A Research on Digital Financial Services of Bangladesh

Focusing SureCash, Bkash, iPay, Upay

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Author: Tashnin Hossain
BRAC University

INTERNSHIP REPORT

A Research

On

“DIGITAL FINANCIAL SERVICES OF BANGLADESH: SURECASH, BKASH, IPAY, UPAY”

Submitted To:

Rahma Akhter
Lecturer
BRAC Business School
BRAC University

Submitted By:

Tashnin Hossain
ID 14104052
BRAC Business School
BRAC University

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Letter of Transmittal

30th April, 2019

Rahma Akhter
Lecturer
BRAC Business School
BRAC University

Subject: Submission of Internship Report on ‘Digital Financial Services of Bangladesh: SureCash, bKash, iPay, Upay’.

Dear Madam,
It is indeed an incredible obligation of mine as I prevail at the overflow of my graduation with the report of my internship which I humbly presenting before you for your assessment and approval. The report is titled ‘Digital Financial Services of Bangladesh: SureCash, bKash, iPay, Upay’ has compelled me through plentiful experiences which I have examined to best fit in my report. I hopefully you will find the paper to be very much investigated, enlightening and reflection of my endeavors and perseverance.

While preparing this report, I deliberately followed your guidelines and well-tried to cover each of the aspects with important figures. Initially, the report contains both primary and secondary information. In addition, the report reflects my experience and information which accelerated through everyday work. Finally, this internship increased skilful aptitudes to advance my career in the best directions with enthusiasm, promptness and persistence.

May I, therefore, express my wholehearted thanks with gratitude to you for your kind supervision, direction and co-operation for completing this report and oblige thereby.

With Warm Regards,

Tashnin Hossain
ID 14104052
BRAC Business School
BRAC University
Letter of Endorsement

The Internship Report entitled ‘Digital Financial Services of Bangladesh: SureCash, bKash, iPay, Upay’ has been submitted to BRAC Business School of BRAC University for completing all the requirements of the Degree of Bachelor of Business Administration; Major in E-commerce and Marketing on April 30, 2019 by Tashnin Hossain, ID 14104052. The report has been accepted and ready to be presented to the Internship Defense Committee for evaluation.

(Any opinions and recommendations given in this paper are entirely that of the author of the report. The University neither vindicate nor reject any of these opinions or suggestions.)

Rahma Akhter
Internship Supervisor
BRAC Business School
BRAC University
Acknowledgement

I, Tashnin Hossain, would like to express my heartiest gratitude to each and every one of those people who encouraged me to complete my internship report and provided support regarding the topic, ‘Digital Financial Services of Bangladesh: SureCash, bKash, iPay, Upay’.

To begin with, I am grateful enough to the Almighty for making this internship report possible. Moreover, I would like to offer my thanks and wholehearted gratitude to my academic supervisor Rahma Akhter, Lecturer of BRAC Business School for facilitating me with guidance and advice to complete my research.

Furthermore, I would like to give my heartfelt thanks and obligations to my authoritative supervisor Mr. Abdullah Omar Tahseen, the Assistant manager, Department of Business Development of SureCash- Progoti Systems Limited, for aiding me with all the essential data. I also would like to express my thanks to each and every one of the colleagues who have supported and encouraged me constantly through the span of my internship period.

Last but not least, I feel fortunate enough for getting all the support, supervision and guidance of my teachers, colleagues and friends whoever have helped me throughout this journey.
Executive Summary

It is a known fact that, Digital platform has broken through a whole new world with a full speed attractiveness and acceptance of people globally. Whilst, digital platform ranges from Ecommerce sector to mobile banking to the society’s door of health, education, and government level each and to each and every sectors which connect people for convenience. According to a report of ‘State of the Industry Report, 2018’, the growth in Ecommerce transaction facilitated by mobile money is 79% and the rise of global mobile penetration from 2013 to 2017 is 29% to 43%. These information clearly shows the attractiveness of the digital platform globally. By the same token, digital platform transaction has also opened a new era in Bangladesh as well. In addition to that, the trend of using digital platforms for payments is being widely accepted by the people of the country leading this industry to make mark on the economy of Bangladesh. In this whole report, I have well- tried to cover the DFS services of Bangladesh and their gap to meet the market requirements. Chapter 1 presents the company overview of SureCash, bkash, iPay and Upay including mission, vision, objectives and their offered services to the customers. Chapter 2 presents the literature review of DFS in Bangladesh and some description major terms and abbreviations. Before that, I have mentioned the research background, scope of study, methodology, sources of data. In the Chapter 3, I have done competitive analysis of SureCash, bkash, iPay, Upay using Porter’s five forces model, PESTEL framework and SWOT in the last. After that in Chapter 4, the presentation of the results of survey has been showcased with different charts and graphs. The data analysis is done using SPSS tool and Microsoft excel. Not only that, the reliability testing has also been done for better investigation. And in the last, I tried to figure out all the possible Findings and based on that my Recommendations were given. To conclude my report, I write a few lines for the Conclusion part for this reports along with References and attached the survey questionnaire in the Appendix section.
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Company Profile

1) SureCash

SureCash is the mobile financial platform of Progoti Systems Limited which is considered to be one such fastest mounting fin-tech companies of Bangladesh. This DFS commenced its commercial operations in 2015. Currently, the company has partnership with five local banks of the country including Rupali Bank Limited. Moreover, the company has more than 1,000 payment partners and stakeholders. The estimated market share of the company is around 5%. On another note, Rupali Bank Ltd. is the first one to start mobile banking service among any the other banks of government by making partnership with SureCash. As a bonus, SureCash is aiding more than 10 million families with the primary education stipend serving near 80 thousand villages of Bangladesh under the project of PESP- Primary Education Stipend Project of the current Prime Minister of our country.

The company has developed its own proprietary technology initially focusing on connecting with different educational institutions including schools, colleges, government education programs and utilities reaches to the last mile of the country.

Mission & Vision:

As the mission, vision of the company have not been shared officially, the proposed mission and vision of SureCash have been constructed under the supervision of the work experience:

The ultimate goal or vision of SureCash is to reach nationwide by providing at a low cost mobile banking services.

The company’s mission is to attain a minimal Customer Acquisition Cost by integrating and succeeding its payment partners and stakeholders and also aiming to secure a growing customer ground with customers’ long term value.
Objectives:

The main objectives of SureCash are given below:

✓ To make the service as easier and user friendly as possible for the ease of customers.
✓ To convert customers into loyal customers by obtaining their trust on the services being provided.
✓ To obtain a least amount of customer acquisition cost by the integration of its stakeholders.
✓ To achieve the ability to serve nationwide.

Fundamental Departments:

SureCash is one of the growing Digital Financial Service companies with 260 current employees working in the company, has its interlinked 8 major departments directed and controlled by the Managing Director & CEO Mr. Shahadatullah Khan.

