



## Comparative Study on Attitude towards Mobile Wallets and Mobile Banking

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### ABSTRACT

In today's digital world and rise of COVID-19, people prefer contactless payments. To find a solution to this problem, we have methods and technologies like m-banking or m-wallets. This study shows how perspective of a consumer can be affected and how m-banking or m-wallet is overtaking the ancient trend. Bill payments, online transactions and even online shopping facilities. M Banking or mobile banking is the use of personal device to conduct transactions. It is a service that is usually provided by the bank or financial institution. It enables customers to perform tasks for which they needed to visit bank, at home itself. Like, paying bills, checking account balance, receiving information in case of a fraud, etc. m banking could be performed either on the app provided by the bank or at the website of a bank. Few of the biggest m banking providing banks are, HDFC provides its customers the feature to lock your app by face recognition system, State Bank of India provides YONO which is an integrated digital banking platform, JK bank has its own app called m-pay.

Comparatively, m-wallets are a form of service that enables us to transact with people who are able to acquire and transfer funds via mobile devices. Like a traditional wallet, it can keep track of your credit and bank card information digitally. Mobile devices like smartphones and tablets can gain access to it by downloading and using a special software. You can avoid always having to carry currency or use a credit card by using this digital technology to make immediate internet utility payments.

As a result of the time and effort they save, as well as the resulting boost to productivity, both of these services are now considered indispensable. Near Field contact (NFC) is another crucial technology used in m-commerce, as it allows for short-range contact between devices that are interoperable with each other. Similar to Bluetooth and Wi-Fi, NFC uses radio signals to transfer data over relatively small distances. NFC is built on top of an earlier technology called RFID (Radio-frequency identity) that transmitted data via electromagnetic resonance. Explain the key distinctions between Bluetooth and other similar wireless systems.

It has been thoroughly researched and implemented in the area of practice to see how the tri-component model influences customer mindset and choice. It has three parts, as the name implies. There's the mental, emotional, and behavioral facets to consider. If you want to know what customers want and need, the tri-component model is a great tool to use. Cognitive components refer to persons beliefs, knowledge and thoughts, in other words it is a person's mental image of an object. These beliefs are formed over the period of time, with persons experience and factual information. It is the initial phase of formation of attitude towards the brand or object. Second component is, affective component is associated with persons feelings and emotions towards a specific object. It describes how a person feels towards particular person, object or thing. It refers to the feelings of happiness, sadness, anger and frustration. It usually means that the feelings towards a brand or object is either in favour or against the brand, if a person is in favour of the brand or object, it usually means that, a person is likely to reach the third component and purchase the product or use the service provided. Third component is the behavioural component with refers to persons actions towards a situation, object or thing. It is the active element of tri-component model. It will either end up in 0 customer buying or denying any chance towards buying.

**Keywords:** m-banking, m-wallet, online transaction, tri-component model, NFC.

### 1. Introduction

Internet banking was introduced in mid 1990s, it was a process which enabled the access of financial accounts using a computer and internet connection. Although Internet banking was promising, it had its drawbacks. One of the biggest issues was mobility, staying connected to internet 24/7 and accessing it from remote places was almost impossible.

Hence the solution, mobile banking. Almost everybody today has a cellphone and as the name suggest, mobility. Because of advancements in mobile technology, banks are now able to offer their services to customers wherever they may be. M-wallet is a virtual wallet made possible by modern technology; it may be filled with funds from a checking account, a credit card, or a debit card, and then used to make purchases over the Internet. Mobile devices such as smartphones and tablets can be used as payment methods. You can avoid carrying around physical currency by using an electronic wallet software on your mobile device.

Tri Component Model of attitude toward M- Payment.

1. The cognitive component towards m-payments started when first transaction was made in 2000, which eventually led people to the introduction of digital world of m-commerce, people developed and understood the knowledge of contactless payment.
2. The feelings have been positive since the very beginning as it was easy, secure and time saving. The payment which would usually take a minute or two, started happening in few seconds, this made people positive toward the m- payments.
3. The actions taken are referred to as the behavioral components, people started adopting the new and improved versions of wireless payments. With the experience gaining every day, people have put their trust in m-payments. As they realized it was easy and the main factor, i.e. security was there.

