

# Adoption and Challenges in Usage of Mobile Banking: A Literature Review

Mrs. Divya M P<sup>1</sup> \* &Dr. C. K. Hebbar<sup>2</sup>

<sup>1</sup>Assistant Professor, Government First Grade College for Women, Balmatta, Mangalore, India. ORCID ID: https://orcid.org/0000-0003-3156-838X

<sup>2</sup>Research Guide, Srinivas Institute of Management Studies, Srinivas University, Mangalore, India. ORCID ID: 0000-0002-3711-9246

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#### ABSTRACT

During this Covid pandemic situation mobile banking plays a very important role in banking sector throughout the world. According to RBI report during March 2020 total value of 520199 crore of mobile payment has been recorded and during March 2021 total value of 1246220 crore mobile payment has been recorded. We can see a tremendous increase in usage of mobile banking in India. This data shows that majority of the customers are moving towards mobile banking due to its convenient way of banking. Universally availability of mobile devices as made banking activities easier compared to traditional branch banking. There is a rapid increasing number of mobile consumers which has affect in growth of mobile payment services. Previously mobile banking usage was carried out by only certain group of customers and usage was only to limited banking transactions. But know scenario has been changed. Adoption of mobile banking services has been tremendously increased in past few years. The purpose of this study is to find out the factors which influence in adoption of Mobile banking among customers and also to identify the challenges faced by customers during using mobile banking services. There are many studies conducted towards it. The intention of this Literature review is to identify some common factors which influence customers in adoption of mobile banking services and some common identified challenges during mobile banking usage from the various studies conducted and also o identify the research gap in the study. This study presents a detailed classification for mobile banking based on 100 articles in various journals on mobile banking, technology & information system, which are published from 2010 to 2021, RBI & Bank websites and wikipedia. The papers are classified into India towards Digitalisation, related works on mobile banking,

adoption factors and challenges faced during mobile banking.

Key Words: Traditional Banking, COVID-19, Pandemic Situation, Mobile Banking, E-Wallet, Adoption, Challenges.

#### I. INTRODUCTION

There are various technological advancements taking place around the world. Among them Smart phones are one of the most popular and universally accepted technology.Mobile phones are not just a device but also a smart part of our life. Mobile phones are not only used for making calls but also for watching sports, weather forecast, news, entertainment, etc. these devices helps to slove day to day issues faced in our life and also stores data which can be access whenever required(Grzegorz Szyjewski, 2018). During 1973 Motorola company was the first company which introduced a mobile phone and it was very costly. In 1995, 1G was commercially introduced in India. During the 2G era there was a few changes made within the spectrum itself such as GSM, GPRS and EDGE. Second generation mobile communication replaced analogue Signal with the signal digital(Devadevan, 2013). Introducing 3G was a biggest revolution in technology advancement for network and data transmission. Instead of secured switching for transmission of data 3G technology developed a concept of packet switching. It is with speed capabilities of up to 2 MBPS. In 2000 4th generation technology was introduced with latest advancements like WiMAX and Long-Term Evolution(LTE) technologies. In 2019 Fifth generation wireless network was launched across the world. The main goal of 5G is achieving increased capacity of bandwidth than 4G. In terms of various aspects 5G has brought changes, such as broadband user per unit area, high speed,



availability, bandwidth, superfast and many more interesting and professional services. 5G technology allows large population of users to download videos, audiosand other services without any interuption and restrictions can avail non stop services with increased efficiency(Aithal K. K., 2017). They have increased bandwidth and higher download speeds up to 10 Gb/s and also it is possible to make new applications in Internet of things(IoT) and machine to machine areas(WIKIPEDIA, 2020).

Mobile phone facilitate people with a wide variety of uses but people should have enough knowledge to utilise it in right manner and enjoy complete advantage of mobile technology. There were 358 internet service providers (ISPs) who are offering broadbannd and narrow band internet services in India as on 31 december 2019. Total number of internet users is 743.19 million.Among them 55.75 million are narrow band subscribers and 687.44 million are broadband subscribers(contributors, List of internet service providers in India, 2021). In recent days internet service has been cheaper which made all categories of people to avail benefits of getting high speed unlimited data. Specifically after Reliance launched Jio 4G service since 2016, with high speed internet data, which is affordable and easily accessible by common people too. Mobile phone with internet facility has wide range of usage. The rapid development of communication and networks has pushed service providers including financial institutions to search a new ways of delivering services.