Figure-1: Departments of SureCash

A simple hierarchy of Business Development department has been shown below:
Product and Services:

SureCash offers a complete mobile payment services allowing customers to make-

- Cash-in/ Cash-out transactions
- Person-to-person (P2P) money transfers
- Bulk transfers and disbursements (e.g. salary & incentive)
- Inward international remittances
- Government payments (e.g. VAT and Chalan)
- FMCG pharmaceuticals, agro businesses
- Hospital, Hotel, Restaurant
- School and college fee payments
- Utility bill payments
- Payments for goods and services (Retail transactions)
- Online purchase and E-commerce payment
- Credit Card payment
- Insurance and healthcare payments
- Facilitate microcredit and SME loans.
These features are constantly being modified and updated to meet customer demand. Moreover, the SureCash app allows to create new account using a 4 digit PIN number to ensure customers’ security. SureCash always tries to make its merchants’ and customers’ feel as comfortable as possible and tries to make the system as convenient and user friendly as promising.

2) bKash

bKash Limited is a multinational company and a subsidiary mobile financial service provider of BRAC Bank, with a lion’s share of 65% of the market. bKash offers harmless, convenient and easy payment methods and money transfer services via mobile phones serving both banked and unbanked people of the country. The company gradually built its stakeholders and partners with almost every mobile operators of Bangladesh. The technology bkash is using currently serving 98% of mobile users permitting access to its service via very basic mobile phone devices.

Bkash is basically the joint venture of the BRAC Bank Limited and started its journey from July 2011 and have been in the leading position among its competitors.

Vision:
To being in greater financial inclusion amongst the unbanked in Bangladesh.

Mission:
bKash targets to expand its financial inclusion by providing convenient, affordable and reliable financial services.

Objectives:
Some of the major objectives of bKash are as follows:

☑ Ensuring a wide range of access of financial services for the people of Bangladesh.
✓ Serving the low income masses of the country in order to attaining comprehensive financial inclusion concerning convenience, affordability and reliability.

**Product and Services:**

- Safe and secure Cash In/ Cash out
- Fast money sending
- From convenient good to Ecommerce payment
- Online Ride services payments
- Cash-back offers and deals
- Purchasing Airtime from user account
- International Remittance service by collaborating with Western Union and MasterCard
- Giving interest on saving in the account of Bkash which is up to 4% annually

**Company Hierarchy:**

At present-day, bKash is one of the leading MFS Provider in the world and vastly growing. bKash’s each and every division & department plays crucial roles with different specific objectives and responsibilities. The hierarchy of bKash has been given below:
bKash is succeeding DFS with a captivating business plan and social enriching agenda to capitalize these aspects to upsurge the access of digital financial services in Bangladesh.
3) iPay

iPay Systems Limited is a secure e-wallet and a seamless payment system for one’s day to day transactions without any charges. Payment can be done via mobile phone or computer, connected to the internet to make cashless and hassle free transactions anytime, anywhere with iPay e-wallet. iPay was founded by Mr. Zakaria Swapan and started its journey in 2015. However, the company began its journey in March, 2018 and became much popular within a very short period of time. The investors of iPay are basically the entrepreneurs involved with many banks and other financial institutions including high-tech industries both in Bangladesh and overseas.

Vision

iPay aims to become a pioneer in the electronic payment services industry that not only simplifies life but also vowed to develop a whole new dimension of going cashless society in Bangladesh.

Mission:

iPay promise to fetch an innovative change in the transaction experience by providing a wide range services that enables lifestyle payment access for individuals and business.

Objectives:

- Building a secure payments ecosystem for people via online, in stores and on mobile devices.

- Giving a better way to the customers to connect with the digital money.

- Providing significant importance to customers’ safety and security of their financial information and ease of use in during their transaction experience.

- Developing a business plan to operate and measure the network for Bangladesh and overseas market.
Company size:

After running its beta mode successfully, ipay is gradually trying to overcome its start-up phase. According to the company, iPay can employ 51 to 200 employees. However, approximately 140 people are working together in teams in iPay.

Product/ Services and Features:

The initial services that are being currently offered by iPay have been mentioned as follows:

- Add and Withdraw money
- Send and Receive money
- Bill Payment
- In-store payment
- Credit Card Bill Payment
- Mobile Top-Up/ Mobile Recharge
- QR based system
- Restaurants, Café, Jewelry, Gadgets, Fashion, Transport, Tour and Hotels
- DESCO & DPDC bills payment

DESCO and DPDC bill payment feature is the new addition to the iPay offerings and services. Moreover, iPay is continuously offers, deals and rewards in order to attaining its new customers.
4) Upay

Upay is a mobile app-based, cryptographically secured digital payment solution launched by United Commercial Bank Limited (UCB) in 2017 for both consumer and corporate customers. UCB Limited is one of the renowned private commercial banks of the country has been providing services with modern technology and brilliance since 1983. UCBL Upay aims to promote cashless and ready to provide payment and transaction service anytime anywhere using mobile phones. Hence, the slogan comes ‘Digital Bangladesh’. In addition, According to the CEO of UCBL, Mr. A. E. Abdul Muhaimen, Upay will be using the Block-chain and QR Code (Quick Response Code) which are the most innovative and reliable technologies first ever in Bangladesh to secure all financial transactions. In a nutshell, the power of convenience will be in a hand of customers’ with their existing mobile device to go cashless platform.

Vision of United Commercial Bank Ltd.:

UCBL aims to be the leading Private Commercial Bank in Bangladesh by serving and ensuring to the maximum height of satisfaction to its consumers. Their aim is to achieve efficiency, large capital assets, quality, effective management and profitability having strong liquidity. Their main vision is to satisfy consumers in such a way that their services are best in the country.

Mission of United Commercial Bank Ltd.:

Building United Commercial Bank Limited into the best bank service provider by achieving and improving efficiency, large capital & asset and effective management through integration of technology at all sectors of banking.

Objectives:

- To go Cashless/ Card-less transaction platform using digital devices
- To utilize both Android and Apple based mobile devices for payments
- To provide anytime, anywhere and many in one payment platform.
- To make payments directly by debiting accounts or digital wallet.
✓ To provide highly secured transaction using cryptographically Block-chain and QR Code Technology
✓ To provide faster than card transaction
✓ To charge No Cost to the consumer to make the service as cheap as possible.

Product and Services:

Some of the main features that Upay offers to its customers are:

- Payments of Goods/ Services from Physical/Online Merchants.
- Making Payments for Consumer, Corporate and Government
- Paying for the travel Tickets
- Utility bill payment
- Salary disbursement
- Loan repayment
- Insurance premium
- Inward remittance
- Purchasing of Digital Cheque for gifts and payments.
- Redeeming coupons/vouchers/reward points
Chapter 2: Research Background
2.1 Origin of the Report

The purpose of this report is to accomplish the requirement for completing the Internship program. From the three-month period of my Internship at SureCash- Progoti Systems Limited and under the supervision of Rahma Akhter, this report has been prepared.

2.2 Objective of the Study

Broad Objective:
To analyze and explore the current performance and effectiveness of Digital Financial Services of different local companies in Bangladesh.

Specific Objective:
With the intention of evaluating and analyzing the market environment of the current DFS industry focusing SureCash, bKash, iPay and Upay of Bangladesh based on what values are being provided by companies this study has been done. This report tries to find out the market competitiveness in terms of each companies’ strengths, weaknesses and their external environmental factors affecting the DFS industry.

Some of the main objectives of the study have been mentioned as follows:

➢ To measure the effectiveness of the current value propositions of SureCash, bKash, iPay and Upay

➢ To analyze the companies’ external environment and future growth.

➢ To know companies’ internal strengths and weaknesses.

➢ To find out the gaps of companies’ offerings to their customers.

