Report On

"The Potential Data and Financial Risk of MFS (Mobile Financial Services) in Bangladesh"

By

Hasibul Hasan 17364050

An internship report submitted to the BRAC Business School in partial fulfillment of the requirements for the degree of Master of Business Administration

Brac Business School Brac University August 22, 2023

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Declaration

It is hereby declared that

1. The internship report submitted is my own original work while completing degree at Brac

University.

2. The report does not contain material previously published or written by a third party,

except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other

degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

Hasibul Hasan

17364050

Supervisor's Full Name & Signature:

Dr. Mohammad Enamul Hoque

Assistant Professor, BRAC Business School BRAC University

ii

Letter of Transmittal

Dr. Mohammad Enamul Hoque

Assistant Professor,

BRAC Business School

BRAC University

66 Mohakhali, Dhaka-1212

Subject: Submission of Internship Report on "The Potential Data and Financial Risk of MFS

(Mobile Financial Services) in Bangladesh"

Dear Sir.

With due respect, I feel pleased and privileged to submit this internship report on "The

Potential Data and Financial Risk of MFS in Bangladesh: How Can They Be Addressed?"

Since it is an essential requirement of completing an MBA degree, I tried to include all the

theoretical and practical knowledge that I have gained through my courses while studying at

BRAC University and working with bKash. This internship paper is a reflection of my work

experience and employment. However, I have faced various challenges and obstacles during

the internship period, but I tried my best to make this internship report successful. I would

like to thank my supervisor for guiding me in preparing the internship report during

myinternship period. Without your guidance, it would be difficult to complete this report

properly. Hence, I hope you will appreciate the information that I have provided in the report.

However, report might have some limitations due to confidentiality issues, but I am glad to

provide you with any clarifications on my report. Sincerely yours,

Hasibul Hasan

17364050

BRAC Business School

BRAC University

Date: August

2023

iii

Non-Disclosure Agreement

This agreement is made and entered into by and between E-ZONE and Hasibul Hasan,

student ID 17364050 at BRAC University. The non-disclosure agreement ensures that the

The information in this report is solely for the purpose of completing the internship

report. Using this data publicly and for any other use is strictly prohibited. Both parties have

agreed to the condition and will act in the utmost good faith according to the agreement terms.

.....

HASIBUL HASAN

Student of BRAC University

Student ID:17364050

iv

Acknowledgement

The effective involvement and effort of a number of people make this accomplishment successful. as well as their valuable opinion, develop the ideas of this work. At the beginning, I would like to express my modest gratitude to the Almighty Allah for giving me the capability to work hard under many challenging circumstances. However, it provides me with an enormous desire to thank a large number of people for their pleasant collaboration and assistance, who have contributed both directly and indirectly in preparing this report.

This is a great opportunity for me to be assigned under the direction of Dr. Muhammad Enamul Hoque, Assistant Professor of BRAC Business School, BRAC University, and Dr. Kausar Alam, Assistant Professor of BRAC Business School, BRAC University. I am very thankful to them for their support and direction in preparing this report. Their valuable recommendations and plans helped me a lot to make this report in an organized way.

Then I would express my heartfelt gratitude to my superintendent, Syed Azmal Ali; Manager, Human Resources, E-Zone, for his close supervision and advice about employment. Through my internship.

It would have been impossible to complete this internship report without their guidance and assistance. The experience and knowledge I gained in bKash helped me a lot to recognize different features connected to my study.

Lastly, I would like to acknowledge all those individuals, such as my friends, colleagues, and family, who have pooled their opinions about my internship, provided me with essential material, vilified me and acknowledged me The acknowledgement is not sufficient to tell them how How thoughtful their opinion is on this internship report and how obligated I am to them.

Executive Summary

This report is prepared for the partial fulfillment of the course of internship for the degree of

Master of Business Administration from BRAC Business School, BRAC University, Dhaka.

This report reflects my work experience at bKash. A large section of people in Bangladesh

are relying on MFS for necessities like bill payment, money transfers, receiving salaries, and

even saving. However, the lack of data protection, which can ultimately cause financial loss

to customers, is a big challenge for MFSs. If the customer's data can be protected, a country

like Bangladesh, where 85% of people are out of reach of banking services, can become a

global leader in the MFS sector. In this report, I tried to show the potential data and financial

risks of the MFS industry in Bangladesh. I gathered the data from published online sources

and my own experience, and even tried to make some recommendations with the little data I

have access to.

