

Mobile Banking Supervising System- Issues, Challenges & Suggestions to improve Mobile Banking Services

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Abstract

Banking is one of the Largest Financial Institution which constantly provides better Customer Services. To improve the Service Quality, Banking Services are expanded to Mobile Technology. Recently Mobile Banking plays a vital role in Banking Sector. This technology helps the Customers to provide all the account information as well as save timings. Customer can avail all financial services such as Credit, Debit, Money Transfer, Bill Payment etc in their Mobiles using this application. It saves time to speed in a Bank. Almost, most of the banks providing financial services through Mobile phones. But still majority of peoples are not preferred this services like ATM or Online because of Risk Factor. The main objective of this paper is to discuss about the benefits, issues and suggestions to improve Mobile Banking services successfully.

Keywords: ATM, Online Service, Mobile Banking, Risk Rating, MPIN, Log Off

1. Introduction

Mobile Banking System allows the Customers to avail all financial services through Phones or Tablets. The traditional Mobile Banking Services offered through SMS which is called as SMS Banking. Whenever the Customer availed Transaction either Debit or Credit, SMS will be sent to the Customers accordingly. But this service offer two transactions only such as Credit and Debit. Other benefits are gathered by spending money for SMS. New technology is rapidly modified the traditional Systems of doing banking services. Banking Services is expanded up to this technology. By using iphones, Customers can download and use Mobile applications for further financial Services. This service avoids the Customers going to branch premises and provided more Services. The Usages of technological Financial Services was tested by 50 Customers and most of them indicated that major risk service is Mobile Banking instead of ATM and Online Services as follows in table 1

Table 1 - Technology Usage Survey

Issues	ATM	Online Banking	Mobile Banking
Preferable	25	20	5
Risk Factor	30	40	75

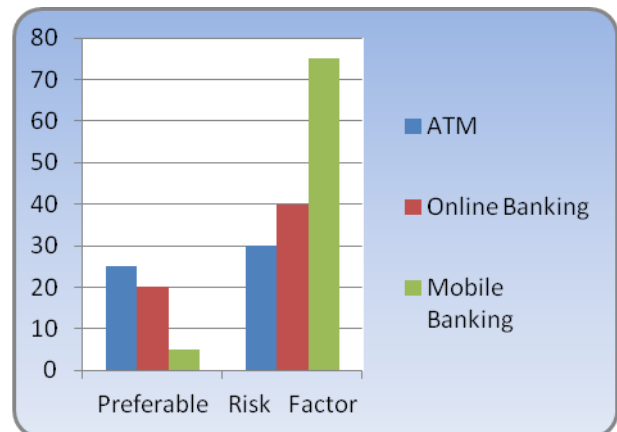


Figure 1 - Technology Usage Survey Chart

The above table and figure proves that the major risk comes under the third category such as Mobile Banking. ATM and Online Services are having minimum Risks comparable with mobile banking services. So that, in this Survey indicates that mostly preferred service is ATM then the next option is Online Services. This paper studies the benefits, limitations and suggestions to improve the mobile banking services.

2. Related Work

Renju Chandran [1] suggested some ideas and presented three steps to run and improve the mobile banking services effectively. The author presented the benefits, limitations and problems faced by the customer during the transaction of mobile banking and suggested a method for improving that service. Aditya Kumar Tiwari.et.al [2] discussed about mobile banking advantages, drawbacks, Security issues and challenges in mobile banking services and proposed

some idea to get the solution of mobile banking security.

V.Devadevan [3] conversed about Mobile Compatibility, Mindset about Mobile Banking acceptance and Security issues. The author depicted from the study that the evolution of eminent technologies in communication system and mobile device is a major factor and challenge to frequently changing the mobile banking solutions. The author suggested creating awareness among the existing customers and providing special benefits for mobile bankers which will increase the service. MD. Tukhrejul Inam.et.al[4] described the present condition of mobile banking services in Bangladesh and also showed prospects and limitations of Mobile banking in their country. The author suggested to the Bangladesh banks to follow the mobile banking services for making their lives easier. Mobile phones target the world's nonreading poor[5] discussed the Modern Cell Phone usage and functionalities.

3. Objectives of Mobile Banking System

The following steps are discussed in the next Section

1. Benefits & Limitation of Mobile Banking
2. Identify the Major Issue in Mobile Banking
3. Suggestion proposed to improve the Mobile Banking Services.

3.1 Benefits & Limitations of Mobile Banking

Benefits of Mobile Banking

i. Reduce Timing

Instead of going to bank premises and waiting in a Queue for checking the account transactions, Customers can check all details through Mobile Phones

ii. Mini Statement

In Offline Mode, We can see our Transaction Details through Mini Statement by using MPIN

iii. Security

During Transactions like Amount Transfer, SMS Verification Code is provided for checking the Authorised Persons.

iv. Availability

At any time, Customers can avail all the Services through Mobile Phones

v. Ease of Use

User Friendly. Customers can access all the financial services with little knowledge about mobile application.

