User Experience and Satisfaction with UPI Payment Systems

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How to Cite this Article:

C, A. M. D. A. C. S. M. M. K. P. B. D. J. K. (2026). User Experience and Satisfaction with UPI Payment Systems. International Journal of Creative and Open Research in Engineering and Management, <i>02</i>(7), 1-9. https://doi.org/10.55041/ijcope.v2i7.124

https://doi.org/10.55041/ijcope.v2i7.124

Abstract

The rapid growth of digital technology has changed the way people make payments. The Unified Payments Interface (UPI) has become one of the most popular digital payment systems because it is fast, easy to use, and convenient. This study focuses on customer perception and satisfaction regarding UPI payments in Kannur District. The study aims to analyse customers' perceptions towards UPI services, identify the factors influencing UPI usage, assess the level of customer satisfaction, and study the problems faced by users while making UPI transactions. The study collected primary data from 60 respondents through a structured questionnaire. The data were then analysed with the help of percentage analysis, weighted average, Chi-square test, independent sample t-test, and correlation analysis.

The findings revealed that most respondents use UPI regularly and prefer it because of its convenience, ease of use, speed, and wide acceptance among merchants. Google Pay was found to be the most preferred UPI application among the respondents. The study revealed that customer perception is positively related to customer satisfaction with UPI payments. Although users reported certain problems such as network issues and transaction failures, the overall level of satisfaction with UPI services was high. The study concludes that UPI has become an important part of daily financial transactions and contributes significantly to the growth of a digital and cashless economy.

Keywords: Customer perception, Customer satisfaction, UPI payments, Digital payments, Mobile payments, Cashless economy, Digital banking.

Introduction

Nowadays, technology has changed the way people make payments and carry out financial transactions. People are slowly moving away from cash transactions and are increasingly using digital payment methods because they are easy, fast, and convenient. The growing use of smartphones, internet services, and mobile applications has led to the rapid growth of digital payments. One of the most popular digital payment systems in India is the Unified Payments Interface (UPI), introduced by the National Payments Corporation of India (NPCI). UPI enables users to transfer money directly from one bank account to another using mobile phones. It helps users send and receive money, pay utility bills, purchase goods and services, and make cashless payments quickly and securely. Popular mobile applications such as Google Pay, Paytm, PhonePe, and BHIM have made UPI payments simple and accessible to a large number of people. People can make payments anytime and from anywhere using their smartphones. The COVID-19 pandemic further increased the use of UPI payments as many people preferred contactless transactions instead of using cash.

Customer perception and satisfaction are important for the success of UPI payments. Customer perception refers to how people feel about UPI services in terms of convenience, security, speed, and reliability. Customer satisfaction shows whether the services meet the expectations of users. If customers have a positive experience, they are more likely to continue using UPI services in the future. However, customers also face some problems while using UPI payments. Transaction failures, internet issues, technical problems, and security concerns can affect their experience and satisfaction. Therefore, it is important to understand customers' opinions and experiences regarding UPI payments. Such studies can help identify the strengths and weaknesses of UPI services and suggest measures for improving digital payment systems in the future.

Problem Statement

The use of UPI payments has increased rapidly in recent years and has changed the way people make financial transactions. Many customers prefer UPI payments because they are fast, convenient, and easy to use for everyday transactions. Applications such as Google Pay, Paytm, PhonePe, and BHIM have made digital payments more accessible to people. However, despite the growing popularity of UPI payments, customers continue to face several problems such as transaction failures, technical issues, internet connectivity problems, and security concerns. Some users also lack awareness about the safe use and advanced features of UPI applications. These problems can affect customers' perception and satisfaction towards digital payment services.

Customer satisfaction is important for the continued growth and success of UPI payments. If customers experience frequent problems or feel that digital payments are not secure, they may hesitate to use these services regularly. Therefore, it is necessary to study customers' perception, satisfaction levels, and the problems they face while using UPI payments. The present study attempts to examine these aspects with special reference to Kannur District.

