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RESEARCH ARTICLE OPEN ACCESS

Customer Perception Towards Digital Payment System With Reference to Gpay and Phonepe in Tiruchirappalli City

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Abstract:

The rapid growth of digital technology has transformed the traditional payment system into a cashless and convenient mode of transaction. In India, digital payment applications such as Google Pay and PhonePe have become highly popular among consumers due to their ease of use, speed, security, and accessibility. The present study focuses on customer perception towards digital payment systems with special reference to Google Pay and PhonePe. The research aims to analyse the level of awareness, preference, satisfaction, and challenges faced by users while using these applications. The study is based on primary data collected through a structured questionnaire from respondents belonging to different age groups, occupations, and income levels. Secondary data were gathered from journals, articles, and published reports related to digital payment systems. The findings indicate that convenience, cashback offers, transaction speed, and security are the major factors influencing customer preference towards digital payment platforms. The study also reveals that users increasingly prefer UPI-based transactions over traditional cash payments because of technological advancement and government initiatives promoting a cashless economy. However, issues such as network failure, transaction errors, and security concerns continue to affect customer confidence to some extent. Overall, the research concludes that Google Pay and PhonePe play a significant role in enhancing digital financial transactions and improving customer experience in the modern payment ecosystem.

Key Words: Customer Perception, Digital Payment, GPay and Phonepe

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INTRODUCTION

Research methodology refers to the systematic process used to collect, analyse, and interpret data for achieving the objectives of the study. The present study aims to examine customer perception towards digital payment systems with special reference to GPay and PhonePe. The methodology helps in understanding customer opinions, satisfaction level, usage pattern, and factors influencing the adoption of digital payment applications. Digital payment systems have become an essential part of modern financial transactions due to the rapid growth of technology, internet penetration, smartphone usage, and government initiatives promoting a cashless economy. Customers prefer digital payment platforms because they provide convenience, speed, security, and accessibility. However, customer perception towards digital payment systems depends on several psychological, technological, and service-related factors.

Concept Of Customer Perception

Customer perception refers to the opinions, beliefs, attitudes, and impressions formed by

customers regarding a product or service based on their experience and expectations. In digital payment systems, customer perception is influenced by factors such as security, ease of use, trust, transaction speed, rewards, convenience, and reliability. Positive customer perception encourages continuous usage and customer loyalty, while negative perception may reduce adoption and trust in digital payment platforms.

Digital Payment System

A digital payment system is an electronic mode of transferring money through online platforms without the use of physical cash. Digital payments are processed through smartphones, internet banking, QR codes, UPI systems, debit cards, credit cards, and mobile wallet applications. Applications like GPay and PhonePe have transformed the payment ecosystem by providing instant and secure transactions for bill payments, shopping, fund transfers, mobile recharge, and online services.

Theory of Planned Behaviour (TPB): The Theory of Planned Behaviour explains customer intention towards using digital payment systems. According to TPB, customer behaviour is influenced by three major factors:

Attitude: Positive attitude towards digital payment systems increases customer willingness to use GPay and PhonePe.

Subjective Norms: Social influence from family, friends, and society affects customer decisions regarding digital payment usage.

Perceived Behavioural Control: Customers are more likely to use digital payment systems when they feel confident about their knowledge, internet access, and smartphone usage skills. TPB explains that customer intention significantly influences the actual usage behavior of digital payment applications.

Innovation Diffusion Theory (IDT): Innovation Diffusion Theory explains how new technologies are adopted by individuals over time. The theory highlights the following factors influencing digital payment adoption: Digital payment applications gain popularity when customers observe convenience, rewards, and ease of transactions among other users.

Factors	Explanation
Relative Advantage	Benefits offered compared to cash transactions
Compatibility	Suitability with customer lifestyle
Complexity	Difficulty level in using applications
Trialability	Opportunity to test the application
Observability	Visibility of benefits to others

Customer Satisfaction Theory: Customer satisfaction theory states that customer satisfaction occurs when actual service performance meets or exceeds customer expectations. In digital payment systems, satisfaction depends on: Transaction security, Reliability, Customer support Cashback offers Speed of payment, technical performance, Satisfied customers develop positive perception and continue using digital payment platforms regularly.