There was technological changes taking place in banking sectors, which influence on operation of banking activities. (Due to) Because of which Banks were indiificultsituation. There was changes in capital structure of banks which lead into banking activities. These changes changing influenced banks to perform the banking activities in better way. To cope up with these changes Banks started offering various products and services to their customers by adopting latest technologies(P. S. Aithal, 2021). During initial stage, the advancement of latest technology has influenced banks for providing customised application for mobile phones. Where as know with introduction of smartphones, Mobile Applications has been developed. The greatest challenge of this latest technology advancement is to develop different mobile operating systems(Devadevan, 2013).

Banks has taken this opportunity to introduce Mobile Banking services which provide their customers to avail banking services easily just sitting at home through their smartphones.

From past few years the mobile and wireless market has been one of the fastest growing markets in the world and even know it is growing at a rapid pace. Apples iPhone was success in mobile industry and there was development in many other android-based operating system also. These developments led to increasing use of special client programs which is called as applications which is downloaded to the mobile device. Mobile banking application is also on of the application meant for conducting digital banking transaction.Mobile banking helps customers to access their account information, carry out banking transactions at very less cost from any where and at any time. As Mobile banking is convenient to carry out banking transactions from anywhere and at any time it has become customer preference in recent days(Norzaidi Mohd Daud, 2011).

Even though Mobile banking has been introduced long back, the adoption of Mobile Banking among Indian customers was very slow. There are various resons for slow adoption of Mobile banking which are identified by many studies conducted on it. The study also identified that awareness aboutmobile banking was increased during post demonetization period. Customers adoption of mobile banking was more during COVID Pandemic situation(Kiri, 2020)

### **India towards Digitalization :**

On november 8<sup>th</sup> 2016 government declared ban on Rs.500 and Rs.1000. Demonetization has effected many people's life. Farmers and other informal sectors, especially people who are from rural region are not aware of digital currency or cashless transactions. Majority of them in rural area completely depend on cash based transactions. These group of people were affected most from demonetization (Md. Rasel, 2019). But on other side it helps to popularaize digitalization in all types of sectors. Many economists believed that this is a right time to move towards digitalization. Many e-commerce start ups like Amazon, Flipcart, Jabong etc., started introducing cashless transaction through online shopping(contributors, E-commerce in India, 2021). Digital transactions are becoming more popular not only in india but also in other parts of the world. on August 14th 2015, Government launched a new scheme the Pradhan Mantri Jan Dhan Yojana(PMJDY). On same day 1.5 crore bank accounts were opened in all over nation under this scheme. The scheme has provision of opening a zero balance account with free debit card and also accidental insurance policy. The intension of Jan Dhan Yojana is to provide universal access to banking facility and an important milestone for



moving towards digitalization(Divya.MP, 2016) [3]. Today we can see many people have bank accounts not only in urban or semi urban region but also in rural region. Specially women in rural region have opened bank accounts. Government of India is emphasizing the need and importance of a cashless and Digital economy.

Table 1 : Pradhan Mantri Jan Dhan Yojana(PMJDY)	) statistics as on14 january 2021 (all figures in
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crores)						
Bank Type	Number of Accounts		Balance in	Number of Rupay		
	Rural/Semi Urban	Rural Female	Urban	Total	Accounts	Cards
Public Sector Banks	20.21	18.09	12.77	32.98	106471.60	26.13
Regional Rural Bnks	6.51	4.29	0.92	7.43	26547.44	3.39
Private Banks	0.69	0.69	0.56	1.25	4176.90	1.12
Total	27.40	23.07	14.25	41.65	137195.93	30.65

Source : [Pradhan Mantri Jan Dhan Yojana(PMJDY), 2021]

In today's world of technology and digitalisation has made fast and easy way of banking sitting anywhere and any time banking is possible. Digital India was launched on 1st July 2015, with the intention of connecting throughout all rural areas with High speed internet networks. So through this program digital literacy can be improved. Many digital programme was introduced by government towards digitalization. Some programmes are AGRIMARKET App, BHIM(Bharath Interface for Money), Crop Insurance Mobile App, E-GRANTHALAYA Etc.(Digital India, n.d.; Digital India, n.d.).