How does **m-banking** work?

There are two types of services, Pull Transaction and Push Transaction.

When a customer uses their mobile device to seek information or services from their bank, the transaction is considered a "pull" transaction. A draw transaction would be something like checking your account amount, while a push transaction would be the bank sending you information according to some guidelines. One common use of push transactions is the notification of a low amount. In this example, client has instructed bank to send a notification whenever their account value falls below \$100.

#### TECHNOLOGY

- Interactive Voice Response (IVR): This is how it functions: When advertising to the public, banks typically use a specific collection of figures. Mobile IVR numbers are dialed by customers. They hear a prerecorded computerized greeting, then are presented with a list of choices. The customer chooses a course of action by dialing the appropriate numeric number. The required data is delivered aloud by a text-to-speech software application.
- SMS: SMS banking and smartphone banking are the same thing. This is because SMS banking relies on texting, quintessential method of communicating via mobile device. Sending and receiving SMS messages are both possible. In draw mode, bank initiates contact with a mobile user via a one-way text message to inform them of account status or market new service. When using push mode, a mobile user transmits a text message to a designated number along with a predetermined request code. Bank then sends back an SMS with requested details.
- Wireless Application Protocol (WAP): the technology architecture that makes accessing Internet pages possible from a mobile phone. Because it includes the concepts of browsers, servers, URLs and gateways, provides a user experience that echoes Internet banking conducted on a home computer. This is an attractive feature to many banks, who also appreciate the fact that customers don't have to download any proprietary software to enjoy robust access to a full line of services and transactions.
- Mobile Applications: Banks are now allowing smartphone users to access their services via a free app. These mobile apps provide a trustworthy medium for users to engage in elaborate financial dealings. They permit financial institutions to personalize user experience and market it in their own image.

How does **m-wallet** work?

Mobile wallets make it difficult for hackers to engage in deceptive activities with the information they keep because information is protected. Mobile accounts are more secure than traditional credit and debit cards because they use encryption to prevent unauthorized access. Near-field communication (NFC) is used when a consumer pays with a smartphone software while physically present in shop. If payment device supports NFC, & NFC reader can read a QR code, key, or other form of personal identity to complete transaction. To initiate the desired response, user simply touches or gestures their NFC-enabled device in front of the retailer's POS machine.

M-wallet is simple and safe means of making payments It is quick and effective, all you need is a mobile device with active internet connection. With few m-wallet apps allowing timely payments, basically remembering and paying for things automatically. Few of the most commonly used m-wallets in India are Paytm, MobiKwik, Gpay, PhonePay.

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## 2. Literature Review

1. The perception of consumers about the new technology Digital Wallet. Also study the factors that influence and shape adoption policy of consumers along with the risks and challenges faced by consumers in the use of digital wallet. A quantitative method ANOVA was used on 150 smartphone users who also use m-wallet, in order to get statistic result. The result being m-wallets are quickly becoming main stream, with shoppers adopting more modern methods that are quick and easy. (Dr. Hem Shweta Rathore 2016)
2. The state of mobile payment industry in relation to the mobile customer. According to research, mobile wallet adoption among Finns is just getting started, & industry's ultimate success will rely upon promotional efforts of mobile wallet providers & country's economic planners. (Ngoc Doan 2014)
3. Businesses in banking, retail, hospitality, etc. sectors are using wallet money & wireless payment instruments such as contactless payments & remote payment in C2B & C2C areas because of its convenience, security, as well as simplicity in managing application.