Keywords:

MFS (Mobile Financial Services)

vi

Table of Contents

Declar	rationii
Letter	of Transmittal iii
Non-D	Disclosure Agreementiv
Ackno	owledgementv
Execu	tive Summaryvi
Table	of Contentsvii
Chapt	er 1 OVERVIEW OF INTERNSHIP1
	1.1 Student Information
	1.2 Internship Information
	1.2.1Period, Company Name, Department, Address1
	1.2.2 Internship Company Supervisor Information
	1.2.3 Job Description
	1.3 Internship outcome
	1.3.1Contribution to the Company2
	1.3.2 Benefit of the Student2
	1.3.3 Challenges3
Chapt	er 2 Organization Overview4
	2.1 bKash4
	2.2 Overview of bKash5
	2.3 Company Organogram6

	2.4 Management Practices	6
	2.5 Recruitment	6
	2.6 Emloyee Benefits at bKash	7
	2.7Financial performance of bKash	7
	2.8 Achievements	8
Chap	ter 3 Project Part	9
	3.1 Introduction	9
	3.2 Problem Statement	10
	3.3Objective of the study	10
	3.4 Methodology	10
	3.5 Limitations	10
	3.6 Potential Data And financial Risk in Bangladesh	11
Chap	ter 4 Findings, Recommendations and Conclusion	14
	4.1 Findings	14
	4.2 Recommendations	15
	4.3 Conclusion	15
	Reference	16

Chapter 1

OVERVIEW OF INTERNSHIP

1.1 Student Information

Name: Hasibul Hasan

ID:17364050

Program: Master of Business Administration

Major: Finance

1.2 Internship Information

1.2.1 Period, Company Name, Department, Address

Period: July 6, 2022 –present

Company Name: bKash

Department: Digital & E-KYC Management

Address: Shadhinata Tower, House No. 6, 4th Floor, Block-SW, Bir ShresthaShaheed

Jahangir Gate, Dhaka 1206

1.2.2 Internship Company Supervisor Information

Name: SYED AZMAL ALI

Position:Manager

Email:hrminfo4@e-zonebd.com Contact No: 01678075505

1.2.3 JobDescription

I am currently working as an officer in the 'Digital and EKYC' department of bKash I am working in this department from july 6, 2022.

It is my responsibility to monitor whether the new customers of bKash are included as customers of bKash in accordance with the laws enacted by the Bangladesh Government and Bangladesh Bank. My responsibilities as an officer of this department are

1

To verify the consistency of the customer's national identity card or passport information and the information provided by the customer.

Assisting customer service representatives with necessary customer information.

To verify the details of the customers who are interested in becoming bKash Agent and Merchant and help them open accounts.

#Helping the customer service team and providing service-related reports to higher authorities is also one of my responsibilities. My department is responsible for bKash's new customer onboarding and Agent & Merchant account opening .My department plays a vital role in the expansion and profitability of bKash.

The main objective of my department is to lawfully enroll new customersAgents and Merchants thereby expanding business and preventing financial fraud.

To work in this department, it is necessary to have an understanding of the financial laws of Bangladesh, policies of the Bangladesh Bank, the overall economy and related computer software.

1.3 Internship Outcome

1.3.1 Contribution To the Company

I have been working in the digital and e-KYC departments of bKash as an officer since July 6, 2022. I am responsible for onboarding new customers, merchants, and agents of bKash following the regulations of Bangladesh Bank. I submit a report of my work to my team leader.

My department plays an important role in the development of the business, as the expansion of the business is ensured through the onboarding of new customers, merchants, and agents.

1.3.2 Benefit of the Student

I have been working at bKash for the past 1 year, and this is my first corporate job. So, this job made me who I am in this corporatesector. From monitoring customers identity to

cooperate with marketing and legal team this job made me a responsible person. Working simultaneously with other departments actually increases my communication skills greatly. Also, working on a roster duty also helps me manage my time better.

1.3.3 Challenges

The digital and e-KYC departments are open 24 hours a day, 365 days a year. Joining this department means roster duty. midnight working hours and holidaysworking hours. As a student, I never considered working at odd hours, so my mind was made up.thinking that life is all about working 9–5. So, it took me a long time to get used to working odd hours. That time of my life was very difficult. So I got used to this lifestyle after 3–4 months. Nowadays, this odd-hour office does not disrupt my life. because I learned to manage my family time and working time.