➢ To enhance the understanding of corporate research.
2.3 Scope of the Study

This is an experimental research study done for the purpose of knowing about the current DFS market and their performance towards the customers’ satisfaction. Although initial survey tries to provide us with the precise information and experiences regarding different DFS providers, the rest is mainly based on the secondary information sources. The survey questionnaire holds 14 specific questions with 123 respondents. Nevertheless, the research focuses only on the people who have used the DFS wallets and have knowledge about the concept.

2.4 Significance of the Study

This research will provide the overall accumulated information regarding the four different DFS companies (i.e. SureCash, bKash, iPay, Upay) and their current market position and effectiveness, what are their lacking and how they can overcome. In addition, the level of customer expectation and satisfaction regarding their usage of wallets have also been found by this research. Furthermore, this report will aid with its overall information to those of brand practitioners, organizations, university teachers and students who are keen to know about market condition related to the study topic. Again, based on the report recommendations and survey results, it will be helping the organizations for making their smooth business plans.

2.5 Research Methodology

The topic for this report was chosen focusing on the performance of the current DFS companies in Bangladesh (SureCash, bKash, iPay, Upay). After discussing with my respective advisor, this topic was accepted for the internship report.

In many institution, the most popular and widely used research practice is the Descriptive Research Technique. For this very reason, to prepare this report Descriptive Research Method has been followed. In addition, descriptive research technique basically refers to the description of any population, phenomenon and organizations. Besides, it is also a quantitative research procedure as the responses are known and associated with numbers that carries the importance of each factor.

For this research paper, most of the analysis have been done using one of the most common Statistical tool SPSS. Moreover, frequency distribution as well as the reliability analysis have
been done in purpose of capturing actual output of the survey poll.

2.5.1. Research Hypothesis

DFS received much attention within a short period of time. For this research paper, we will explore the satisfaction level of multiple DFS services being provided in Bangladesh. This part of the research discusses about the hypothesis which has been developed in purpose of comparing with the results of the survey conducted on the performance of the current DFS platforms. The expectation from the investigation is to get a positive correlation of the communication effectiveness and value proposition of DFS services with customer satisfaction. Thus, the hypothesis for this research has been developed as follows:

\[
H_1 = \text{the value propositions and current beneficial offerings and communication effectiveness have positive impact on the customer satisfaction level of DFS.}
\]

2.5.2 Sources of data

While doing this research, both primary data and secondary data sources have been taken into account for gathering information. Also, relevant websites and research paper were used while collecting secondary data. Moreover, as being fortunate enough to work in a tech-based company, internal documents of the organization aided much to collect more data as and be counted as secondary data source. Likewise, practical work experience, observations and interaction with the customers through the use of questionnaire played a big role to collect all the primary data. Also, many research paper and journal paper have been gone through for the detailed research.

2.5.3 Respondents and sampling procedure

The overall population for this research can be considered as the users of any particular Digital Financial Service platforms (i.e SureCash, bkash, iPai, Upay etc.) existing in Bangladesh. People who have had a minimum experience on any digital fund transactions are the population for this report.

As we know Sample refers to a subset of the population which is selected for a research. Thus, only a few people as sample from the total customers of DFS were
taken as the respondents for this research work.

Out of two major categories for sampling of Probability and Non-probability, this research followed the probability sampling method. To be more precise, the sample random sampling technique has been used as the research population for this research is known.

2.5.4 Sample size

While preparing this research, total 123 people responded in the survey poll and shared their unbiased information and experiences. Additionally, the survey was conducted on the online platforms and the questionnaire was prepared with the help of Google form. The questionnaire was developed from the knowledge of previous studies and by filling up the form, respondents presented the insights of their e-wallets and experiences.

2.5.5 Research Instruments/ Questionnaire

Various types of questions can be used in the survey question. And, for this research, some basic questions was used following the Simple Attitude scale, 5 point Likert Scale and Open-ended questions in the survey. In a few words, respondents showed their own viewpoint by checking how strongly they agree or disagree with a statement. The questionnaire consisted of 14 questions about customer’s feedback towards the current DFS system of Bangladesh.

2.5.6 Analysis and Presentation of Data

The survey data for this report has been analyzed using different charts and tables and has been utilized to observe the gathered information and provide with visible interpretation of the research. While analyzing, the most popular tool SPSS has been used for frequencies and reliability analysis.

2.5.7 Findings from Interpretation

All the collected information has been investigated and analyzed efficiently and assembled in the report in a systematic way and presented as findings of test results in the last part of the report.
2.6 Limitations of the Study

Several limitations have been found while developing the research. First of all, the research was limited to mostly the customers found online and few from my office and universities. Whereas, other users of mentioned DFS companies could not be reached and were remained out of the sample as the research is done for the academic purpose. Second of all, as the research includes four specific DFS entities and most of them are at startup phase except bKash as a result limitations of finding secondary data were there. Last but not least, the administration of the companies including SureCash (my workplace) were not willing to disclose some important data owing to confidentiality which could have been useful for this research. For instance, data from company analytics to know about user behavior could have been a better insight for this report analysis. Nevertheless, despite the fact of facing some restrictions, the personal survey poll was conducted on the users to furnish the paper with a great understanding about the experience factors.

2.7 Literature Review:

The main focus of the study is the overview of Digital Financial Services (DFS) of SureCash, bKash, iPay and Upay. DFS refers to the broad range of financial services accessed and delivered via different digital channels which includes fund transactions and payments. DFS models set up agents or third-party intermediaries to improve the accessibility and lower the cost of service. Additionally, Digital Financial Services (DFS) concept comprises Mobile Financial Services (MFS). MFS refers to the use of mobile phones for accessing financial services and making financial transactions.

Previously, many researches have been done on different aspects of DFS companies but only a few study or researches can be found on the competitive analysis of the current DFS companies. This study discusses broadly on the aspect of competitiveness among SureCash, bKash, iPay and Upay with help of analyzing the survey conducted for interpretation of the current situation in the existing market. The research will also put the light on the effectiveness of the value proposition of companies.

Some of the major theoretical terms and their definitions have been given below:
• **DFS:** It is the abbreviation stands for Digital Financial Services. It is the wide range of financial services which can be accessed and delivered via various digital channels including fund transactions.

• **MFS:** Stands for Mobile Financial Services. Refers to the use of mobile phones for accessing and making digital financial payments.

• **FinTech:** It is a contraction of ‘Financial Technology’, the technological innovations in the financial sector including retail banking, investment and crypto-currencies.

• **Third-party Provider:** Agents appointed on behalf of a DFS provider by virtue of a service agreement, joint venture or other contractual arrangement.

• **KYC:** Abbreviation of Know Your Customer. KYC refers to the process of a business authenticating its customers and analyzing their suitability accompanied by the potential risks towards the business relationship.

• **Cash In:** The procedure whereby customers exchange money or cash for electronic value.

• **Cash Out:** The procedure whereby customers exchange electronic value for cash.

• **P2P:** Person to Person

• **CAC:** Customer Acquisition Cost refers to the cost that is incurred by the organization mainly associated in convincing a potential customer to purchase a product or service.

