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ADOPTION OF ONLINE PAYMENTS APP

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ABSTRACT

Growth in Indian economy and evolving standard of living of Indians have welcomed room for new technologies in the lives of Indians, leading to the evolution of plethora of technology based solutions. Smartphone is one such multifarious technological solution used for connecting with people to performing financial activities, studying to gaming and shopping. Online payments is the recent trend which intensified lately due to collective affairs like government promoting digital India through awareness programmes, demonetization, financial inclusion through JDY, UPI launch, telecom growth with 4G launch and affordable internet facility, economical handsets, growth of mcommerce, new entrants in the m-payment industry and most importantly revamp in the lifestyle of people craving for viable solutions for everything. Whenever any new technology is introduced in the country usually advanced cities or metropolitan cities are the one to adopt it more quickly relatively to other cities and towns. So, this study takes an opportunity to study the adoption and usage of online payments. The study also tries to find the impact of the independent variables and demographic variables on the use of mobile payment systems. To study the objectives proper research hypothesis was formulated and tested using suitable statistical analysis tools using SPSS (version 23). Different statistical tools used in this research study are - cronbach alpha, factor analysis, chi-square, pie charts, tabulation and frequency. The majority of respondents (based on age) are between the ages of 18 and 25, and the preference for g-Pay for implementing online payments is at most 46.7%, while the preference for Paytm is at most 35.5%. The majority of respondents are male, and the preference for g-Pay for adopting online payments is at most 44.9%, while the preference for Paytm as an online payment method is at most 36.2%. Based on the statement "Digital payment service makes purchase of Goods/Services convenient," 43.8% of respondents gave a strong agreement rating. The total Chi Count was 8.85, and the P-Count was 0.715, which was higher than 0.05. It shows that the null hypothesis is accurate. As a result of a government initiative that had a favourable effect on the continuation of mobile payments for both consumers and businesses, the government should keep spreading the word about the economic advantages of mobile payment systems and provide concessions to businesses who accept them. Additionally, the federal government and state governments should collaborate to improve the security of the mobile payment infrastructure.

1. INTRODUCTION

1.1 OVERVIEW

With its numerous tasking capabilities and portability, smartphones have transformed into a way of life for many people, boosting their productivity in all areas of their lives by giving them convenience, independence, and flexibility. By enabling daily tasks like ticket booking. The retail sector has undergone a change as a result of consumers' willingness to shop via their smartphones due to their multifunctionality. Indians use their smartphones to access the internet for one-third of their waking hours, according to a study by the Economic Times. Due to the country's significant youth population, the Indian smartphone market is expanding rapidly. Because of the potential of smartphones and high-speed internet, the market environment has changed, causing all types of marketers to concentrate on offering all sorts of goods and services via mobile. A new market for mobile commerce has emerged as a result of the convergence of the two fastest growing sectors of this era—the internet and mobile communication—and every businessman, large or little, is now creating mobile-based solutions. Online shopping and online banking have been made possible by the ever-growing number of mobile phone users and the quick development of mobile technologies, making room for mobile payment systems in the e-commerce activity requires an effective payment settlement through a mobile phone.

India has a 25% illiterate population and a two-thirds rural population, making financial inclusion a challenging endeavor. Even after the government's JAM Trinity (Jan Dhan, AADHAR & Mobile) programmes, where JDY saw a huge success with the opening of 25.68 crore bank accounts, 190 million adult Indians remain unbanked and without access to financial services. Branchless banking is what is meant by "m-payment." As the cost of creating a bank for a lower socio-economic group will not yield large returns to the bank, brick and mortar bank launching in rural areas is an expensive affair for banks. India has the most dormant bank accounts in the world (48%), according to Quartz India 2018, with no transactions in the past year. A well-known example of how technology has significantly improved



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financial inclusion is Kenya's M-Pesa, which Safaricom created. Currently, 90% of Kenya's young have M-Pesa accounts. The expansion of digital financial services will be beneficial for the economy. Financial services have been transformed by mobile payment, which is the next-generation of e-payment technology.

