2016-2017. The utility bill payment increased 100 crore more on 2018. The weighted average of the growth (Weight given 2017-18 = .05, 2016-2017=.03, 2016-2015=.02, 2014-2015=.01) since 2014-2018 is 13%.

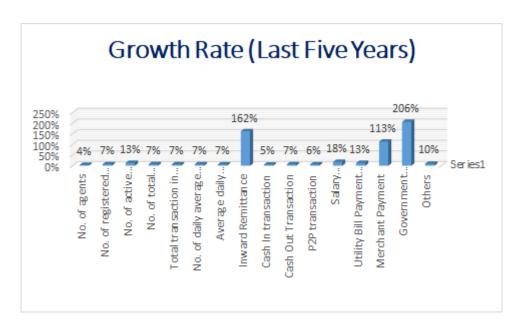


Figure-14 Growth Rate (Appendix- A)

The weighted average growth rate of the mobile financial service industry shows that the industry has witnessed the highest growth in Government Payments in the last five years but it has only been two years since Government Payments and Merchant Payment services started. If we consider the highest growth among the services which have been available from the very beginning, we find Inward remittance having the highest growth. The growth rate of Inward remittance is 162% and the reason behind that is foreign resident Bangladeshi people's growing interest in MFS. The rise in the use of MFS platform in case of Salary disbursement and Utility bill payment is mention worthy as well. Their growth rate is consecutively 18% and 13%.

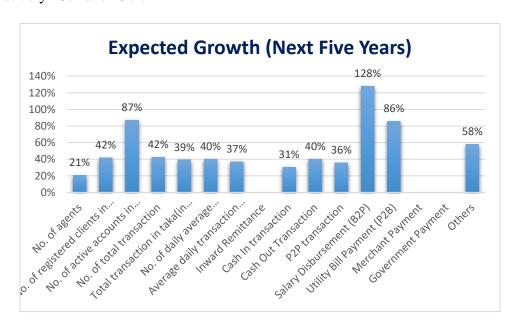


Figure-15 Expected Growth Rate (Appendix- B)

Considering the growing trend from the last five years, we have prepared a forecast for the next five years. From the forecast, we have presumed that Salary disbursement service will grow the most. As MFS companies are pretty proactive in promotion and market is growing pretty rapidly we expect that MFS account's activity to grow by 87% along with the growth in new customers by 42%. We haven't calculated the expected growth of Inward Remittance service, Merchant Payment service, and Government Payment service because they haven't reached a stable status yet. Though the industry players are planning and putting everything together to slow down the Cash-out trend while pushing Cash-in rate even further, the chart shows that Cash-out rate may exceed the growth rate of Cash-in by 9%.

5.6 Customer Perception Analysis

To understand the level of customer preference of using mobile financial services, the potential that might hinder the progression of MFS industry and the suggestions or feedbacks which reflects customer demand, we have performed a survey (Appendix-C-1, C-2, C-3).In our survey, we have taken a sample of 50 people containing 10 people each from Labor class, Businessman, Remittance receiver, Student and Office staffs/Employees profession. The properties of the sample are shown below-

Age group of MFS beneficiary-

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	14	28.0	28.0	28.0
	26-30	16	32.0	32.0	60.0
	31-35	10	20.0	20.0	80.0
	36-40	4	8.0	8.0	88.0
	41-45	3	6.0	6.0	94.0
	46-50	2	4.0	4.0	98.0
	50+	1	2.0	2.0	100.0

Total	50	100.0	100.0	

Income Limit-

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<3000	2	4.0	4.0	4.0
	3000-5000	7	14.0	14.0	18.0
	5000-10000	7	14.0	14.0	32.0
	10000-20000	11	22.0	22.0	54.0
	20000-30000	9	18.0	18.0	72.0
	30000-40000	7	14.0	14.0	86.0
	40000-50000	3	6.0	6.0	92.0
	50000+	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Profession-

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wage-earners	10	20.0	20.0	20.0
	Businessman	10	20.0	20.0	40.0
	Remittance Receiver	10	20.0	20.0	60.0
	Student	10	20.0	20.0	80.0
	Office staffs/Employee	10	20.0	20.0	100.0
	Total	50	100.0	100.0	

During our analysis, we have found that 76% of people actually receive Mobile Financial Services and rest 24% is still a potential bunch (Appendix-D). 22% of people strongly agreed, 54% of people agree, 20% of people were neutral and 4% people disagreed with the fact that they prefer using Mobile Financial Services (Appendix- D). From the people we took as the sample, 60% people think MFS is important since it provides fast and safe banking services, 16% think for foolproof security and 24% think the ability to use frequently for business purpose is what makes MFS important (Appendix-D).

While considering the reasons which are keeping the customers away from Mobile Financial Services, we have found the response graph as below-

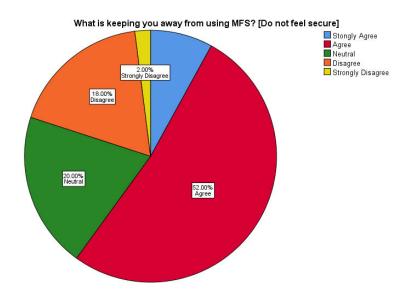


Figure -16: Response of "Do not feel Secure" (Appendix-D)

According to the customer response, 8% of the participants have a strong agreement with the reason that they don't feel secure while transacting through mobile financial service providers. 52% of people have agreed with the concern as well. The percentage of disagreement is nearly 20% of the responses. So, it can be said security concern is burning question nowadays.