# Mobile wallet and UPI payment Application in India:

The study finds that E-Wallets and Mobile Wallet are not same. E-wallet are popular method which is commonly used for quick transfers, shopping etc. which is fast growing. They are linked with their debit or credit card using an id. Some Ewallets commonly used by consumers are Paypal, PayTM, Transferwise etc. Mobile wallet, on the other hand, is a very easy way to make payments. Instead of linked to a debit or credit card, money is transfered into the wallet through the Immediate Payment Service(IMPS). Some of the popular Mobile Wallets are Mobikwik, PayUmoney, Oxigen etc(SAXENA, 2021).

Mobile wallet is a digital wallet in which people can add their money through their credit or debit cards and can use to make various kinds of payments from it. It is an electronic prepaid account which can be utilised for making all types of banking transactions. To make use of mobile Wallet services we need to download the particular app from play store or App Store then we have to open an account with the mobile wallet provider. Then money has to be added to wallet through their debit/credit card. This added money in mobile wallet is ready to use for various purposes. This is more convenient and secured way of doing banking activities which has many benefits for customers. There are different types of mobile wallets in India, they are namely- open, semi-open, semi-closed and closed type. It depends on type of usage and payments that can be made.

Unified Payment Interface (UPI) has been launched by National Payment Corporation of India which made mobile banking more easier. Mobile payment app is linked to customer bank account directly so not required to keep money in wallet. Know any banking activities can be carried out easily through Mobile payment app than through mobile wallet. Money can be transferred to others account using Virtual Payment Address (VPA) or even just with their phone numbers or though using QR code. There are many mobile payment Applications available for smartphone some are offered by Banks and some are private. Some of the popular Mobile Wallet and payment applications in India are as follows:

Google pay : google pay previously known as Tez is one of the top most online payment apps in India. Customers can transfer money, bill payment, recharge mobile and online shopping etc., with google pay. As it is linked directly to bank account money is safe and need not worry about loading money into wallets. More than 100 million people have registered google pay.

Phone pay : In India phone pay was introduced in 2015, but in short period of time it is in the list of top online payment apps. It offer various rewards and discounts to their customers. Trough UPI link can make money transfers, bill payment, recharges etc., more than 100 millions are users of phone pay.



BHIM Axis pay : it is banking app through which money can be transferred easily to others account. More than 1 million users are there.

Dhani App : dhani app is E-wallet app through which online transactions can be done. It is part of the India bulls group. This app can be combined with dhani supersaver rupay card. It is free for  $1^{st}$  month and it has benefit of 5% cash back on all types of purchases made by using this app. More than 20 millions are using this app in India.

Pay TM : paytm application was introduced in 2010 and today it is one of the top online payment apps in India. It was introduced as E-wallet where customers can store money and make all types of payments and other transactions using smartphone. It has gain popularity among users. Now it has enabled UPI through payment also where customers can link to their bank account and directly can make banking transactions. There are more than 100 million users of paytm application in India.

Mobikwik : Mobikwik is E-wallet app where customers can add money in wallet and then use for making online transactions. Mobikwik has made a tie up with various retailers, small business, Restuarants and other merchants. It has unique feature of expense tracker which helps customers to plan their budget accordingly. More 10 million users of Mobikwik app.

Yono by SBI : State bank of India launched a mobile wallet called Yono for their customers. They can do various banking transactions through this app which is beneficial in many ways. It offers various banking services not only for their customers but also for non SBI customers too. It is providing their services in 13 different languages. It also allows customers to remind them about their payments due, money transfer etc., by setting alarm. More than 10 million customers are using Yono SBI app.

Amazon app : amazon pay was launched in 2007 globally and in 2017 it was introduced in India. It is one of the top most payment app through out world. It focus on consumers of Amazon.com and provide an option to their consumers to pay external merchant websites through their app. In 2019 Amazon pay has a partnership with worldpay. It has tied up with fintech company like Zestmoney who are providing no cost EMI payment option to their customers who can make purchases in amazon with easy EMI option.

ICICI Pockets : ICICI Pockets are mobile Wallet in which customers can transfer money into their

wallet and make use of it for various banking activities. It has provided various benefits to their customers. More than 5 million users of this mobile banking.

