

Mobile Financial Services by Banks: Gearing up for Digital Bangladesh

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Abstract

Mobile, one of the most widely used modern telecommunication device, has become a part and parcel of mass people's life in Bangladesh. The growth of subscriber is reaching over 130 millions proving that it is one of the vital tools to reach mass people easily and conveniently. Bangladesh being a rising economy needed technological tools to establish the concept of digital Bangladesh, that's open up the opportunity to serve and empower mass population by setting up the mobile financial services with financial inclusion incorporated with mobile technologies, internet and integration of banks in the system. The study shows that mobile financial service is an important means to empower all sectors people with the help of mobile network providers and banks but it has challenges to face, despite this challenges, Bangladesh government and other stakeholders must take necessary steps to monitor and to accelerate the grab of this opportunity to conceptualize the digital Bangladesh concept and thereby boost up our national socio-economic development.

Key terms: Mobile financial services; digital Bangladesh; mobile money

Introduction

Digital Bangladesh express the broad use of computers, and embodies the modern philosophy of effective and efficient use of technology in terms of implementing the promises in job placement, education, health, poverty reduction and empowering both the rural and urban population. The philosophy of "Digital Bangladesh" comprises ensuring people's democracy and accountability, establishing justice, human rights, transparency and ensuring delivery of government services to the citizens of Bangladesh through optimum use of technology and modern innovation, with the aim of overall improvement of living standard of general people. This includes participation of all classes of people without discrimination or other hazards in terms of technology. The present government further weighted on the four elements of "Digital Bangladesh Vision", that includes development of human resource, involvement of people, civil services and use of information technology in industry, trade and commerce (International Monetary Fund, 2012).

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It has been observed that in order to establish the concept "Digital Bangladesh" financial transaction and financial empowerment to the mass people is one of the key issues. Researcher Mashhour and Saleh (2015) pointed mobile phone is one of the much distributed technological innovations which is widely accepted and used by the both rural and urban people which are one of the major financial service providers. According to AlSoufi and Ali (2014) banks are more efficient when utilizing the mobile financial services in modern digitized world. Therefore, banks of Bangladesh are playing vital role in providing mobile financial services for gearing up digital Bangladesh concept.

Methodology of the study

This research is based on descriptive approach. The fundamental discussion on a descriptive method is to show the wide use and opportunities of financial services through mobile phone by banks and thus an effective tool for digital Bangladesh theme. For this, the researcher did qualitative analysis only.

Data were collected from different secondary sources including sixteen major mobile financial service-providing banks of Bangladesh. For further analysis, data often shared, represented and discussed from different web sites relating to mobile financial service, books and journals to understand and interprets the significance of MFS and digitalization. Information also represented form Bangladesh bank guideline regarding the mobile financial services.

Digital Bangladesh Concept

Digital Bangladesh is a phase of change and shaping a new dimension into a modern country. Any change needs positive persuasion and participants by the stakeholders (Fishbein and Ajzen, 1975). The digital or the electronic revolution holds the potential to minimize the differences in the quality of citizen services between developed and developing countries, and ensures stronger accountability, transparency and efficiency of government in the next phase. Bangladesh Enterprise Institute (2010) discussed that Bangladesh has made significant approaches to move forward in the field of e-Government in the previous years, starting with slightly scattered projects for internal automation but moving gradually towards e-services delivery and connected governance throughout the whole nation. Nevertheless, the country has faced some frequent and common challenges like developing countries, many of which continue to remain barriers to e-Government implementation for such situations digitalization can improve through the application of IT and MFS in every conceivable activity; from collecting taxes to bank management, complex scientific and technical problems (Goddy, 2016).

'Digital Bangladesh' concept was the overall main promise in the election manifesto of the Awami League (Bangladesh Awami League) led by Grand Alliance that now forms the largest chunk of this government's commitment. In Digital Bangladesh, ICT needs to play vital role to reduce the nation's struggle to achieve the economic, cultural, and social freedom and empowerment. This concept can really play vital role towards the poor who constitute a large majority of the people. In many ways, 'Digital Bangladesh' is a reincarnation of the vision of 'Sonar Bangla' meaning a golden Bangladesh. From that point of view, it is wise to keep it as an overarching objective rather than a conclusive target. So for that objective to achieve ICTs and new technologies need to be leveraged in all areas of national progress of a Digital Bangladesh. Some of the important areas in which ICT, digital tools, that can be promoted immediately in financial empowerment to mass people are outlined below ("Vision 2021," n.d.)

