



Department of CSE

Project report

Group-08

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CH.1

INTRODUCTION

MOBILE BANKING

(Also known as M- banking, SMS banking etc.) is a term used for performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone. Mobile banking today is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device. Mobile banking is a way for the customer to perform banking actions on his or her cell phone or other mobile device. It is also known as M-Banking or SMS Banking. Mobile banking allows the user to log into his or her account from a cell phone, and then use the phone to make payments, check balances, transfer money between accounts, notify the bank of a lost or stolen credit card, stop payment on a check, receive a new PIN, or view a monthly statement, among other transactions.

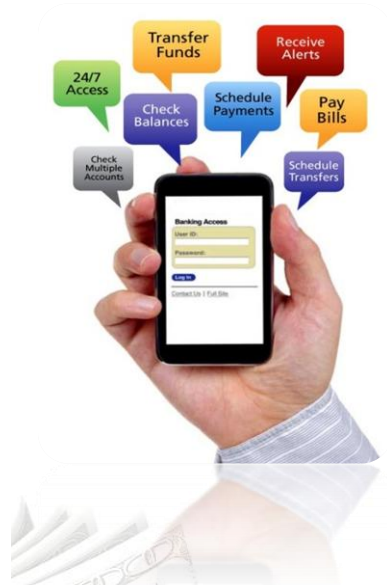
ORIGIN

Mobile banking probably had its origin in November 1946. In India, the first bank on wheel was launched by the bank of Patiala in 1950. Internet banking helped give the customer's anytime access to their banks. Customers could check out their account details, get their bank statements, perform transactions like transferring money to other accounts and pay their bills sitting in the comfort of their homes and offices. However the biggest limitation of Internet banking is the requirement of a PC with an Internet connection, not a big obstacle if we look at the US and the European Mobile banking - The Future White Paper Overview Abstract This paper describes the basic concepts, services offered, market survey and technology which enables Mobile banking. Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. This opens up huge markets for financial institutions interested in offering value added services. With mobile technology, banks can offer a wide range of services to their customers such as doing funds transfer while traveling, receiving online updates of stock price or even performing stock trading while being stuck in traffic.

Definition of Mobile Banking:

Mobile banking is defined as:

"Mobile Banking refers to provision and availment of banking- and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access Customised information."



1.1 Problem statement

This research explores and examines the important elements that will affect the customers to use the mobile banking. It is because bankers should understand the needs of the customers so that they can improve the inadequate and insufficient of the services. This also can increase the customers' usage intention of mobile banking services. By using mobile banking, some of the problem might occur. Some customers will think that mobile banking is difficult to utilize and its use is complicated. Mobile banking services might make the customers difficult to use because it is a new technology service. Rogers (2003) determine that the innovation services are perceived as difficult to understand and use.

In addition, some customers also will think that the mobile banking is not secure and they will meet risk. They will worry that hacker will forgery their information and takes out their money without notify the customers. They will also doubt that their money is still in their account or not. Sometimes, customers will feel helpless when they are using mobile banking services because there will might occur some errors during the transaction. According to Mitchell (1999), risk is a subjective-determined expectation of loss; the greater the expected probability of loss, the higher the risk perceived. This will lower the customers' motivation to adopt the mobile banking.

1.2 Mobile Banking Solutions Offer Customers

Mobile banking software basically brings the bank to the customer's home or office, where he can transact on his account using the mobile phone. Most mobile banking apps offer a number of convenient features for customers. This includes:

Anytime Banking

The bank is now available literally in the customer's pocket. The customer can access his account and transact on it anytime. This can be done from the convenience of the customer's home or office. The customer does not have to visit the branch.

Core Banking

Mobile banking solutions offer core banking services to customers. This includes: Managing the account - viewing balance and transactions. Facility to change the online password would be available. Customer can apply for a loan using the software. Since all details of the customer are already available with the bank, a simple application can be used to accept a loan application. Managing deposits and withdrawal can be done using the software. Bank draft can be ordered using the mobile banking platform. The draft can be delivered to the home or office of the customer. Customer can also place a request for cheque books or printed bank statements, as required. Applying for new products offered by the bank can also be done using the software. Payment of bills can be done using the software.

