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## MOBILE PAYMENT ADOPTION BY SMALL RETAILERS IN BUSINESS

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### ABSTRACT

The usage of mobile payments has become more popular nowadays. However, most of the people prefer mobile payments for their transactions which is one of the fintech product. The purpose of this study is to determine the factors influencing retailer's intention to adopt the mobile payments. Previous researches of mobile payments mainly concentrated on the expectations and opinions of the consumers and the regular users of the mobile payments. This study focused on the retailer's perspective of the mobile payments' usage in the business and how well this mobile payment adoption fit well with their business. The samples of the study are the 351 respondents. Primary data was obtained from 351 respondents through structured questionnaire. This data was analysed using the descriptive statistics, correlation, regression, chi-square. SPSS 20 was used for the analysis purpose. The findings indicates that the image, intention to use, perceived ease of use, perceived usefulness have a significant impact on the intention to use and the usage behaviour. Variables like compatibility, result demonstrability, risk and voluntariness does not have any impact on the intention to use and the usage behaviour.

**Keywords:** Mobile payments, Behavioral Intention, Correlation, Regression, Chi-square.

### 1. Introduction

Mobile payments are a technological innovation used to carry out the financial transactions. The mobile payments are popular for its cashless transactions. It provides various benefits for the stakeholders nobly customers, retailers, financial institutions and the service providers. The retailers have been using these technologies in order to survive in the highly competitive marketplace and to increase the efficiency of the business, The payment landscape in India has seen significant change in recent years as a result of mobile payment technologies. The rise in e-commerce platforms has triggered the adoption of mobile payments. These days, mobile payments are regarded as a crucial component of essential business operations. The disadvantages of the old payment system like sending payments in cash, spending hours in paying bills and the time taken on those actions have been decreased with the rise of mobile payments. Mobile payments have a reputation for being inexpensive, convenient and accessibility.

Compared to the conventional method, mobile payments are quicker and also safe method for payments. However, India is still a long way from having a fully cashless economy. Due to a lack of infrastructure, some rural people are still unaware of these mobile payment systems for their economical transactions. Thus, it is essential to understand how Indian retailers are accepting new technology and how they act in this field.

In recent times, the method of money transactions has been totally changed. Instead of cash payments and credit cards, there are many ways for transactions which includes internet transactions and applications is called mobile payment system. This big shift has happened because of faster internet transactions which everyone has happened because of faster internet transactions which everyone has to use smartphones and the world is changing with new businesses and also for online shopping platforms. These mobile payment systems let business take payments easily using their mobile phones or tablets from anywhere at any time, which helps

in growth of their business. Hence in this research the key factors that impact the behavioural intention of retailers to adopt Mobile payments were studied.