Chapter 2

2.1 bKash



Introduction

MFS refers to a service that a subscriber is able to access from his basic mobile phone. And MFS is able to provide services like money transfer, salary receipt, payment and savings, and digital loans with maximum security through its mobile wallet account system.

Although MFS is a new concept for Bangladesh, it has gained the trust of the people of the country in a very short period of time, especially for people who are out of reach of conventional banking services. Some of the most popular MFS services are:

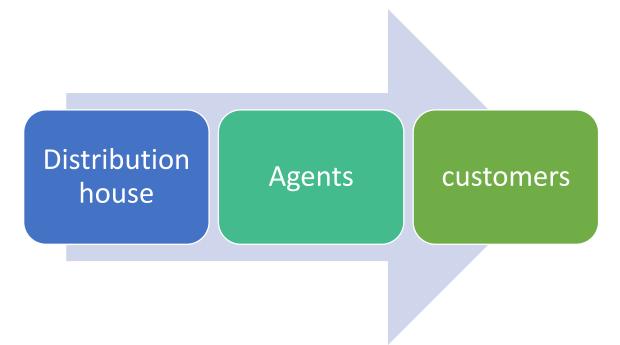
- 1) bKash
- 2) ROCKET
- 3) Nagad
- 4) উপায় (Upay)

2.2 Overview of bKash

bKash, a subsidiary of BRAC Bank, started its journey as a joint venture between BRAC Bank and Money in Motion LLC, later joining the International Finance Corporation as an equity partner in 2013 and the Bill and Melinda Gates Foundation as an investor in 2014.

The main objective of bKash is to create a safe, easy, and cost-effective means of transaction for the 85% of people in Bangladesh who are outside the conventional banking system.

bKash provides its customers with a very fast and easy money transfer and payment method that the customer can use from his own basic mobile phone. Even the transaction cycle in bKash is very simple.



From the distribution house, the virtual money is transferred to the authorized Agents in each district and upazila, through whom customers can easily transact. Besides building a strong network of around 3 lakh agents and 3 lakh merchants across the country, bKash is playing a role in building a cashless digital financial ecosystem by partnering with banks, financial institutions, and various service providers.

2.3 Company organogram



2.4 Management Practices

bKash's management is one of its most significant assets. Its managerial strategies have allowed it to grow steadily throughout the years while providing nice customer service. bkash's Management is separated into departments, each of which operates independently. Management is in charge of operations like training, recruitment, and employee benefits. Because bKash prioritizes its clients above all else, the management socializes customers in such a way that they become potential clients in the future. Management often recruits people that are dynamic and self-motivated and have the potential to become future leaders.

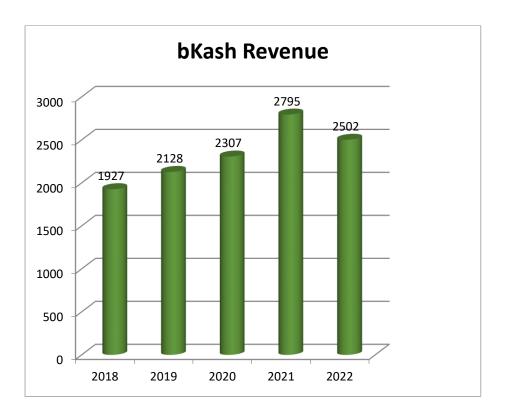
2.5 Recruitment:

Recruitment in bKash is done by following certain procedure that requires the candidates to apply for the position. From the application, candidates are shortlisted and chosen for the written test. Candidates who pass the written tests are then asked to attend an interview.