1.2 HISTORY OF CURRENCY AND PAYMENT METHODS

With the start of human civilization, the idea of money emerged. In essence, it served as a middleman for the exchange of products between two people. Around 9000 BC, the barter system emerged as a first step in the exchange of products. In this society, people may trade goods among themselves without using a formal system, for instance, trading an axe for a goat. These were typically rare, naturally occurring items that varied from place to location, such as shells, unique kinds of stones, etc. As metallurgy advanced around 700 BC, kingdoms began to use precious metals like gold and silver as currency. Kingdoms gradually turned their focus to less expensive metals like copper and other alloys like bronze. These materials made it far more affordable to create coins with the status of value marked on them. Around 700 A.D., the Chinese invented paper, which completely changed the way money is used today. The printed paper bearing its value and other specific information came to be regarded as money quite quickly. It was far simpler to carry and print than complicated metallurgical techniques used to make coins. The use of paper notes has since spread around the world and is still prevalent. A British banker introduced a second paper-based check method in the year 1762 AD. This was delivered to customers and issued by the bank; it could be cashed with a valid signature and check number. Plastic money first appeared in 1946 when a bank in Brooklyn introduced the credit card. Due to wallets starting to go cashless and the general public like the newfound sense of security that came with not carrying cash, Mobile wallets, which are essentially software apps put on mobile phones for making payments, gradually came into existence. Numerous banks and other third-party businesses have begun operations. Numerous more NFC and UPI technologies have evolved with mobile wallet in recent years. In recent years, cryptocurrencies have also achieved the status of money.

1.3 DEFINITION OF MOBILE PAYMENT

Any payment made using a mobile device is referred to as a mobile payment. According to Van der Heijden, a mobile payment is any traditional or modern payment that is safely conducted between peers or businesses through a mobile network infrastructure. Mobile payments have been referred to by Karnouskos and Fokus as a game-changing solution that will accelerate both e-commerce and m-commerce in addition to e-payments. Any form of payment that needs to start, activate, or be approved by a mobile device is what they meant by "m-payment." It acknowledged the importance of mobile payments and advised that both consumers and businesses adopt them widely, expanding their use beyond just mobile commerce. The concept of mobile payment as a fresh payment option to conventional payment by confirmation is supported by this. However, authorization was not included in their definition. It also recommended commencement and confirmation in mobile payment transactions. The ecosystem of mobile payments consists of:

Consumer

The payer, or the person who makes the payments, is the consumer. The end user who possesses a mobile phone is referred to as a consumer. The consumer needs to be persuaded that mobile payments are superior to all other payment methods. Consumers hold the key to acceptance of mobile payments.

Merchant i.e. stores and web portals

Merchants are real stores or websites where customers can make mobile payment purchases for goods and services.

Financial institutions (banks, credit card companies & payment processor)

These organisations develop and provide financial services for mobile payment transactions. It serves as both the issuer and the acquirer in interactions with both merchants and customers. Following identification of the merchant and a request for transaction confirmation from him, the acquirer bank makes the payment and notifies all parties involved after receiving the payment notice.

Mobile Payment Service Providers

They create wallet apps or the user interface for NFC apps, which are available for download from the app store. The developing party may come from a third party or any connected field. The developers of the applications are in charge of safely storing any virtual money and transferring it only after valid authentication.

Mobile Network Operators

The infrastructure for mobile payments is provided by MNOs, who also have a sizable customer base. SIM and WIM (wireless identifier module) cards of mobile devices are under the jurisdiction of mobile network carriers. High-speed networks are provided by telecom firms to ensure smooth transactional operation. If a customer wants to pay for the good but is unable to do so because the network is down, the scenario might be very terrible.



Mobile Device Manufacture

The key responsibility of the device producer is to continuously advance technology by improving the ability of the device to carry out mobile payment services. Between banks and MNOs, mobile devices should serve as a trustworthy middleman. A safe and dependable gadget at a fair price must be provided by the maker.

Software Provider

They create software that is compliant with standards and suitable for users, then they sell it. Additionally, servers and the staff that maintains them are part of it because, without them, such a massive amount of database management is impossible.

Government

All mobile payment solutions should be created in accordance with the regulations set forth by the government, which is the regulatory body that establishes the limitations. Government laws and regulations, whether at the national or international level, may impose these rules. They must offer a reliable and secure method for operating mobile payments.