## 2. Conceptual framework

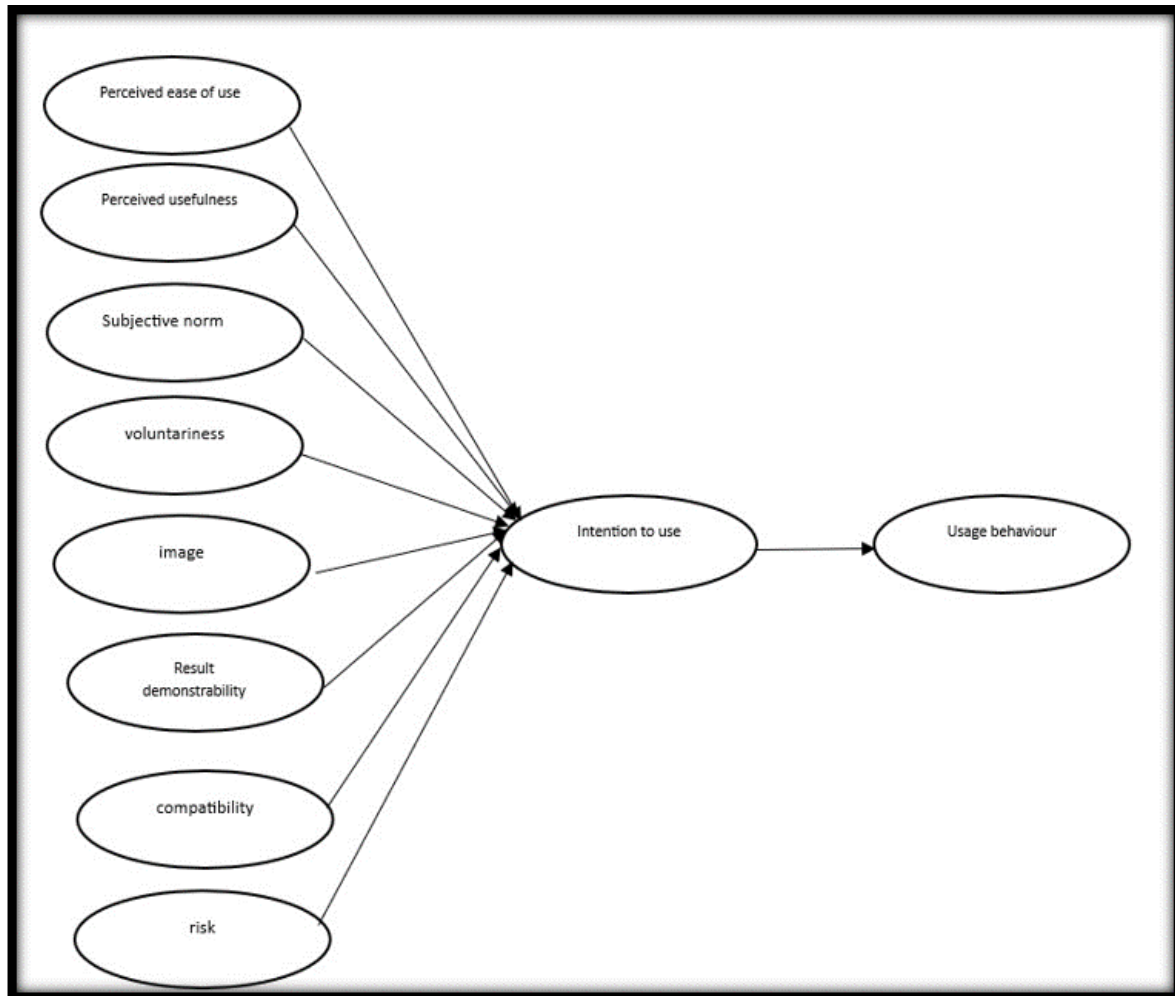
The research on mobile payments adoption has been undertaken by various researchers and academicians. Some of them are as follows

Moghavvemi et al. (2021) investigated the Malaysian merchants regarding the mobile payment adoption highlighting the convenience, fees and security as the motivating factors meanwhile the incompatibility, complexity, cost act as the barriers [1]. Schuster (2016) examined the acceptance of mobile payments in the German retail market by analysing the data using correlation between the system satisfaction and economic benefit, quality of environment and system satisfaction. SEM-PLS analysis was also done to identify the impact of variables [2]. Thal Nay Zar Linn (2022) studied the retailer's digital payment adoption. the study revealed that the perceived ease of use, observability and compatibility positively impact the attitude whereas the risk has a adverse impact. The subjective norms and the behavioural control also have a significant relationship on the usage behaviour [3]. Ahmed Taher Esswe (2022) investigated the retailer's intention towards the mobile payment adoption and the study employed the SEM-PLS to examine the variables such as facilitating conditions, performance expectancy, social influence, effort expectancy, trust, risk and behavioural intention. Effort expectancy has a significant impact on the behavioural intention [4].

Krassie Petrova and Bo Wang (2013) conducted a qualitative study regarding the mobile payment adoption on small business retailers highlighting the factors and barriers. Variables employed for this study includes fees, efficiency, process convenience, sales, security, compatibility and education. Customer's expectation and business efficiency are considered as a motivating factor whereas the information gap was considered a challenge in adoption [5]. Ali Nawaz Khan and Ahsan Ali (2018) investigated mobile payment adoption among retailers using TOE framework. This study found that external pressure and the relative advantage significantly impact the retailer's intention [6]. Bharti Ramtiyal, Deepak Verma and Ajaypal Singh Rathore (2022) examined the mobile payment adoption of mobile payments among the unorganized retailers highlighting the risk and situational factors. The study analysed how the different types of risk can impact the retailer's intention to use using SEM analysis. the study found that the risk impacts the behavioural intention to use mobile payment system [7].