Significance

The present study is important because digital payment systems have become a common part of daily life and business activities. Understanding customers' perception and satisfaction towards UPI payments helps banks, financial institutions, and service providers improve the quality and efficiency of digital payment services. The study provides useful information about customers' expectations, preferences, and experiences while using UPI applications. It also helps identify the major factors influencing the use of UPI payments and the problems faced by customers during transactions.

Objectives

1. To understand customers' perception towards UPI payments.
2. To identify the reasons that encourage customers to use UPI payments.
3. To examine the level of customer satisfaction with UPI services.
4. To know the difficulties faced by customers while using UPI applications.
5. To study the relationship between customer perception and satisfaction towards UPI payments.

Hypotheses

$H_0 1$: There is no significant association between gender and frequency of UPI usage.

$H_0 2$**:** There is no significant difference in customer satisfaction towards UPI payments between male and female respondents.

$H_0 3$: There is no significant relationship between customer perception and customer satisfaction towards UPI payments.

Literature Review

Gupta and Arora (2020) studied customer perception towards digital payment systems with special reference to UPI. The study found that ease of use, convenience, and time-saving features of UPI positively influence customer perception. The authors concluded that UPI has played an important role in promoting a cashless economy in India.

Kumar and Ramesh (2021) analysed customer satisfaction towards UPI services and found that most users were highly satisfied because of instant transactions and low transaction costs. The study highlighted that technical reliability and quick settlement of payments are major factors contributing to customer satisfaction.

Sharma (2022) examined the influence of security and trust on customer perception towards UPI payments. The study identified security concerns and fear of fraud as major challenges affecting customer confidence. The author suggested improving awareness regarding security features to enhance customer satisfaction.

Iyer and Christian (2023) studied the growth of digital payments in India and observed a rapid increase in digital transactions after demonetisation and during the COVID-19 pandemic. The study reported that UPI usage increased significantly as consumers shifted towards contactless payment methods.

Patel (2023) examined demographic factors affecting UPI usage and found that younger and more educated customers were more comfortable using UPI services compared to older users. The study recommended digital literacy programmes to encourage adoption among all age groups.

Patel and Mehta (2023) focused on demographic influences on customer perception and satisfaction towards UPI payments. Their findings showed that younger, educated, and urban customers had more favourable perceptions towards UPI services than older users.

Singh (2024) explored factors influencing the continued use of UPI payments and concluded that customer satisfaction is strongly related to transaction speed, reliability, and acceptance across merchants. The study recommended strengthening technical infrastructure to ensure uninterrupted service.

Singh and Kaur (2024) conducted a comparative study among UPI users and non-users. The study found that frequent UPI users showed higher levels of satisfaction due to greater familiarity and trust in the system. The authors emphasised the need for continuous technological improvements to maintain customer satisfaction.

Shrivastwa (2025) analysed consumer behaviour towards UPI payments in the Delhi NCR region using survey data. The findings revealed that transaction speed, convenience, and trust are the major determinants of customer satisfaction. The study also found that most users rely on UPI for daily transactions and consider it faster than traditional payment methods, although occasional technical failures affect satisfaction levels.

Research Methodology

A descriptive and analytical research design was adopted for the study to examine customer perception and satisfaction towards UPI payments in Kannur District. The population includes all users of UPI payment services in Kannur District. A sample of 60 respondents was selected for the study using convenience sampling. Primary data were collected using a structured questionnaire. The data were analysed with the help of percentage analysis, ranking method, weighted average, Chi-square test, independent sample *t*-test, and correlation analysis.

Analysis and Interpretation

Primary data collected from 60 respondents are analysed in the following section.

Table 1 : Demographic Profile

Variables	Category	Frequency	Percentage
Age	Below 20	2	3.33
	21-30	51	85.00
	31-40	3	5.00
	41-50	3	5.00
	50 & above	1	1.67
Gender	Male	33	55.00
	Female	27	45.00
Education	SSLC	6	10.00
	Plus two	6	10.00
	Graduation	32	53.33
	Post-graduation	14	23.33
	Others	2	3.34
Occupation	Student	18	30.00
	Employed	34	56.67
	Self employed	7	11.67
	Home maker	1	1.66
	Others	0	0
Monthly income	10000-20000	12	20.00
	20000-30000	41	68.33
	30000-40000	4	6.67
	40000 and above	3	5.00
Total		**60**	**100.00**

The majority of respondents (85%) belonged to 21-30 years of age. Respondents in the age groups of 31- 40 years and 41-50 years each accounted for 5 percent of the sample. About 3.33 percent of respondents belonged to the below 20 years of age, while the remaining 1.67 percent belonged to 50 years and above age group.

