SYNOPSIS OF THE THESIS

Adoption and Usage of Mobile Payment Systems by Consumers and Merchants

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By

Sonal

UID No.15JU11400013

Under the Supervision of

Research Co- Supervisor	Research Supervisor
Dr. Kirti Ranjan Swain	**Dr. Vishal Kumar**
IIPM, Rourkela,	**IUJ, Ranchi**
Odisha	**Jharkhand**

ICFAI
UNIVERSITY
JHARKHAND

ICFAI UNIVERSITY JHARKHAND

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1. Introduction

Indian payment landscape has witnessed massive changes in the recent past due to several factors such as increase Smartphone penetration, customers and merchants crave for quicker payment settlement. Mobile phones have been through a transition phase from basic mobiles to Smartphones. The growth of this market has boomed because of the constant technology upgradation. Telecom players have tried hard to get everyone addicted to smartphone by providing cheap internet services and have compelled new users to adopt technology by giving many lucrative offers. The use of Smartphone have shown major shift towards digital payment than mere social networking. Increase in e-commerce and m-commerce is one of the major drivers of payment through mobile. We have further witnessed a surge in mobile payment industry after demonetization.

Government is working towards ways to incentivize cashless transactions and discourage cash payments, in order to curb black money and corruption in India. The government's initiatives such as JAM Trinity (Jan Dhan, AADHAR & Mobile) would also facilitate this transformation, as less financial inclusion and lack of digital knowledge are major hurdles in cashless economy. JDY has witnessed a massive success with an opening of 25.68 crore bank accounts which is really commendable. Also National Digital Literacy Mission ('NDLM') has been initiated with the vision to empower at least one person per household with crucial digital literacy skills by 2020. The National Digital Literacy Mission is a dynamic and integrated platform of digital literacy awareness, education and capacity programs that will help rural communities fully participate in the global digital economy. Also government has launched nationwide toll free no, 24 hour tv channel, made several tutorial videos etc to promote and educate people towards cashless modes of transaction. The central government has also promoted cashless transactions through UPI, USSD, AEPS and Rupay Card.

The mode of payment evolved from barter system in ancient times, to coins in medieval period, to cash in modern period and now digital mode of payment. Transition from one phase to another was a long and slow process, however, transition from hard cash to digital was rather fast. The long and tedious systems such as sending money by money order and cheques, standing in queues for payments of bills, booking for entertainments and transportation etc, has slowly but gradually driven people of India towards adopting digital mode of payments. Digital payment

has made life easy for people and has created a boundary less business scenario. This system is faster, safer and easier for people to use, thus attracting masses towards itself. Even digital payment is going a shift from plastic cards to payment through few taps on a smartphone. But even now India is cash driven economy compared to other developed economies. India still is very far away from dream of being complete cashless economy. Still lot of works needs to be done like to include people living in rural areas, by creating adequate infrastructures, financial inclusion and increasing digital literacy among masses. So, there is still a long way for India to go.

2. Research Relevance and Motivation

This topic has been chosen to study and analyze the factors affecting the usage of mobile payment in Ranchi, and also, to compare it with level of adoption with that of people in Kolkata. Our country is witnessing an exponential growth in the area of digital payment in recent times. After demonetization and with ever-increasing internet and mobile penetration, India is all set to witness a massive surge in the adoption of mobile payments in the coming days.

India, with over 900 million mobile users, ranks second in the world, out of which 220 million own smart phones. Rapid growth of m-commerce industry has developed a trust and sense of security in digital payments, with competition among telecom operators in providing high speed 3G/4G internet at low rate to the consumers, has helped in booming of mobile payments. Even Government is taking initiatives by means of videos and advertising instructions for using digital payments, making more and more people literate about digital payments. Government has launched a free hotline to enquire about digital payments in case of any difficulties are faced by the person. The government is mulling over to bringing insurance in the mobile wallet similar to debit and credit card segment. Mobile wallet providers are emerging as mini banking institutions and it won't be surprising if they all get banking license in the future. Growth of mobile payment is important consideration for the government's agenda of financial inclusion. Hence, this study becomes a necessity, as it will help government agencies to take necessary steps so that more and more people can join this revolution..