1.4 MOTIVATION OF STUDY

In India, not just consumers but even businesses have embraced mobile payments since demonetization. After demonetization, everyone—from large retailers to small business owners—began using m-payments and other electronic payments. M-payment has shown to be a solution, particularly for penny transactions. It is crucial for a firm to stay on top of technological advancements and to cater to customer expectations. The merchant holds the key to a cashless society since it is they who must have faith in the system; else, the entire system will be useless. For the roughly 65 million retailers in India, there are just 4.9 million PoS terminals, illustrating the vast disparity in digital adoption. As the cost of printing and shipping money drops, the government would save almost 2 lakh crores annually. Reduced transaction costs and increased transaction limits have been implemented by the government to promote and encourage businesses to participate in the cashless revolution.

1.5 CHAPTER SCHEME

Introduction: Chapter 1 provides the introduction related to online payments and mobile payments.

Review of Literature: Chapter 2 provides the review of literature related to market trends with online payments. It provides detail survey of various authors related to this work.

Research Methodology: Chapter 3 provides the research methodology of this work. It also consists of objectives related with work, the hypothesis formulated to be tested using statistical tools, research design, data methods with sampling size etc.

Data Analysis & Results: Chapter 4 provides main data analysis of this work. It provides data with the help of analytical tool. It covers primary data generated from survey which was evaluated using descriptive analysis.

Conclusion & Suggestion: This covers the major finding as per objectives and brief conclusion, suggestions after data analysis of this work.

2. REVIEW OF LITERATURE

2.1 REVIEW OF LITERATURE

To realize its goal of offering infrastructure as a utility to every citizen, Goel et al. (2020) concentrated on constructing the physical infrastructure as well as the software and security infrastructure. Transactions without cash help save time and money. Additionally, businesses and governments will receive effective funds. The goal of "Digital India" is to make India a stronger digital and knowledge economy. The government also released the Bharat Interface for Money (BHIM) app to encourage cashless transactions. Cashless commerce is evolving as a cutting-edge business model.

The goal of the study by Kurian et al. (2021) is to determine whether perceptions of risk, utility, trust, ease of use, and susceptibility have influenced millennials' adoption of digital payment methods during the COVID pandemic. The goal of this research is to examine the relationships between millennials' adoption of digital payment methods and their perceptions of risk, utility, trust, convenience of use, and vulnerability in the context of COVID 19. Adoption of the descriptive research design. Data gathering is done through the survey approach. The respondents of this study are India's millennials. Within the context of COVID 19, there is a substantial correlation between perceived risk, perceived utility, perceived ease of use, considered vulnerability, and millennials' acceptance of digital payment.

According to Sahi et al. (2021), financial inclusion has the potential to significantly improve millions of people's lives in undeveloped nations. Despite the potential of their digital payment mechanisms, many developing nations have not yet adopted them widely. This study reviewed earlier studies on the uptake of digital payments and evaluated their numerous drivers and obstacles. The majority of the research studies utilized either Tam or Utaut theories, according



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to the assessment of this literature. Research indicates that customers' expectations for the success of their digital payment transactions are the most important element determining their behavioral intention to utilize digital payments. The adoption of digital payments was also found to be significantly influenced by convenience of use.

According to Ghosh et al. (2021), digitalization has boosted trade and commerce as well as made payment transactions quick and easy. The entire essay is based on a review of the literature by numerous authors who discuss various digital payment methods, including how frequently they are used, why they are adopted, and what will happen to them in the future. The study's goal is to identify the factors that various authors have considered when determining why individuals have adopted digital payments.

Lakshmi et al. (2021) concentrated on how customers utilized payment applications and how satisfied they were with them. Data for this study were gathered from primary sources utilizing a sample size of 120 clients and was conducted using a descriptive research design approach. Simple percentage analysis, the chi-square test, and the Anova test are used to examine and interpret the data. Pie charts and graphs are used to display data analysis and interpretation.

Wei et al. (2021) aimed to improve the body of research on this topic. To this goal, 295 samples from an online survey in Taiwan were gathered, the majority of which were more tech-savvy members of generation Y and generation Z. The empirical findings of this study show that social influence has a particularly favourable impact on young people's behavioral intention to adopt mobile payment.