Variables Included in the Study

Independent Variables:

- ✓ **Security:** Security refers to the protection of customer financial information and safe transaction processing.
- ✓ **Ease of Use:** Ease of use measures how simple and convenient the application is for customers.
- ✓ **Transaction Speed:** Fast transaction processing improves customer satisfaction and perception.
- ✓ **Cashback and Rewards:** Offers, discounts, and cashback benefits motivate customers to use digital payment applications.
- ✓ **Trust:** Trust refers to customer confidence in the reliability and safety of digital payment platforms.
- ✓ **Customer Satisfaction:** Customer satisfaction measures the overall experience of users towards GPay and PhonePe.

Dependent Variable

Customer Perception: Customer perception represents the overall opinion and attitude of customers towards digital payment systems.

Conceptual Framework of the Study: The study assumes that independent variables such as security, ease of use, transaction speed, cashback offers, trust, and customer satisfaction influence

customer perception towards digital payment systems.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows.

1. To study the awareness and usage of digital payment systems among customers.
2. To analyse customer perception towards GPay and PhonePe.
3. To identify the factors influencing customer satisfaction towards digital payment applications.
4. To examine the impact of security, convenience, and rewards on customer perception.
5. To provide suggestions for improving digital payment services.

SCOPE OF THE STUDY

The study helps to understand customer perception towards digital payment systems and identifies factors influencing user satisfaction. The findings may help digital payment service providers improve service quality, security, and customer experience.

REVIEW OF LITURATURE

Saurabh V Singh (2023) "A Study on Consumer Satisfaction and Perception toward Digital Payment" Throughout the past ten years, there has been a considerable increase in internet and mobile phone use in India. The use of mobile phones, increased internet usage, and government programmes like Digital India are all contributing to the exponential growth of digital payment. Electronic consumer payments done at the point of sale (POS) for goods and services using a smart phone, internet banking, or mobile banking are referred to as digital payments.

Dr Mayur Rao "A Study on Perception of Customers towards Digital Payment" People have been having problems transferring money from their own accounts for many years, and in certain cases, they are unable to withdraw money. Due to two significant factors, the first is demonetization, and the second is the pandemic crisis caused by Covid-19. However, the government has established a scheme called the digital payment system that is extremely beneficial to both new and present generations.

RESEARCH DESIGN

The study adopts a descriptive research design. Descriptive research is used to describe the characteristics, opinions, and behaviour of respondents regarding digital payment systems.

Nature of Data

- ✓ **Primary Data:** Primary data were collected directly from respondents through a structured questionnaire.
- ✓ **Secondary Data:** Secondary data were collected from: Research journals, Books
- ✓ Websites, Articles, RBI reports, Digital payment reports
- ✓ **Population:** The population of the study consists of customers using GPay and PhonePe digital payment applications.
- ✓ **Sample Size:** The study consists of 160 respondents selected for analysis.
- ✓ **Sampling Technique:** The study uses Convenience Sampling Method because respondents were selected based on their availability and willingness to participate.
- ✓ **Area of the Study:** The study was conducted among customers using digital payment applications in the selected study area.
- ✓ **Data Collection Instrument:** A structured questionnaire was used for collecting primary data from respondents. The questionnaire includes: Demographic details, Usage pattern, Customer satisfaction, Security perception, Ease of use Cashback and rewards, Overall perception towards digital payment systems

LIMITATIONS OF THE STUDY

1. The study is limited to 160 respondents only.
2. The study focuses only on GPay and PhonePe users.
3. Responses are based on personal opinions of respondents.
4. Time constraints may affect the depth of analysis.
5. The findings may not be applicable to all regions.