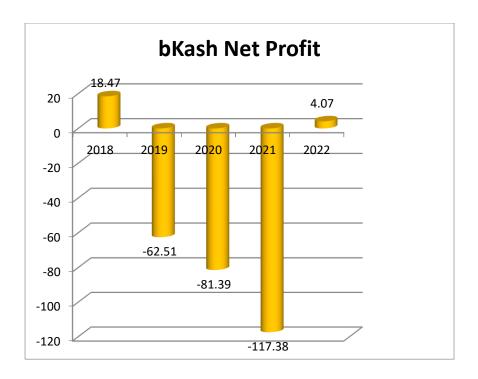
2.6 Employee Benefits at bKash

- bKash ensures health and safety of the employees while at the bank.
- Provident fund for all permanent employees.
- Yearly bonus
- Two festival bonuses for the employees
- Gratuity for the long-term employees.
- bKash provides career development and training program for its employees

2.7Financial performance of bKash



Taka in crore



Taka in crore

In Q3 of 2022, the net revenue of bKash grew 28% year-on-year to Tk857.84 crore and its net profit reached Tk46.54 crore. The fintech giant's profit for the first nine months of this year stood at Tk4.07 crore, while its net revenue was around Tk2,502 crore.

2.8 Achievements

- 1) Received the Global Brand Excellence Award and the Manhattan Award in 2014.
- 2) Received the Mbillionth Award in 2015.
- 3) Ranked 23rd on Fortune's Top 50 "Change the World" list in 2017,
- 4) Best Brand Award 2018 in the MFS category
- 5) Most Preferred Brand Award 2019
- 6) Best Brand Award 2020 in all categories
- 7) Bangladesh's number one employer of choice DHL-Daily Star Award for Best Financial Institution in Bangladesh 2021

Chapter 3

Project part

3.1Introduction

Mobile financial services are a relatively new phenomenon. Until the 2010s, the only link between mobile and financial transactions was SMS, also known as SMS banking. However, all financial transactions that make life easier can now be done via mobile.

More recently, electric money (which can be transacted through mobile financial services) has become very popular. It has brought a structured financial service to billions of people who are out of reach of traditional banking services. The impact of MFS in the financial sector is so strong that conventional Visa and Mastercard are losing business to it and even becoming a good alternative to banking services. Currently, MFSs like Apple Pay, Google Pay, or bKash are not only making people's lives easier but also ensuring maximum value for their money. Although MFSs are committed to providing maximum security to their customers' data and money, they are always prone to data theft and financial irregularities. It remains vulnerable to corruption as The success of this growing empire of MFSs is completely dependent on data security and the utmost safety of customers' money.



3.2 Problem Statement

This paper will evaluate the potential data and financial risk of MFS in Bangladesh and How Can they be Addressed?

3.3 Objective of the Study

- 1. To get an overview of bKash
- 2. To get an idea of principal activities of bKash
- 3. Evaluate potential Data and financial risk of MFS in Bangladesh and How can they be

Addressed

3.4 Methodology

Both primary and secondary data will be used in this report

- 1. Primary data was gathered while working in bKash
- 2. Secondary data was collected from various online sources

3.5 Limitations

The admins were quite helpful, but they were also very busy, so they didn't have much time toprovide information regarding every details. I am the sole author of this report. Despite my bestattempts, there were certain roadblocks and limitations in the way of completing my report. The following are some of them:

- 1. Lack of enough information as some information were extremely confidential.
- 2. Time constraint was a big issue, as I had to do this report along with my regular office work
- 3. The depth of the analysis has been limited to the level of information collected from different sources.
- 4. Difficult to crosscheck the authenticity of the collected data.
- 5. Imbalance among organizational departments and in culture.
- 6. Proper academic documentation regarding the study and the organization was not available.

3.6 Potential Data And Financial Risk In Bangladesh

MFS handles approximately 9,900 billion taka per year in Bangladesh. It is one of the largest MFS markets in the world. The sector's market leader, bKash, achieved a growth rate of 18% last year alone. According to international analysts, the use of MFS in Bangladesh will increase further in the future. As financial transactions increase, the risk of illegal use of data in this sector and theft of the transacted money will also increase.

The challenges of mobile financial services in terms of customer data protection can be divided into several categories, respectively: technological threats, wallet app-based threats, device-based issues, threats for merchants, and threats associated with acquirers.

→A "technological threat" refers to the use of technology to extort user information and money. Technological threats include modification, fabrication, interception, etc. Through this process, cybercriminals enter the user's network through various types of software, steal their information, and try to disable the network's security system by conducting cyber attacks.

Some of the biggest sources of data security threats are hackers, internal threats, human error, and natural disasters. A data breach can cause dire financial and reputational damage to both companies and customers.

→Currently, mobile app transactions are very popular, and they have made transactions easier, but they have also become one of the targets of cybercriminals' attacks. App-based security threats include social engineering, phishing attacks, malware attacks, etc. Using all these methods, cybercriminals usually steal users' identities and fool network security with stolen identities.