The elements that affect a Turkish bank's clients' adoption of online payment methods during the COVID-19 epidemic were identified by Coskun et al. in 2022. Through a deeper investigation of the effects of 11 elements on attitude, behavioral intention, and actual usage, the study model expands on the technology acceptance model (TAM). The findings imply that these characteristics have a significant impact on attitude and behavioral intention.

In order to better understand how Generation Z customers, who are the main proponents of mobile payments, particularly in developing nations, use mobile payments, Purohit et al. (2022) conducted a study. A questionnaire, filled out by 365 undergraduate students between the ages of 18 and 22, was used to gather the data. The partial least square structural equation modelling (PLS-SEM) research established that social influence, performance expectations, and effort expectations had a significant and beneficial impact on behavioral intention to use mobile payments. The facilitating circumstances and monetary value, however, were inconsequential. The detrimental impact of price on the decision to use mobile banking shows that promotional offers (discounts, cash-backs) are irrelevant for uptake.

3.RESEARCH METHODOLOGY

This chapter discusses the entire research strategy, which entails developing research questions from the research problem and creating research objectives from those questions. Research hypotheses are developed and put to the test in order to further the aims. This chapter goes into great detail on the research approach used for this study. A plan for resolving the research challenge is known as research technique.

3.1 PROBLEM STATEMENT

The use of smart phones and associated services by users in India has expanded in recent years as technology has propelled Indian society. After demonetization, the mobile payment system exploded in India, although it hasn't yet grown as quickly as was anticipated. The simultaneous acceptance of the mobile payment system by customers and businesses is essential to its success. Customers are the ultimate end users, whilst merchants serve as the intermediaries for mobile payment services to consumers. Therefore, it is crucial for the companies offering mobile payment services, such as banks, third parties, etc., to get both parties to accept their offerings simultaneously. Therefore, the purpose of this study is to examine how millennials use and utilize online payment applications.

3.2 OBJECTIVES OF STUDY

- > To study factor influencing adoption of digital payments app using TAM model
- > To study the govt initiative in promoting cashless economy

3.3 HYPOTHESES OF STUDY

On the basis of above research objectives, following consolidated null hypotheses have been framed.

 H_{00} : There is no significant relation between the factors influencing adoption of digital payments app and customer response.

3.4 RESEARCH EMTHODOLOGY

Research Design

The research design is the framework or blueprint for a research effort. Each process taken to collect the data required to meet the research issue is described in full. The researcher will attempt to uncover the elements impacting the adoption of a digital payments app, hence the research strategy for the current study is descriptive in nature.



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Data Collection: The study is compiled using primary data collection sources.

Sample Size

The Researcher has selected 130 respondents of Punjab.

Distribution of Sample

The Punjabi users made up the majority of the sample size needed for this investigation.

Category (Age)	Observed	%age
18-25	107	82.3
26-35	20	15.4
36-40	1	0.8
40+	2	1.5

Category (Gender)	Observed	%age
Female	60	46.2
Male	69	53.1
Prefer not to say	1	0.8

3.5 DATA ANALYSIS & TECHNIQUES

In data analysis, researcher has prepared charts and tables to analyze the data so that the data can be easily understood and used in the research. In this research, researcher has used the chi-square test technique and Reliability analysis with descriptive statistics to study reliability and overall mean value of all statements. After this, factor analysis is used to apply under TAM Model. Statistical data were analyzed using SPSS tool.

3.6 RELIABILITY ANALYSIS & DESCRIPTIVE STATISTICS

The most often used indicator of internal consistency is Cronbach's alpha ("reliability"). Cronbach's alpha merely gives you a total reliable coefficient. Higher numbers signify more reliability.

The Cronbach's alpha is calculated by:

$$\propto = \frac{Nc}{v + (N-1)c}$$

Where

N= No. of Items

c= Average inter item co-variance

v= Average Variance

Table 3.2: Overall Reliability of Items

Overall Cronbach's Alpha	N of Items		
.893	13		

Source: IBM SPSS

Reliability in all cases is more than 0.7.

4. DATA ANALYSIS

In order to test the theory put forth, this chapter deals with the analysis of the user data gathered. Several tests are performed to determine the importance of the data used.