Post demonetization, Ranchi has witnessed a massive change in its payment system. The city has observed that mobile wallet was being used by merchants of every segment from roadside paani puri walas to mall shop owners. Country's first India Post Payment Bank has been opened at

Ranchi, Jharkhand and Raipur, Chhattisgarh. As we also know that, Ranchi city has been selected as 13 fast track cities, which will be developed as smart city along with 20 cities which were selected in first phase. With high speed internet becoming more and more affordable, the digital payment adoption will increase in tier II cities. These factors seem to be very interesting to do research on usage and adoption of mobile payment system in this city and comparing the level of awareness and usage of mobile payment system with a tier I city Kolkata.

3. Review of Literature

Intensive research has been done in consumer technology adoption area covering different domains like internet banking (Malhotra & Singh, 2010), m-banking (Dash, Bhushan and Samal, 2014; Tam and Oliveira, 2017), m-commerce (Singh & Islam, 2016), e-payments (Roy & Sinha 2014), m-wallets (Sunny and George,2018; Routray et al., 2019).

Usefulness and ease of use was found to be of the most significant factors in technology adoption research by various researchers like Mbogo (2010); Padashetty & Kishore (2013); Ahrenstedt et al (2015); Kabata (2015); Lesa & Tembo (2016); Pal et al. (2019. Researchers around the globe such as Ahrenstedt et al (2015); Kabata (2015); Lesa & Tembo (2016); Nguyen et al (2016) have studied the influence of social influence on adoption of mobile payments.

Various researchers such as Venkatesh et al. (2003) ;Dahlberg and Oorni (2007) ;Alafeef et al. (2011) ; Chan and Chong (2013) ; Kesh 2017 etc have found that demographic variables have important role on adoption intention and the variables affecting the technology adoption decision are age, gender, education, income, occupation, ethnicity.
Some of the important research reviewed is listed in the table below:

Sl. No.	Literature Reviewed (Title of the paper, article etc. along with the source, i.e. the name of	Literature Type (Research paper, Review paper, Chapter of the book etc.)	Author/s	Gist of Points Gained	Linkage to this Research

	the Journal, magazine, Book etc.)				
1	Mobile Payment: A Journey Through Existing Procedures And Standardization Initiatives	IEEE Communications Surveys & Tutorials	Stamatis Karnouskos & Fraunhofer Fokus (2004)	Concept of mobile payments, players of mobile payment ecosystem, characteristics , mobile payment procedures are dealt in this research	This research paper is of very importance as this provides the basic knowledge about mobile payment system.
2	A Comparative Study Of Smartphone User's Perception And Preference Towards Mobile Payment Methods In The U.S. And Korea	The Journal of Applied Business Research	Seungjae Shin, Won-Jun Lee and Dustin Odom (2014)	Two technically advanced countres Korea and U S has been compared for mobile payments adoption where adoption was seen more in Korea in comparison to US	This research helped in comparative study among Ranchi and Kolkata
3	Study of Mobile Payment Services in India	CMI International Conference, Aalborg University Copenhagen	Gurpreet Singh Sambhy (2014)	Study of various m-payments available in the Indian market.	This research helped in understanding the current m-payment system of India.
4	Trends in mobile payments research: A literature review	Journal of Innovation Management	Denis Dennehy and David Sammon (2015)	This paper reviewed literature from 1999 to august 2014 and identified the key research themes	This helped me work on the gaps to avoid repetitive work

				and methodologies used for m-payment research studies.	
5	The economics of mobile payments: Understanding stakeholder issues for an emerging financial technology application	Electronic Commerce Research and Applications	Yoris A. Au and Robert J. Kauffman (2006)	This research discusses the mobile payment system, theoretical background and gave a framework of m-payment ecosystem. They also analysed the issues of various stakeholders involved.	This helped to understand basics of mobile payment system.
6	A Compendious Study of Online Payment Systems: Past Developments, Present Impact, and Future Considerations	International Journal of Advanced Computer Science and Applications	Burhan UI Islam Khan, Rashidah F Olanrewaju, Asifa mehraj Baba, Adil Ahmad Langoo and Shahul Assad (2017)	Discusses the current scenario of various electronic payments worldwide.	The informations of this research paper helped in understanding the various e-payments and adoption factors
7	An Empirical investigation on the Relationship Between Technological Infrastructure and Government Regulations on Effective Operations of m-	International Journal of Arts and Commerce	Mberia Paul Muthure, Dr.Gorretty A Ofafa, Muathe Stephen M A. and Ms. Jedidah Muli	Poor Technological infrastructure and excessive taxes paid by m-payment agents to to government is major hinderance in developing country like	Role of technology and government in use of m-payment