• **CLV:** Customer Lifetime Value refers to a estimation of the net profit attributed to the entire future relationship with a customer.
Chapter 3:
Competitive Analysis: SureCash, Bkash, iPay, Upay
Competitive Analysis

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

In order to examine the market environment and the degree of competition among the rivals, for this paper the Porter’s Five Forces model and PESTEL Analysis have been done for SureCash, bKash, iPay and Upay separately. In addition to that, Competitive Strength Assessment (CSA) Analysis and Strategic Group Mapping are presented for better understanding of the current situation and rivals of above mentioned industries. Not only that, after having done with all the theoretical analysis matters, the SWOT analysis in the last tries to cover the industries’ strength and weaknesses, what could be their opportunities and threats or challenges. Yet again to mention, this an experimental research and henceforth, all the analytical matters have been done based on the theories and collected information.

3.1. SureCash | Porter’s Five Forces Model

SureCash is one of the new rising fin-tech industries having 5% of the total market share. Its target audiences are basically the people of rural area of the country. The competitive environment within the industry for SureCash has been given below by the help of Michael Porter’s five forces model:

i. **Competition from Existing Rivals:**

   The MFS platform under DFS system is growing very fast. Since bkash has always been on top, the competition from the existing rivals for SureCash is very high. Apart from bKash, there are other competitors in the industry for instance-Nagad, Ucash, Ipay, Upay, Rocket etc. with which SureCash has hard to hard competition. Henceforth, the competition among these rivals is high.

ii. **Threat of New Entrants:**

   As the Bangladesh bank has approved a new rule which states every bank in the country should have mobile banking service and gave the license for MFS to 28 banks. Therefore this no hard to understand that the threat of potential new entrants is very
high as well. However, SureCash is not owned by Rupali Bank rather contracted for a partnership, for that reason, the new entrants like Nagad, iPay etc. may planning to enter into the industry. Nevertheless, SureCash has been able to create a brand positioning with a 5% market share as well as the control over license can be counted as entry barrier. Thus, the threat of new entrants for SureCash is moderate.

iii. Threat of Substitutes:

The threat of substitute products or services is high. For the reason that, technology in this sector is growing vastly and people of Bangladesh getting more excellence in bringing up with new ideas to lead over the e-commerce market sector and so as in fintech arenas. In addition, common people have not been used to fully on using digital sectors. Thus, the threat of substitutes for threat of SureCash is high in the market.

iv. Bargaining Power of Supplier:

The most basic and major supplier of SureCash are the telecom companies and the partners including banks. In addition, the bargaining power of suppliers in this platform depends on the image of a brand and strategic importance of the network being provided. Moreover, various agents, merchants and vendors re also the suppliers of SureCash but not in vast number like bKash has. On these ground, the bargaining power of supplier is moderate to high.

v. Bargaining Power of Customer:

The bargaining power of customers of SureCash is very high as because there are many substitute brands with strong brand image is dominating the market for instance bkash, DBBL Rocket, Upay etc. Not only that, the rivals are constantly pushing the agents with much more rewards to persuade customers to. Whereas, SureCash is growing gradually and is weak to compete for its customer.

3.2 bKash | Porter’s Five Forces Model

Far as we can tell, bkash has been ruling the MFS industry of DFS with the lion’s share of 65% alone, the competition is becoming more intense as others planning strategies
to compete over bKash. The following analysis for bkash using Porter’s five forces model will try to cover bKash’s current situation.

i. **Competition from Existing Rivals:**

   From the time being, bKash and DBBL Rocket has gained more popularity and been dominated the market by this two. Apart from these two there are M Cash, Ucash, Upay, SureCash and iPay which are trying to provide customers with similar services to outcompete bKash. Ever since, bkash has obtained a strong brand image and economies of scale unlike any other industries could do. Therefore, the threat of existing rivals is moderate.

ii. **Threat of Potential New Entrants:**

   Many new apps are being developed to do cash less fund transfer business. However, bKash being the early leader for the time being and still is on the top. For this reason, the threat of new entrants for bkash is high.

iii. **Threat of Substitutes:**

   The threat of substitutes is moderate for bkash. As being the only leading company that has changed the masses into using digital platform of fund transferring system, bkash has the highest customers out of all other rival companies. However, bkash is still trying to reach to the rural areas fully that are not being covered or not yet used to of using digital platform. As a result, bKash’s threat of substitutes is moderate.

iv. **Bargaining Power of Supplier:**

   Currently there are 4 different mobile operators: Grameenphone, Banglalink, Robi and Teletalk. These are the suppliers of bKash who have the strong power in the industry because these are the suppliers of other existing DFS industries as well. Like any other DFS service company, bKash has the highest number of agents, vendors and other potential suppliers in Bangladesh and thus the bargaining power of suppliers of bKash is moderate to high.

v. **Bargaining Power of Customer:**

   As it is not unknown that, the current mobile banking operators offer almost consistent services with having low switching costs between operators. This
results in providing high bargaining power of the customers. However, for Bkash, the bargaining power of customers is low to moderate except for the customers of remote-area having no alternative service available in their locality.

3.3 iPay | Porter’s Five Forces Model

iPay is the newest inclusion into the DFS industry of Bangladesh. iPay claims to bring all the possible solutions along with on digital platform mobile banking. The following shows the Porter’s five forces analysis model for iPay:

i. **Competition from Existing Rivals:**

   As being at the start-up phase, iPay is performing well with more than 100k+ downloads from Google Play store within a year. Similarly, new inclusions of Upay, Nagad, Mcash etc. are also growing with their own strategies to survive in the market which is being dominated mostly by bkash and Rocket. However, the existing rivals are strong enough and can come up with strategies to outcompete iPay from the industry. Hence, the competition from existing rivals is extremely high.

ii. **Threat of New Entrants:**

   The threat of new entrants for iPay is also very high in DFS platform because this arena is booming and on the focus of the people who want to do business on this platform. So, the threat of potential new entrants is high.

iii. **Threat of Substitute Products/ Services:**

   For iPay, threat of the substitutes is moderate to high. Although iPay’s performance of growth seems to be going sound, the company has not overcome its start-up phase yet. In addition, iPay’s CLV (Customer Lifetime Value) is still at lower rate and may increase its switching rate of customers. Henceforth, the threat of substitutes is moderate to high for iPay.

iv. **Bargaining Power of Supplier:**
The bargaining power of supplier for iPay is also moderate to high for being new in the industry and it is obvious because suppliers for any fin-tech company at the current market is almost same vendors.

v. **Bargaining Power of Customer:**

For iPay, the bargaining power of customers is also very high because of the switching rate between the rivals.

### 3.4 Upay | Porter’s Five Forces Model

Upay is one of the strategic business offering of the United Commercial Bank Limited. The following analysis for Upay using Porter’s five forces has been given as follows:

i. **Competition from Existing Rivals:**

In comparison with other MFS and DFS services Upay is a new inclusion and offering a cryptographically secured QR Code based fund transferring platform. However, the bKash and DBBL-Rocket are still in the lead position. As a result, for Upay, the threat from the existing rivals moderate to high.

ii. **Threat of Potential New Entrants:**

According to the new rule of the, all the banks of Bangladesh should have mobile banking services. As a result, it is obvious that the threat of new entrants for Upay is very high.

iii. **Threat of Substitute Products/ Services:**

For Upay, it is moderate to high as there are many options of the substitutes in the industry.

iv. **Bargaining Power of Supplier:**

The supplier power of Upay is moderate to high for Upay. However, UCB Limited has a positive brand image and has developed a vast amount of suppliers which can benefit for Upay as well. The rest of suppliers are more or less similar i.e. telecom companies, agents, vendors etc. Thus, the supplier bargaining power for Upay is moderate to high.
v. Bargaining Power of Customer:
The customers’ power to bargain is moderate as many rival industries are there serving similar to Upay.