HDFC Payzapp : payzapp is a mobile payment app introduced by HDFC banks for easy transactions to their customers in just one click. It allows to make payments, recharge, pay bills, purchases, money transfer etc., more than 10 million users of this payment app

Advantages of mobile wallets :

- One click payment: Mobile wallet is more convenient way of banking where user can make bills payments without much difficulties. A Mobile wallet get all information of customers debit or credit card through which it has been linked by which can add money to wallet.
- 2. Accessible any time : Mobile wallet can be accessed from anywhere and any time. Customers need Mobile phone and internet services to use mobile wallet from anywhere.
- 3. Security features : Mobile wallets provide safety and security for money stored in it. There is no tension of money stolen as were chances in physical wallets. Mobile wallets have robust security features to keep financial details safe and secure.
- 4. Various uses : Mobile wallets have many benefits. It is not used only for making bill payment but also used for fund transfer, shopping, recharges etc.,
- 5. Other uses : there are many offers and discounts for mobile wallet users which benefits them. Cashbacks and rewards provided for valuable customers.

# II. OBJECTIVES

- 1. To understand the important factors which influence consumer's adoption intention to adopt mobile banking.
- 2. To find out the challenges faced by the consumers during the usage of Mobile banking.
- 3. To find out the research gap in the study of mobile banking in India.

### III. RESEARCH METHODOLOGY

In this study, various articles related to Banking system & Mobile Banking from different jounals covering from the period from 2010 to 2021 have been reviewed.RBI reports, Websites of RBI and other Banks, Wikipedia etc. are the main sources for the study.Analysis



#### 1. RELATED WORK ON MOBILE BANKING

Mobile Banking is a medium through which customers can reach bank through their Mobile phone or personal digital assistant [PDA]. Market potentiality for mobile banking is vast mainly because of its anytime and anywhere functional ability. Mobile banking system has more advantage in those places where there is a lack of banking infrastructure and where poor people live and work. Mobile banking scheme M-PESA which was introduced in Kenya, has been very successful. Mobile Banking usage has been increasing very fast is due to the easy wat to operate and highly convenient way of banking. Online banking allows customers to check account balances, funds transfers and making payment of bills and access to many other banking products and services from anywhere and at any time (Ahmed Dermish, 2011).

The biggest advantage of mobile banking is convenience, whereas the main disadvantage is security. As antecedents of the benefit and cost of implementing the mobile banking system, a set of ability and risk factors were modelled using a structural equation model (SEM). Consumers' new technology adoption behaviour is a complex phenomenon, and understanding it may necessitate different models for different product situations(Yung-Cheng shen, 2010).

Many commercial banks in Malaysia have attempted to implement mobile banking systems in order to improve their operations and lower costs. Only bank branches are no longer sufficient to provide banking services to demanding customers in the banking industry. As a result, mobile banking is an alternative for providing banking services to bank customers in a convenient and fast manner(Norzaidi Mohd Daud, 2011).

Mobile commerce involves the delivery of various products and services through a wireless technology which enables them internet commerce activities. There is no restriction of time and place for online commerce activities. Mobile banking is a channel through which customers can interact with their banks through that mobile device, such as smart phones and there is a vast market potentiality for mobile banking due to it's always onfunctionality and online banking at any time and anywhere(Sindhu Singh, 2010).

Mobile banking performs various functions such as SMS alerts access, access to bank statement, checking balance, mini statement, mobile recharge, online shopping etc. through their smartphones. Banks want to increase the usage of mobile banking by types of customers therefore they are continuously upgrading technology. Mobile banking is si advatageous even customers in rural area can easily access to it whenever they want to perform banking transactions(Sankar, 2012).

In India the importance of online mobile banking are discussed mainly by considering seven important reasons they are - considering mobile device as essential than luxurious, Mobile devices are available at low price, it has multiple uses, usage cost is less, services are available even in Rural areas, Integration of various services applications within a device, more usage of mobile devices, improved economic conditions of the people(Dr. P. S. Aithal, 2015).

The Robust system for authentication and authorization of online transactions by using a trusted device to create a very small trusted secure computed base, which enables communication. This includes the computer which customer using to access the E- Banking website. The device forms a trusted path from the bank to cutomers. The Most of them target the security of Internet banking application is addressed at three levels. The first area is the security of client information which is sent from customer's smart phone, computers etc. to the web server. The second area is related to the security of the environment in which the internet banking server and client information database reside. Finally security measures are in a place so that to prevent an unauthorized users from attempting to log in through online banking section of the web system(Hudaib, 2014).