Alerts And Notifications

Mobile banking solutions providers would send notifications and alerts through the banking app. This would ensure that the customer is aware of all that is happening with his account. This would include:

Information on credit of money into the account

Notifications on debit of money from the account through cheques or other modes

Notification related to interest amount being credited to the account

Alerts in case of low balance in the account

Alerts on due dates for bill payment

Investment Banking

Many mobile banking providers would also offer investment banking services through the mobile banking app. This allows customers to invest their money in various avenues. This includes investment in mutual funds, time deposits, etc. This service would also offer risk assessment, where a questionnaire would be presented to customers. Based on their response, the risk appetite of the customer would be estimated. This would be used to suggest various investment options.

Secure Platform



In the process of mobile banking app development care would be taken to provide a secure platform that the user can use safely. Security risks are a major concern for customers who use mobile banking.

The fear of data loss, hacking, and fraud make many customers avoid using mobile banking. The mobile app needs to be completely secure to prevent hacking and to assure customers of the privacy of their data.

Apart from this, features like use of separate login and transaction passwords can help enhance the security level. Use of one time password for transactions and two factor authentication would help in increasing the security of the mobile banking software.

This re-assures customers on safety and security. Banks are even offering biometric and voice recognition authentication of customers through mobile banking software.

Benefits Of Mobile Banking Solutions

A mobile banking platform offers multiple benefits for both customers and banks. This is the reason why such solutions are popular and are being offered by even small banks to their customers. Following are some of the benefits:

Mobile banking ensures customers have full control of their bank account. They can at any time know their account balance and can transact on the account on their own, without having to visit the bank.

Mobile banking offers place and time convenience for customers. They can transact on their account from anywhere using their mobile phones. They need not have to visit the bank for anything. The entire banking can be done from the comfort of their home or office. This is a major convenience for customers. They can also access their account at any time and the bank is effectively available 24/7 for them.

Mobile banking solution providers would need to implement software solutions at the bank. This leads to automation of most processes in the bank. Automation helps to reduce workload and can save resources for the bank. This is a major benefit for the bank.

Mobile banking ensures that the services provided would be accurate. When work is done by humans there are chances of errors occurring. This can be completely eliminated by the use of software. This makes banking a hassle-free experience for customers.

Customers can get services much faster thanks to online banking. Transactions, like transferring money to other accounts and paying bills, can be done instantly using the app. This helps them save time and is highly convenient.

Since the customer accesses banking services using the app, location based services can be offered. Customers can be informed about location of bank ATMs and branches based on where their location. Also, any offers provided by the bank can be informed. For instance, the bank may be offering a discount for customers at a particular restaurant. Using the location services, a customer can be informed about this when he is near that restaurant.