4.1 DATA ANALYSIS

Objective 1: To study factor influencing adoption of digital payments app

Results Based on Factor Analysis

The output's commonalities table shows how much of the variation, or the communality Count, should be more than 0.5 to be taken into consideration for additional study. For instance, the highest extraction Count accounts for approximately 98% of the variance in "like inexpensive automobiles exclusively & prefer consistent quality of goods". Numerous statistics exist, including the Kaise-Meyer-Olkin measure of sample adequacy (KMO). The KMO statistic



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.565

.527

.583

.522

.538

.487

.519

.704

.643

.587

.437

.492

.370

1.000

1.000

1.000

1.000

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can be calculated for a single variable or for a number of variables. The KMO statistic has a Count between 0 and 1. Typically, KMO Counts greater than 0.5 are regarded as acceptable. Additionally, it is important because its P-Count is less than 0.05.

1. EFA for Identifying Factors

Would you recommend it to others?

Does Digital Payment App execute the desired output Overall, you'll use Digital Payment App consistently?

Overall, you like to use Digital Payment App?

EFA is a useful tool for extracting latent factors from a variety of variables that initially appear to be important. In a broader sense, factor analysis refers to a collection of methods for condensing a large number of variables into a smaller number of factors by examining their correlations. The KMO Count is shown below. The aforementioned table makes it evident that KMO's Count is 0.90, which is higher than its threshold limit of 0.6 and sig. Count 0.00, which is lower than 0.05. Therefore, the data was appropriate for the data reduction process.

Table 4.1: KMO Test with Analysis Based on Statements

KMO Test				
KMO Value		.900		
Bartlett's Test	Chi Value	669.763		
	Degree of Freedom	78		
	P-value	.000		

Communalities Extraction Initial 1.000 Digital payment service makes purchase of Goods/services convenient Digital Payment app is easy to understand 1.000 Digital payment apps is time efficient 1.000 Digital Payment app's user interface is smooth 1.000 1.000 Digital Payment Apps provide better classification of icons & data. I intend to use Digital Payment service frequently. 1.000 I intend to use Digital Payment apps more than cash. 1.000 1.000 I find working with digital payment apps very easy Personal user experience directs towards positive response. 1.000

Table 4.2: Communalities for Statements

Community evaluates the existence of variance in a particular variable that can be explained by all the causes taken together and can be used to determine how reliable an indicator is. A higher communality indicates less variety between objects. The table demonstrates that almost all of the statements' extraction Counts are equal to or higher than the table's 0.4 minimum threshold Count.

Component		Initial Eigen C	ounts	Extraction Sums of Squared Loadings		
	Total	% of Variance Cumulative %		Total	% of Variance	Cumulative %
1	5.725	44.038	44.038	5.725	44.038	44.038
2	1.248	9.602	53.640	1.248	9.602	53.640
3	.962	7.401	61.042			
4	.765	5.882	66.923			
5	.725	5.577	72.500			

Table 4.3: Variance Calculation Based on Statements



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6	.633	4.867	77.367	
7	.609	4.685	82.052	
8	.501	3.851	85.903	
9	.463	3.558	89.462	
10	.400	3.078	92.540	
11	.381	2.932	95.472	
12	.312	2.403	97.875	
13	.276	2.125	100.000	

Table 4.4: Rotated Component Matrix

Rotated Component Matrix					
	Component				
	1	2			
Digital payment service makes purchase of Goods/services convenient		.727			
Digital Payment app is easy to understand	.686				
Digital payment apps is time efficient	.549	.530			
Digital Payment app's user interface is smooth	.699				
Digital Payment Apps provide better classification of icons & data.	.646				
I intend to use Digital Payment service frequently.	.446	.536			
I intend to use Digital Payment apps more than cash.		.691			
I find working with digital payment apps very easy	.819				
Personal user experience directs towards positive response.	.793				
Would you recommend it to others?		.671			
Does Digital Payment App execute the desired output	.424	.507			
Overall, you'll use Digital Payment App consistently?		.607			
Overall, you like to use Digital Payment App?		.608			

The factor loadings upon rotation are displayed in the Rotated Component Matrix. The statements that together address the same topic are grouped under one. Here, 2 factors are extracted.