Digitalization through different types of electronic systems

Digitalization and use of modern technologies in financial sectors as well as distributing those tools among all kinds of people in every corner of Bangladesh is the most comprehensive approach in term of establishing the concept of Digital Bangladesh (Bangladesh Enterprise Institute, 2010). Hence, electronic system can play crucial roles. In broad way, electronic system includes different types of electronic services. Such as-

Electronic banking (E-banking)

E-banking is about using the infrastructure of the digital technologies and electronic communication systems to create opportunities both locally and globally. E-banking enables the dramatic covering of transaction cost and the innovation of new types of banking opportunities that removes the barriers of time and distance. Financial transaction opportunities are local, global and immediate in E-banking.

Internet Banking

Internet banking involves conducting of banking transactions, for example, account enquiry, acknowledgement of account statement; funds transfer, payments for goods and services etc on the internet using electronic tools such as the computer without visiting the banking premises. The modern era of E-commerce, which is largely facilitated by internet banking and is mostly used to effect payment, internet banking commonly uses the electronic card (debit or credit card) infrastructure to carry out payment instructions and for final settlement of goods and services over the internet between the customer and the merchant. Currently the most common internet payments are for consumer bills including utility fees like electricity, water, phone etc. through the websites of the merchants.

Automated Teller Machines (ATMs)

ATMs are computerized telecommunication devices that enable customers of financial institutions to directly use a secure method to withdrew (or deposit) cash as well as their bank accounts details (Moutinho and Meidan 1989; Davies, Moutinho et al. 1996;

Goode, Moutinho et al. 1996; Curran and King 2008). Automated Teller machines give customers the chance to enjoy banking services at almost any time. It is also called 24-hour tellers. Consumer needs an ATM card and a personal identification number for withdrawing cash, making deposits or transferring funds between different accounts. Different banks charge different fees for their users. People who don't have account with their banks have to pay higher fees. The fee must be revealed on terminal screen.

Direct Deposit and Withdrawal Services

Direct Deposit and Withdrawal Services allow consumers to deposit directly and withdraw directly from other institution for the customer. It is also possible to authorize the bank, for a fee, to withdraw funds from your account to pay your recurring bills, such as mortgage payment, installment loan payments, insurance premiums and utility bills.

Pay by Phone Systems

This system let consumers to phone their financial institutions and instruct them to pay with instructions certain bills or to transfer funds between accounts.

Point-of-Sale Transfer Terminals

A point-of-sale (POS) terminal is an automated substitution for a cash register. Generally, a POS terminal has as its core a personal computer, which is provided with application-specific programs and Input and Output (I/O) devices for the particular environment in which it will serve. With immediate transfer of funds at the point-of-sale, it is easy to overdraw your checking account and incur additional charges unless you keep careful watch on spending.

Mobile Banking

Mobile banking is a system that admits and affords the customers of a financial institution to operate and execute a number of financial transactions through a mobile device such as a mobile phone, TAB or personal digital assistant (PDA). Mobile banking slightly differs from mobile payments, which involve the use of a mobile device to pay for goods or services either at the point of sale or remotely (Mashhour and Saleh, 2015).

Federal Reserve System (2013) defines mobile banking as "using a mobile phone to access your bank account, credit card account, or other financial account. Mobile banking can be done either by accessing your bank's web page through the web browser on your mobile phone, via text messaging, or by using an application downloaded to your mobile phone."

The earliest mobile banking services were offered over Short Message Service (SMS), a service known as SMS banking. With the innovation and adoption of smart phones with Wireless Application Protocol (WAP) support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to

their customers with success.

Mobile banking has most often been performed via SMS and still many private banks in Bangladesh keep their SMS banking support simultaneously with internet base mobile financial services to reach more customer segments. Apple's initial success with iPhone and the rapid growth of phones based on Google's Android (operating system) have led to increasing use of special client programs, called apps. So modern day's mobile banking is heavily dependent on smart phone, specific application and internet activated mobile phone networks.