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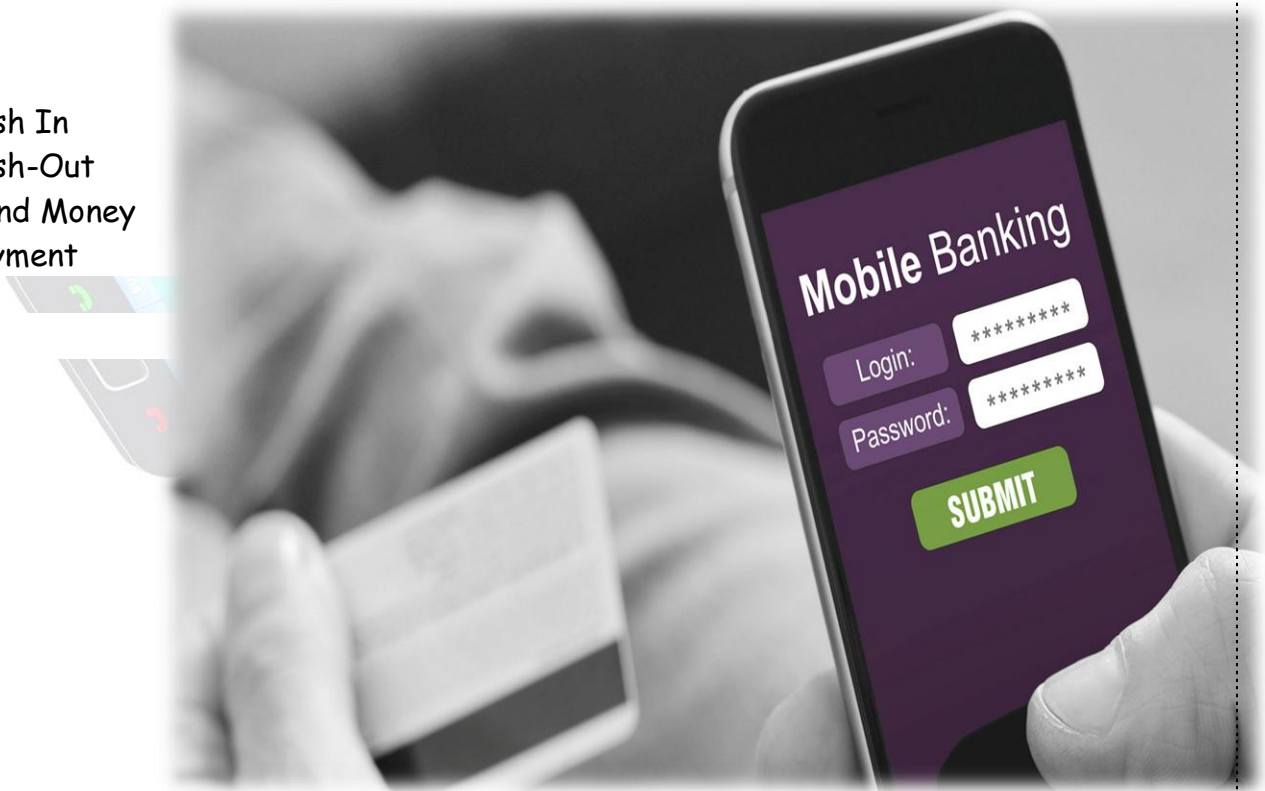
Related Project

Projet-01

Bkash Limited is a subsidiary of BRAC Bank. It is a joint venture organization between Money in Motion, LLC, USA and Brac Bank Limited Bangladesh (bKash, 2013). Its mission is to provide affordable, convenient and reliable financial service towards the customers.

Bkash Provides six type of services. They are-

1. Cash In
2. Cash-Out
3. Send Money
4. Payment



Analysis

3.1 Advantage & Disadvantage of Mobile Banking

Advantages of using mobile banking

The most obvious advantage is, of course, easy access. With only a smartphone in your hand, you have a possibility to check your balance, transfer your funds or pay bills. It's safer to use a special app than online Internet banking. The greatest advantage is that most banks allow their customers to do online shopping without paying bills, which is very useful for online stores' fans. Also, you can easily monitor your account - you can check your transfers, transaction history, deposits etc. Mobile banking is something like remote control.

Disadvantages

The main disadvantage is that it is not suitable for every phone. If you want to use mobile banking, you can download the app, which is available only for smartphones. There is a risk of hacking too, but it is easy to be safe from that - don't share your password with anyone.

Mobile banking gains popularity from year to year. This option deserves attention, because it allows you to use money without leaving home. Now, when you know how mobile banking works, you can start using it and check by yourself how convenient it is.

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3.2 Interview and Observation

3.3 Functional And non-Functional

Some typical non-functional requirements are:

- Performance - for example Response Time, Throughput, Utilization, Static Volumetric
- Scalability
- Capacity
- Availability
- Reliability
- Recoverability
- Maintainability
- Serviceability
- Security
- Regulatory
- Manageability
- Environmental
- Data Integrity
- Usability
- Interoperability
-