3.5 PESTEL Analysis

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

Political Environment

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

Economic Environment

There are nearly 168 million people in Bangladesh at current time. The available data that from 2012 to till this date Bangladesh has made a successful story of DFS. Moreover, the secondary data shows that 43% of the population are financially included, 33% have a mobile account. Moreover, the total number of registered accounts are only 9% and only 8% are the active users. Furthermore, 95% of user transaction is person-to-person (P2P) based and only 15% of the users using mobile apps for bill payments and loan activities. All of these data shows the impact of DFS on the economy of Bangladesh and how the industry is being grown by the time being towards the digitalization. Hence, the economic factor for DFS services is very positive.
Social Environment

The social factor has strong and positive impact on the DFS and MFS industries. DFS can be used by anyone at any time and from anywhere via e-wallets and internet connection which eliminates the hassle of traditional banking activities. In addition to that, the digital platform provide a secure and low cost services. For the usefulness and mass accessibility of DFS services, the attitude of people towards this industry is very positive. In a nutshell, the DFS industry is being attracted and accepted by the health, education, mobility and every sectors of the society.

Technological Environment

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

Legal Environment

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

<table>
<thead>
<tr>
<th>Strengths:</th>
<th>Opportunities:</th>
</tr>
</thead>
</table>
| - Serving 80 thousand villages, 10 million students of primary education (PESP)  
- Partnership with Rupali Bank and many more.  
- Reaching rural areas mostly.  
- Fast and secure transaction  
- Availability of Bengali version of app | - Creative Marketing and more publicity  
- Increasing number of users  
- Technological innovation  
- Adding more options like utility bill payments, ecommerce payments, super shop payments |

<table>
<thead>
<tr>
<th>Weaknesses:</th>
<th>Threats/ Challenges:</th>
</tr>
</thead>
</table>
| - Higher service charge  
- Lack of publicity  
- Lack of liquidity  
- Less number of agent(s)  
- Lower urban customers  
- Lack of technological innovation | - Sudden change in Government’s rules and regulations  
- Corruption of the authority  
- Server Hacking  
- Threat of new entrants/ services and existing rivals |

**Strengths of SureCash:**

SureCash is serving nearly 80 thousand villages and more than 10 million mother and students with the Primary Education Stipend Project of the Government via mobile fund transferring platform. At same time, it has partered with Rupali Bank which is one of a state owned bank of Government. This status of SureCash shows a positive brand image in the market, the company which is working with and for the Government. Apart from this, the major strengths of SureCash include the fast and secure transaction system, reaching and educating the rural areas about the digital services. SureCash also provide language preferences (English and Bengali) in its application for further ease of use.
Weaknesses of SureCash:
SureCash although became well known, however, they are not promoting the brand the way any other competitors like bKash, Nagad, Rocket etc are doing resulting in not focusing on attaining new customers. Moreover, the service charge of SureCash is a bit higher with charging BDT 4.00 in sending money to P2P. Furthermore, there are less number of agents found in the city in comparison with other competitors like bKash. Additionally, SureCash do not give 24 hour services to its customers and lack in cash liquidity can be counted as their internal weakness.

Opportunities of SureCash:
The opportunity for SureCash is vast. SureCash can come up with new technologies which is more secure and advanced. Moreover, the diversification of services can be brought to the app for more convenience and acceptance.

Threats/ Challenges of SureCash:
Sudden change of Government rules and regulations may impact badly on doing business of SureCash. Moreover, recession in the economy or the inflation rate can also effect. Any bad rumors or unexpected corruption of the authority may harm the image of the company.
### 3.7 bKash | SWOT

<table>
<thead>
<tr>
<th>Strengths:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strong brand image; SBU of BRAC NGO</td>
</tr>
<tr>
<td>• Superior technology and simple mobile banking</td>
</tr>
<tr>
<td>• Unique marketing strategies</td>
</tr>
<tr>
<td>• Attractive deals and offers</td>
</tr>
<tr>
<td>• Wide range E-commerce payment</td>
</tr>
<tr>
<td>• Wider range of services</td>
</tr>
<tr>
<td>• 24 hour customer care service system</td>
</tr>
<tr>
<td>• Strong company culture</td>
</tr>
<tr>
<td>• Massive number of customers and agents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Going diversified</td>
</tr>
<tr>
<td>• Globalizing</td>
</tr>
<tr>
<td>• Developing strong ethics and laws against fraudulence &amp; money laundering</td>
</tr>
<tr>
<td>• Using innovative technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service charge is higher</td>
</tr>
<tr>
<td>• Lack of security</td>
</tr>
<tr>
<td>• Limited monthly transaction amount</td>
</tr>
<tr>
<td>• Lower rural customers</td>
</tr>
<tr>
<td>• Sudden server down</td>
</tr>
<tr>
<td>• Customers failing to understand about invisible money concept</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threats/ Challenges:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sudden change in Government’s rules and regulations</td>
</tr>
<tr>
<td>• Corruption of the authority or the Government</td>
</tr>
<tr>
<td>• Server hacking</td>
</tr>
<tr>
<td>• Threat of new entrants/ services</td>
</tr>
</tbody>
</table>

**Strengths of bKash:**

bKash has a very strong brand image and also for being under the renowned NGO of BRAC. Currently bKash has more than thirty thousand merchants and 24 million customers having 65% of the market share in the industry alone. Moreover, its unique marketing strategy has the ability to achieve global partners soon. Furthermore, bkash
A Research on Digital Financial Services of Bangladesh

has the 24/7 call center based customer service to meet its customers need. The company has reached to its maturity level quiet a soon and is coming up with broad range of services to hold its position in the lead.

**Weaknesses of bkash:**
The first weakness of bkash is that many people claim bkash lacking in secured e-transaction. Bkash has many rumors about the fact of money laundering or fraudulence which creating a worse impact on its brand image. Also there are plenty of complaints regarding unexpected server down problem. One of the basic weaknesses of bkash is that many customers majorly living in rural areas fail to understand the concept of bkash.

**Opportunities of bkash:**
Among all the existing DFS companies, bKash has the highest possibility to intervene the global industry. Other than that, bkash has acquired economies of scale to focus more on R&D sectors and look forward to bringing up with new and innovative technology.