Mobile payments can be used as a complimentary for cash payment, cheques, credit cards and debit cards. It can also be used for making various bills payments through account based payment instruments like electronic funds transfer, Internet banking payments and direct debit(Vishal Goyal, Mobile Banking in India: Practices, Challenges and Security Issues, 2012).

Anywhere, anytime and number of times banking to all customers at a time is possible using mobile banking system which is ubiquitous banking. Usage of computer and information technology supports to make banking services ubiquitous. With the aid of 5G mobile technology banks are providing mobile banking services to customers are more authenticated and secured. This has increased confidence among customers to adopt mobile banking services in their daily life for all types banking transactions(Aithal P., 2021).

There was a significant association found among certain variables in the study. They are as follows: income per month and use of cash deposite machines, level of education and mobile banking,



level of education and use of deposite machines, gender and use of cash deposite machines, occupation and mobile banking and occupation and cah deposit machines(Dr. Chandana Goswami, 2018).

In the study it was observed that trust was found to be positively connected with customers' intention to do financial transactions. The perceived usefulness was found to be a strong predictor of customer's future behaviour. Although perceived ease of use has no much effect on intents to transact, but it does have a significant impact on usefulness. Percieved risk was strongly related to intentions to transact(Satadruti Chakraborty, 2018).

A new conceptual model has been developed on introduction of latest technological innovation to the society on the basis of focus group interaction and it was named as Theory of Customers Stimulation through Education and Traing (TCSET). The TCSET model was applied to test customers perspective towards adoption of mobile banking services(Dr. P. S. Aithal, 2015).

The study focused on the growing popularity of paperless transactions around the world. India is a booming market for online commerce, where online payments are accepted. The author has attempted to investigate all possible ways for obtaining information on the awareness of the new payment system and the usage of the ewallet system among India's youth. In his study, the author explains that the modern financial system has undergone many changes in terms of payment processing systems, from traditional banking to Debit cards, credit card, NEFT, RTGS etc., and the most recent mode of payment is the digital wallet. The author has found that the awareness and practical usage of digital wallet mode of payment are less. So it has to be increased by adding more value added services to it(Kalyani, 2016).

Many empirical investigations have found that trust is an important factor in reducing the perceived risk connected with technology and creating a favourable attitude toward it. Customers have faith in their banks and consider them as their custodians, which is another reason that trust has a large impact on adoption intention.

#### Mobile Banking and securirty issues

Wireless Application Protocol (WAP) is a micro-browser-specific protocol that allows mobile devices to connect to the Internet. WAP allows customers to access more Internet banking features. Encryption is used to protect data sent between the bank and its clients. However, encrypting data isn't enough to keep it safe. In the case of internet banking, it has been discovered that there are powerful computer systems and well-defined complicated encryption processes that ensure higher security in securing data between banks and customers(Vishal Goyal, Mobile Banking in India: Practices,Challenges and Security Issues, 2012).

In 2007 Eko was the first startup in India to offer mobile phone-based savings accounts and payment services to unbanked peopl. EKO mobile banking was considered as a boon for small savers and also those who depend on risky informal savings practices. It was regarded as a reliable replacement for a large number of unofficial savings accounts, as well as a bank account(Nandhi, 2012).

Transformation is posssible only if everything moves towards digital. Mobile Banking concept is slowly moving towards progress throught the world. But still Mobile banking is still growing stage in India. Hence there is a need for understanding various factors influencing in adoption of Mobile banking in India.

SI. NO.	<b>RESEARCH AREA</b>	FOCUS AREA	REFERENCES
1	Ease of use	The study presents the findings that	
		perceived use of ease plays a crucial role	(Satadruti Chakraborty,
		in facilitating in adoption of Mobile	2018)
		payment solution.	
2	Trust	Trust is a major factor which influence	(Ashish kumar, 2020)
		adoption of mobile banking. Trust	
		reduces perceived risk in association with	
		technology and creates positiveattitude.	
		Trust increase faith among customers	
		towards their banks and influence them	
		to adopt mobile banking.	
3	Ease of use	The mobile payment application must be	(k.Lohith Kumar, 2016)
		simple to use and require less or no	

 