	Payment in Kenya		(2013)	Kenya for m-payments	
8	Biometric Electronic Wallet for Digital Currency	International Journal of Research in Engineering and Technology	Suhas M S, Abhilash C B, Vikas K C and Amit Pareek (2014)	There is need for biometric electronic wallet to store and transfer digital currencies for higher security.	This research helped me understand the future possibilities of digital wallets and how a safe digital wallet could be given to clients.
9	A Study on the Scope of the Virtual Wallets in Indian Market – Issues and Challenges	International Journal of Multifaceted And Multilingual Studies	Mr. Sai Kalyan Kumar Sarvepalli and Dr. N. R. Mohan Prakash (2016)	The researcher has proposed a model helpful for the virtual wallet companies- EARN Model, E – Empathize, A – Adoption, R – Reiterate, N – Nexus. This research also discusses the advantages, disadvantages, issues and challenges of Indian virtual market.	This helped me in understanding about virtual wallet in Indian context.
10	Mobile payment services adoption across time: An empirical study of the effects of behavioral beliefs, social influences, and personal traits	Computers in Human Behavior	Shuiqing Yang, Yaobin Lu, Sumeet Gupta, Yuzhi Cao and Rui Zhang	Factors affecting pre-adoption and post adoption including behavioral beliefs, social influences, and personal Traits.	This research helped me in finding the factors for my research

			(2012)		
11	Influence of age in the adoption of new mobile payment systems	Computers in Human Behavior	Francisco Liebana-Cabanillas, Francisco Munoz-Leiva and Juan Sanchez-Fernandez (2015)	Age of users has been studied as the moderating variable with other variables.	This research helped in finding impact of age on mobile payment adoption
12	Determinants of behavioral intention to use mobile wallets – a conceptual model	Journal of Management	Prajod Sunny and Ajimon George (2018)	Adoption of mobile wallet is studied where demonetization has been studied as one of the independent variables.	This research helped in finding impact of government on mobile payment adoption

4. Research Gap

It has been observed that mobile payment has been an interesting topic for researchers in the last two decades globally. Much research has been done on the adoption of mobile payment but not much has been done covering the merchant adoption of the same. If we talk about India, even here we have seen researchers' inclination towards this topic in past few years. Mostly research has been done in tier I cities, and comparative study with tier II has hardly been done. So this research aims at cross city study between two different tier cities. Further this research would cover dual perspective that is, consumer as well as the merchants. On the basis of literature reviewed following are the areas where gaps are found -

- There has not been much study covering the merchant adoption of mobile payment system. Therefore, this study tries to cover merchant aspect too.

- Maximum researchers in the past, have concentrated on the adoption intension not focusing on the actual usage of mobile payment system by merchants and consumers. Therefore, this research study primarily aims at studying the actual usage level rather than the adoption intension.

- Very little importance has been given to tier II cities for this topic. Here in India where we see that small village like Adodara is going cashless, alarming us that its high time we focus on tier II cities and towns not just keeping our research confined to metro cities. Therefore this study considers tier II city like Ranchi for this study.

5. Research Objectives

In order to understand the main research question, the researcher will conduct fundamental research which will address the following objectives.

The objective of research is to understand about the consumers and merchants adoption status of mobile payments within Ranchi city.

- To study the awareness, adoption and usage of consumer and merchants about mobile payment system

- To find the influence of demographic factors on the awareness and use of mobile payment system.

- To study the impact of other factors that influence consumers and merchants to continue the use of mobile payment system.

- To find out the obstacles faced by merchants and consumers while using mobile payments

6. Research Hypothesis

Research hypothesis is predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent variables.

Following null hypotheses were formulated and tested to meet above objectives:

Consumer Hypotheses

$H_0$1a-There is no association between the awareness about the mobile payment system and city of the consumer

$H_0$1b-There is no association between the use of mobile payment system and city of the consumer

$H_0$1c-There is no significant difference in the continued use of mobile payment system and city of the consumer

$H_0$2a-There is no association between the awareness about the mobile payment system and gender of the consumer

$H_0$2b-There is no association between the use of mobile payment system and gender of the consumer

$H_0$2c-There is no significant difference in the continued use of mobile payment system and gender of the consumer

$H_0$3a-There is no association between the awareness about the mobile payment system and age of the consumer.