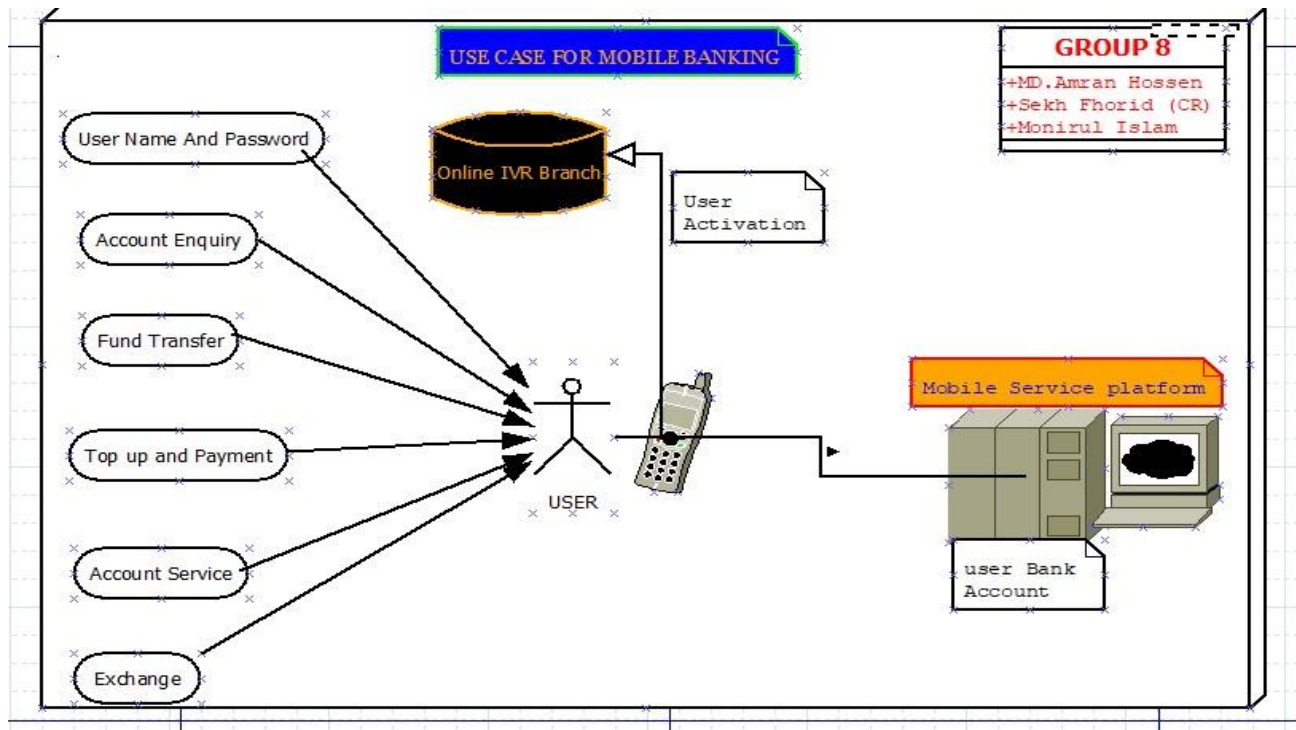
Some of the more typical functional requirements include:

- Business Rules
- Transaction corrections, adjustments and cancellations
- Administrative functions
- Authentication
- Authorization levels
- Audit Tracking
- External Interfaces
- Certification Requirements
- Reporting Requirements
- Historical Data
- Legal or Regulatory Requirements
-