Nor Hapiza Mohd Ariffin, Fauziah Ahmad, Umar Mohd Haneef (2020) investigated retailer acceptance of mobile payments. This study analysed the data using correlation, percentage analysis. The study revealed that effort expectancy, performance expectancy, social influences and the security has a major impact on the retailer's intention to use mobile payment system [8]. Shuiqing Yang, Yaobim Lu, Sumeet Gupta, Yuzhi Cao, Rui Zhang (2012) examined the factors influencing the adoption behaviour in pre and post adoption of mobile payments. The study includes the variables such as subjective norms, image, perceived risk, fee, compatibility, relative advantage and behavioural intention. The study revealed that social influences have a major impact on the mobile payment adoption [9]. Koenin- lewis et al (2015) studied the intentional factors impacting the mobile payment adoption. the study found that social influence mitigates the risk and perceived ease of use does not have any impact on perceived usefulness and the intention to use [10].

Figure 2.1 Conceptual framework



The variables such as perceived usefulness, perceived ease of use, subjective norm, voluntariness, image, result demonstrability, intention to use and usage behavior are adopted from TAM 2 model along with additional variables such as compatibility and risk independent variables

### 3. RESEARCH METHODOLOGY

The primary data required for the study was gathered through physical questionnaire. The research model consists of 10 variables. Purposive sampling was used for this study. The population of the research consists of small retailers doing business in the Thanjavur district. 351 responses are collected for the study. The questionnaire was classified into three parts where the first part consists of demographic details, the second part consists of general questions related to mobile payments in business and the third part consists of specific questions related to variables required for the study. The SPSS 20 was used to analyze the collected data. Percentage analysis, Correlation, Multiple regression, Chi-square were used for the analysis purpose.

### 4. ANALYSIS AND FINDINGS

#### 4.1 Reliability Analysis

Table 4.1.1

Reliability Statistics	
Cronbach's Alpha	No of Items
0.857	46

Source: primary data processed by SPSS 20

The table 4.1.1 exhibits that Cronbach Alpha is 0.857. Hence, the data are very much reliable and Questionnaires and the data also valid.

## 4.2 Percentage Analysis

The demographic details are analyzed by percentage analysis.

**Table 4.2.1**

Characteristics	Values	Frequency	Percentage (%)
Age	20-30 Years	25	17.1
	31-40 Years	76	47.9
	41-50 Years	33	25.4
	50 and above	16	9.7
Gender	Male	111	74.6
	Female	39	25.4
Education	Diploma	21	13.1
	Under Graduate	70	48.7
	Post Graduate	31	21.7
	School Graduate	28	16.5
Type of Product	Apparel and Accessories	28	16.8
	Electronics and Home Essentials	31	21.1
	Personal Care and Wellness	26	15.4
	Office and Stationery	17	13.4
	Groceries and Household Supplies	21	17.4
	Entertainment and Leisure	14	8.3
	Automotive and Outdoor	7	3.7
	Specialty Items	6	4
	Business Period	Below 5 Years	31
	5-15 Years	41	26.8
	15-25 Years	52	35.9
	Above 25 Years	26	16.8

Source: primary data processed by SPSS 20

The table 4.1 shows that 74.6% of respondents are male and 47.9% of the respondents fall between the age group of 31-40 years. The educated people are more familiar with the mobile payments. Groceries, electronics and apparels emerge as a top user of mobile payments in business. Majority of businesses are operating for 15-25 years.

## 4.3 Correlation Analysis

H1: There is a significant relationship between perceived usefulness, perceived ease of use, subjective norm, voluntariness and usage behaviour

**Table 4.3.1**

Correlations						
		Usage Behaviour	Perceived Usefulness	Perceived Ease of Use	Subjective Norm	Voluntariness
Usage Behaviour	Pearson Correlation	1	.621**	.692**	.243**	.604**
Perceived Usefulness	Pearson Correlation	.621**	1	.637**	.247**	.578**
Perceived Ease Of Use	Pearson Correlation	.692**	.637**	1	.317**	.586**
Subjective Norm	Pearson Correlation	.243**	.247**	.317**	1	.210**
Voluntariness	Pearson Correlation	.604**	.578**	.586**	.210**	1

\*\* Correlation is Significant at the 0.01 Level (2-Tailed).

Source: primary data processed by SPSS 20

Perceived usefulness and the perceived ease of use are highly correlated, since the value is 0.692 which indicates that users find it easier to use, assumes it too useful. Perceived ease of use, perceived usefulness and Usage behaviour has a strong correlation between them. Subjective norm indicates a weak correlation with

the usage behaviour. Even though it has relation, the relation is not strong as perceived usefulness and perceived ease of use. voluntariness is having a significant relationship with the usage behaviour.