$H_0$3b-There is no association between the use of mobile payment system and age of the consumer.

$H_0$3c-There is no significant difference in the continued use of mobile payment system and age of the consumer.

$H_0$4a-There is no association between the awareness about the mobile payment system and educational qualification of the consumer.

$H_0$4b-There is no association between the use of mobile payment system and educational qualification of the consumer.

$H_0$4c-There is no significant difference in the continued use of mobile payment system and educational qualification of the consumer.

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H_05a-There is no association between the awareness about the mobile payment system and occupation of the consumer.

H_05b-There is no association between the use of mobile payment system and occupation of the consumer.

H_05c-There is no significant difference in the continued use of mobile payment system and occupation of the consumer.

H_06a-There is no association between the awareness about the mobile payment system and income of the consumer.

H_06b-There is no association between the use of mobile payment system and income of the consumer.

H_06c-There is no significant difference in the continued use of mobile payment system and income of the consumer.

H_07a-There is no association between the awareness about the mobile payment system and personal innovativeness of the consumer.

H_07b-There is no association between the use of mobile payment system and personal innovativeness of the consumer.

H_07c-There is no significant difference in the continued use of mobile payment system and personal innovativeness of the consumer.

H_08- Usefulness will not significantly influence the continued use of mobile payment system by the consumer.

H_09-Ease of Use will not significantly influence the continued use of mobile payment system by the consumer.

H_010- Social Influence will not significantly influence the continued use of mobile payment system by the consumer.

H_011- Government Initiatives will not significantly influence the continued use of mobile payment system by the consumer.

H_012- Application Provider will not significantly influence the continued use of mobile payment system by the consumer.

Merchant Hypotheses

H_013a-There is no association between the awareness about the mobile payment system and city of the merchant.

H_013b-There is no association between the use of mobile payment system and city of the merchant.

H_013c-There is no significant difference in the continued use of mobile payment system and city of the merchant.

H_014a-There is no association between the awareness about the mobile payment system and gender of the merchant.

H_014b-There is no association between the use of mobile payment system and gender of the merchant.

H_014c-There is no significant difference in the continued use of mobile payment system and gender of the merchant.

H_015a- There is no association between the awareness about the mobile payment system and age of the merchant.

H_015b-There is no association between the use of mobile payment system and age of the merchant.

H_015c-There is no significant difference in the continued use of mobile payment system and age of the merchant.

H_016-There is no association between the awareness about the mobile payment system and educational qualification of the merchant.

H_016b-There is no association between the use of mobile payment system and educational qualification of the merchant.

H_016c-There is no significant difference in the continued use of mobile payment system and educational qualification of the merchant.

H_017a-There is no association between the awareness about the mobile payment system and personal innovativeness of the merchant.

$H_0$17b-There is no association between the use of mobile payment system and personal innovativeness of the merchant.

$H_0$17c-There is no significant difference in the continued use of mobile payment system and personal innovativeness of the merchant.

$H_0$18a-There is no association between the awareness about the mobile payment system and technology inclination of the merchant.

$H_0$18b-There is no association between the use of mobile payment system and technology inclination of the merchant.

$H_0$18c-There is no significant difference in the continued use of mobile payment system and technology inclination of the merchant.

$H_0$19-Usability will not significantly influence the continued use of mobile payment system by the merchant.

$H_0$20-Consumer influence will not significantly influence the continued use of mobile payment system by the merchant.

$H_0$21-Government initiatives will not significantly influence the continued use of mobile payment system by the merchant.

$H_0$22-Application provider will not significantly influence the continued use of mobile payment system by the merchant.

7. Scope of the Research

The present study will throw light on the various factors that influences the use of mobile payment by both consumer and merchant. A comparative study between capitals of two different states: West Bengal and Jharkhand is done to find out the level of awareness and usage of Mobile Payment System among both the cities.

8. Research Methodology

The present study is based on descriptive research as the study has applied quantitative research approach. Survey method using structured questionnaire has been selected as the quantitative research instrument to obtain primary data.

The target population for the study was grouped into four set of people namely: Ranchi consumers, Kolkata consumers, Ranchi retail merchants and Kolkata retail merchants

Sample size-

Total sample size considered for this study is 600, with 300 respondents each from Ranchi and Kolkata city. Further, 300 respondents are divided among consumers and merchants in the ratio of 2:1.

