#### **Chief Editor** Dr. A. Singaraj, M.A., M.Phil., Ph.D. Editor Mrs.M.Josephin Immaculate Ruba **EDITORIAL ADVISORS** 1. Prof. Dr.Said I.Shalaby, MD,Ph.D. **Professor & Vice President Tropical Medicine**, Hepatology & Gastroenterology, NRC, Academy of Scientific Research and Technology, Cairo, Egypt. 2. Dr. Mussie T. Tessema, Associate Professor, **Department of Business Administration,** Winona State University, MN, United States of America, 3. Dr. Mengsteab Tesfayohannes, Associate Professor, Department of Management, Sigmund Weis School of Business, Susquehanna University, Selinsgrove, PENN, United States of America, 4. **Dr. Ahmed Sebihi Associate Professor** Islamic Culture and Social Sciences (ICSS), Department of General Education (DGE), Gulf Medical University (GMU), UAE. 5. Dr. Anne Maduka, Assistant Professor, **Department of Economics**, Anambra State University, Igbariam Campus, Nigeria. Dr. D.K. Awasthi, M.SC., Ph.D. 6. **Associate Professor Department of Chemistry**, Sri J.N.P.G. College, Charbagh, Lucknow, Uttar Pradesh. India 7. Dr. Tirtharaj Bhoi, M.A, Ph.D, Assistant Professor. School of Social Science, University of Jammu, Jammu, Jammu & Kashmir, India. 8. Dr. Pradeep Kumar Choudhury, Assistant Professor. Institute for Studies in Industrial Development, An ICSSR Research Institute, New Delhi- 110070, India. 9. Dr. Gyanendra Awasthi, M.Sc., Ph.D., NET Associate Professor & HOD Department of Biochemistry. Dolphin (PG) Institute of Biomedical & Natural Sciences, Dehradun, Uttarakhand, India. 10. Dr. C. Satapathy, Director, Amity Humanity Foundation, Amity Business School, Bhubaneswar, Orissa, India.



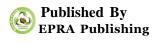
ISSN (Online): 2455-7838 SJIF Impact Factor : 6.093

### **EPRA International Journal of**

# Research & Development (IJRD)

Monthly Peer Reviewed & Indexed International Online Journal

Volume: 4, Issue:3, March 2019







 SJIF Impact Factor: 6.093
 Volume: 4 | Issue: 3 | March | 2019
 ISSN: 2455-7838(Online)

 EPRA International Journal of Research and Development (IJRD)
 Peer Reviewed Journal

**MOBILE BANKING APPLICATION** 

### **B.Beena**<sup>1</sup>

Student of III B. Com(PA), Department of Commerce with Professional Accounting, Dr. N. G. P. Arts and Science College, Coimbatore, T.N, India

#### **R.Hemalatha<sup>2</sup>**

Student of III B. Com(PA), Department of Commerce with Professional Accounting, Dr. N. G. P. Arts and Science College, Coimbatore, T.N, India

#### M.Aishvariya<sup>3</sup>

Student of III B. Com(PA), Department of Commerce with Professional Accounting, Dr. N. G. P. Arts and Science College, Coimbatore, T.N, India

#### ABSTRACT

Mobile banking application (m-banking apps) can be defined as a service offered by a bank or any other financial institution that allows the customers of such establishments to carry out a variety of banking operations through mobile banking applications. Communication of mobile banking application in smart phone will be asynchronous through back-end system.

**KEYWORDS** - Mobile banking, Paytm, Mobikwik, Ewallet, smart apps and Wireless Application Protocol.

#### **INTRODUCTION**

Financial services and transactions through mobile device are called Mobile banking. The protocol translation and compression of contents from mobile devices are working through online banking architecture. The architecture of online banking can be at variance by subject

on outline by the panel of bank bodies. These online banking architectures were applied into mobile internet banking application since the bank has application servers that involve e-mail server, website server and others. Then the router will direct the transaction request by the user into those application servers.