Among the 60 respondents, 55 percent were male and 45 percent were female.

With regard to educational qualification, the majority of respondents were graduates (53.33%), followed by postgraduates (23.33%). Respondents with Plus Two and SSLC qualifications each accounted for 10 percent of the total sample.

The occupational profile shows that 56.67 percent of the respondents were employed. Students constituted 30 percent of the total respondents, while 11.67 percent were self-employed. Only 1.66 percent of the respondents were homemakers.

The income analysis reveals that the majority of respondents (68.33%) have monthly income between ₹20,000–₹30,000. About 20 percent of the respondents earned between ₹10,000 and ₹20,000 per month. Only 6.67 percent earned a monthly income between ₹30,000 and ₹40,000, while 5 percent earned above ₹40,000 per month.

Table 2 : Frequently used UPI application

Frequently used application	Frequency	Percentage
Google pay	24	40.00
Phone pay	18	30.00
Paytm	10	16.67
BHIM	8	13.33
Total	**60**	**100.00**

The analysis shows that Google Pay is the most preferred UPI application among the respondents, with 40 percent using it. PhonePe is the second most preferred application, used by 30 percent of the respondents, followed by Paytm with 16.67 percent. BHIM is used by 13.33 percent of the respondents.

Table 3: Duration of UPI usage

Duration	Frequency	Percentage
Less than 6 months	6	10.00
6 months -1 year	7	11.66
1 year-3 years	25	41.67
More than 3 years	22	36.67
Total	**60**	**100.00**

Out of the 60 respondents, 41.67 percent have been using UPI for 1 to 3 years, making it the largest group of users. About 36.67 percent of the respondents have been using UPI for more than 3 years. 11.66 percent using UPI for 6 months to 1 year and 10 percent using it for less than 6 months.

Table 4 : Frequency of UPI Usage

Frequency of UPI Usage	Frequency	Percentage
Daily	26	43.33
Weekly	13	21.67
Occasionally	17	28.33
Rarely	4	6.67
Total	**60**	**100.00**

Out of the 60 respondents, 43.33 percent use UPI daily, making it the largest group of users. About 28.33 percent use UPI occasionally, while 21.67 percent use it weekly. Only 6.67 percent of the respondents use UPI rarely.

Association Between Gender and Frequency of UPI Usage

$H_0 1$: Gender has no significant influence on the frequency of UPI usage.

Table 5 : Association between Gender and Frequency of UPI Usage (Chi-square Test)

Gender	Daily	weekly	Occasionally	Rarely	Total	χ^2	χ^2 at 5% LoS and 3 DF
Male	18	7	6	2	33	2.37	7.815
Female	10	9	7	1	27		
Total	28	16	13	3	60		

As the calculated Chi-square value is less than the table value at the 5% level of significance (3 degrees of freedom), the null hypothesis is accepted. Hence, gender has no significant association with the frequency of UPI usage among the respondents in Kannur District. In other words, male and female respondents do not differ significantly in their UPI usage.

Table 6 : Main purpose of using UPI

Main propose of using UPI	Frequency	Percentage
Shopping	28	46.67
Bill payments	12	20.00
Fund transfer	10	16.67
Recharge	8	13.33

Others	2	3.33
Total	**60**	**100**

Out of the 60 respondents, 46.67 percent use UPI mainly for shopping. About 20 percent of the respondents use UPI primarily for bill payments, while 16.67 percent use it mainly for fund transfers. Around 13.33 percent of the respondents use UPI for recharges such as mobile and DTH recharges.