To calculate our sample size, we have used Slovin's formula. The formula is described as

$$n = N/\{1+N(e)2\}$$

Here, n= sample size

N= total population

e= margin of error

The population of Ranchi is 13,09,860 and that of Kolkata is 44,96,694, so total population (N)= 58,06,554 and we have taken 5% as margin of error (e).

$$n= 5806554/(1+5806554*0.05^2) = 5806554/14517.4 = 399.98$$

So, we get sample size (n) as 400 after rounding off.

We have taken total sample size as 600 as population size is large, dividing it into two categories i.e., Consumers and Merchants, in the ratio of 2:1, wherein we will be covering 200 consumers and 100 merchants from each city.

Pilot survey data was obtained from 50 consumers and 30 merchants, each from Kolkata and Ranchi. Main survey data was obtained through questionnaire from 200 consumers and 100 merchants, each from Kolkata and Ranchi.

Reliability test was done to find out the internal consistency and all the reliability coefficients was found out to be 0.7 or more which is considered to be good.

9. Research Data Analysis

Research hypothesis were tested using suitable statistical analysis tools with the help of SPSS (version 23). Different statistical tools used in this research study are - cronbach alpha, factor analysis, recession analysis, independent sample t-test, one way anova, chi-square, t-test, pie charts, tabulation, frequency.

EFA is done to determine the correlation among the data set and uncover the underlying structure of a relatively larger set of variables. Here EFA was done to determine the number of latent constructs underlying a set of items. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy help to access the factorability of the data. We obtained KMO value as 0.912 for consumers and 0.906 for merchants.

Regression analysis was done to determine impact of other factors that influence consumers and merchants to continue the use of mobile payment system. Chi-square was done to find the association between the demographic factors and the awareness and use of mobile payment system. One way ANOVA was done to find the association between the demographic factors and the continued use of mobile payment system for consumers and merchants.

10. Findings and Conclusions

Consumer Analysis Findings

There is high level of awareness among consumers groups of both the city. More than 90 percent of respondents were aware about the mobile payment systems. Cash is the most preferred payment option for both Ranchi and Kolkata Mobile payment is preferred to net baning and credit cards in Ranchi while the case is opposite in Kolkata where mobile payment is the last preferred payment method. Mobile payment seems to be recent trend in Ranchi as almost 65% of users are using mobile payment from last 2 years. Whereas, opposite case is seen in Kolkata where more than 55% of the users have been using mobile payment for more than 2 years. In case of expenditure, only 50% of the users in Ranchi used mobile payment for payments of more than Rs 2000, whereas 67% of the users in Kolkata pay through mobile payment for such transactions. PayTm was most used mobile payment app by respondents of both the cities.

Chi-square was done to find the association between the awareness about mobile payment system and the demographic factors. The results revealed that there was no association between the awareness about mobile payment system and the demographic variables- city, gender and qualification whereas demographic variables, occupation, income and personal innovativeness have a significant relationship with the awareness about mobile payment system for consumers.

Chi-square test showed significant association between the demographic variables age, profession, income and personal innovativeness, and use of mobile payment system for customers whereas no association was found among the demographics variables city, gender, qualification of the consumers and use of the mobile payment systems by consumers.

Results from one-way Anova revealed that city and gender significantly impact the continued use of mobile payments for consumer. While, age, qualification, occupation, income and personal innovativeness do not impact continued use of mobile payment system for consumer.

The resultant model significantly predicted the continued use of mobile payment system by the consumers explaining 56.3% of the total variance. All the independent variables usefulness, ease of use, social influence, application provider and government initiatives significantly impact the continued use of mobile payments for customer

Transaction failure and network failure were the most common obstacles for the respondents of both the city with more than 50% of the users facing these issues while accepting mobile payments. Maximum non-using consumers are the one who are still convenient with cash and card transactions. Further people who have abandoned mobile payment found mobile payment complex, time taking, insecure and useless. The feeling of insecurity among the non users is very high in case of Ranchi consumers, whereas for Kolkata non users, mobile payment is viewed as a complex procedure by majority of them. Most of the non users, who abandoned it are not willing to use mobile payment even if their issues get resolved.