Recently, the work on back-end system, Service Oriented Architecture (SOA) is needed for all application components provide services to other components by the use of a communications protocol, usually an Internet. It is due to the advanced technology and wireless technology users are more convenience to do their financial services through mobile banking application based on WAP (Wireless Application Protocol) and SMS (Short Message Service) is popular.

#### MOBILE BANKING AND APPLICATIONS

Mobile banking users are becoming more comfortable doing banking transaction with their smart phones. With the increase of trend in m-banking new users shows more confident in banking on mobile devices. India has the youngest population of mobile banking users across the globe further; it also showed that the Mobile Banking users in India account for over 50% of its population today. Many banks have came up with their banking apps which help people to make online transactions, pay bills, recharge mobile phones, etc.. The top five mobile banking apps are State Bank Freedom, HDFC Bank mobile application, iMobile from ICICI Bank, Baroda M-connect and New Axis Mobile in India. Almost all banks have been building mobile banking apps for their customers, and upgrading them too. The Reserve Bank of India (RBI) has given approval to 80 banks to start mobile banking services, which includes apps and 64 banks have commenced operations. As of October 2013, nearly 30 million people had subscribed to mobile banking services, which is still small number of app users. According to Kern Communication Pvt. Ltd, a user experience research consultancy firm, only 0.12 million downloads banking apps.

#### MOBILE BANKING APPLICATIONS IN INDIA

#### 1) VENMO APP

Venmo is mobile baking apps which have prominently advertised its security on its website. Venmo use encryption tool to encrypt all connections by applying SSL and "uses bank-grade security systems and data encryption to protect the information and to prevent the loss or any unauthorized transactions or access to your personal or financial information.

#### 2) STARBUCK APP

Starbuck mobile application is a convenient pay for purchases, earn stars, redeem rewards with My Starbuck rewards and much more. The mobile banking application can be downloaded by iPhone and Android smart phone. Ordering any drinks is faster without waiting line. Besides, customer can leave a tip for barista digitally. The app itself lets the customer pay at checkout with mobile phone. The customer can reload Starbuck gift card by inevitably drawing fund from his bank account or credit card.

#### 3) E-WALLET

Suitable for: Small-ticket transactions. Transaction limit: Rs. 20,000 per month (Rs. 1 lakh for KYC compliant wallet holders) Details required: Login ID Cost: Only if you transfer money from your wallet into your bank account.

#### 4) BHIM

A mobile banking application. This application is developed for making retail payments. This application is supported by only android phones or android users can only use this app. This app support aadhar card for making payments which require fingerprint impression but yet it is not started working. But If you have signed up for UPI-based (UPI is a payment system which facilitates the fund transfer between two bank accounts. You are not required to give bank account details for the fund transfer through the UPI payment system) payments on your bank account, which is also linked to your mobile phone number, you'll be able to use the BHIM app to carry out digital transactions. BHIM is not like another mobile Ewallet. As every BHIM users need to be linked with their bank account for making payment. Another app like Paytm and Mobikwik does not required to link with bank account for making payment. In those app one have limited amount of money in their wallet, which you can send only to someone who is using the same wallet.

#### 5) PAYTM

Paytm can be accessed through its website and is also available on all the phone platforms as an application. Paytm is the most widely used way of offline digital transaction, which means it's easy to find local stores where Paytm payment is accepted. Paytm offers the widest range of options where it can be used. The money stored in Paytm Wallet can be used for sending money, purchases, cab rides and much more. Paytm has disable transfer to bank feature on its app and website, which means you can't send the money in your wallet back to your bank account.

#### 6) MOBIKWIK

Mobikwik is another option available to Indians when it comes to cashless transaction. It also started as prepaid recharge website; it works closely similar to paytm. However, the places and the services where you can use Mobikwik are fewer. Mobikwik allows bus and train bookings but not flights. Mobikwik lite offers smooth functioning even on slow internet. It doesn't require a smart phone. Mobikwik has limited reach compared to Paytm.

#### 7) FREECHARGE

Freecharge also works and offers services more or less similar to Paytm and Mobikwik. The app is available on Android OS and Windows mobile platforms. While the Freecharge payment is not accepted on major services like Uber and Ola, it offers some interesting features like "split bill", which allows you to split the amount to be paid among your friends. Freecharge also offers for prepaid, postpaid, DTH, metro recharge and utility bill payment for various services. It also offers redemption.