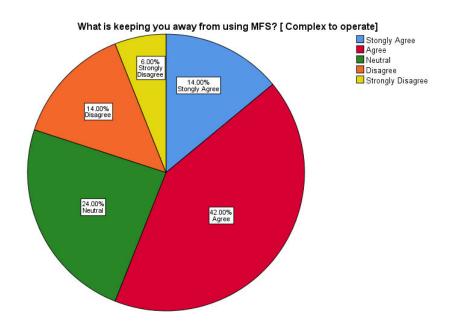


Figure -17: Response of "Complex to Operate (Appendix-D)

Around 14% of people have a strong feeling and 42% of people have a general concern regarding the procedural complexity. Since most of the users are not so well adept in using mobile-based application and keypad based transaction is also very lengthy, the concern regarding complexity is pretty legit in this case.

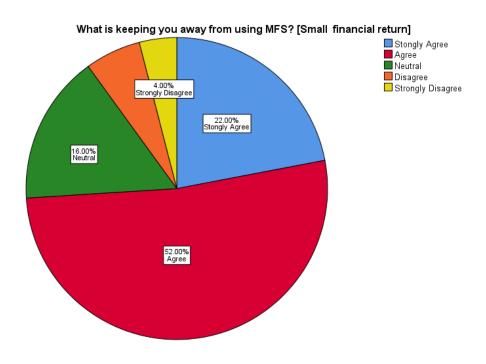


Figure -18: Response of "Small Financial Return (Appendix-D)

Almost every other financial medium provides a reasonable return while the return on savings in MFS platforms is literally little. According to the graphical presentation, 52% has agreed with the concern while 22% of people are strongly bothered regarding the issue.

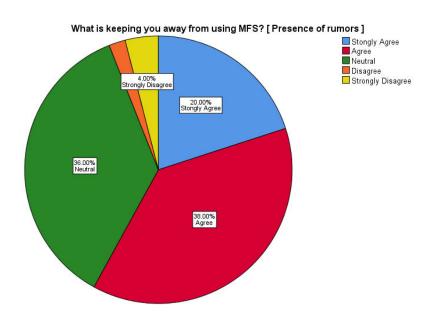


Figure -19: Response of "Presence of Rumors" (Appendix-D)

The continuous presence of rumors and fraudulent activities has been crucial recently. Fear of losing hard-fought earnings has become a critical issue. Since a huge percentage of the potential and existing customers are of Labor class and little income, the fear resulting from rumors is mention worthy. 29 people out of 50 people are seriously concern regarding the issue.

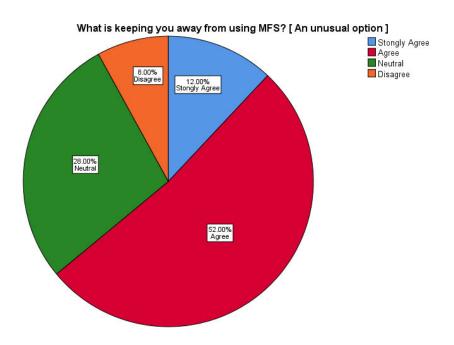


Figure -20: Response of "Unusual Option" (Appendix-D)

12% of the responder has never considered MFS as a potential alternative of cash. 52% of people still feel uncomfortable while using MFS. 28% of people have said that their actions literally depends on the requirements. They use MFS only when it is somehow required for any transaction or they find any special offer prevailing.

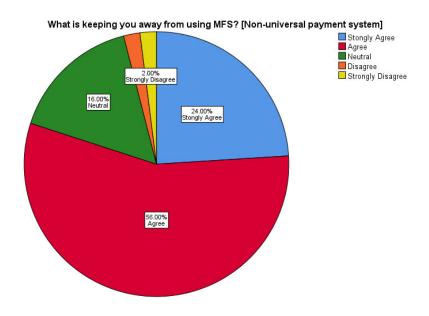


Figure-21: Response of Non-universal Payment System (Appendix-D)

Mobile Financial Services have not yet been usable in every case of life. We can solely depend on MFS yet now. Merchant payment is the biggest concern here. Daily transaction limitation is critical. People need to carry cash with them or have to transact through checks or other instruments. 40 people out of 50 people sample consider this issue as not motivating.

The most common suggestions and unique demands from the Customer perspective are-

- Expansion of the Merchant Payment agreement and facility
- > Demonstrative advertise will be helpful
- Cash back on usage or offers and easy operate system.
- ➤ Increasing the Daily Transaction limit on personal Account.
- ➤ More bank transfer agreements
- ➤ Giving more incentive in terms of discounts and cash back
- ➤ Limit Extension and International payments
- ➤ Different exciting offers for shopping online
- ➤ Light version of apps
- ➤ Authenticity of promotion materials
- ➤ Reduce cost/charge
- Voice Command system on App
- ➤ Separate Statement for separate services
- Electronic KYC
- > Increase return on saving and decrease the saving time requirement
- > Credit overdraft facility
- ➤ AI based security measures

Chapter 6

Comparative Analysis

6. Comparative Analysis

Concentrated Role:

- bKash strongly focuses on delivering mobile-based service to the potential market. As
 a subsidiary company, it has its own identity and a single focus on promoting and
 establishing a cashless transaction trend rather than welling off the parent bank
 services.
- Rocket is SBU of Dutch Bangla Bank Limited. Its ultimate goal is to facilitate the banking services provided by the parent bank. Although it is the second largest position holder in the market, it does not prioritize creating a position in the Mobile Financial Service industry.

Since bKash started its journey as an individual subsidiary company and is more determined to hold a prime position in the market rather than being a complimentary service providing unit like Rocket, it is successfully leading the industry by a huge margin of market share difference.

Credit Rating:

- bKash has achieved credit rating of "AA1" for the long run operation and "ST-1" for the short run operation. It has a stable outlook according to the CRG rating operated Credit Rating Agency of Bangladesh Limited (CRAB).
- Since Rocket is a subsidiary unit, it does not have any separate credit rating but the parent bank's credit rating has certain influence on the unit. The Bank has been able to sustain its credit rating at 'AA+' in the Long Term and 'ST-1' in the Short Term for the consecutive last 6 years.