Figure 1 : Main purpose of using UPI

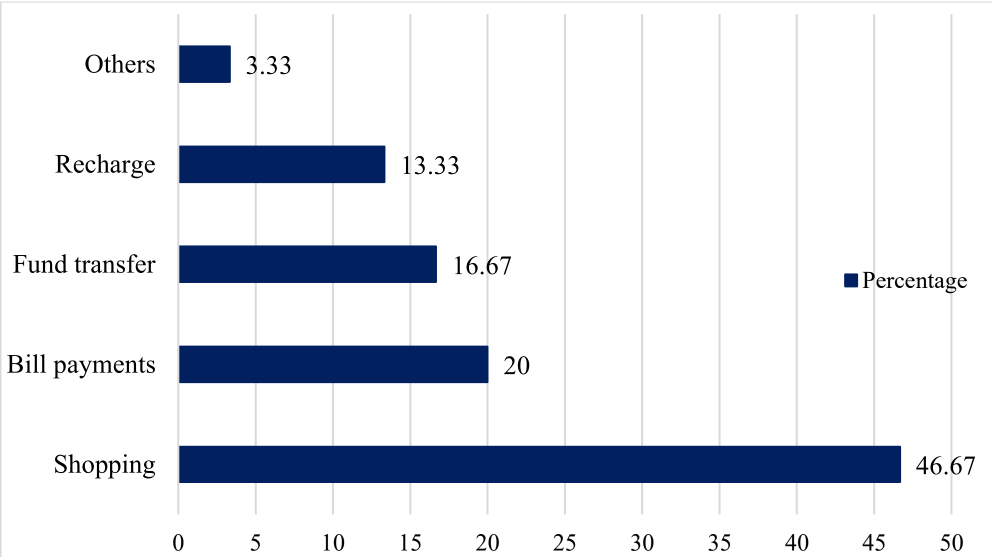


Table 7 : Factors Influencing UPI Usage

Factors Influencing UPI Usage	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Mean
Convenience	38	18	3	1	0	**4.55**
Ease of use	34	20	4	2	0	**4.43**
Speed of transaction	33	21	4	2	0	**4.42**
Security	24	25	7	3	1	**4.13**
Availability of offers	16	24	12	6	2	**3.77**
Trust in app	26	23	8	2	1	**4.18**
Wide acceptance by merchants and shops	31	22	5	2	0	**4.37**
Contactless payment preference after COVID-19	29	21	7	2	1	**4.25**

The mean score shows that convenience is the most important factor influencing the use of UPI payments, with the highest mean score of 4.55. This is followed by ease of use (4.43) and speed of transaction (4.42), indicating that customers prefer UPI because it is simple, quick, and convenient. Wide acceptance by merchants and shops also received a high mean score of 4.37, showing that the availability of UPI payment facilities encourages its usage. Contactless payment preference after COVID-19 (4.25), trust in the app (4.18), and security (4.13) were also found to influence customers positively. Availability of offers received the lowest mean score of 3.77, suggesting that cashback and promotional offers are less important compared to convenience and ease of use.