4. Adoption of m-payments could be affected by a variety of technological, societal, and individual variables. Simultaneously, numerous information system (IS) theories and models have been built to investigate the variables that influence spread of innovative technologies. A few examples of such theories are F.D. Davis's 1998 TAM & V.Venkatesh's 2003 UTAUT model)
5. In order to better account for M-internet situation, Je and Myeong-Cheol (2005) investigated mobile internet adoption in Korea by creating an expanded form of TAM. Attitude was determined to be the most important factor, followed by the apparent fun of M-Internet and its utility. In addition, they found that one's impression of fun positively influenced their mood and purpose, while one's impression of high prices negatively influenced both. Nor Shahriza et al. (2006) looked into the prevalence of mobile phone use among Malaysian students and discovered students had a favorable impression of utility of wireless hand services within the context of libraries and other information resources.
6. Alkhunaizan and Love (2013) in their research analysed effect of demographical factors influence on mobile commerce usage in Saudi Arabia. Findings of the study indicated that age affect statistically significant on the actual usage while gender and education level do not have impact on the mobile commerce actual usage. In contrast, Park et al. (2007) found moderating factors such as gender and education level to have a significant influence but interestingly, internet usage experience found to have no significant effect on m-commerce adoption.

### 3. Objectives of the study

- To find out more about the awareness of mobile banking transactions & internet banking
- To find out more about the purpose
- To identify relation between demographic factor like age & income and choice of internet banking
- To identify relation between demographic factor like age & income and choice of mobile banking among customer.
- To find if people prefer to use m-wallet or m-banking and why?

### 4. Research Gap

- The research gap of M wallets vs M banking is the lack of understanding of the differences between the two. There is no need to understand the advantage and disadvantage of each, as well as security implications of each.
- Additionally, there is need to understand how M wallets and M banking can be used in combination to provide a more secure and more efficient payment system.
- Furthermore, research is needed to understand how M wallets and M banking can be used to facilitate cross border payments and transaction.
- The M banking is much heavily used when it comes to cross borders, while M wallet not.

### 5. Outcomes

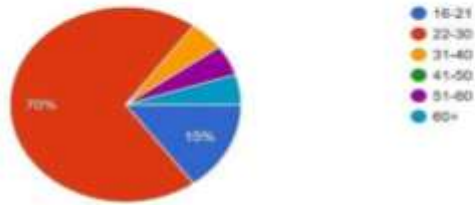
Primary data was collected and from questioners on google forms, it was sent to over 100 people and responses are still coming. Two different set of questions regarding m-banking and m-wallet was framed.

#### M-Banking

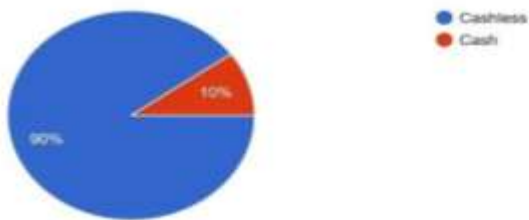
Gender  
23 responses



What is your age group?  
20 responses



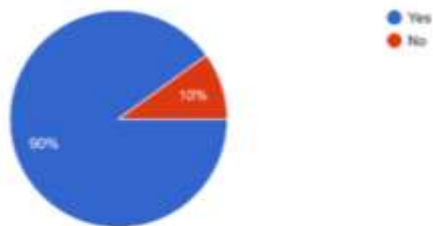
Which mode of transaction do you often use?  
20 responses



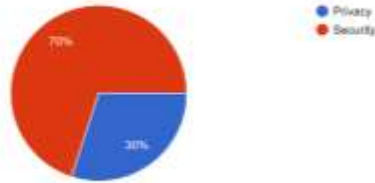
Do you feel secure while using these apps?  
20 responses



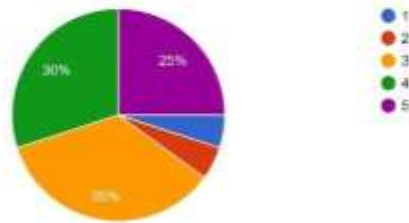
Do you find privacy while using these apps?  
20 responses



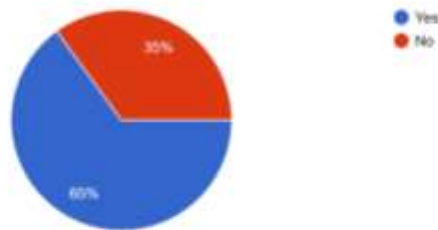
What is more important to you Privacy or Security?  
20 responses