Table 4.5: Factor Loading Count

Statement	Rank	Factor Loading Count
Factor 1: Features		
Digital Payment app is easy to understand	1	.686
Digital payment apps is time efficient	1	.549
Digital Payment app's user interface is smooth	1	.699
Digital Payment Apps provide better classification of icons & amp; data.	1	.646
I find working with digital payment apps very easy	1	.819
Personal user experience directs towards positive response.	1	.793
I intend to use Digital Payment service frequently.	1	.536
Factor 2: Overall Response		
I intend to use Digital Payment apps more than cash.	2	.691
Digital payment service makes purchase of Goods/services convenient	2	.727
Would you recommend it to others?	2	.671
Does Digital Payment App execute the desired output	2	.507



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Overall, you'll use Digital Payment App consistently?	2	.607
Overall, you like to use Digital Payment App?	2	.608

All Counts of factor loading are greater than 0.4.

Factor 1: Features

This factor is made from the seven statements; P1 Digital Payment app is easy to understand with factor loading Count 0.686; Digital payment apps is time efficient with Count 0.549, Digital Payment app's user interface is smooth with Count 0.699, Digital Payment Apps provide better classification of data with Count 0.646, I find working with digital payment apps very easy with Count 0.819, Personal user experience directs towards positive response with Count 0.793, I intend to use Digital Payment service frequently with Count 0.536.

Factor 2: Overall Response

This factor is made from the six statements; I intend to use Digital Payment apps more than cash with Count 0.69, Digital payment service makes purchase of Goods/services convenient with Count 0.727, Would you recommend it to others? With Count 0.671, Does Digital Payment App execute the desired output with Count 0.507, Overall, you'll use Digital Payment App consistently? With Count 0.607, Overall, you like to use Digital Payment App? With Count 0.608.

Objective 2: To Study the Govt Initiative in Promoting Cashless Economy

- In order to realize its goal of providing infrastructure as a utility to every person, the government is concentrating on constructing the physical infrastructure as well as the software and security infrastructure.
- The Pradhan Mantri Jan Dhan Yojana (PMJDY) is without a doubt the biggest financial inclusion initiative the world has ever seen. However, given the government's recent announcement to demonetize, this should dramatically decline.
- In order to encourage digital and card-based payments, the government has announced waivers on convenience fees, surcharges, and service fees for digital payments made by government agencies and organisations.
- A new service called Unified Payment Interface (UPI) has just been introduced that will enable transactions between two bank accounts using two smartphones, taking us one step closer to a cashless society. This is especially beneficial for those who are not tech-savvy when it comes to secure transactions. Additionally, the government has introduced UPI, a payment mechanism that enables instant mobile transfers.
- To encourage cashless transactions, the Bharat Interface for Money (BHIM), G-Pay, and Paytm App were also introduced.
- Table shows the Observed and Expected Counts of all Digital Payments Application in which users provided maximum response to G-pay with 48.4% Count. After this, Paytm is preferred with 34.6% Count.

Category	Observed	Test Proportion	Expected	Chi Value
Amazon pay	2	0.25	32.5	28.6231
Gpay	63	0.25	32.5	28.6231
Paytm	45	0.25	32.5	4.8077
Phone pay	20	0.25	32.5	4.8077

Table 4.6: Observed and Expected Counts of all Digital Payments Application

Table shows the overall user response of all Digital Payments Application in which users provided maximum response to G-pay with 48.4% Count. In G-pay, maximum 42.8% provided strongly agree response. After this, Paytm is preferred with 34.6% Count. Its overall Chi Count is 66.86 and p-Count is 0.000 which is less than 0.05. Hence, it rejects null hypothesis. SO, there is a relation between user response and statement.

	1	2	3	4	5	All
Amazon pay	1	0	0	0	1	2
Gpay	3	7	5	21	27	63
Paytm	2	3	5	18	17	45
Phone pay	0	1	4	7	8	20
All	6	11	14	46	53	130

Table 4.7: Overall User Response of Digital Application



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Fig 4.1: Observed Counts of all Digital Payments Application

5. FINDINGS & SUGGESTIONS

The main research conclusions are presented in this chapter. In this study, Punjabi users' awareness of and use of mobile payments were examined in relation to their demographic characteristics. It was also investigated how independent variables can affect the continuous use of mobile payments. This study attempted to comprehend the actual level of usage and knowledge of mobile payment systems together with the performance-affecting variables. The study was conducted to fulfil the research's objectives, and a synopsis of those aims is provided below.