**Table 4.3.2**

H2: There is a significant impact between image, result demonstrability, compatibility, risk and usage behaviour

Correlations						
		Usage Behaviour	Image	Result Demonstrability	Compatibility	Risk
Usage Behaviour	Pearson Correlation	1	.414**	.683**	.802**	.576**
Image	Pearson Correlation	.414**	1	.362**	.366**	.237**
Result Demonstrability	Pearson Correlation	.683**	.362**	1	.751**	.341**
Compatibility	Pearson Correlation	.802**	.366**	.751**	1	.610**
Risk	Pearson Correlation	.576**	.237**	.341**	.610**	1

\*\* Correlation Is Significant At The 0.01 Level (2-Tailed).

Source: primary data processed by SPSS 20

The compatibility and the usage behaviour have a strong correlation between them, which indicates that mobile payments are more compatible with the retailer's business. There is also a significant correlation between the result demonstrability and the usage behaviour which indicated that the results of the mobile payments are easily understandable that results in increase of mobile payment adoption. Risk is moderately correlated with the usage behaviour which shows that decrease of mobile payments risk can lead to increase in adoption of mobile payment in business. There is a significant relationship between the image and the usage behaviour, indicates that image can influence the retailer's decision on mobile payments adoption.

#### 4.4 Regression Analysis

H3: There is a significant impact between perceived usefulness, perceived ease of use, subjective norm, voluntariness and usage behaviour

**Table 4.4.1**

Coefficients					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	0.753	0.169	4.464	0
	perceived usefulness	0.206	0.045	4.552	0
	perceived ease of use	0.434	0.053	8.233	0
	subjective norm	0.005	0.024	0.225	0.822
	voluntariness	0.233	0.046	5.029	0

a. Dependent Variable: usage behaviour

Source: primary data processed by SPSS 20

R	R Square
.752a	0.665323

Source: primary data processed by SPSS 20

Variables such as perceived usefulness, perceived ease of use and voluntariness has a positive influence on usage behaviour. subjective norm does not have significant impact on the usage behaviour. Increased usefulness of mobile payments, easy usage, increased voluntariness of retailers can result in increased usage behaviour and mobile payment adoption. Here the regression table indicates that 66.53% of the variance.

Hence there is a strong positive relationship between the independent variables such as perceived usefulness, perceived ease of use, subjective, voluntariness and the dependent variable such as usage behaviour.

**Table 4.4.2**

Coefficients					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	0.301	0.145	2.08	0.038
	image	0.092	0.026	3.536	0
	Result demonstrability	0.196	0.044	4.424	0
	compatibility	0.521	0.058	8.967	0
	risk	0.132	0.029	4.493	0

a. Dependent Variable: usage behaviour

Source: primary data processed by SPSS 20

R	R Square
0.83	0.69

Source: primary data processed by SPSS 20

The table shows that compatibility has a strongest positive impact on the usage behaviour and it was followed by the risk, result demonstrability and image. Here all the independent variables have a significant impact on the usage behaviour ( $p < 0.05$ ). The positive image, easy demonstration of mobile payment results, more compatibility, risk mitigation can lead to increase the level of mobile payment adoption. This table shows that the R value is 0.830 which indicates a strong positive relationship between the variables such as the compatibility, risk, result demonstrability, image and usage behaviour. The R square value is 0.69% which indicates the variation in the usage behaviour can be explained by the independent variables such as compatibility, risk, result demonstrability, image.

#### 4.5 CHI-SQUARE ANALYSIS:

H13: There is a significant association between the gender and the perceived usefulness, perceived ease of use, subjective norm and voluntariness.

**TABLE 4.5.1**

Variables	Value	Significance
Perceived Usefulness	70.265	0
Perceived Ease of Use	65.775	0
Subjective Norm	23.984	0.02
Voluntariness	34.345	0.001

Source: primary data processed by SPSS 20

The null hypothesis is rejected for the above variables. Because the significant value is less than 0.05. Hence, there is an association between the gender and the perceived usefulness. There is an association between the gender and perceived ease of use. There is an association between the gender and subjective norm. There is an association between the gender and voluntariness.

H14: There is a significant association between education and risk, compatibility, image, result Demonstrability.