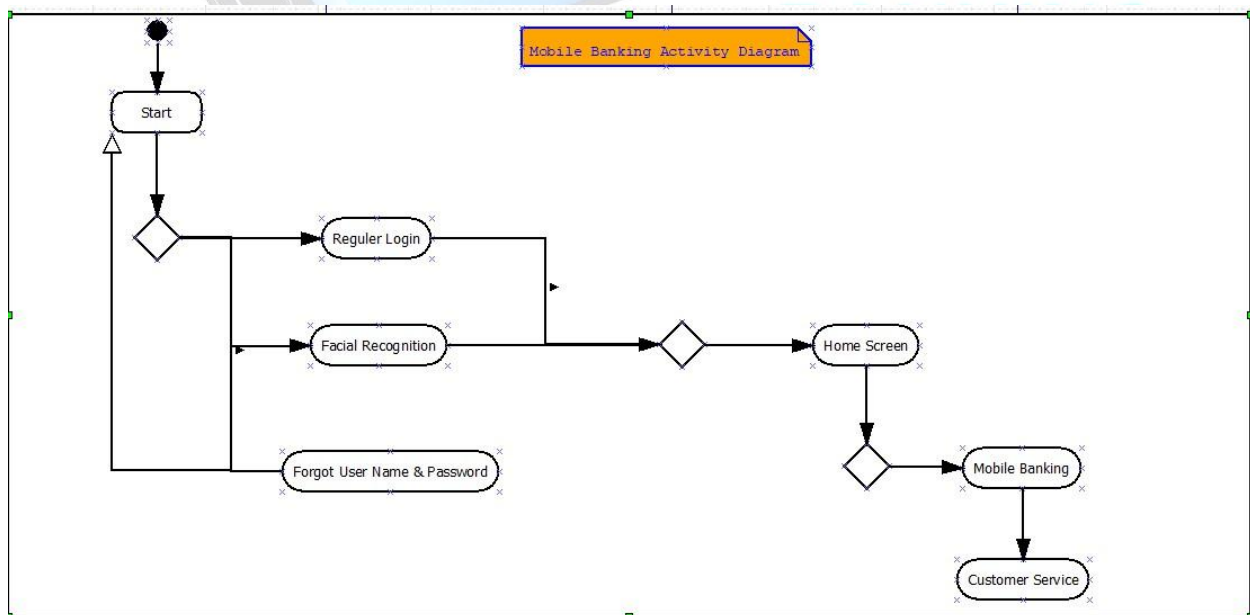
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Design