MAJOR FINDINGS

- According to the demographic profile, 82.3% of people are at most in the 18–25 age group.
- According to the gender profile, 53% of users are men.
- According to reliability analysis, it has a 13-item total reliability rating of 0.893. As a result, they are trustworthy in nature.
- The majority of respondents (based on age) are between the ages of 18 and 25, and the preference for g-Pay for implementing online payments is at most 46.7%, while the preference for Paytm is at most 35.5%.
- The majority of respondents are male, and the preference for g-Pay for adopting online payments is at most 44.9%, while the preference for Paytm as an online payment method is at most 36.2%.
- Based on the statement "Digital payment service makes purchase of Goods/Services convenient," 43.8% of respondents gave a strong agreement rating. The total Chi Count was 8.85, and the P-Count was 0.715, which was higher than 0.05. It shows that the null hypothesis is accurate.
- Regarding the statement "Digital Payment app is straightforward to grasp," 37.6% of respondents strongly agreed. Its total Chi Count is 13.897, and its P- Count, which is higher than 0.05, is 0.307. It shows that the null hypothesis is accurate.
- Regarding "Digital Payment Apps is Time Efficient," 41.5% of respondents gave a strong agreement response. The total Chi Count is 34.12, and the P-Count, which is less than 0.05, is 0.001. It shows that the null hypothesis is untrue.
- Regarding "The user interface of the digital payment app is smooth," 42.3% of respondents gave their opinion. It has a P-Count of 0.904, which is higher than 0.05, and an overall Chi Count of 6.23. It shows that the null hypothesis is accurate.
- 32.3% of respondents agreed that "Digital Payment Apps allow better classification of data." The total Chi Count is 16.32, and the P-Count, which is greater than 0.05, is 0.177. It shows that the null hypothesis is accurate.
- In response to the question "Intend to Use Digital Payment Service Frequently," 39.2% of respondents strongly agreed. The total Chi Count is 15.77, and the P-Count, which is greater than 0.05, is 0.202. It shows that the null hypothesis is accurate.



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- 46.15% of respondents who said they "want to utilize digital payment apps more than Cash" gave a strong agreement response. The total Chi Count is 17.32, and the P-Count, which is greater than 0.05, is 0.138. It shows that the null hypothesis is accurate.
- 36.9% strongly agreed that they "found working with Digital Payment Apps Very Easy." It has a P-Count of 0.442, which is higher than 0.05, and an overall Chi Count of 12.04. It shows that the null hypothesis is accurate.
- 40.7% of respondents gave a highly agree response to the statement, "Personal user experience steers towards favourable response." Its total ChiCount is 13.380, and the P-Count, which is higher than 0.05, is 0.342. It shows that the null hypothesis is accurate.
- 35.3% of respondents who were asked "Would you suggest it to others?" gave a yes response. It has a P- Count of 0.522, which is higher than 0.05, and an overall Chi Count of 11.08. It shows that the null hypothesis is accurate.
- Regarding whether a digital payment app produces the required results, 43.07% of respondents highly agreed. It has a P-Count of 0.070, which is higher than 0.05, and an overall Chi Count of 19.85. It shows that the null hypothesis is accurate.
- 40.07% highly agreed when asked "Overall, you'll use Digital Payment App consistently?" It has a P-Count of 0.070, which is higher than 0.05, and an overall Chi Count of 19.79. It shows that the null hypothesis is accurate.
- In response to the question, "Overall, will you use Digital Payment App consistently?" 53.07% gave a strongly agree response. It has a P-Count of 0.539, which is higher than 0.05, and an overall Chi Count of 7.95. It shows that the null hypothesis is accurate.
- KMO's Count is 0.90, which is higher than its threshold limit of 0.6, and sig. Count 0.00, which is lower than 0.05, according to factor analysis, which makes this obvious. The information was therefore suitable for the data reduction method. All factor loading Counts are higher than 0.4.