 Table 1: The list of scholarly publications related to adoption of mobile banking with factors like system utility, Reliability, ease of use, secured access, social influence and more usage



		training for the customer. The customer	
		should also be able to customise the app	
		to his or her preferences.	
4	Ease of Use	Inference drawn from this study shows that perceived ease of use is an important factor in the adoption of mobile banking among customers. It was also found that when any new technology is easy to use	(Ashish kumar, 2020)
		then people will adopt it easily.	
5	Ease of use	According to the findings of the study, users are more concerned with performance, transaction ease, and convenience. The findings reveal that consumer's intentions to use mobile payments are not affected by social	(Aik Chiek, 2021)
6	Ease of use	influence. Author examines the factors which helps influencing the decision for adoption of Mobile Banking Apps. One of the important factor is ease of use. With less mental efforts makes mobile banking ease of use. Money transfers, bill payment and recharges are easy to perform .	(Sheena Chopra, 2021)
7	System Utility	Mobile banking users are more interested in checking balance, review mini statement, review credit card balances. Customers are only interested in getting some information through mobile banking.	(k.Lohith Kumar, 2016)
8	Trust	Indian customers adopt M-Commerce more if it is more trustable and reliable. Without trust factor customers are not ready to utilize online systems, many studies demonstrated the importance of trust factor which influence customer for using such systems.	(Bhatt, An Empirical Study of Factors Affecting Adoption of M- Commerce in India, 2020)
9	System Utility	Mobile banking adoption is more because of perceived usefulness in TAM. People find mobile banking has more useful and convenient way of banking, consumers perceive less time consuming, convenience, efficiency and effectiveness of conducting banking transactions through mobile banking.	(Norng Sokha, 2021)
10	Perceived ease of use	Davis(1989) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort" if customers believes mobile banking is easy to use then it will influence them to use further.	(D, 1989)
11	System utility	In this study, Utility benefit factor was tested through four variables. They are	(Amitabh Mishraa, 2021)



		save travelling expenses, save time, keep	
		record of finances, conveniently used anywhere and anytime with factors	
		loadings 0.873, 0.756, 0.787 and 0.693 respectively.	
12	Trust	The study revealed usage of Mobile banking among rural areas majority of customers have lack of trust in mobile banking usage. Even though customers in rural area are ware about mobile banking the trust issues are main reason of not utilizing M-banking services.	(Bhagyalakshmi Burra, 2021)
13	System utility	Mobile banking services has provided high utility to their customers. Variety of services are provided to their customers which made mobile banking much better than traditional banking.	(Prerna Sharma Bamoriya, MOBILE BANKING IN INDIA : BARRIERS IN ADOPTION AND SERVICE PREFERENCES, 2012)
14	Secured access	Study identified that Security threats are major factor which act as barrier in mobile banking usage.	(Prerna Sharma Bamoriya, MOBILE BANKING IN INDIA : BARRIERS IN ADOPTION AND SERVICE PREFERENCES, 2012)
15	Secured access	Study examined that customers will trust mobile banking, if banks build effective service provider strategies and give security against fraud and violations of privacy. This will become more prevalent and increase adoption of mobile banking. If already using mobile banking then those customers will continue usage of it.	(NITIN NAYAK, 2014)
16	Trust	Mobile banking involves risk and uncertainty, therefore banks required to build trust among customers so that they can adopt and start using mobile banking	(M, 2016)
17	Perceived ease of use	The study indicates perceived ease of use as significantly induced customers for adoption of mobile banking in northern part of Gujarat.	(Kiri, 2020)
18	Perceived ease of use	Study found that usage of Mobile banking services are much easier and convenient compared to traditional banking. Because in mobile banking transactions can be done faster and it is easy to maintain transaction activities.	(Prerna Sharma Bamoriya, 2012)
19	Ease of use	Author examines the factors that influence the decision for adoption of Mobile Banking Apps. Among those factors one of the important factor is ease of use. With less mental efforts makes mobile banking ease of use. Money	(Sheena Chopra, 2021)