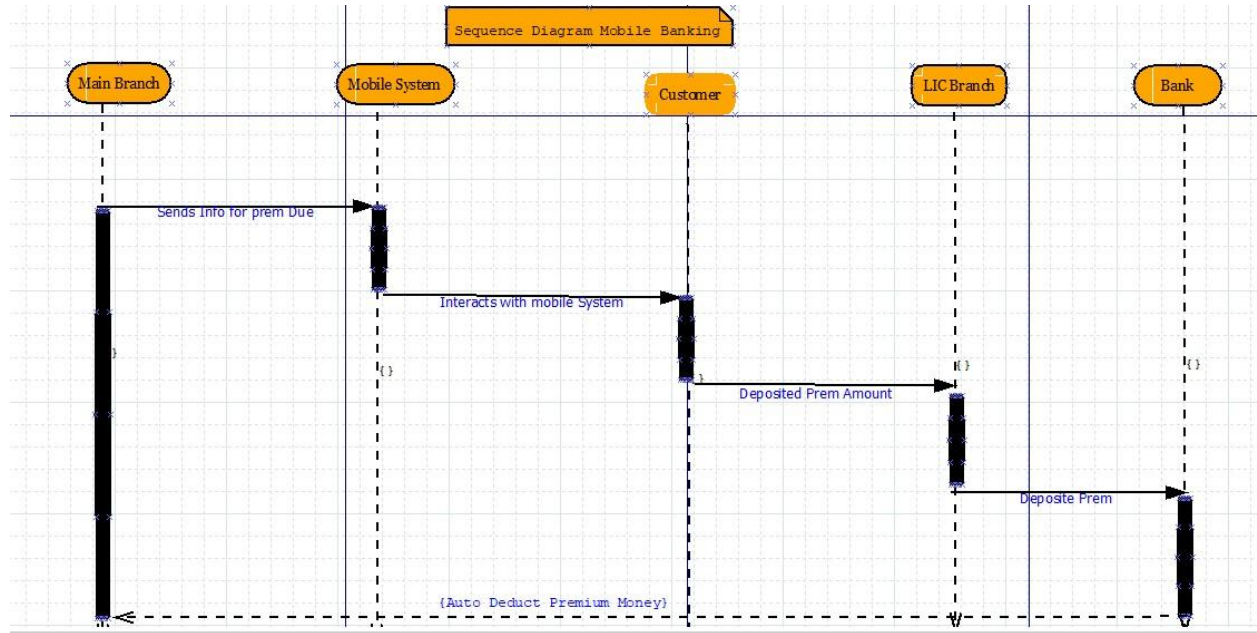
4.1 - USE Case Diagram



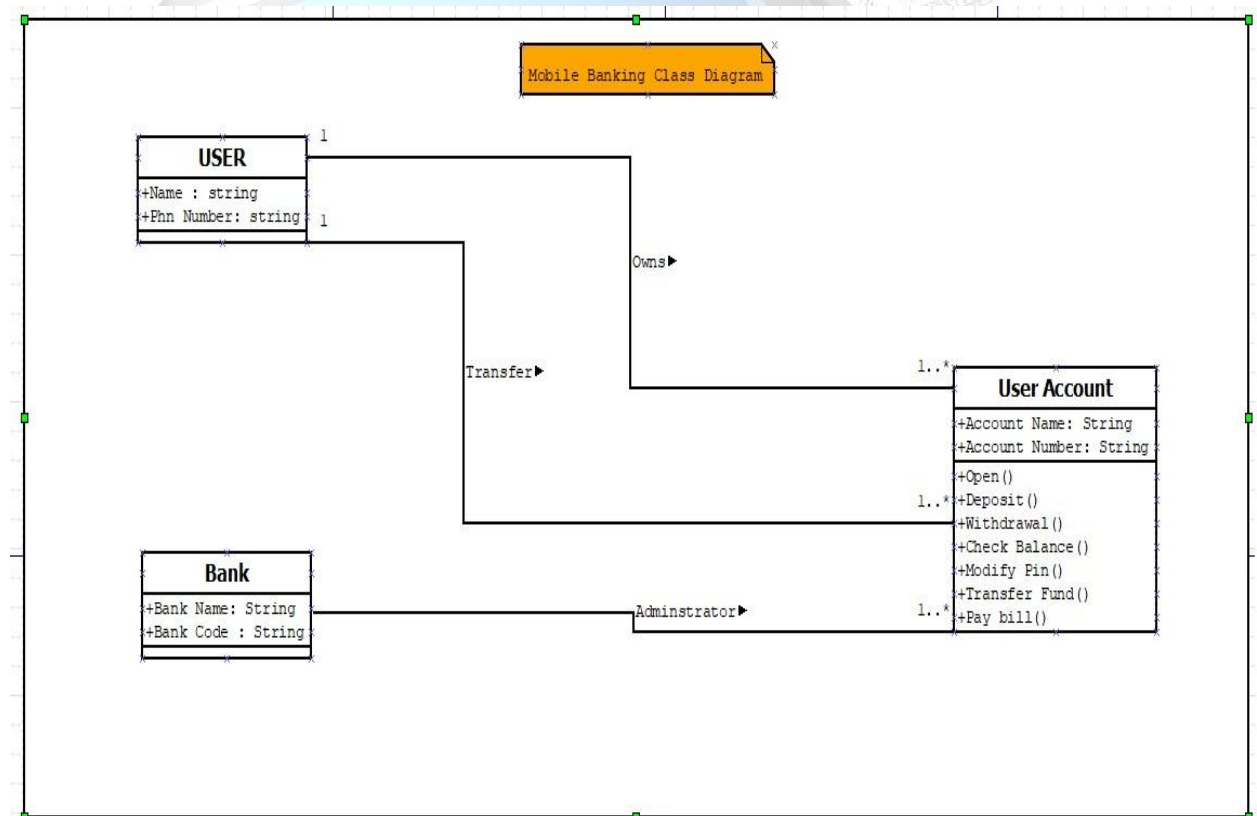
4.2 - Activity Diagram



4.3 - Sequence Diagram



4.4 - Class Diagram



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Conclusion

In conclusion, mobile banking has its potential to develop in Malaysia. From this chapter, we can know the factors that will affect the customers' perception toward mobile banking. Besides, the problem statement and research objective also will be determined. We also can know the scope and key assumptions of this research so that we can determine the area of this study. In addition, limitation of study also will be discuss so that so that we can improve the future research.