**TABLE 4.5.2**

Variables	Value	Significance
Risk	131.179	0
Compatibility	52.337	0.002
Image	80.035	0
Result Demonstrability	70.62	0

Source: primary data processed by SPSS 20

The null hypothesis rejected for the variables. Hence, there is an association between education and risk, compatibility, image and result Demonstrability. There is an association between education and compatibility.

There is an association between the education and image. There is an association between the education and result Demonstrability.

#### 4. DISCUSSIONS

The adoption of mobile payments is primarily influenced by retailers in the age group between 31-40, showing a trend towards adopting advancements in technology. Higher education level of retailers highly correlated with increased mobile payment adoption, indicating that they are more likely to be competitive. Business such as groceries, household necessities and electronics are major users of mobile payments. Users of mobile payment system have indicated a positive outlook to continue the usage of this mobile payments in future. Most of the respondents agreed with statements relating to the ease of use and usefulness of the mobile payments in the business. The effective features of the mobile payments made the retailers to continue the mobile payments in their business. The subjective norms, voluntariness, image and the result demonstrability have a significant impact on the intention to use. The mobile payment are compatible with the business. The convenience of the mobile payments usage has driven the satisfaction level of users. Though the mobile payments offering convenience and ease of use some issues like security and connectivity issues are still present. Fellow retailers also have a significant impact on the mobile payment adoption. in order to be more competitive in the market, retailers indicated higher adoption of mobile payments. Initiatives for education and awareness must be conducted to increase the mobile payment adoption among the unutilized retailers. The mobile payments benefits are varied according with the usage of retailers.

#### 5. CONCLUSION:

This study highlights the popularity of mobile payment system among the retailers in their business. The importance of upgrading the business services with technological development is identified. The variables like perceived usefulness and the ease of use have a major impact on the intention to use this mobile payment system. The other factors also influence the retailers to use this mobile payment system in their business for their convenience and business efficiency. The study also found that retailers are willing to continue the usage of Mobile payment system to maintain the competitive advantage in the business environment. Since the Indian government also supported this digital transaction with various initiatives among the people and businesses to Promote the digital India. Hence the growth and usage of the mobile payment systems are expected to be more in the future. The service providers may upgrade this mobile payment system with more facilities and options with more security norms in order to protect from the risk involved in this system.

#### References

- [1] Moghavvemi, S., Mei, T. X., Phoong, S. W., & Phoong, S. Y. (2021). Drivers and barriers of mobile payment adoption: Malaysian merchants' perspective. *Journal of Retailing and Consumer Services*, 59, 102364.
- [2] Schuster, O., Falkenreck, C., & Wagner, R. (2016). The acceptance of mobile payments in the German retail market.
- [3] Linn, T. N. Z. (2022). *Factors Influencing on Digital Payment Adoption by Retailers* (Doctoral dissertation, MERAL Portal).
- [4] Esawe, A. T. (2022). Exploring Retailers' Behavioural Intentions Towards Using M-payment: Extending UTAUT with Perceived Risk and Trust. *Paradigm: A Management Research Journal*, 26 (1), 8–28.
- [5] Petrova, K., & Wang, B. (2013). Retailer adoption of mobile payment: A qualitative study. *Journal of Electronic Commerce in Organizations (JECO)*, 11(4), 70-89.
- [6] Khan, A. N., & Ali, A. (2018). Factors affecting retailer's adoption of mobile payment systems: A SEM-neural network modeling approach. *Wireless Personal Communications*, 103, 2529-2551.
- [7] Ramtiyal, B., Verma, D., & Rathore, A. S. (2022). Role of risk perception and situational factors in mobile payment adoption among small vendors in unorganised retail. *Electronic Commerce Research*, 1-39.
- [8] Ariffin, N. H. M., Ahmad, F., & Haneef, U. M. (2020). Acceptance of mobile payments by retailers using UTAUT model. *Indonesian Journal of Electrical Engineering and Computer Science*, 19(1), 149-155.
- [9] Yang, S., Lu, Y., Gupta, S., Cao, Y., & Zhang, R. (2012). Mobile payment services adoption across time: An empirical study of the effects of behavioural beliefs, social influences, and personal traits. *Computers in Human Behaviour*, 28(1), 129-142.
- [10] Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: predicting mobile payment adoption. *The Service Industries Journal*, 35(10), 537-554