Limitations of Mobile Banking

i. Compulsory Internet Connection & Tower Problem

Internet Connection is necessary to avail these Services. If the Customers reside in rural area means then they cannot avail the services because of Tower problem or line breakage.

ii. AntiVirus Software Updation

Many Customers are not aware about Anti Virus Software so that spyware will affect their mobiles.

iii. Forget to Log Off

if Customer's mobile phone theft means unauthorised person can reveal all our transaction details.

iv. Mobile Compatibility

Latest Mobile Phones alone suited for availing these services

v. Spend Nominal Charge

For Regular Usage, Customers has to spend some nominal Charges for transactions

3.2 Identify the Major Issue in Mobile Banking

Customers mostly prefer ATM and Online Services. Mobile Banking is not preferred by many because of the above limitations. Customers have to aware about Mobile Banking Services before usage. The awareness and Risk about Mobile Banking was tested by 50 Customers and Comparable with other risk factor most pointed out the "forget to Log off" Issue in these Limitations as follows.

Table 2 - Risk Ratings in Mobile Banking

Issues in Mobile Banking	Risk Ratings				
	5	4	3	2	1
Compulsory Internet Connection & Tower Problem	25	5	5	10	5
Anti Virus Software Updation			10	20	20
Forget to Log Off & Misuse Mobile Phones	35	5	10		
Mobile Compatibility				10	40
Spend Nominal Charge			10	40	

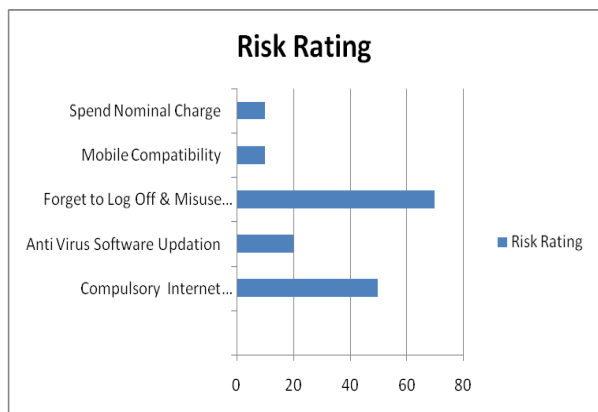


Figure 2 - Risk Ratings in Mobile Banking Chart

The above collected data also indicates that 70% of Customers mentioned the “Forget to Log Off & Misuse of Mobile Phones due to theft” is a major risk factor in the above list. The author suggested an idea to improvise the mobile banking services in the next section

3.3 Suggestion proposed to improve the Mobile Banking Services

In Mobile Banking Applications, whenever we need to avail financial services we have to enter our User name and Password for using our account transactions. After completion of our task, Customers have to log off these services. But sometimes, for regular usage Customers may forget or postponed to log off. At that time, This mobile application always keep inside the corresponding Customer’s Account Database. If the Customers mobile phones theft means, automatically hackers can reveal all their transaction details very easily. This will become a very big issue. Banking Sector has to avoid this type of problems by using new emerging technologies. At the Same time, Customers also have to aware about these Services like How to use these apps, what are the security measures taken by the banking sector and how to avoid major risks from unauthorized persons.

4. Proposed Mobile Banking Supervising System [MBSS]

This paper suggested to implement Mobile Banking Supervising System [MBSS] along with mobile banking applications for protecting and keep track all the sensitive information. For tracking all the transactions, MBMS keeps Stop Watch for monitoring the Services regularly like Log in Timing, transaction Particulars, Log off (or) skip the application. Everything has to be monitored by MBSS. If the Customer skips these mobile apps or forgets to log off keep on staying means, Automatic Log off Functions is

invoked by MBMS. Clock Time Limits are not fixed, Customers can change the limits at any time.

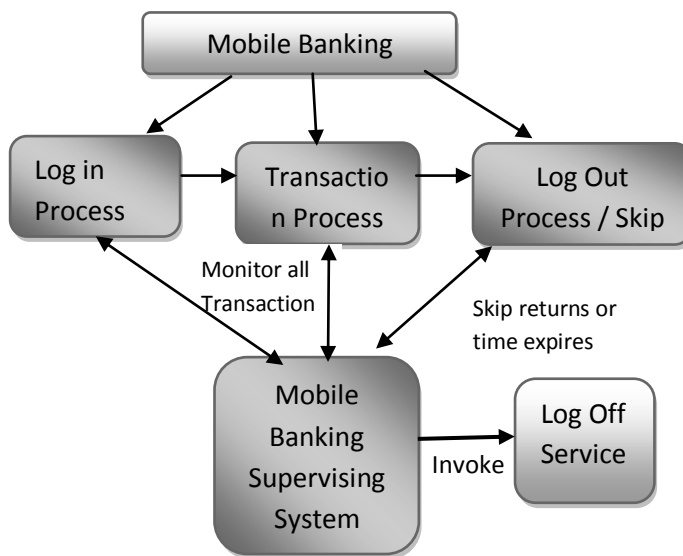


Figure 3 - MBSS Model Design

5. Conclusion

Mobile Banking is a convenient financial services to the Customers. Customers can avail all account transactions like Bill payment, Credit Amount, Debit Amount, Fund Transfer etc. It offers many benefits with ease of use. But still it has some limitations. So this paper discussed the major issues faced by the Customer & Banks Sector through Mobile Banking services and suggested an idea for protecting the account information from unauthorised persons through Mobile Banking Supervising System.

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