Merchant Analysis Findings

There is high level of awareness among both cities with 99% of Kolkata merchants and 95% of Ranchi merchants being aware about the mobile payment system. The number of merchants

accepting mobile payments is much higher in Kolkata as compared to Ranchi. 74% of merchants are accepting payments through mobile in Kolkata whereas only 58% of merchants are accepting such payments in Ranchi. In both the cities significant percentage of merchants have used and abandoned mobile payment as 11% of Ranchi merchants have abandoned the use of mobile payments and 13% of Kolkata merchants have done so.

Mobile payment is the third preferred payment options among merchants of both the cities. Cash was found to be the most preferred option for accepting payments in both the cities followed by card payments and net banking respectively. PayTm is accepted by almost every merchant in both the cities with 97% of merchants accepting payTm in both the cities

Chi-square was done to find the association between the awareness about mobile payment system among the merchants and the demographic factors. The results revealed that there was no association between the awareness about mobile payment system and the demographic variables. Results from chi -square revealed significant association between the demographic variables city, qualification, and personal innovativeness and use of mobile payment system for merchants. While, there was no association seen among the use of mobile payment system and demographics variables city, qualification and personal innovativeness.

Results from one-way Anova revealed that city, personal innovativeness and technology inclination significantly impact the continued use of mobile payments for merchant whereas gender, age and qualification do not impact continued use of mobile payment system for merchants.

The resultant model significantly predicted the continued use of mobile payment system by the merchants explaining 62.2% of the total variance. All the independent variables usability, customer influence, application provider and government initiatives had significance impact on the continued use of mobile payments for merchants

Cash and card is still preferred to mobile payments by merchants of both the cities. They also feel that there is less demand for mobile payments by the consumers group. Merchants are mostly not using mobile payment due to their comfort with cash. Charges involved and no

consumer demand were also reasons for not accepting mobile payment. Many merchants of Ranchi are not comfortable with mobile payment, indicating a less tech-savvy population.

11. Research Contribution

This research provides new dimensions in the mobile payment adoption research area where focus is primarily on the   actual awareness and usage of mobile payment system with a comparative study within two different states of India. Previous studies mostly focused on pre adoption intention of mobile payment system and not the actual use or post adoption of it. Comparative study between two different cities has been considered for this research which is studied first time for mobile payment research in Indian context, to the best of researchers knowledge. This research also studied government initiatives as independent variable which was new in mobile payment research. So this can help in using these variables for other context of technology continuance study in future. Also this research has worked on a major gap of not considering merchants much in the mobile payment study by taking both merchant and consumers for the study.

12. Limitations of the Research

Limitations are influences that the researcher cannot control. They are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on the methodology and conclusions. The limitations that could be addressed in the entire study journey could be following

1. First and foremost the researcher studied the acceptance of mobile payments by two most vital elements for the prosperity of mobile payments industry among the various players of mobile payments ecosystem i.e, merchant and consumer which bring in the limitation of not considering the other elements of an ecosystem like mobile payment service providers, mobile network operators, financial institution , govt etc.

2. Second limitation was that survey questionnaire was used as research data instrument for both merchant and consumers while focused group and personal interview were not considered.

3. Thirdly, another limitation is that India though being home of many cities this study was conducted within geographical boundaries of only two capital cities of two states of

India. The results may vary if larger geographical area is considered. Also, total sample size of 600 respondents were taken which is very less to 20 ebruary 20 e the vast population of both the city.

4. Fourth limitation was with the sampling technique used which was convenience sampling which further adds to the limitation of this research.

5. The research has been carried considering only smart phone as a mobile payment option, and not normal feature phones and any other PDAs. .Also, time frame of data collection is another limitation as there may be variations in the finding due to changes made after the data collection period in the mobile payment industry.

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13. Scope of future work

- This study has primarily focused on dual aspects of mobile payment systems and two parties of the mobile payment ecosystem i.e. merchants and consumer providing a valuable insight about the merchants and consumers acceptance in the Indian context. The findings can be used as a foundation for such type of research in future. In future researcher could further explore various stakeholders of mobile payments together in the Indian context.

- The future researcher could also study and compare various technologies used in mobile payment simultaneously and various m-payments available in market

- Data could be collected in different times and pos scenarios in the future and assessed to understand if there is an impact of different scenarios like busy pos or no busy pos and long queues at pos or short queues at pos.

- Also different types of merchants like small, medium, big enterprises can be considered for future study and compared for acceptance level of mobile payment systems.

- Mobile payment preference has changed in emergencies like COVID so this can be considered by future researcher.

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