A better credit rating entails better creditworthiness. With a better credit rating, Rocket has certainly better creditworthiness in the long run.

Organogram:

- bKash being a subsidiary company has a foolproof organizational structure starting with the CEO at the top following hierarchical dropping down within the structure. Besides, It has its own operationally segregated divisions.
- Rocket is a mobile financial service based segment of the Financial Inclusion Division of Dutch Bangla Bank Limited. The operation of Rocket is under the supervision of a Deputy Managing Director.

bKash has a complete organizational structure and a team of dedicated employees with an ultimate goal to achieve the defined mission and vision of bKash Limited. On the other hand, Rocket is a product or service offered by the parent bank to make their core banking services more accessible and smooth. Though in the process of offering Mobile banking facilities it creates E-Money, It is not their primary concern. Rocket doesn't have several divisions and dedicated employees. It is actually supervised and operated by a bunch of Dutch Bangla Bank Limited employees.

Advantages those bKash has over Rocket due to the differences in structure and primary concentration are:

- ✓ It can take more favorable decisions as it has a clear objective of generating E-money in the market
- ✓ It exhibits expertise for having a foolproof team of chiefs
- ✓ It doesn't have to face parent bank's compliance issues since it has a completely segregated organization under the supervision of parent bank
- ✓ It has its own management team to make major decisions about the organization whereas Rocket has to consider aspects of DBBL and other parties of Financial Inclusion Division of DBBL for any decision making process

Market Share

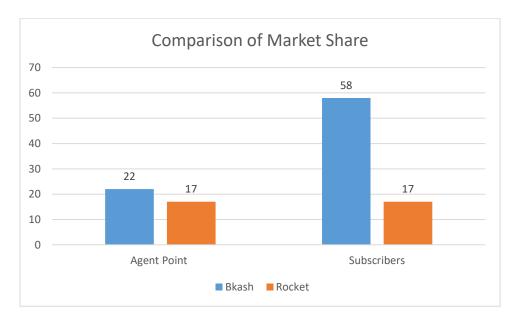


Figure-22 Comparison of Market Share

• bKash has 58% of the market share considering the subscribers and 22% of market share considering the agent points.

• Rocket has 17% of market share considering both the subscribers and the agent points.

Higher Market share in both of the cases gives bKash a competitive advantage. The competitive advantage is huge in the case of subscribers.

Brand Image

- bKash has already achieved a brand image by being synonymous to the name of the mobile financial services. Nowadays when people take any MFS services, they name it after bKash. Even If anyone is taking services of other service providers, they name it after bKash services.
- Despite having the second highest market share and an almost similar level of quality and customer satisfaction, Rocket has not had a satisfactory level of popularity yet.

Technology

- ➤ bKash uses Huawei solutions
- ➤ Rocket uses Sybase 365 solutions

Huawei is the world's third largest information and communications Technology (ICT) and smart devices providing company. Most of the telecom companies in Bangladesh uses Huawei solutions and bKash has selected Huawei as its core platform provider to effectively operate its mobile based services. In the case of Sybase, It doesn't exist anymore. Sybase is now a part of SAP.SAP is pretty known software and solution based company. A notable amount of Bangladeshi businesses use SAP solutions but it has relatively less experience in Telco and mobile-based sectors. SAP doesn't have any direct presence in Bangladesh. It operates in Bangladesh through some local partners whereas Huawei has an office in Bangladesh which helps it to more productive and efficient in offering and monitoring technologies, and it has great involvement with the present Government regarding digitalization of Bangladesh. Considering the aspects discussed above Huawei is certainly a better value creator. Thus, bKash possesses a better position.

Application

- ➤ bKash has a fully dedicated mobile phone application. The application is capable to offer all the bKash services. It can capture Barcodes and automatically generate the necessary information.
- ➤ Rocket doesn't have a dedicated mobile application. It can be accessed through NEXUSPAY which is a mobile-based application for DBBL. It provides access to all the DBBL cards and accounts.

Since the bKash application is totally focused on bKash, it is capable of offering all the bKash services efficiently. It has a pretty smooth user interface dedicated only to bKash. It doesn't offer any mobile-banking facility from the Brac bank.on the other hand, Nexuspay is a multipurpose application. It has a separate module for Rocket but that is not well defined and well organized for Rocket services. It only offers basic services in a general manner. It is interconnected with other DBBL services. Thus, it has "All in one" advantage. Above all, the bKash application has more competency in case of Mobile Financial Services.

Customer fee

MBC	Bank Involvement	Cash In charge			Cash C	Send Money Charges			
		Apps	Regular	1000 BDT	%	App (1000 BDT)	%	App	Regular
bKash	Brac Bank	N/A	Free	18.5	1.85	17.5	1.75	Free	5
Rocket	DBBL	N/A	Free	18	1.8	18	1.8	5	5

Channel Commission Structure

MFS	Bank Involvement	Distributor				Agent			Send Money	
Provider	BDT-1000	CI	%	СО	%	CI	%	СО	%	APP/R
bKash	Brac Bank	1.45	.10	1.45	.15	4.10	.28.	4.1	.41	Free/5
Rocket	DBBL	1.45	.15	1.45	.15	1.20	.42	4.2	.42	5

Payment Commission Structure

MFS Provider	Bank Involvement	Merchant Settlement Time	Bill Payment (BDT)	Payment Collection	School Fees Payments	KYC	
						Distributor	Agent
bKash	Brac Bank	1.5%	20	0.41	0.41	15	50
Rocket	DBBL	1%	2 to 20	0.45	0.45	25	20

Parent

- bKash
 - Brac Bank Limited
 - Ant Financial
 - Bill & Melinda Gates Foundation
 - Money in Motion LLC
 - International Finance Corporation

Rocket

- DBBL
- Sybase 365 or SAP (Strategic alliance for technology)

bKash has a huge array of parents. Its parents include some internationally well-known social welfare foundation and Financial Institutions and this help out bKash to get more international exposure and create a global brand image. Strategic alliance with Alipay which is a concern of one the most popular company gives bKash a huge competitive edge. Diversified investors portfolio with diversified development focuses help bKash to grow even more rapidly than its nearest competitors. Rocket doesn't have any international parent except Sybase which is only for technological support. DBBL is Rocket's one and only true parent. Having quite a little international exposure and being under single parent somehow sidetracks Rocket from its potential growth.