**Threats/ Challenges of bkash:**
One of the most similar threats for any DFS is the unexpected changes in the Government rules and regulations. Apart from this, bkash may face the threat of the global pliers in South Asia. For instance, India has also succeeded in DFS platforms and its popular DFS like Ipay can be challenging on the inclusion in the global market of bkash.
### 3.8 iPay | SWOT

<table>
<thead>
<tr>
<th><strong>Strengths:</strong></th>
<th><strong>Opportunities:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lifestyle payment along with traditional mobile banking options</td>
<td>• Acquiring more customers</td>
</tr>
<tr>
<td>• Linked with 57 commercial banks</td>
<td>• Inclusion of Lifestyle payment in traditional mobile banking system</td>
</tr>
<tr>
<td>• QR based secure payment</td>
<td>• Availing international digital payment</td>
</tr>
<tr>
<td>• Hassle free and seamless transaction</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Weaknesses:</strong></th>
<th><strong>Threats/ Challenges:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• New in the industry</td>
<td>• Sudden change in Government’s rules and regulations</td>
</tr>
<tr>
<td>• Lack of promotion</td>
<td>• Corruption of the authority</td>
</tr>
<tr>
<td>• Lack of management</td>
<td>• Server hacking and money laundering</td>
</tr>
<tr>
<td>• Lack of liquidity</td>
<td>• Threat of new entrants/ services and existing rivals</td>
</tr>
<tr>
<td>• Lower number of customer acquired</td>
<td></td>
</tr>
</tbody>
</table>

**Strengths of iPay:**

iPay has come up with lifestyle payment service along with the traditional mobile banking services which include a wide range of payment partners. Being new in the industry, iPay has already linked up with 57 commercial banks. Moreover, iPay is technologically advanced too.

**Weaknesses of iPay:**

New in the industry hence the survival is really competitive. Ipay lacks in their management system and liquidity ratio is also lower.

**Opportunities of iPay:**
Ipay has the motive to include every possible payment media which is related to the lifestyle of the people of the country. iPay can think of availing and providing the payment systems internationally.

**Threats/Challenges of ipay:**

Threat of new entrants and competition from existing rivals are there for iPay as a challenge to its survival. Moreover, unexpected rumors, server hacking, lacking in internal management system can be counted as threats for ipay.

### 3.9 Upay | SWOT

<table>
<thead>
<tr>
<th><strong>Strengths:</strong></th>
<th><strong>Opportunities:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive brand image- Parent company UCBL</td>
<td>Acquiring more customers</td>
</tr>
<tr>
<td>Lower Customer Acquisition Cost</td>
<td>Inclusion of Lifestyle payment in traditional mobile banking system.</td>
</tr>
<tr>
<td>Innovative technology- Block-chain and QR code based</td>
<td>Innovative services</td>
</tr>
<tr>
<td>Convenient mobile banking service</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Weaknesses:</strong></th>
<th><strong>Threats/Challenges:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>New in the industry</td>
<td>Sudden change in Government’s rules and regulations</td>
</tr>
<tr>
<td>Traditional Mobile banking</td>
<td>Corruption of the authority</td>
</tr>
<tr>
<td>Lower number of customer acquired</td>
<td>Server hacking and money laundering</td>
</tr>
<tr>
<td></td>
<td>Threat of new entrants/services and existing rivals</td>
</tr>
<tr>
<td></td>
<td>Cheaper rate of switching cost</td>
</tr>
</tbody>
</table>

**Strengths of Upay:**

Upay has started its journey under the parent company United Commercial Bank Limited and has a good brand image over its customer. An innovative technology is
being used by Upay to provide secure services counted as its major strengths. Also, the customer acquisition and merchant for Upay is much easier as most of them are related with its parent company.

**Weaknesses of Upay:**
The company is providing similar mobile banking services like others. Innovation needs in this aspect of Upay.

**Opportunities of Upay:**
Upay can acquire more customers by providing better services than other rivals do. Upay can include some of the features for lifestyle payment for instance, utility fees, education fees, car insurance fees etc.

**Threats/ Challenges of Upay:**
Apart from the possibilities of unexpected changes of the govern rules, there are threats of new entrants and existing rivals in the industry. 28 banks have got the license for mobile banking so it is not hard to think that the banks are taking preparations for intervening into the DFS industry with greater power.
Chapter 4: Interpretation & Analysis of Data
Interpretation & Analysis of Data

Customers are always on the top for any sort of business and for an industry like DFS, the platform is fully based on the customer-centric mindset. Into the bargain, services of digital platform are being developed in a way in order to getting the full trust and height of satisfaction of the target customers. That being the case, a survey has been done to know more about the customers of any particular DFS company. For this paper, the survey results will show the data for SureCash, bKash iPay and Upay.

For this research, total 123 responses have been counted and analyzed and most of the respondents were basically students, businessman, service-holders or housewives. The purpose of the survey is to find out the competitiveness and performance covering the 4 companies.

4.1 Interpretation of the Data:

This part of the report shows the interpretation of the questionnaire consisting of some basic questions reflecting the respondents’ demographics and preferences. Moreover, the survey has been made considering some certain factors which may have impact on the DFS industries.

The following section shows the explanation of the survey result and the result have been done using both SPSS and Excel work:

Results from SPSS:

Q1. Gender Indication

<table>
<thead>
<tr>
<th>Statistics</th>
<th>What is your gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 123</td>
</tr>
<tr>
<td></td>
<td>Missing 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is your gender?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>67</td>
<td>54.5</td>
<td>54.5</td>
<td>54.5</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>45.5</td>
<td>45.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
To know about the gender ratio this question was given in the survey poll. According to the table and diagram, out of 123 respondents of the survey 67 of them were male and 56 of them were female. The percentage of Male is 54.47% and Female 45.53%. The result shows that DFS are being used by both male and female having a small ratio gap between them.

Q2. Age Range?

<table>
<thead>
<tr>
<th>Age range</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 24</td>
<td>71</td>
<td>57.7</td>
<td>57.7</td>
<td>57.7</td>
</tr>
<tr>
<td>25 to 30</td>
<td>31</td>
<td>25.2</td>
<td>25.2</td>
<td>82.9</td>
</tr>
<tr>
<td>31 to 40</td>
<td>15</td>
<td>12.2</td>
<td>12.2</td>
<td>95.1</td>
</tr>
<tr>
<td>above 40</td>
<td>6</td>
<td>4.9</td>
<td>4.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
From the graph, it can be interpreted that most of the DFS users in this survey were aged from 18 to 24 containing the frequency of 71 out of 123 and the percentage is 57.72. And the percentage of lowest age group is 4.8%.

Q3. Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>service holder</td>
<td>36</td>
<td>29.3</td>
<td>29.3</td>
<td>29.3</td>
</tr>
<tr>
<td>Businessman</td>
<td>17</td>
<td>13.8</td>
<td>13.8</td>
<td>43.1</td>
</tr>
<tr>
<td>Housewife</td>
<td>13</td>
<td>10.6</td>
<td>10.6</td>
<td>53.7</td>
</tr>
<tr>
<td>Student</td>
<td>55</td>
<td>44.7</td>
<td>44.7</td>
<td>98.4</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.6</td>
<td>1.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The frequency table shows, the highest number of respondents were the students having 44.72%. While, 29.3% were service holders, 13.8% businessman, 10.6% housewives and 1.6% were the other occupation holders.

Q4. Income Range

<table>
<thead>
<tr>
<th>Income range</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 to 15000</td>
<td>65</td>
<td>52.8</td>
<td>52.8</td>
<td>52.8</td>
</tr>
<tr>
<td>16000 to 30000</td>
<td>27</td>
<td>22.0</td>
<td>22.0</td>
<td>74.8</td>
</tr>
<tr>
<td>31000 to 45000</td>
<td>5</td>
<td>4.1</td>
<td>4.1</td>
<td>78.9</td>
</tr>
<tr>
<td>46000 to 60000</td>
<td>11</td>
<td>8.9</td>
<td>8.9</td>
<td>87.8</td>
</tr>
<tr>
<td>60000 above</td>
<td>15</td>
<td>12.2</td>
<td>12.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3: Occupation Indication
The highest monthly income range of BDT 1000 to BDT 15000 according to the graph says 52.85%. On the other hand, the lowest income range of BDT 31000 to BDT 45000 is only 4%. The table indicates that 65 out 123 people’s income range is BDT 1000 to BDT 15000.