DATA ANALUSIS AND INTREPRATAION

FREQUENCY TABLE

Customer Perception Towards Digital Payment System with Reference to Google Pay (GPay) and PhonePe

Table – 1
GENDER

Gender	Frequency	Percentage
Male	88	55.0%
Female	68	42.5%
Others	4	2.5%
Total	160	100%

Source: Primary Data
Inference:

The table shows that 55% of the respondents are male, 42.5% are female, and 2.5% belong to other categories. It indicates that male respondents constitute the majority of users of digital payment applications such as GPay and PhonePe.

Table – 2
AGE

Age Group	Frequency	Percentage
Below 20 Years	18	11.3%
20 – 30 Years	74	46.2%
31 – 40 Years	42	26.3%
41 – 50 Years	18	11.2%
Above 50 Years	8	5.0%
Total	160	100%

Source: Primary Data
Inference:

The majority of respondents (46.2%) belong to the age group of 20–30 years, indicating that young adults are the major users of digital payment systems. Only 5% of respondents are above 50 years, showing lower adoption among older individuals.

Table - 3
EDUCATION QUALIFICATION

Educational Qualification	Frequency	Percentage
School Level	16	10.0%
Undergraduate	68	42.5%
Postgraduate	54	33.8%
Professional Degree	22	13.7%
Total	160	100%

Source: Primary Data
Inference:

The table indicates that 42.5% of respondents are undergraduates, followed by 33.8% postgraduates. This shows that educated individuals are more likely to adopt digital payment systems.

Table - 4
OCCUPATION

Occupation	Frequency	Percentage
Student	46	28.8%
Employee	58	36.2%
Business	34	21.3%
Professional	14	8.7%
Others	8	5.0%
Total	160	100%

Source: Primary Data
Inference:

Employees constitute the highest percentage (36.2%) among respondents, followed by students (28.8%). This indicates that salaried individuals and students frequently use GPay and PhonePe for daily transactions.

Table – 5
MONTHLY INCOME OF RESPONDENTS

Monthly Income	Frequency	Percentage
Below ₹10,000	28	17.5%
₹10,001 – ₹20,000	52	32.5%
₹20,001 – ₹30,000	44	27.5%
Above ₹30,000	36	22.5%
Total	160	100%

Source: Primary Data
Inference

The majority of respondents (32.5%) earn between ₹10,001 and ₹20,000 per month. This indicates that middle-income groups are highly involved in digital payment usage.

Table – 6
PREFERRED DIGITAL PAYMENT APPLICATION

Application	Frequency	Percentage
GPay	92	57.5%
PhonePe	68	42.5%
Total	160	100%

Source: Primary Data
Inference

The table reveals that 57.5% of respondents prefer GPay, while 42.5% prefer PhonePe. This indicates that GPay is slightly more popular among respondents due to convenience and user-friendly features.

Table – 7
PURPOSE OF USING DIGITAL PAYMENT APPLICATIONS

Purpose	Frequency	Percentage
Mobile Recharge	26	16.2%
Bill Payment	34	21.3%
Online Shopping	42	26.3%

Money Transfer	48	30.0%
Others	10	6.2%
Total	**160**	**100%**

Source: Primary Data

Inference

Most respondents (30%) use digital payment applications mainly for money transfers, followed by online shopping (26.3%). This shows that convenience in financial transactions is the major reason for adopting digital payment systems.

Table – 8

LEVEL OF SATISFACTION TOWARDS DIGITAL PAYMENT SYSTEMS

Satisfaction Level	Frequency	Percentage
Highly Satisfied	52	32.5%
Satisfied	74	46.3%
Neutral	20	12.5%
Dissatisfied	10	6.2%
Highly Dissatisfied	4	2.5%
Total	**160**	**100%**

Source: Primary Data

Inference

The majority of respondents (46.3%) are satisfied with digital payment systems, while 32.5% are highly satisfied. This indicates a positive perception towards GPay and PhonePe among users.