Core Competencies

Core Competencies of bKash are -

- Very strong brand recognition
- Impressive bunch of investors
- The parent organization BRAC is well reputed and recognized NGO
- One and only foolproof MFS based separate organization
- Strong Agent Network

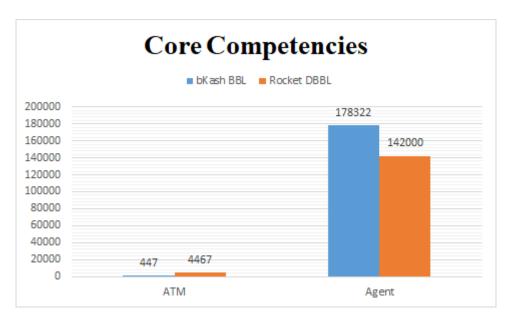


Figure-23 Core Competency Graph

Core competencies of Rocket-

- Strong ATM network
- Strong Parent Bank
- Strong Interconnected Banking Services
- Partnership with every mobile network operator in Bangladesh
- Notable partnerships with insurance providers and employers to use its platform for distributing payments

bKash has a significantly strong brand image. People subconsciously intend to name all the MFS services available from all the MFS provider after bKash. Having a greater agent network (not agent banking structure) gives it an extra edge. bKash promotes the mission of serving potential banking customer from the remote areas which connect social welfare quite well. Thus, having Brac (the largest and the best) as the parent influences its acceptability even more. DBBL has a greater agent banking record but hasn't had Rocket agents everywhere. It has an immense advantage regarding the availability of ATMs. Availability of a huge number of ATMs helps Rocket's growth. Rocket is strongly interconnected with other DBBL services. So, it gets enough push to grow even better.

Interest offers

 Along with keeping money safe, you can also enjoy up to 4% Interest (per annum) on Savings on your bKash Account. Interest is offered to bKash Customer Accounts only.

Balance/Slab	Rate p. a
BDT 1,000 – BDT 5,000.99	1.5%
BDT 5,001 – BDT 15,000.99	2%
BDT 15,001 – BDT 50,000.99	3%
BDT 50,001 and more	4%

• Rocket doesn't pay any interest on wallet based savings.

Special Offers for Customers

bKash's special offers for customers are-

- 40% Cash back on Pathao (Present) and Sohoz (Earlier)
- Buying Ticket and 15% instant cash back on any purchase at DITF
- 32% cash back on Ekhusey Boi Mela payments
- Up to 30% cash back on purchase from selected 90+ Brands and 1000+ shops across the country.
- 100% cash back on mobile recharge
- 5% bonus on transferring remittance through bKash
- Up to 60% cash back on Hotel, motel and resort bookings



Rocket's Special offers for customers are-

- 10 -15 % cash back on selected brands products
- 10% bonus on remittance
- 30% cash back on purchases from Agora
- ROBI Data offer on Rocket Mobile recharge service
- Buy 1 Get 3 dinner offer at Le Meridian



If we consider both bKash and Rocket's offer, we can see that both of them have put notable effort to attract people with special schemes. If we look at bKash's offers, it has focused on all the possible sectors, industries and all the players within the industries. So, bKash has achieved all the gains one can expect from a particular industry. From transportation to food

to daily accommodation to sports to insurance premium, almost everything has bKash's concern. Ion the other hand, Rocket's special offers are pretty infrequent and selective. Rocket doesn't focus on the industry as a whole it rather focuses on one or two industry players which eventually narrowed down its exposure.

• SWOT Analysis

Strengths		Strong backup from investors
		 Strong national and global brand image
	bKash	
	Olxasii	Train and maintain agents in every corner
		Better Corporate Culture (Employee Brand Award
		2017)
		Innovative initiatives to expand business (Bangladesh
		innovation award 2018 for bkash customer app)
		Strong banking backup from parent bank
		Strong agent banking structure
	Rocket	Country's best and the largest ATM network
		Facilitate parent bank account holders to transfer money
		from bank account to Rocket account or Rocket account
		to bank account
Weaknesses		Comparatively high service charge
		Weak security measures for field agents
		Heading back in terms of differentiating itself from
	bKash	providing services at lowest cost
		Lack in new product development
		Unable to operate as a separate entity
		Bound to compliances of parent bank
	Rocket	Does not have dedicated divisional operation
		Conservative promotional strategies
		No interest on savings
Opportunities		A huge array of potential customers
		Online shopping is growing rapidly and bkash are connected with most of the popular online shops or

	bKash	vendors
		Since it has a magnificent portfolio of international
		investors, it can expand its business globally
		comparatively better position and prospect to flourish in
		remittance services
	Rocket	expanding target groups
		rapid growth of app users leads more customers
Threats		Most of the rumors of the industry are bKash focused
		Rapidly growing money-laundering
	bKash	The gap with the nearest competitors is declining
		Entrance of government organization into the industry
		with better service offers.
		Increasing number of inactive accounts
		Possibility of losing existing market share if bKash
		offers even better services with the help of newly
	Rocket	aligned Alipay
		• Government initiated "NAGAD" can be a potential
		threat to the existing market share.