Q5. DFS User Indication

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>116</td>
<td>94.3</td>
<td>94.3</td>
</tr>
<tr>
<td>Valid No</td>
<td>7</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The majority of the respondents of 94.3% said they use DFS wallets. This indicates the survey was conducted with the targeted people of the particular users of DFS.

Q6. Mostly Used DFS Features

<table>
<thead>
<tr>
<th>DFS</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>bKash</td>
<td>82</td>
<td>66.7</td>
<td>66.7</td>
<td>66.7</td>
</tr>
<tr>
<td>SureCash</td>
<td>10</td>
<td>8.1</td>
<td>8.1</td>
<td>74.8</td>
</tr>
<tr>
<td>iPay</td>
<td>3</td>
<td>2.4</td>
<td>2.4</td>
<td>77.2</td>
</tr>
<tr>
<td>Upay</td>
<td>18</td>
<td>14.6</td>
<td>14.6</td>
<td>91.9</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>8.1</td>
<td>8.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
It is clear from the survey again that the use of bKash is the highest amongst the respondents and as always bKash is in the lead with having 82 frequencies and 67.7% of users. The second highest of DFS is the Upay having 14.6% with 18 frequencies. The lowest responses were for the iPay with only 3 frequencies the survey could found and the percentage is only 2.4%. However, SureCash and other DFS having the same percentage of 8.13%

Q7. Satisfaction Level of Safety Issues

<table>
<thead>
<tr>
<th>Mobile wallets are safer than digital cards and other banking system</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly disagree</td>
<td>46</td>
<td>37.4</td>
<td>37.4</td>
<td>37.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>10</td>
<td>8.1</td>
<td>8.1</td>
<td>45.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>27</td>
<td>22.0</td>
<td>22.0</td>
<td>67.5</td>
</tr>
<tr>
<td>Agree</td>
<td>37</td>
<td>30.1</td>
<td>30.1</td>
<td>97.6</td>
</tr>
<tr>
<td>Highly agree</td>
<td>3</td>
<td>2.4</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
This was 5 point likert scale where 30% of the respondents agreed with the statement mobile wallets are safer than digital cards or any other banking system. On the other hand, the majority responded that they highly disagree with statement and the percentage is 37.4. However, 21.95% were neutral for this statement. If we draw a conclusion for this statement, the percentage of highly disagreed and disagreed responses are higher than highly agreed and agreed responses.

Q8. Satisfaction Level on DFS Convenience

<table>
<thead>
<tr>
<th>DFS platforms are more convenient</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly disagree</td>
<td>40</td>
<td>32.5</td>
<td>32.5</td>
<td>32.5</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>6.5</td>
<td>6.5</td>
<td>39.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>21</td>
<td>17.1</td>
<td>17.1</td>
<td>56.1</td>
</tr>
<tr>
<td>Agree</td>
<td>41</td>
<td>33.3</td>
<td>33.3</td>
<td>89.4</td>
</tr>
<tr>
<td>Highly agree</td>
<td>13</td>
<td>10.6</td>
<td>10.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
This was too a 5 point likert scale question where 33.3% and 10.6% highly agreed and agreed with the statement- DFS platforms are more convenient. On the other hand, 32.5% and 6.5% highly disagreed and disagreed with the statement and the rest of 17% were neutral. Thus, the result clearly shows that the percentage of highly agree and agree is higher.

Q9. Fraudulence Indication

<table>
<thead>
<tr>
<th>Rate of fraudulence is lower than in DFS platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Highly disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Highly agree</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
31.7% agrees that the rate of fraudulence is lower in DFS platforms and 21.95% highly disagreed with the statement. If we add up the portion of highly agree with agree and highly disagree with disagree then the difference of these two extreme shows that with 36.59% the highly agree and disagree is above the other extreme. Hence, the result is positive.
Q10. Satisfaction with DFS Features

<table>
<thead>
<tr>
<th>Satisfied with all features/ options of your DFS wallet or app you are using</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly disagree</td>
<td>23</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>10</td>
<td>8.1</td>
<td>8.1</td>
<td>26.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
<td>15.4</td>
<td>15.4</td>
<td>42.3</td>
</tr>
<tr>
<td>Agree</td>
<td>40</td>
<td>32.5</td>
<td>32.5</td>
<td>74.8</td>
</tr>
<tr>
<td>Highly agree</td>
<td>31</td>
<td>25.2</td>
<td>25.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 10: Satisfaction Level of DFS Services

The majority here agrees and highly agrees that they are satisfied with all the features or options of their DFS app and the result is positive.
Q11. Most Used Payment Type

For which type of payment you use your DFS app?

123 responses

Figure 11: Payment Criteria Indication

The chart shows that among many given options, most of the users use their DFS for mainly mobile recharge and the percentage is 61.8%. Similarly, the second criterion is sending money to others having 58.5% of the respondents. Only 0.8% use other options. 41.5% use their DFS for Ecommerce payment, 20.3% for Food delivery payment, 19.5% for ride sharing and 17.1% use DFS to pay the Utility Bills.

Q12. Rating of Personal DFS Wallet out of 5

On the scale of 5, how much would you like to give to your personal DFS wallet?

123 responses

Figure 12: Rating of personal DFS wallet
40.7% rated their wallet with 5 and 32.2% gave 4. Whereas, only 2.4% and 5.7% of the respondents rated 2 and 1 respectively. It means, their personal DFS wallets are satisfactory to most of them.

Q13. Monthly Usage Rate of DFS Wallet

How many times do you use your DFS app in a month?

123 responses

- Very rarely
- 5 times
- 3/4 times
- 3-4 times
- regularly
- Not more often.
- 10-15 times
- Not monthly. I use it when needed.
- 1/2 times
- Only when needed
- Depends on necessity but in an average 5 to 10 times a month
- 3/4
- More than 4 times

Figure 13: Usage of DFS wallet (monthly)

This was an open-ended question as the usage of personal wallet totally depends on the users. This is a picture of the responses collected while conducting the survey. All of the answers cannot be counted due to keeping the data accuracy. However, the majority said they use their DFS wallet 3 to 4 times in a month.
Q14. Do you have any query or suggestion for the current DFS system of Bangladesh?