Mobile Financial Services and Digital Bangladesh

Mobile banking involves the use of mobile phone for settlement of financial transactions. It supports person-to-person transfer with immediate availability of funds for the beneficiary; mobile payments use the card infrastructure for movement of payment instructions as well as secure SMS messaging for confirmation of receipt to the beneficiary. Mobile banking is meant for small value transactions where speed of completing the transaction is key, mobile payment have a very exciting potential within Bangladesh, given the low infrastructure requirements and a rapidly increasing mobile phone penetration. The services covered under this product include account enquiry, funds transfer, recharge phones, changing of passwords and bill payment, which are offered by few institution (Parvez, Islam, and Woodard, 2015).

Mobile banking in ordinary sense means the using of a mobile phone to offer banking services. Banks have introduced two different products in mobile banking. One is a personal/retail banking product and the other is a product to promote financial inclusion. As a personal banking product, it is offered to every savings/current account holder and provides anytime anywhere banking (Fonchamnyo, 2013). The mobile banking initiatives were started by foreign and private banks followed by public sector banks.

Shi (2009) discussed that mobile banking service are widely inaugurated and popularly used. Mobile banking service is primarily available over SMS (Short Messaging Service) or through GPRS (General Packet Radio Service) or sometimes through USSD (Unstructured Supplementary Service Data). The services available are:

- Funds transfer (intra and interbank)
- Balance enquiry services/mini statements
- Request services (cheque book)
- Utility bill payments
- Remittance facilities
- Credit card payments

- Demat (dematerialization) account services
- Mobile top up
- Merchant payment, life insurance premium
- Stop payment instructions

Suoranta and Mattila (2004) noted that the shift, from Traditional branch banking to electronic banking and the newly emerged wireless delivery channel are effectively connected with the diffusion and adopters of mobile banking services. The argument for using mobile banking to promote financial inclusion is that even 45 years after independence, the majority of Bangladeshi do not have access to banking services. The development of the Bangladesh economy has to translate into income generation and empowerment of the whole population irrespective of areas and sectors (Bangladesh Enterprise Institute, 2010). According to Sultana and Khan (2016), realizing the Vision of Digital Bangladesh through e-Government includes access to finance by the poor and vulnerable groups is necessary for poverty reduction and social cohesion. Providing access to finance is a type of empowerment of the low income and weaker sections of the society. The various financial services include credit, savings, insurance, payments and remittance facilities.

The significant number of increase in mobile users shows the potentiality in mobile banking and future of financial service through internet and mobile networks. The majority of the low income groups are agitated of opening accounts with Banks partly because of unavailability of the nearest bank branch (Sultana and Khan, 2016) which means an expenditure on transport (especially in the rural areas) plus loss of a day's wages and partly because they are intimidated by the bank branch formalities or approaches. The poor are not able to access banking facilities because of illiteracy, gender, age, low and irregular income, regulating factors like identity documentation, non-availability of bank branches etc (Parvez, Islam, and Woodard, 2015). A major barrier cited to expand appropriate banking services to the poor is also the cost of providing these services. Servicing the poor with small value services is not viable using conventional retail banking approach.

Bangladesh Bank, the central bank, issued guidelines on "Mobile Financial Services for Banks" clearly stating a choice to make the market bank-led. However, the central bank has advocated for mobile operators and microfinance organizations to be active partners (Bangladesh Bank, 2012). It has provided 10 licenses to banks to offer the full range of mobile financial services.

This regulatory definitely has allowed the market to move and by late 2011 and into 2012 two early leaders have emerged with the largest customer bases and agent

I. The bKash service is provided by BRAC Bank in cooperation with its subsidiary bKash.

II. Dutch Bangla Mobile is a new service of Dutch Bangla Bank.

These two providers made the largest contribution to the nearly 500,000 new mobile accounts and more than 9,000 new agents.

Bangladesh Bank may allow the following Mobile Financial Services (in broad categories) :

- a. Disbursement of inward foreign remittances,
- b. Cash in /out using mobile account through agents/Bank branches/ ATMs/Mobile Operator's outlets.
- c. Person to Business Payments e.g. utility bill payments, merchant payments
- d. Business to Person Payments e.g. Salary disbursement, dividend and refund warrant payments, vendor payments, etc.
- e. Government to Person Payments e.g. elderly allowances. Freedom-fighter allowances, subsidies, etc.
- f. Person to Government Payments e.g. tax, levy payments.
- g. Person-to-Person Payments (One registered mobile Account to another registered mobile account)
- h. Other payments like microfinance, overdrawn facility, insurance premium, DPS, etc.