Phishing attacks and social engineering are two of the biggest weapons of hackers. Phishing attacks and social engineering target MFS employees and steal their credentials to send

malware and ransomware to thousands or even millions of customers. Malware like Trojans and ransomware is used to steal customer information and money. This type of malware usually comes via email attachments, malicious ads, or even SMS.

→ Nowadays, most people use mobile devices like USBs and hard drives, which are great causes of data breaches andThese devices are one of the greatest targets of cybercriminals because mobile devices can be easily controlled and their security systems are very weak. →The rise of e-commerce and digital transactions are intertwined. And e-commerce sites use customers' personal information to receive payments, and this is where customer data theft and financial irregularities are created. Such risks include issues like app cloning, relay attacks, and man-in-the-middle. In this case, cybercriminals trick people into making payments and sharing information by impersonating genuine websites or apps, and in many cases, they manipulate customer information to fool security systems.

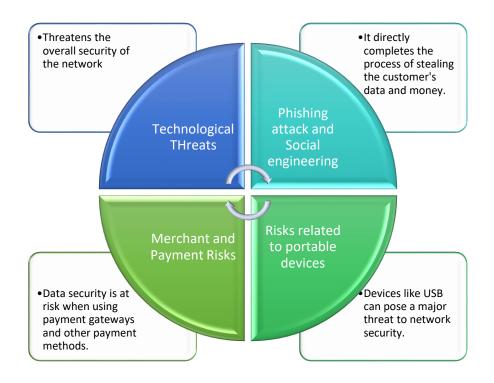


Figure: Potential Security Risks of MFS & Their Causes

Chapter4

Findings, Recommendations and Conclusion

4.1 Findings

Due to the constant adoption of new techniques and methods by cybercriminals, it is difficult to identify specific threats to data and financial security. So customer awareness is the biggest weapon to deal with such risks. For example, it is not possible to be active on two devices at the same time using a bKash account, which greatly reduces the possibility of data and money theft bKash automatically closes suspicious transaction accounts regularly and only reinstated those account after proper investigation, Subject to the customer providing specific information and proof. But even after this, the theft of customers' money and data does not stop.

However, MFSs cannot leave the burden of data and financial security on customer awareness alone. MFSs need to be more vigilant to ensure the protection of customer data and money. At present, Bangladesh's MFS is not the victim of large-scale cyber attacks, but there are very good attempts to steal customer data and money by questioning the integrity and intentions of MFS employees. Therefore, MFSs need to be more vigilant and strategic in dealing with such crimes.

bKash has gained the trust of nearly 40 percent of its customers and has become a profitable company despite the COVID pandemic, proving that customers' data and money transacting through bKash are not at risk and customers are satisfied with data and financial security.

4.2 Recommendations

Phishing attacks can be easily prevented with anti-virus and anti-malware software, but employees of MFS organizations should be aware of social engineering attacks, and organizations should regularly train their employees in this regard. Mistakes made by MFS personnel in contacting the wrong source are a very common occurrence, but these mistakes can spell disaster for an organization. These mistakes can be avoided through the use of sophisticated software, such as Data Loss Prevention (DLP) tools such as Endpoint Protector. With the help of features like this, sharing permission restrictions can also be used to reduce the wrong sharing of data. Regular training of MFS personnel can also reduce data leakage to a great extent.

The use of unauthorized USB devices is one of the biggest causes of data security breaches. The easiest way to prevent such breaches is to completely block employee access to USB and peripheral ports. However, there's no denying the usefulness of USB in the workplace. For companies that still want to use USB, there are security measures in place to combat these cybersecurity threats. Chief among these is a trusted device policy for all files transferred on USB sticks that only allow trusted devices to connect to company computers.

One of the most important steps to prevent a data breach is to prevent employees from using their own devices in the workplace.

4.3 Conclusion

bKash is the largest MFS company in Bangladesh. I am working as an officer in the 'Digital and E-KYC' department of this company, and therefore, I understand the importance of data security in this company and in the MFS sector, which will ultimately provide financial security to the customer. Therefore, in this report, I have discussed the main threats to data security in the MFS sector and some possible steps to address them. which will ultimately make bKash's main motto of "making life easier" successful.

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