# ADVANTAGES OF MOBILE BANKING APPLICATION

The benefits of these apps are endless, both for the service providers as well as customers. Truly, these smart apps have raised the standards of banking services to incredible heights. Let's check the list of their benefits:

**CONVENIENCE:** Convenience is perhaps the biggest factor that drives the success of banking apps. Nothing can be easier than being able to transfer funds and check accounts at just a tap of the finger. What more, there is no need to visit the physical location as the customer can interact with the bank at any time and from anywhere.

**IMPROVED CUSTOMER SERVICES:** Banking applications have enabled the banks to raise the caliber of their services manifold. Some banks have even integrated AI-powered virtual assistants in their apps to ensure that customers get 24/7 assistance. Smart apps also reduce operational costs as banks can provide

enhanced services without investing in additional touch points (branches) for the customers.

**SECURITY:** Banking applications improve the security of transactions to a certain extent. It is possible for the customers and banks to monitor transactions in real-time and locate the fraudulent activities faster with these apps.

## **GROWTH OF BUSINESS AND REPUTATION:**

These smart apps allow the banks to leverage the mobile customer base and grow its revenues and reputation. These turn out to be worthy investments as banks having them as a part of their business arsenal can attain unmatched advantages they bring.

## DISADVANTAGES OF MOBILE BANKING APPLICATION

**VIRUS ATTACKS IN MOBILE BANKING APPS:** There are different types of viruses, internet malicious program and Trojan Zeus Trojan targeted mobile bank users. Virus Zitmo has been commonly used by attackers to defect SMS banking. As well as virus Zeus is commonly used by the hackers to access to mobile transaction authentication number or password.

**SPENG MALWARE**: According to Kaspersky Lab it discovered that a breed of malware targeting mobile devices called Svpeng. The malware, which targets Android devices, looks for specific mobile banking apps on the phone, then locks the phone and demands money to unlock it. Speng breaks into a mobile device through a social engineering campaign using text messages. Once it's wormed its way into a device, the malware looks for apps from a specific set of financial institutions.

### MOBILE BANKING APPS RISK BY HACKERS:

Research has shown that hacking or malware has been the predominant method of Credit Card data breaches that occurred from 2005 to 2014. Most apps have been hacked. The research of top financial apps reveals that: -95% of Android apps have been hacked -70% of iOS apps have been hacked. The research also reveals a growing trend of financial app hacking - Android app hacking increased from 76% to 95%, from 2013 to 2014 - iOS app hacking increased from 36% to 70%, from 2013 to 2014.

#### CONCLUSION

Mobile technology is transforming the banking industry in worldwide by providing convenience to banking customers and offering new services to the unbanked customers in emerging market of India. M-banking is rapidly growing in finance sector for the transactions and payment settlement. For this all stakeholders like Regulators, Govt, telecom service providers and mobile device manufactures need to make efforts so that penetration of mobile banking reaches from high-end to low- end users and from metros to the middle towns and rural areas.

#### REFERENCE

- 1. Dr. D. Bhanu Sree Reddy and Dr.B Naresh (2018) "Factor influencing customer perception on app usage for bank transactions: an empirical study", international journal of pure and applied mathematics, volume119, issue 12, PP No. 287-305.
- Sagar Bird, Kajal Agrahari, Mrs. Priya Chandran(2017) "study of mobile banking application usage in various sectors of society", international journal of scientific & engineering research, volume8, issue5, PP No.33-36.
- 3. Sameer Hayikader, Farah Nurafiqah Hanis binti Abd Hadi & Jamaludin Ibrahim (2016) "Issues and Security Measures of Mobile Banking Apps", International Journal of Scientific and Research Publications, volume 6, issue1, PP No. 01-06.
- Wu He, Xin Tian, Jiancheng Shen & Yaohang Li (2015) "Understanding Mobile Banking Applications' Security risks through Blog Mining and the workflow Technology", Thirty Sixth International Conference on Information Systems, PP No.01-10.