Table 1: Banks providing financial service through mobile banking system

SL	Bank Name	Product Name
1.	Duch-Bangla Bank Limited.	Mobile-Banking
2.	BRAC Bank Limited.	bKash
3.	Prime Bank Limited.	EasyCash
4.	Islami Bank Bangladesh Limited.	mCash
5.	Trust Bank	Mobile Money
6.	National Credit and Commerce Bank Limited	SureCash
7.	Bank Asia Limited.	Mobile Banking
8.	Dhaka Bank	SMS Banking
9.	Mercantile Bank	MYCash
10.	AB Bank	SMS Banking
11.	South East Bank	SMS Banking
12.	First Security Islami Bank	SureCash
13.	Bangladesh Commerce Bank	SureCash
14.	United Commerce Bank	SMS Banking
15.	IFIC Bank Limited	IFIC Mobile Banking
16.	ONE Bank Limited	OK banking

Source: Different websites of respective bank and their annual report (2015)

Recommendations

Mobile financial services being new and innovative features in banking business which need to be more concern in following aspects for proper and effective establishment in digital Bangladesh concept.

1. Chian (2012) argued banks should promote the belief of usefulness and easy access to mobile banking by providing sufficient information on the benefits of mobile banking. In order to achieve this, banks should provide user manual that contains details on mobile banking, including usefulness and simplifying of use. Banks should also have separate counters for mobile banking customers. These counters can offer advice and assistance to bank customers focusing on the usefulness and ease of use of mobile banking. By having these counters, bank customers will be able to learn about mobile banking. This, in turn, will influence customers' decision to adopt mobile banking.
2. Banks should ensure safety measures such as firewalls, intrusion detection and other related security devices properly developed to be enforced in the mobile banking systems. In addition, banks should also stress the importance of confidentiality of personal identification number (PIN) in mobile banking (Amin, Baba and Muhammad, 2007).
3. Banks can be more focused on the development of self-efficacy. In order to promote a bank customer's perception of self efficacy in mobile banking, banks should organize training courses in various mobile commerce applications. This will increase bank customers' familiarity and understanding of mobile banking.
4. Mobile financial service providers already providing different payment options. Besides this service providers may introduce mobile-based credit services through credit risk analysis and scoring using mobile phone usage data. This type of mobile-based scoring is already being done in several markets globally, both by MFS providers directly (such as M-Shwari in Kenya) and third-party providers (such as in Venture). Introducing similar types of credit scoring services and micro-credit products in Bangladesh could help us to gearing up digital Bangladesh.
5. Both banks and telecommunication companies are advised to focus on more customer driven strategies to reach both rural and urban users to empower them to satisfy their needs in a cost efficient ways. With this aim in view customer research and continuous development in technological framework is essential.

Conclusion

Digital Bangladesh is a broad theme and its implementation will greatly influence through the establishment of mobile financial services. Scornavacca and Hoehle (2007) analyzed that the develop countries like Japan, Germany and New Zealand included banking services through mobile financial services for better effective and efficient service delivery. The more the inclusion of electronic and mobile banking gain success the more it will be easier to reach the dream of Digital Bangladesh. The days are ahead it is our expectation, when Bangladesh will be fully digitalized with the proper implementation of mobile services in financial and non-financial sectors throughout the country. Some of banks in Bangladesh who have received permission from Bangladesh Bank for MFS provider are still undecided about when and which strategies they will launch their service due to the cost factor. To establish the Digital Bangladesh concept country wide with affordable cost, the possible solution for banks who are attracted to come into the MFS space is to form an association and have one specific bank providing fully managed service to ease the investment cost by the partner banks. This would allow other banks to focus on only business aspects and operational innovations.

Recent significant growth in mobile and internet usage as well as banks involvement in customized mobile services towards its clients' shows a promising start towards the glory , yet to reach global recognition and competitiveness and building a digital Bangladesh, our banks, government and other regulatory authorities must invest in research and developments of different mobile financial services.

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