Chapter 7

Findings, Recommendations, and Conclusion

Findings

Industry Basis: While analyzing various aspects of the Mobile Financial Service Industry, we have found some areas of concern- both optimistic and pessimistic. The findings regarding the industry considering as a whole are-

	Optimistic View	Pessimistic View			
•	The industry is at the Growth stage as	•	Since Mobile Financial Services		
	it is expanding and getting more and	Industry is an oligopoly industry, th			
	more customer acceptance		high entry barrier is resulting in		
•	Huge response from the inward		absence of competitive pricing		
	remittance customer	•	Being an oligopoly industry there are		
•	More and more organizations have		very few options in differentiation		
	started trusting MFS platform as the		which is hindering the development of		
	best alternative for salary		living standard		

- disbursement
- High fixed cost is actually creating better capabilities for the future
- Both Government and Bangladesh
 Bank are significantly supporting and
 investing for technological
 development and digitalization. Thus
 FinTech based MFS companies are
 getting magnificent upward push
- With the growing economy of Bangladesh, innovative ideas and FinTech based implementation of MFS industryhave immense possibility to progress
- The number of active accounts has grown up to 13% in the last five years and has a presumption to grow by 87% in the next five years considering the immediate trend and increasing effort from the industry players.
- Newly initiated services Inward Remittance, Government payment, and Salary Disbursement have already created a noteworthy market and demand.

- High bargaining power of the Suppliers- MNO and IT vendors.
- High competitive rivalry and the entrance of Government-backed organization "NAGAD" may have a bad impact over existing customer status.
- This industry is based on advanced financial technology, however, insufficient technological know-howand less awareness among users are creating fraudulent and privacy crisis.

Company specific basis

bKash	Rocket
bKash is an autonomous subsidiary	• Rocket is a Strategic Business Unit of
with a single business focus which is	Dutch Bangla Bank Limited. It is
creating E-money	rebranded as a single focused E-
• It has a better organizational	money creator but its core focus is

- structure, existence of dedicated department and chiefs
- It has better agent availability, brand recognition, and subscribers status
- bKash has a magnificent array of investor portfolio which ensures better resource sharing, risk sharing, diversified fund pooling, and immense international exposure
- It is failing to utilize the ATM option since BRAC Bank Limited has pretty poor ATM network
- bKash has a significant number of special offers and right sharing agreement with the mammoth amount of organizations which is increasing its transaction volume notably
- The most important strength for bkash is its brand recognition and awardwinning the corporate culture
- bKash has a better merchant service position and the whole industry is putting more focus on merchant payment nowadays. So, bKash has a way better growth possibility in this regard
- Remarkable alliance with government initiatives and public welfare

- still the same which is to deliver the typical banking services of DBBL to the regular customer and the potential customers from remote area.
- In the case of creditworthiness or credit rating Rocket is comparatively in a better position
- Rocket has the parent bank who has comparatively better banking brand image, agent banking status and ability to diversify the negative outcome and offset that by positive returns from other services or inclusions
- It has always been shy while attracting customers by offering something new now and then
- Rocket is the pioneer of technologybased banking in the country. Thus, Rocket has better technological experience. The number of fraudulent related complains about Rocket is comparatively low.
- It is stuck between being a complementary banking service facilitator and an E-wallet service provider

Recommendations

- The industry needs more and more competitors in order to ensure reasonable and competitive pricing.
- Better differentiation should be on the focus to satisfy different customer needs.
- Alliance with regular public services should be increased.
- Remittance is one of the core influencers of the country economy and MFS has already experienced a significant involvement with the inward remittance in the last five years. So, special focus on inward remittance, frequent special offers to the remittance senders and separate charges for the inward remittance service users may prove as a jackpot.
- Salary Disbursement through MFS increase the velocity of the money. So, it should get priority from both ends Industry and Government.
- Since the industry is marching towards maturity, company players should focus more on keeping customers active rather than increasing the number of registrations.
- Supplier bargaining power should be controlled and monitored by a concerned authority in order to help the industry players to offer services charging lower fees.
- The industry should push MNOs for network up gradation in order to ensure better service availability.

For bKash

- More focus on merchant payment agreement s is an immediate necessity.
- ATM-based operation should get more attention
- Since most of the rumors and fraudulent cases are about involved with bKash, it should focus more on user security.
- Despite having a lot of ongoing special offers, the number of customer engagement is
 not up to the expectation. It should focus more on creating buzz rather than offering
 for everything and making the special offer a casual fact.
- Bank transfer agreement with more and more banks is an emergency urge from the customer.
- Since bKash is the market leader, it has to be the pioneer in every aspect and has to accept every possible chance considering the related risk up to a limit.

For Rocket

- Rocket has to clarify its position to itself at first. Rocket has to decide whether it
 wants to smoothen up the DBBL typical banking facility by being the complementary
 facility or service or it actually wants to contribute as the E-money creator and taking
 it as the core focus.
- It should focus better off its brand image. Even though it is offering some services better than the competitors, the credit still goes to bKash as Rocket has failed to create a noteworthy brand identity.
- Rocket is way beyond of bKash considering the subscription rate, it should proliferate the number quickly by reaching the un-approached population or the customers of bKash by offering better charges and quality services.
- Rocket has a competitive edge regarding the ATM network and has a huge number of regular customer of ATM, It should start differentiating its services and special offer keeping ATM usage in mind.
- Since DBBL has already involved with insurance companies regarding some of its services, it can start offering insurance guarantee for Rocket fraudulent case about which bKash hasn't done anything yet.
- A dedicated Unit having dedicated divisions for diversified operations for Rocket will help it to grow even more.
- Inward remittance can be a jackpot for Rocket since bKash is more concerned about merchant banking nowadays.
- Offering Interest on saving with a notable number may give a huge upward push to the volume of rocket transactions.