Do you think metrics to measure "how secure" a specific app is rated be of any help or value to you? Please rate on the 5-point scale, where 5 is dec...,3 is just a factor and 1 is definitely not a factor  
20 responses



Is there any time you had a bad experience with any one of the apps?  
20 responses

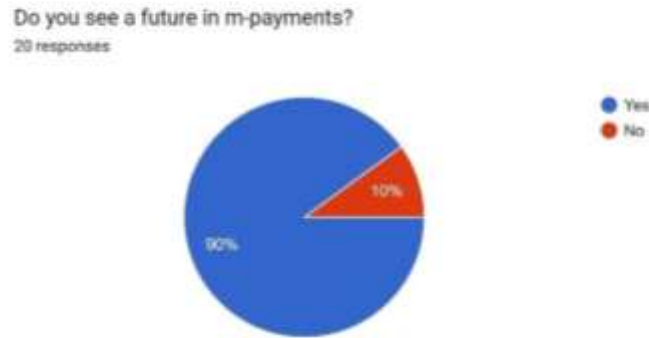
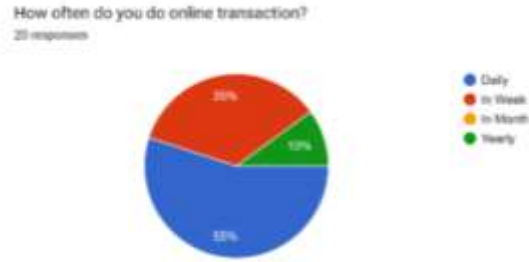


If yes, did you have anyone to report an issue to?  
20 responses



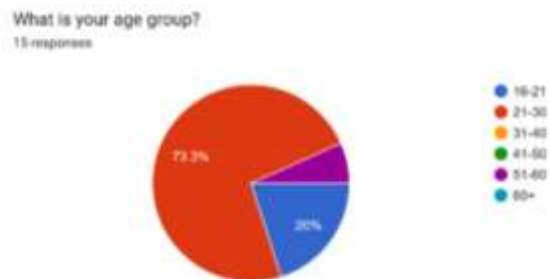
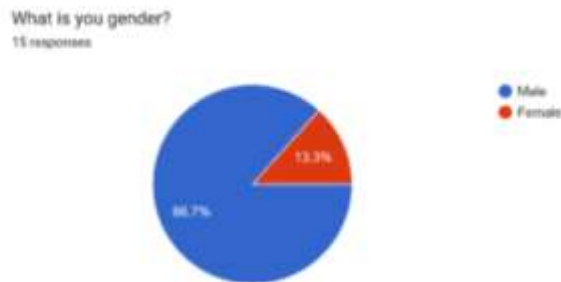
How do you find using these apps?  
20 responses





From the responses, it can be observed, although people find m-banking convenient, it is still preferred to use m-wallet instead of m-banking. With responses of Paytm, Gpay, still in the form of m-banking clearly shows people find m-wallets more convenient than m-banking.

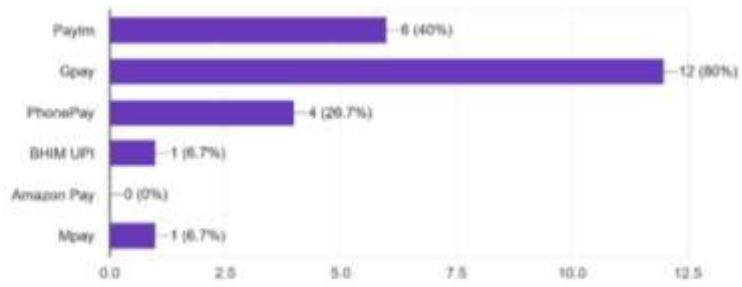
Here is the questionnaire for m-wallets.