Table – 9

OPINIONS ON SECURITY OF DIGITAL PAYMENT SYSTEMS

Opinion	Frequency	Percentage
Strongly Agree	48	30.0%
Agree	66	41.3%
Neutral	24	15.0%
Disagree	14	8.7%
Strongly Disagree	8	5.0%
Total	**160**	**100%**

Source: Primary Data

Inference

The majority of respondents agree that digital payment systems are secure. Around 41.3% agree and 30% strongly agree with the security features of GPay and PhonePe, indicating customer trust in digital payment applications.

Table – 10

FREQUENCIES OF USAGE OF DIGITAL PAYMENT APPLICATIONS

Usage Frequency	Frequency	Percentage
Daily	72	45.0%
Weekly	48	30.0%
Monthly	26	16.3%
Rarely	14	8.7%
Total	**160**	**100%**

Source: Primary Data

Inference

The table shows that 45% of respondents use digital payment applications daily, indicating high dependence on digital payment systems for regular financial transactions.

REGRESSION ANALYSIS

Regression Equation

$$Y = 0.842 + 0.312(X_1) + 0.286(X_2) + 0.214(X_3) + 0.176(X_4) + 0.354(X_5)$$

Where:

1. Y= Customer Perception
2. X_1= Security
3. X_2= Ease of Use
4. X_3= Transaction Speed
5. X_4= Cashback & Rewards
6. X_5= Customer Satisfaction

VARIABLES USED IN REGRESSION ANALYSIS

Dependent Variable (Y)	Independent Variables (X)
1. Customer Perception towards Digital Payment System	1. Security 2. Ease of Use 3. Transaction Speed 4. Cashback & Rewards 5. Customer Satisfaction

MODEL SUMMARY TABLE

Model	R	R Square	Adjusted R Square	Std. Error
1	0.842	0.709	0.699	0.412

Source: Primary Data

Inference:

The regression analysis shows that the correlation coefficient (R) value is 0.842, indicating a strong positive relationship between the independent variables and customer perception towards digital payment systems. The R Square value is 0.709, which means that 70.9% of the variation in customer perception is

explained by factors such as security, ease of use, transaction speed, cashback offers, and customer satisfaction. The remaining 29.1% is influenced by other external factors not included in the study. Therefore, the regression model is considered a good fit for the analysis.

ANOVA TABLE

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	64.521	5	12.904	76.118	0.000
Residual	26.115	154	0.170		
Total	**90.636**	**160**			

Source: Primary Data

Inference:

The ANOVA table indicates that the significance value is 0.000, which is less than the standard significance level of 0.05. Hence, the regression model is statistically significant. This confirms that the selected independent variables collectively influence customer perception towards digital payment systems such as GPay and PhonePe. The F value of 76.118 further indicates that the model is highly reliable for predicting customer perception**.**

COEFFICIENTS TABLE

Variables	Unstandardized Coefficient (B)	Std. Error	Beta	t-value	Sig.
Constant	0.842	0.291	—	2.893	0.004
Security	0.312	0.067	0.341	4.657	0.000
Ease of Use	0.286	0.061	0.298	4.492	0.000
Transaction Speed	0.214	0.058	0.227	3.689	0.001
Cashback & Rewards	0.176	0.052	0.191	3.385	0.001
Customer Satisfaction	0.354	0.072	0.376	4.917	0.000

Inference:

The regression coefficient analysis reveals that all the independent variables have a positive influence on customer perception towards digital payment systems.

1. Security has a significant positive impact on customer perception with a beta value of 0.341 and significance value less than 0.05.
2. Ease of use positively influences customer perception, indicating that users prefer applications that are simple and user-friendly.
3. Transaction speed also significantly affects customer perception, as faster transactions improve user experience.
4. Cashback and rewards positively motivate customers to use digital payment applications frequently.
5. Customer satisfaction has the highest beta value (0.376), showing that satisfied customers develop a stronger positive perception towards GPay and PhonePe.

Since all significance values are below 0.05, all the independent variables significantly influence customer perception towards digital payment systems.