Conclusion

To conclude, we must agree that Mobile Financial service is one the "Big Things" in the economy of an affluently developing country. It is at the growth stage and actually growing at a notable pace. It has been creating a mention-worthy customer base though there are not too many reliable options for the customers since it's an oligopoly industry. Despite its continuous bloom, it has not yet reached to the level as expected and the reasons behind that are Privacy violation, Continuous presence of rumors, high charges, relatively low return (only bKash pays), being the unusual option and not being available at everywhere and in every possible transaction. According to customer perception, 60% of people don't feel secure, 56% find MFS complex,74% is not happy with the small return,58% is frightened

because of continuous rumors,64% feel don't feel MFS a usual option and 70% people may consider using MFs if it becomes a universal payment system. Some striking steps from the industry players may resolve the dilemma. Two key players' bKash and Rocket have some different set of strengths and limitation in comparison to each other and they are trying hard to achieve their specific goals which are pushing the industry in an even better position. Above all, it can be said that Mobile Financial Service Industry will be one of the most influential sectors of the country economy rather than only being the subsidiaries or the small part of Financial Inclusion Division of any parent company.

Reference

- Parvin, A. (2019). Mobile Banking Operation in Bangladesh: Prediction of Future.
 Icommercecentral.com. Available at: http://www.icommercecentral.com/open-access/mobile-banking-operation-in-bangladesh-prediction-of-future-1-15.php?aid=37948
- Mandal, A. (2019). Mobile Banking A Bangladesh Perspective.Dspace.uiu.ac.bd.
 Available at: http://dspace.uiu.ac.bd/handle/52243/739
- Khan, S., Akter, M. and Zeya, F. (2018). Bangladeshi Banking Innovations: A Case Study on Mobile Banking. Business and Management Practices in South Asia, pp.101-124. Available at: https://link.springer.com/chapter/10.1007/978-981-13-1399-8_5
- Malisetty, S., Archana, R. (2018). Next Generation e-Banking through Mobile Messengers. Indian Journal of Public Health Research & Development, 9(2), p.31.
 Available at: https://www.researchgate.net/profile/Sainath_Malisetty/publication/323802325 Next

_Generation_e-

Banking_through_Mobile_Messengers/links/5ac225860f7e9bfc045e4e18/Next-Generation-e-Banking-through-Mobile-Messengers.pdf

 Khan, S, N. Akter, M. Paul, T, A. (2017). Factors influencing adoption and usage of Mobile Banking: Bangladesh Experience. Available at: https://pdfs.semanticscholar.org/504f/80fa37b2e5b5d293458847cc6714282b0da7.pdf

• Uddin, M, S. Akhi, A, Y. (2014). E-Wallet System for Bangladesh an Electronic Payment System. Available at:

https://www.researchgate.net/publication/290462723 E-Wallet System for Bangladesh an Electronic Payment System

• Hossain, S, Z. Islam, R, M. (2018). Creating Shared Value through mobile financial services Bangladesh. Available at:

https://www.researchgate.net/publication/329209273 Creating shared value through mobile financial services in Bangladesh

 Regulations and guidelines. Bangladesh Bank website. Available at: https://www.bb.org.bd/mediaroom/circulars/psd/jul302018psdl04e.pdf

Appendix

Appendix-A: Calculation of Weighted Average Growth

Facts	2014	2015	2016	2017	2018	Growth Rate
No. of Approved Banks	28	28	19	18	18	
No. of Banks in the Services	19	18	17	17	18	
No. of agents	540,984	561,189	710,026	786,459	886,473	4%
No. of registered clients in Lac	251.86	318.45	410.78	588	675.2	7%
No. of active accounts in Lac*	121.54	132.18	158.74	210	373.13	13%
No. of total transaction	74,473,558	114,847,197	133,727,455	166,315,916	210,087,150	7%
Total transaction in taka(in crore BDT)	10,483.04	16,124.81	23,213.67	28,571.00	32,105.57	7%
No. of daily average transaction	2,482,452	3,828,240	4,457,582	5,365,030	6,777,005	7%
Average daily transaction (in crore BDT)	349.43	537.49	773.79	921.66	1,035.66	7%
Inward Remittance	3	4.25	8.12	4.6	63.51	162%
Cash In transaction	4,376.37	6,829.92	10,016.44	12,027.88	12,261.53	5%
Cash Out Transaction	3,887.17	5,931.10	9,046.33	10,894.71	12,213.83	7%
P2P transaction	1,975.07	2,750.84	3,368.21	4,425.22	5,073.65	6%
Salary Disbursement (B2P)	64.7	154.15	234.85	405.45	613.19	18%
Utility Bill Payment (P2B)	50.08	109.12	181.34	184.67	284.76	13%
Merchant Payment	0	0	0	130.03	424.9	113%
Government Payment	0	0	0	128.21	657.48	206%
Others	126.64	345.43	358.39	370.59	512.71	10%