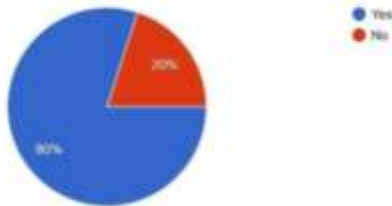
Which mode of transaction do you often use?  
15 responses



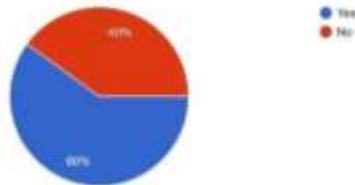
Which of the following apps do often use?  
15 responses



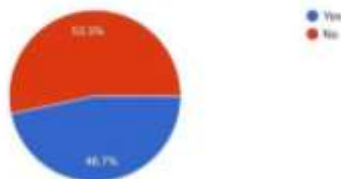
Do you get rewards for using the app?  
15 responses



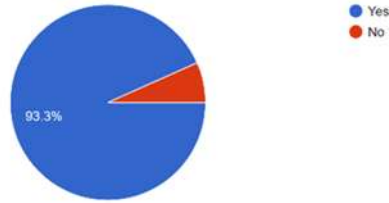
If yes do you find those rewards relevant?  
15 responses



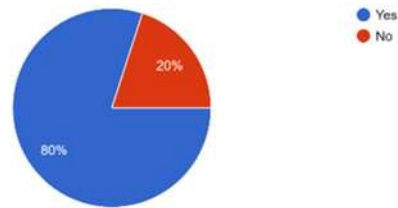
Do you get any discounts for using these apps?  
15 responses



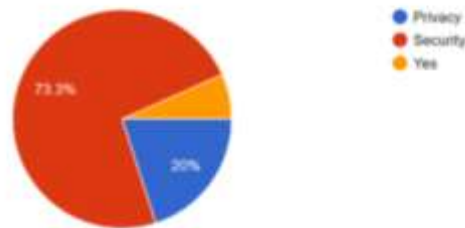
Do you feel secure while using these apps?  
15 responses



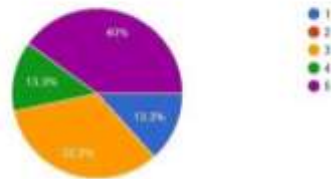
Do you find privacy while using these apps?  
15 responses



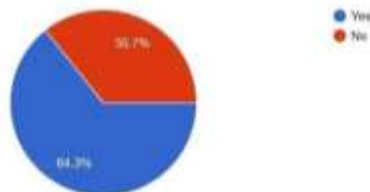
What is more important to you Privacy or Security?  
15 responses



Do you think metrics to measure "how secure" a specific app is rated be of any help or value to you? Please rate on the 5-point scale, where 5 is dec...3 is just a factor and 1 is definitely not a factor  
15 responses



Is there any time you had a bad experience with anyone of these apps?  
14 responses

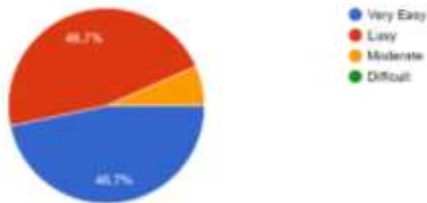




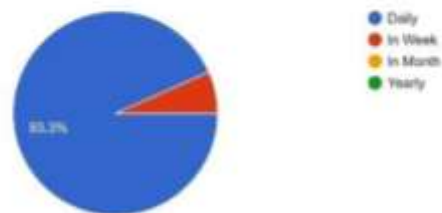
If yes, did you have anyone to report an issue to?  
15 responses



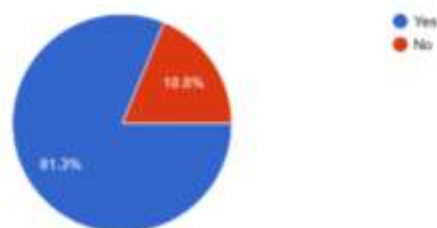
How do you find using these apps?  
15 responses



How often do you use these apps?  
15 responses



Do you see a future in m-wallets?  
16 responses



- It is clearly seen from the responses that people prefer m-wallet apps, over m-banking, as they find it easier to use, more secure and convenient.
- Also, the rewards and discounts provided are more relevant.
- When you find m-wallet app in an m-banking questionnaire, it is understood that m-wallet is gaining more popularity.
- Other than that, the survey will keep on updating, with new questioners, every week, to see the growth of m-commerce business in India.

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