		transfers, bill payment and recharges are easy to perform . Trust	
20	Trust	Indian customers adopt M-Commerce more if it is more trustable and reliable. Without trust factor customers are not ready to utilize online systems, many studies demonstrated the importance of trust factor which influence customer for using such systems.	(Bhatt, An Empirical Study of Factors Affecting Adoption of M- Commerce in India, 2020)
21	System Utility	Mobile banking adoption is more because of perceived usefulness in TAM. People find mobile banking has more useful and convenient way of banking, consumers perceive less time consuming, convenience, efficiency and effectiveness of conducting banking transactions through mobile banking.	(Norng Sokha, 2021)
22	Perceived ease of use	Davis(1989) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort" Customers will be more likely to use mobile banking if they perceive it is simple to use.	(D, 1989)
23	Perceived ease of use	According to study, customers in the northern portion of Gujarat were strongly influenced by perceived ease of use for adoption of mobile banking.	(Kiri, 2020)
24	Perceived ease of use	Study found that usage of Mobile banking services are much easier and convenient compared to traditional banking. where transactions can be done faster and easy in maintaining transaction activities.	(Prerna Sharma Bamoriya, 2012)
25	System utility	Mobile banking services has provided high utility to their customers. Variety of services are provided to their customers which made mobile banking much better than traditional banking.	(Prerna Sharma Bamoriya, MOBILE BANKING IN INDIA : BARRIERS IN ADOPTION AND SERVICE PREFERENCES, 2012)

In many studies Trust is considered as important factor, because if customers trust towards that bank is more than there will be faith towrds the banks and their decisions. This will also help to increase faith and reduce risk and fear among customers towards the intention of mobile banking adoption.

<b>Table 2:</b> the list of scholarly publications related to various challenges faced during mobile banking with factors
like perceived fear, security threats, transaction cost.

SI. NO.	<b>RESEARCH AREA</b>	FOCUS AREA	REFERENCES
1	Perceived Fear	During the study Urban customers have	(Dr. Chandana
		acknowledge the presence of perceived	Goswami, 2018)
		fear, high cost and risk involved during	
		transactions are all associated with	
		technology based banking service usage.	
2	Security Threats	The most recent internet banking	(Hudaib, 2014)

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		securities threats are Phishing, Spyware	
		and Adware, Viruses, Trojans,	
		Keyloggers.	
3	Security Threats	The mobile banking is a complex and	(Hudaib, 2014)
		dynamic. Security and perception of	
		security plays important role who will	
		dominate between technology or service	
		providers. Application providers have an	
		advantage in terms of innovation and	
		speed to market, but their success will be	
		hampered by a lack of focus on security	
		and privacy.	
4	Security threats	Banks should control various dangers in	(K.Madhu Babu, 2020)
		internet banking and ensure their clients	
		about updated security and protection	
		towards mobile banking which build	
		trust towards it.	
5	Security Threats	There are many threats associated with	(Ashish kumar, 2020)
		mobile banking among them biggest one	
		is security issues. Phishing, hacking, and	
		the leakage of personal information are	
-	D ' 1D'1	all risks associated with mobile banking.	(D 1 2012)
6	Perceived Risk	In the study examined role of perceived	(Ravindran, 2012)
		risk has serious influence on continuity of mobile banking usage and also	
		perceived service quality.	
7	Security Threats	Study identified that Security threats are	(Prerna Sharma
		major factor which act as barrier in	Bamoriya, MOBILE
		mobile banking usage.	BANKING IN INDIA :
			BARRIERS IN
			ADOPTION AND
			SERVICE
0			PREFERENCES, 2012)
8	Percieved Fear	Study examined that Customers will	(NITIN NAYAK, 2014)
		trust mobile banking if banks implement	
		strong service provider strategies and give security against fraud and privacy	
		violations. This will increase adoption of	
		mobile banking and if already using then	
		those customers will continue usage of	
		mobile banking.	
9	Trust issues	As Mobile banking entails a high level	
		of risk and uncertainty, banks must build	(M, 2016)
		customer's trust, so that they can adopt	
10		and start using mobile banking	
10	Security Threats	Adoption of mobile banking is mainly	(M, 2016)
		influenced with the issue of security and	
		privacy. Study identified that lack of	
		privacy and security are main obstacles to the adoption of mobile banking.	
11	Security Threats	The study points out that Finnish	(Dr. P. S. Aithal, 2015)
11	Security Initals	Internet banking customers are not	(D1.1.5, Amai, 2013)
		paying much attention towards security	
	1	related issues. both in developed and	1