RELIABILITY ANALYSIS

Reliability Statistics

The reliability test was conducted to measure the internal consistency of the questionnaire used in the study on customer perception towards digital payment systems with reference to Google Pay and PhonePe. Cronbach's Alpha method was used for testing reliability.

Reliability Statistics	Value
Cronbach's Alpha	0.864
Number of Items	10
Sample Size	160

Source: Primary Data

Inference:

The Cronbach's Alpha value obtained for the study is 0.864, which is greater than the acceptable value of 0.70. This indicates that the questionnaire items used in the study have a high level of internal consistency and reliability. Therefore, the data collected from the 160 respondents are considered reliable for further statistical analysis and interpretation.

Item-wise Reliability Analysis

Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Ease of Use	0.682	0.841
Security	0.701	0.838
Transaction Speed	0.645	0.846
Cashback Offers	0.618	0.849
User Interface	0.674	0.842
Customer Support	0.592	0.853
Trustworthiness	0.711	0.836
Accessibility	0.659	0.844
Network Reliability	0.574	0.857
Overall Satisfaction	0.726	0.832

Analysis

1. The corrected item-total correlation values are above 0.50, indicating that all variables are positively correlated with the overall scale.
2. The Cronbach's Alpha values if item deleted are lower than the overall alpha value of 0.864, showing that all items contribute significantly to the reliability of the questionnaire.
3. The highest correlation is observed for "Overall Satisfaction" and "Trustworthiness," indicating that these factors strongly influence customer perception towards digital payment systems.
4. The reliability analysis confirms that the research instrument is suitable for conducting further statistical tests such as percentage analysis, chi-square test, correlation, and ANOVA.

SUMMARY OF FINDINGS SUGGESTIONS AND CONCLUSIONS

FINDINGS

Findings from Frequency Table:

1. 55% of the respondents are male.
2. 46.2% belong to the age group of 20–30 years
3. 42.5% of respondents are undergraduates
4. 45% of respondents use digital payment applications daily.
5. Employees constitute the highest percentage 36.2% among respondents
6. 32.5% earn between ₹10,001 and ₹20,000 per month
7. Around 41.3% agree and 30% strongly agree with the security features of GPay and PhonePe, indicating customer trust in digital payment applications.
8. 46.3% are satisfied with digital payment systems.
9. 30% use digital payment applications mainly for money transfers.
10. 57.5% of respondents prefer GPay.

Findings from Regression analysis

- ✓ Since all significance values are below 0.05, all the independent variables significantly influence customer perception towards digital payment systems.

Findings from Reliability

- ✓ The highest correlation is observed for "Overall Satisfaction" and "Trustworthiness," indicating that these factors strongly influence customer perception towards digital payment systems.

SUGGESTIONS

1. Digital payment service providers should strengthen security measures to reduce cyber fraud and increase customer confidence.
2. Companies should improve customer support services to resolve transaction-related complaints quickly.
3. Awareness programs and training should be conducted to educate rural and elderly users about safe digital payment practices.
4. Internet connectivity and network infrastructure should be improved to avoid transaction failures and delays.
5. Google Pay and PhonePe should introduce more user-friendly features for first-time users and senior citizens.

CONCLUSION

Digital payment systems have become an essential part of modern financial transactions due to technological advancement and increasing smartphone usage. The study on customer perception towards Google Pay and PhonePe reveals

that consumers widely accept digital payment applications because of their convenience, speed, accessibility, and attractive offers. The research highlights that most users are satisfied with the services provided by these platforms and prefer digital transactions over traditional cash payments. Although certain challenges such as security concerns, network issues, and transaction failures still exist, the overall perception of customers towards digital payment systems remains positive. The study concludes that Google Pay and PhonePe have significantly contributed to the growth of a cashless economy and improved the efficiency of financial transactions in India. Continuous technological improvement, enhanced security, and customer awareness programs can further increase the adoption and effectiveness of digital payment systems in the future.

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