Do you have any Query or Suggestion for the current DFS systems for Mobile in Bangladesh?
69 responses

<table>
<thead>
<tr>
<th>Suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathering knowledge among the village people</td>
</tr>
<tr>
<td>I'm satisfied with this system</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Suggestion is to make it a bit more safer so that Nahid from Bkash cannot get access of others' personal accounts by just hacking it using simple 4/5 digits!</td>
</tr>
<tr>
<td>none</td>
</tr>
<tr>
<td>Transaction charge should be reduced!!</td>
</tr>
<tr>
<td>I think there should be a proper digital receipt of every transaction which could be printed in case of emergency</td>
</tr>
<tr>
<td>Try to improve more to gain the customer retention.</td>
</tr>
<tr>
<td>Needed to be more efficient in terms of solving problem regarding forgotten pin no. &amp; also there are some issues in respect of the daily transaction limit, specially with bkash.</td>
</tr>
<tr>
<td>the suggestion is apps are pretty misleading people don't get trusted because the system is complicated and flaws to copy someone's personal data, security debacle should be fixed for more convenient use</td>
</tr>
<tr>
<td>Must strengthen farud check</td>
</tr>
</tbody>
</table>

Figure 14: Suggestions from respondents

This is an important question to ask the respondents because, based on their answers the recommendation section has been developed which is totally user centric of the current DFS. However, the above picture shows the comments of the respondents based on their usage experience.
Reliability Analysis using SPSS

Scale: ALL VARIABLES

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Cases</td>
<td>123</td>
<td>100.0</td>
</tr>
<tr>
<td>Excluded(^a)</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.648</td>
<td>4</td>
</tr>
</tbody>
</table>

The reliability testing has been done to analyze the internal consistency or the variability of the research instrument or the survey questionnaire. The scale of Cronbach’s Alpha and significance have been given below for better understanding of the outcome:

- \( \alpha = 1.0 \) (Perfect)
- \( \alpha \geq 0.9 \) (Excellent)
- \( \alpha \geq 0.8 \) (Very Good)
- \( \alpha \geq 0.7 \) (Good)
- \( \alpha \geq 0.6 \) (Acceptable)

According to the table from SPSS, the Cronbach’s Alpha for the survey questions of Q7 to Q10 is 0.648 which is acceptable.
Findings:

Based on the outcomes of the analysis, it can be said that the current DFS system is widely accepted by the people of all range. However, there is some gaps that have been identified in this research and needs to be taken care of. The following points have been found while doing the research investigation for this paper:

- **Following the customary trend:**
  It is one of the most common habit of people to copy and follow the customary trends rather than making a difference. Same goes with the current DFS industries providing almost same features and services to the customers. Some of the most common features that every mobile banking apps provide are Cash In/ Cash out, Sending Money, Mobile recharge and bank payments. Whereas, a very few provides the services out of the boundary with still having some limitations. For instance, bkash is offering a diversified variety of services and others are following bkash.

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

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

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

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

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

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

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

- **Lack of monitoring**
  Every DFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.

- **Lack of variation in features:**
  Every DFS is serving with almost same features and less innovative ideas are being implemented resulting in lower customer retention.
Digital Financial Service platform has gained a quick success within a very short period of time with massive responses. However, there are a lot more aspects in this attractive and growing industry which need to be improved. In the light of the findings, the followings are some recommendations given not only for SureCash, bkash, ipay and Upay but also every DFS provider can take any of these into their account. Based on the research and outcomes, these recommendations were given:

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

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

- **Amplifying the roll out of Fund Transfer:**
  Despite the fact that, almost every DFS and MFS providers have already being offered a number of services more than just transfer of the money, the extent of their accessibility is still lacking behind. The extension should be focusing more on the international payments and micro-loan services bonding up with mobile wallets in Bangladesh for more advancement.

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

- **Better Local Language Preferences:**
It requires plentiful resources and huge capitals for a company to explore the shared platform for the advancement of the digital platform. Besides, a shared and integrated platform can perform more powerfully in the industry with shared risks and resources. In addition to that, providers like Upay, Rocket etc. can make a collaboration to decrease the cost and risks associated.

- **Decreasing the Transaction Making Time:**
Given that, many a few of the DFS users using their wallets without the aid of the agents when every time they make transactions. However, the majority including the low literate and aged people seek for the help of the agents nearby. As a result the duration of making any transaction becomes lengthy. At the same time, lowering the usage of the particular wallet and this aspect needs to be in the focus of the providers.

- **Additional Recommendations:**
  - Service charge of the DFS and MFS should be lower to serve the masses with full convenience.
  - The internal management of the providers must be swift enough to serve their customers as quickly as possible.
  - Better technology needed for more secured platform
  - International payment options can be integrated for doing payments outside the country.
  - Village people must be reached and educate regarding the services to include them in the system.
  - Server or database backup is highly needed.
  - Stronger password is needed instead of simple 4 digit PIN
Conclusion

It is a known fact, the current generation of Bangladesh is growing up with smart devices and is capturing the technology very quickly. For this reason, the Digital Financial Services are growing very fast as it has foreseen its future success already. The current DFS allow users to the access of mobile banking, utility or merchant payments, ecommerce payments and many more. However, the current DFS system has some limitations like taking higher service charges, safety issues, limited features, hacking issues etc. in spite of everything, the limitations depend on the brands or the companies. For instance, Bkash is in the lead due to its highest satisfactory service level among other rivals and this fact has also been reflected in results of this research paper. SureCash is competing its own way benefiting and leveraging the Government by doing projects and workshops. iPay has come up with diversified aim but lacking the resources. And Upay is trying its utmost to provide the fully secured service to its customers. In a nutshell, ipay, Upay, Bkash and SureCash are the current popular providers among all other DFS providers. Moreover, to define the current situation Digital Financial Services and to analyze the relationship of the user satisfaction with DFS services, these four companies were chosen. The result is positive with few gaps in the industry. Last but not the least, this research paper is contribution for the academics and researchers and can be published under the authority of the credential institution BRAC University and the author.

Further Study:

The research is done with a very small number of respondents of 123 people. Whereas, DFS is a vast topic to explore its full industry. Most of the respondents were online based and living in Dhaka. Hence, the accurate answer may not be found is this case. Moreover, due to the confidentiality, many major data have not been provided by the given companies. Hence, this topic requires more elaborative research for knowing the current and actual DFS industry condition.
References


Appendix

Questionnaire

1. What is your Gender?
   (Male/Female)

2. What is your Age range?
   (18 to 24/ 25 to 30/ 31 to 40/ 40 above)

3. What is your Occupation?
   (Service holder/ Businessman/ Housewife/ Student/ Other)

4. What is your monthly Income range? (In BDT)
   (1000 to 15000/ 16000 to 30000/ 31000 to 45000/ 46000 to 60000/ 60000 above)

5. Do you use/ have you ever used any Digital Financial Services (DFS) like Bkash, SureCash, Ipay, Upay or other? (If 'No' then you need not to continue)
   (Yes/ No)

6. Which of the following DFS you use the most?
   (bKash/ SureCash/ iPay/ Upay/ other)

7. Mobile wallets are safer than digital cards and other mobile banking system?
   (Highly Disagree/ Disagree/ Neutral/ Agree/ Highly Agree)

8. DFS platforms are more convenient.
   (Highly Disagree/ Disagree/ Neutral/ Agree/ Highly Agree)

9. Low rate of fraudulence in DFS platform.
   (Highly Disagree/ Disagree/ Neutral/ Agree/ Highly Agree)

10. Satisfied with all feature/ options of your personal e-wallet?
    (Highly Disagree/ Disagree/ Neutral/ Agree/ Highly Agree)
11. For which type of payment do you use your DFS app?
   (Mobile recharge/ Utility bill/ Rides payment/ Food delivery/ E-commerce shopping/ sending money/ other)

12. On the scale of 5, how much would you like to give to your personal DFS wallet?
   (like/dislike)
   (1/2/3/4/5)

13. How many times do you use your DFS in a month?
   (Open-ended)

14. Do you have any query/ suggestion for the current DFS systems in Bangladesh?
   (Open-ended)