Appendix-B: Calculation of Expected Growth

2019	2020	2021	2022	2023	Expected	Facts
						No. of Approved Banks
						No. of Banks in the Services
920,304.75	955,427.66	991,891.03	1,029,745.99	1,069,045.68	21%	No. of agents
723.81	775.93	831.80	891.69	955.89	42%	No. of registered clients in Lac
422.96	479.45	543.49	616.07	698.35	87%	No. of active accounts in Lac*
225,412,457.96	241,855,707.04	259,498,448.12	278,428,181.01	298,738,788.39	42%	No. of total transaction
34,295.44	36,634.68	39,133.48	41,802.71	44,654.01	39%	Total transaction in taka(in crore BDT)
7,250,978.19	7,758,100.32	8,300,689.78	8,881,227.11	9,502,366.32	40%	No. of daily average transaction
1,103.22	1,175.18	1,251.84	1,333.49	1,420.48	37%	Average daily transaction (in crore BDT
166.67	437.37	1,147.78	3,012.05	7,904.37		Inward Remittance
12,933.86	13,643.06	14,391.15	15,180.26	16,012.63	31%	Cash In transaction
13,067.17	13,980.12	14,956.86	16,001.84	17,119.83	40%	Cash Out Transaction
5,392.75	5,731.92	6,092.42	6,475.60	6,882.87	36%	P2P transaction
723.11	852.75	1,005.61	1,185.89	1,398.48	128%	Salary Disbursement (B2P)
322.26	364.70	412.73	467.08	528.59	86%	Utility Bill Payment (P2B)
906.67	1,934.71	4,128.39	8,809.38	18,797.93		Merchant Payment
2,014.57	6,172.79	18,913.88	57,953.53	177,573.93		Government Payment
561.70	615.38	674.18	738.61	809.18	58%	Others

Appendix-C: Customer Perception Survey Questionnaire

Survey on Customer Perception of the Mobile Financial Services (MFS) Industry

The objective of the survey is to get the prevailing customer perception regarding usage of the MFS products. Customers are requested to mention their points of concern and their suggestions

1. Are you a Mobile Financial Services (MSF) user?

- a) Yes
- b) No

2. Why Mobile Financial Services are important?

- a) Provide fast and safely banking services.
- b) Inexpensive
- c) For foolproof security
- d) Business Purpose

3. Age group of Mobile Financial Services (MFS) beneficiary-

a) 18-25

b) 25-30

c) 31-35

d) 36-40

e) 41-45

- f) 46-50
- g) 50 above

4. Income limit-

- a) Below BDT 3000 b) BDT 3000-5000

c)	DDT F000 10000							
	BDT 5000-10000	d)	BDT 10	0000-15000				
e)	BDT 15000-20000	f)	BDT 20	0000-25000				
g)	BDT 25000-30000	h)	BDT 30	0000-35000				
i)	BDT 35000-40000	j)	BDT 40	0000-45000				
k)	BDT 45000-50000	I)	Above	BDT 50000				
5. Pr	ofession-							
a)	Wage-earners	b)	Studer	nt				
c)	Businessman	d)	Office	stuff membe	er			
e)	Cash receiver from Bang	glade	shi forei	gn resident				
5. "I	prefer to transact throu	ıah M	IES"					
	Strongly agree b) Agre	_		- d\ Disagras	a) Ctrang	lu dicagras		
uj	Strongly agree by Agre		veatiai	u) Disagree	c/ Strong	iy disagi cc	•	
7 \	hat is keeping you away	, from	using N	/Iohile Finar	ncial Servi	-a?		
			. 456				I	T _
	Concern			Strongly	Agree	Neutral	Disagree	Strong
	Concern			Strongly Agree	Agree	Neutral	Disagree	Strong Disagro
	Concern o not feel secure			• •	Agree	Neutral	Disagree	_
Do		rate		• •	Agree	Neutral	Disagree	_
Do St	o not feel secure			• •	Agree	Neutral	Disagree	_
Do St	o not feel secure ill find it complex to ope	1		• •	Agree	Neutral	Disagree	_
Do St No	o not feel secure ill find it complex to ope o notable financial returr	1		• •	Agree	Neutral	Disagree	_
Do St No Co	o not feel secure ill find it complex to ope o notable financial return ontinuous presence of ru	n mors	ment	• •	Agree	Neutral	Disagree	_

মোবাইল ফাইন্যান্সিয়াল সার্ভিস ইন্ড্রাস্টির উপর গ্রাহক মতামত জরিপ

এই জরিপের মুল উদ্দেশ্য হচ্ছে মোবাইল ফাইন্যান্সিয়াল সার্ভিস সম্পর্কে মতামত এবং মতামত সংশ্লিষ্ট সাজেশনসমূহ একত্রিত করা

ক) হ্যাঁ খ) না		
	3. এমএফএ	স সুবিধা প্রদানকারীর বয়স গ্রুণ
2. কেন মোবাইল ফাইন্যন্সিয়াল সার্ভিসেস গুরত্ববহ?	ক) 18-25	খ) 25- 30
ক) দ্রুত ও নিরাপদ	গ) 31-35	ঘ) 36- 40
খ) সুলভমূল্য	ঙ) 41-45	চ) 46- 50
গ) অব্যাহত নিরাপত্তা ব্যবস্থা	ছ) উপরে 5()
ঘ) ব্যবসায়িক সুবিধা		

- 4. আয় সীমা -
- ক) 3000 টাকার নিচে খ) 3000- 5000 টাকা গ) 5000- 10000 টাকা ঘ) 10000-20000 টাকা ঙ) 20000- 30000 টাকা চ) 30000- 40000 টাকা

আপনি কি মোবাইল ফাইন্যান্সিয়াল সার্ভিসেস ব্যবহার করেন?

