

## “An overview of Mobile Banking services, security and Challenges”

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### ABSTRACT

Mobile banking is a transformation that is driven by the world's one of the quickest developing areas – mobile correspondence innovation. This research investigates the issues in mobile banking apparent basic for reception by both mobile banking clients just as non-clients. The investigation distinguished certain issues relating to banks, protection, institutionalization of administrations, customization, Study proposes that from customers' viewpoint mobile handset operability, protection and institutionalization of administrations are the basic issues.

**Keywords:** Banking and Financial Services, Customer, Issues, Mobile Banking.

### INTRODUCTION

Mobile banking in India customary branch-based banking remains the most broadly received strategy for directing banking exchange, at same time business banks are experiencing a fast change significantly determined by the data and telecommunication (ITC) technology. ICICI bank spearheaded in mobile banking administrations in India. Among open banks, Union Bank of India was first to present mobile banking. Today numerous business banks have propelled mobile banking utilizing ITC technology and now they can contact clients and give them general data about its administrations as well as the chance of performing intelligent retail banking exchanges whenever, anyplace.

#### Objectives of the study

1. To consider the chose issues in mobile banking structure urban clients' point of view.
2. To investigate the apparent utility of mobile banking in contrast with retail banking and web based banking among the mobile banking clients and non-clients.

#### Review of Literature

Bamoriya and Singh (2011) discovered that the mobile banking has the issues and difficulties like mobile handset similarity, institutionalizing, programming downloading, protection and security. The Basel Board on Banking Supervision

expects hazard in banking exercises because of phenomenal speed of progress in mechanical and development in items/administrations.

N. Jamaluddin (2013) analysed e-banking, challenges and opportunities in India. This study explains that growth and development or Competition and changes in technology and lifestyle in the last 10 years have changed the face of Banking. The changes that have taken place oblige on banks tough standards of competition and compliance.

Manav Aggarwal (2015) suggested that the consequence of mobile banking is biggest financial institutions which on a usual basis discover the chance of technology to offer enhanced customer service utilities. This study analyzes that the clients to carry out a number of financial transactions by using mobile devices.

Nidhi Singh, Neena Sinha (2016) opined in her research to recognize users or customers perception for mobile banking and identify their experiences after using mobile banking services. This research also identified an impact of mobile banking, comparative analysis of public sector and private sector banks to creating mobile banking awareness to the customers.

Pradnya Meshram (2017) explained that mobile banking is a huge platform or technology which promotes banking operations at anywhere over the world. Mobile banking technology is very

secure and safe without any additional process or efforts.

A.T Jagannathan (2018) suggested that mobile banking has been used by the customer in very effective manner. Mobile banking technology increasing the knowledge of the consumer's behavioural intention to adopt mobile banking services and adoption of mobile banking services to make their customers satisfy and feel secure while using mobile banking services.

### Scope of the study

- Mindset about Mobile Banking acceptance
- Comfort level with existing system
- Availability of Facilities
- Security issues
- Willingness to adopt mobile banking service

### Development stages of Mobile Technology

Motorola<sup>1</sup> was the primary organization presented mobile telephone in the year 1973, which is expensive and furthermore more weight (in Kgs) when contrasted and present mobile sets which are modest and little in size.

1st Generation (1G): The main simple cell framework broadly sent in North America was the Propelled Mobile Telephone Framework (AMPS). It was industrially presented in the Americas in 1978, Israel in 1986, Australia in 1987 and India<sup>2</sup> in the year 1995.

2nd Generation (2G): Second era mobile correspondence supplanted the simple sign with advanced two noteworthy specialized improvements happened that is GSM and CDMA innovations. The NTT DoCoMo in Japan presented network access on mobile telephones in the year 1999.

3rd Generation (3G): The mobile telephone ended up fundamental correspondence framework for many clients around the world. The 3G technology created with the idea of parcel switching rather than circuit switching for information transmission.

4th Generation (4G): The fourth generation<sup>4</sup> technology presented in the year 2009 with the technology headway like WiMAX and Long haul Development (LTE) advances.