Factor 1: Features

• This factor is composed of the following seven statements: P1 Digital Payment Apps are Time Efficient with Factor Loading Count 0.549; Smooth User Interface with Factor Loading Count 0.699; Better Data Classification with Factor Loading Count 0.646; I Find Working with Digital Payment Apps Very Easy with Factor Loading Count 0.819; Personal User Experience Directs Toward Positive Response with Factor Loading Count 0.793.

Factor 2: Overall Response

- This factor is made up of the following six statements: I expect to use digital payment applications more than cash (Count: 0.69) and digital payment services make it convenient to buy goods and services (Count: 0.727). Does Digital Payment App execute the required output with a Count of 0.671? A Count of 0.507? Do you intend to frequently use the Digital Payment App? With a score of 0.607, do you prefer to utilize the digital payment app? Has a 0.608 Count.
- The results of this study highlight the importance of numerous elements that have an effect on how mobile payment systems are actually used. The TAM Model's elements and government activities could serve as a springboard for models that incorporate numerous other, untested or unreviewed factors. As a result, the current study advances the body of knowledge on mobile payment systems.
- As a result of a government initiative that had a favourable effect on the continuation of mobile payments for both consumers and businesses, the government should keep spreading the word about the economic advantages of mobile payment systems and provide concessions to businesses who accept them. Additionally, the federal government and state governments should collaborate to improve the security of the mobile payment infrastructure.
- The findings might help regulatory bodies and policymakers inspire consumer confidence in mobile payment systems. The regulatory authority can pinpoint the variables that are crucial in the acceptance of the payment system with the aid of this study. In order to ensure a secure user interface and encourage more individuals to use mobile payments for daily transactions.

SUGGESTIONS

- The traditional payment methods like cash and credit cards pose a serious threat to mobile payment systems, so the sector must put a lot of effort into marketing.
- The m-payments business needs to grow, and all parties concerned must play their part in promoting m-payments to grow the economy. The research's findings imply that although mobile payment systems are used to some extent in cities, there is considerable awareness of them.
- This study identified network failure as a significant barrier, thus the government and mobile network operators should endeavor to develop a reliable infrastructure for m-payments.



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- More and more consumers are choosing to use m-payments as they feel that their merchants are encouraging them to do so less and less. M-payment adoption is a two-way process, thus the service provider and government should involve merchants in the process. The consumer will embrace more policies the more businesses do so.
- In order to keep transactions safe and secure for the user, payment gateways like Visa and RuPay should make an effort. To prevent several transaction drops, they should demand a quick and successful transaction from their end.

LIMITATIONS & FUTURE SCOPE

- The primary drawback of this study was that it concentrated on a detailed examination of users while only a few questions were posed to non-users; as a result, non-users were not sufficiently investigated in this study, adding yet another drawback.
- The amount of room available for study is minimal. If a greater geographic area is taken into account, the results may differ.
- Future researchers could also examine and contrast alternative mobile payment systems and market-available mpayments at the same time.
- Additionally, various merchant kinds, such as small, medium, and large businesses, can be taken into account for future research and compared for the level of acceptance of mobile payment systems.

6. CONCLUSION

A wide range of technology-based solutions have emerged as a result of the expansion of the Indian economy and the country's population's rising level of life. Online payments are a recent trend that have become more prevalent recently as a result of a number of factors, including the government's efforts to promote a digital India through awareness campaigns, the demonetization of currency, the launch of JDY and UPI, the expansion of 4G internet access and affordable handsets in the telecom sector, the growth of m-commerce, the emergence of new players in the m-payments market, and—most importantly—a change in people's lifestyles that have made them more Using appropriate statistical analysis tools and SPSS, a solid research hypothesis was developed and tested to explore the objectives (version 23). Cronbach's alpha, factor analysis, chi-square, pie charts, tabulation, and frequency are some of the statistical techniques employed in this study. When it comes to adopting online payments, the preference for g-Pay is at most 46.7%, while the preference for Paytm is at most 35.5%, with the majority of respondents (based on age) falling between the ages of 18 and 25. The majority of responders are men, and g-Pay has a preference for embracing online payments of up to 44.9%, whereas Paytm has a preference of up to 36.2%. The government should continue disseminating information about the financial benefits of mobile payment systems and provide discounts to companies that accept them as a consequence of a government programme that positively impacted the continuation of mobile payments for both consumers and businesses.

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