- ছ) 40000- 50000 টাকা জ) 50000 টাকা উপরে
- 5. (9) MI-
- ক) শ্রম শ্রেণী ঘ) ছাত্র
- খ) ব্যবসায়ীর ৬) অফিসের কর্মীরা গ) নগদ প্রাপক বিদেশী বাসিন্দা বাংলাদেশী
- 6. "আমি এমএফএসের মাধ্যমে হস্তান্তর করতে পছন্দ করি৷" -----
- ক) দৃঢ়ভাবে সম্মত হন খ) সম্মত হন গ) নিরপেক্ষ ঘ) অসম্মতি ঙ) দৃঢ়ভাবে অসম্মতি
- 7. আপনার মোবাইল ফাইন্যান্সিয়াল সার্ভিসেস ব্যবহার থেকে দূরে থাকার কারণ-

কারণ	দৃঢ়ভাবে সম্মত	সম্মত	নিরপেক্ষ	অসম্মত	দৃঢ়ভাবে অসম্মত
নিরাপদ বোধ করেন না					
এখনও জটিল মনে হয়					
অবিরত গুজবের উপস্থিতি					
কোন উল্লেখযোগ্য আর্থিক রিটার্ন না থাকা					
এখনও জীবনের সাবলীল অংশ হয়ে উঠেনি					
সকল ক্ষেত্রে ব্যবহারযোগ্য নয়					

8. এমএফএস প্রতিষ্ঠানগুলির কাছ থেকে কোন পদক্ষেপগুলি আপনাকে মোবাইল ফাইন্যান্সিয়াল সার্ভিসেস ব্যবহার করতে আগ্রহী করবে?(পয়েন্টে উল্লেখ করুন)

•	•
•	•
•	•

Customer Perception of MFS Industry

The objective of the survey is to identify the prevailing customer perception regarding usage of the MFS products. Customers are requested to mention their points of concern and their suggestions.

* Required

Are you a Mobile Financial Service receiver * Mark only one oval.
Yes
No
Why Mobile Financial Service is important? * Mark only one oval.
Provides fast and safe banking services
Inexpensive
Offers foolproof security measures
For quick and frequent business purpose
3. Age group of MFS beneficiary-* Mark only one oval.
18-25
26-30
31-35
36-40
41-45
46-50
51 and above
4. Income Limit-* Mark only one oval.
Below 3000
3000-5000 tk
5000-10000
10000-20000
20000-30000
30000-40000
40000-50000
above 50000

 $https://docs.google.com/forms/d/1cKkvb1J0r-MfZB_n_r_7gTDLUcm3Fcc6tmSVApqU0pl/editalign{pstcolor}{ll} \label{lem:linear_condition} \label{linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{linear_condition} \label{lem:linear_condition} \label{lem:linear_condition} \label{linear_condition} \label{linear_cond$

		19

Customer Perception of MFS Industry

Businessman Cash receiver relatives (from Foreign Resident Ba Student Office Stuff/ Employee	ngladeshi)
Student Office Stuff/ Employee	ngladeshi)
Office Stuff/ Employee	
. "I prefer to transact through MFS."*	
Mark only one oval.	
Strongly Agree	
Agree	
Neutral	
Disagree	
Strongly Disagree	
	e Neutral Disagree Strongly D
Strongly Agree Agree Do not feel secure	e Neutral Disagree Strongly D
Strongly Agree Agree	e Neutral Disagree Strongly D
Do not feel secure Complex to operate	e Neutral Disagree Strongly D
Do not feel secure Complex to operate Small financial return	e Neutral Disagree Strongly D

 $https://docs.google.com/forms/d/1cKkvb1J0r-MfZB_n_r_7gTDLUcm3Fcc6tmSVApqU0pl/edit$

Appendix-D: SPSS Calculation

FREQUENCIES VARIABLES=WhatiskeepingyouawayfromusingMFSDonotfeelsecure

 ${\tt What is keeping you away from using MFSComplex to operate}$

What is keeping you away from using MFSS mall financial return

 $\label{thm:problem} What is keeping you away from using MFSP resence of rumors \ What is keeping you away from using MFSA nunusual option$

 $\label{thm:matiskeepingyouaway} What is keeping you away from using MFSN on universal payment system \\ \textit{/ORDER=ANALYSIS.}$

Frequencies

Statistics

		What is keeping you away from using MFS?	What is keeping you away from using MFS? [What is keeping you away from using MFS?	What is keeping you away from using MFS? [What is keeping you away from using MFS? [
		[Do not feel secure]	Complex to operate]	[Small financial return]	Presence of rumors]	An unusual option]
N	Valid	50	50	50	50	50
	Missing	0	0	0	0	0

Statistics

N	Valid Missing	50
		What is keeping you away from using MFS? [Non-universal payment system]

Frequency Table

What is keeping you away from using MFS? [Do not feel secure]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	4	8.0	8.0	8.0
	Agree	26	52.0	52.0	60.0
	Neutral	10	20.0	20.0	80.0
	Disagree	9	18.0	18.0	98.0
	Strongly Disagree	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

What is keeping you away from using MFS? [Complex to operate]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	7	14.0	14.0	14.0
	Agree	21	42.0	42.0	56.0
	Neutral	12	24.0	24.0	80.0
	Disagree	7	14.0	14.0	94.0
	Strongly Disagree	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

What is keeping you away from using MFS? [Small financial return]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	11	22.0	22.0	22.0
	Agree	26	52.0	52.0	74.0
	Neutral	8	16.0	16.0	90.0
	Disagree	3	6.0	6.0	96.0
	Strongly Disagree	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

What is keeping you away from using MFS? [Presence of rumors]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	10	20.0	20.0	20.0
	Agree	19	38.0	38.0	58.0
	Neutral	18	36.0	36.0	94.0
	Disagree	1	2.0	2.0	96.0
	Strongly Disagree	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

What is keeping you away from using MFS? [An unusual option]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	6	12.0	12.0	12.0
	Agree	26	52.0	52.0	64.0
	Neutral	14	28.0	28.0	92.0
	Disagree	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

What is keeping you away from using MFS? [Non-universal payment system]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stongly Agree	12	24.0	24.0	24.0
	Agree	28	56.0	56.0	80.0
	Neutral	8	16.0	16.0	96.0
	Disagree	1	2.0	2.0	98.0
	Strongly Disagree	1	2.0	2.0	100.0
	Total	50	100.0	100.0	