### Merits of mobile banking

In mobile banking with assistance of SMS alert it improve the client administrations. With the

assistance of SMS at whatever point proprietor buys or execute any sum from record bank illuminate to proprietor every single time with the assistance of SMS office it will likewise help in Visa misrepresentation. Essentially client can demand for different offices like little proclamation, store, and withdrawals data can be getting with the assistance of SMS data. Bank additionally remind some other data by SMS like advance related data date and time of portion different offers ready sent by the bank to client to improve the client administrations.

### Challenges and issues in mobile banking

**A. Customer awareness:** Because of absence of learning and mindfulness about mobile banking is likewise a purpose behind doubt in mobile banking administrations and it is additionally another explanation behind hazard and security issue in mobile banking since this is new technology in banking and money related framework so all banking client don't know about it and feel hazard to embrace it so it is likewise a major test before mobile banking administrations in India.

**B. Security issues & privacy:** there is security of mobile banking administrations is enormous issue and challenge. In mobile banking for the security reason Stick or Secret key is utilized which might be taken by the assailant or unapproved client if mobile gadget has misfortune or take so client need to mindful about it. Clients are utilized touchy information and data in mobile so here hazard with go of an authentic application since application administrations are given by outsider.

**C. Virus & malware attack:** there is additionally chance with infection and malware assault it might get to your record data, for example, username, secret word and other data like in PC framework there is likewise chance on infection and malware assault on mobile banking administrations some malignant code are composed to abscond mobile banking like Zeus has utilized for assault on SMS banking and Zeus utilized for take mobile exchange verification, for example, secret word and stick number. So it is additionally huge security issue and challenge in mobile banking administrations.

**D. Wireless network:** All procedure of mobile banking administrations is done in remote mode so there is likewise a security chance in mobile banking administrations mobile gadget segment contact with cell site and committed circuit or microwave for the correspondence benefits so in

the event that there is any shortcoming in any piece of this system, at that point danger of assault is increments so we need to verify all these system and system gadgets for a decent security administrations.

**E. Risk in SMS mobile banking:** Arrangement of SMS is in plain message. As of now start to finish encryption isn't accessible. The main encryption is accessible in base station at handset and at the SMS server during transmission time. Because of this there is chance in SMS banking, for example, SMS satirizing assault where assailant can send message on system by controlling the client's number.

**F. Authentication issue:** In mobile banking there is authentication risk at the login time or when we access our account through the mobile system because in mobile banking for the authentication PINS numbers are used but PINS authentication method is an old method and many security issues such as password and id theft were by stealing the password and id unauthorized access may be possible by getting the password attacker may access our account. Another risk related to authentication in mobile banking as if mobile has stolen then attacker may get the password through the mobile and can access the account by using your id and password.

#### Mitigation and solution of issues

There is some arrangement and proposal for related issues by which we can conquer the difficulties and hazard in mobile banking field

**A. Customer education and awareness:** Since mobile technology is new in banking and budgetary area so all clients and client don't know about it so they doubt on mobile banking and feel security chance in mobile banking so it is additionally a test for us for beat these issues and difficulties we need to instruct and mindful about mobile banking to client.

**B. Privacy issues:** For the protection related issue we need to mindful about mobile banking and its security implies clients must need to mindful and learning about mobile banking framework and its security. Another answer for the protection related issue is that applications are downloading from a trustworthy site and secure with that these applications are tried for security. Since these application administrations are given by outsider and they can take your information and data from your mobile gadget or at the hour of exchange process.

**c. Wireless Network:** Mobile banking framework utilizing a remote foundation for the procedure of exchange, move and other banking process so because of absence of security there might be a hazard on the client benefits so we need to give a high framework and great security for the banking procedure in light of the fact that in these remote foundation exceptionally touchy information and data are voyage.

**D. Trust:** Making trust in client is a test for us so for it we need to improve very much verified administrations by which client have a sense of safety his information and data and can utilize mobile banking administrations with no hazard.

#### Conclusion

This research investigates chosen mobile banking issues from clients' point of view and to cause suggestion to different gatherings to include in mobile banking administrations viz. banks, mobile administrators, content suppliers, controllers on significant issues which could move toward becoming difficulties for them in giving successful mobile banking administrations in the nation. In this paper we concentrated on issues and difficulties in mobile banking in India from clients' point of view. Comparative investigation could be led from specialist co-ops for example financiers' point of view.

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