12	Security Threats	developing countries consumers are perception that risk of fraud is main reason of the secured online transactions. Security is most important factor which influence customers to adopt new services. Study finds that customers prefer more of ATM usage for performing certain transactions compared to Mobile banking. Security issues is the main reason for not in much usage of Mobile banking.	(BHATT, 2016)

# IV. FINDINGS OR DISCUSSIONS :

According to study Banks in Malaysia should increase banking user awareness by emphasising the necessity of ensuring the privacy and security of their customer's banking information and transactions. As a result, lowering their fear of danger in terms of the security and privacy of their financial data and transactions will increase their intention to use mobile banking(Vishal Goyal, Mobile Banking in India: Practices, Challenges and Security Issues, 2012).

According to study the performance expectancy, convenience of usage and effort expectancy are important factors which influence mobile payment usage intention among Malaysian customers. They are much influenced in using mobile banking only if they find it simple to use on their own, convenient and trusted services rather on others opinion. The empirical findings of the study shows that influence of trust factor on mobile payment usage intention is less than performance and ease of use factors among Malaysian users(Tang kin leong, 2021).

The study examined number of elements that influence the decision to use Mobile banking Apps. Study found that in the cities of Chandigarh and Mohali of Punjab region, major users of mobile banking were students, unmarried customers and female customers. The adoption intention of mobile banking users were influenced by simplicity, time effectiveness, social influence and usefulness. Irrespective of type of banks that is public banks or private banks(sheena chopra, 2021).

Study conducted in Cambodia reveals that mobile banking is perceived to be more useful for customers as transactions can be done easily on their smartphones with more efficiency. Mobile banking users in Cambodia have agreed that mobile banking application are easy to manage finance and more suitable for performing their daily activities. Mobile banking is Ubiquitous. This has driven consumers attitude to identify mobile banking is more beneficial and in modern days it is required(Norng Sokha, 2021).

# V. CONCLUSION AND FUTURE RESEARCH

The study of purpose to observed the willingness of consumers to adopt and accesses of mobile wallet and how the security and service feature approaches of mobile wallet application vary among those users adopting mobile wallet application. This study motivated on whether security, trust, risk, challenges will Influence the user's decision in accepting mobile wallet, and how these four variables will affect mobile wallet service structures and security devices provided. Consequently, protection of digital transaction and safety and secure Technologies were associated with an analysis of whether they changed in providing mobile wallet adoption feature and trust, security methods(P.Sarika, 2020).

Banks has to adopt security measures to promote mobile banking among customers so they can build trust among them. Banks has to popularise usage of mobile banking with offering online demos and guidelines of usage so customers are motivated to adopt it(Kumar et al., 2020).

In the study found that the Indian customers are ready to adopt Mobile Banking more if it seems more trustable and reliable. Without a decent level of trust, customers would not be completely spurred to utilize these systems. Numerous studies have demonstrated the significance of trust, which enhances the level of motivation of the users for using such new technology (Sonia Bhatt, 2020).

In India mobile banking has a bright future due to its population, Cheap internet providers, Government initiative towards digitalization and also recent COVID-19 pandemic situation has forced customers more interest towards mobile banking. Banks should take necessary steps to create



more awareness about mobile banking by providing demos to customers. Providing step by step guidance makes more easier to operate mobile banking.

In all sectors digitalization as been adopted. Even banking sector has gone for digitalization to provide services to their customers. But there are certain challengesfaced by customers in mobile banking adoption. Bank account and other personal details are to be linked to adopt mobile banking. This is threat for customers where criminals can misuse those information. fear of leakage of personal information of customers which may lead to fraud. But once digitalization has been introduced and we are all ahead to use it we cannot take it back or move backwards. Therefore with proper security system and with strict rules and regulations these security problems can be solved or reduced. Customers should be assured with appropriate security measures at each step. Then only customers adopt and increase usage of mobile banking is possible.

Studies shows diversity in adoption of mobile banking in different countries. In India studies are inadequate in Mobile Banking. Customers have restricted in mobile banking usage for conducting certain transactionsonly not in usage for all types of banking activities. Therefore more studies towards Mobile Banking has to be conducted to find out the reasons for their restrictive usage of mobile banking. So banks can take necessary measures required to increase in usage of mobile banking by all types of customers and for all types of banking transactions. So that we can see India going completely digitalised in banking sector.

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