Figure 2 : Factors Influencing UPI Usage

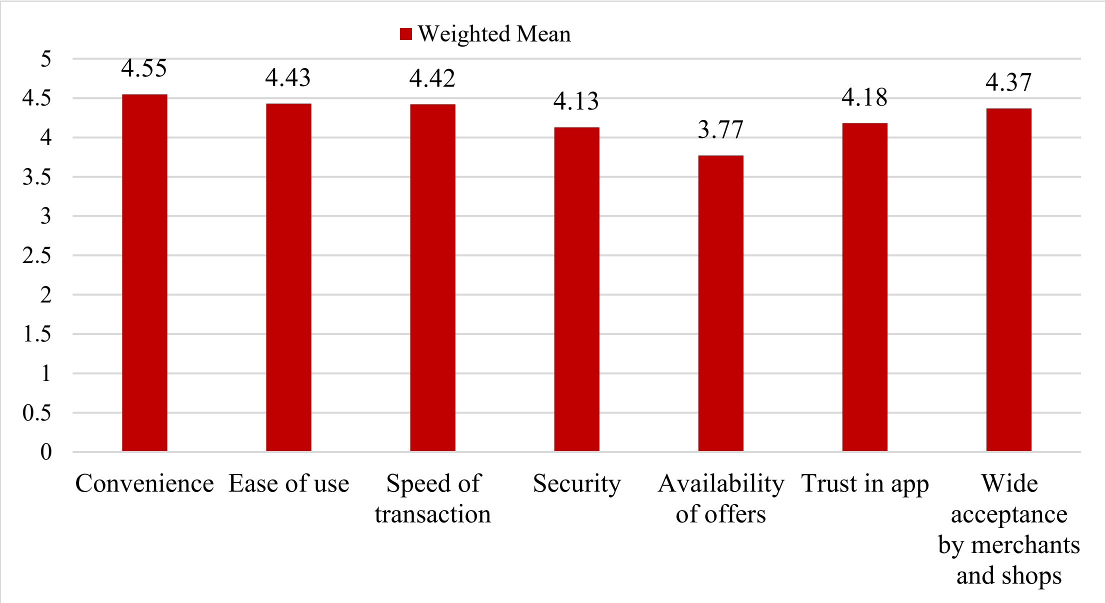


Table 8: Perception regarding UPI Payments

Opinion	Highly Agree	Agree	Neutral	Disagree	Highly disagree	Weighted mean
UPI payments are easy to use	30	26	2	1	1	**4.38**
UPI transactions are secure	8	31	15	4	2	**3.65**
UPI has reduced my dependency on cash	18	20	13	9	0	**3.78**
I can make payments anytime using UPI without difficulty	9	17	19	14	1	**3.32**
UPI save time compared to cash payments	14	26	13	5	2	**3.75**
UPI transactions are safe from fraud and misuse	9	15	21	11	4	**3.23**
UPI is widely accepted mechanism in our area	16	32	9	2	1	**4.00**

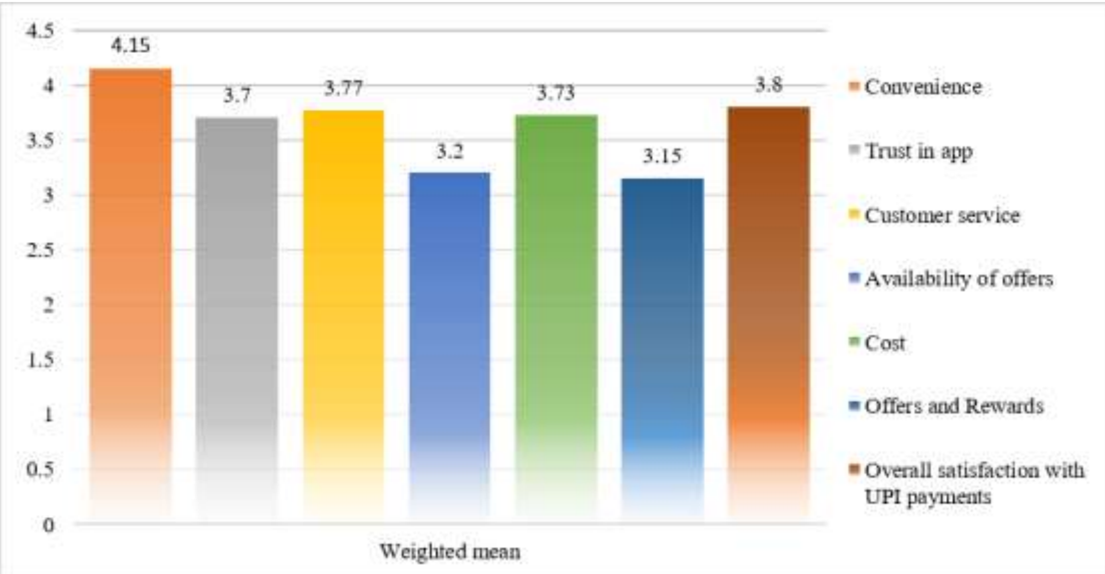
The highest weighted mean score of 4.38 was recorded for UPI payments are easy to use, indicating strong agreement among respondents. The weighted mean scores for wide acceptance (4.00), reduced dependency on cash (3.78), time saving (3.75), UPI transaction are secure (3.65), payments can be made any time without difficulty (3.31) and safety from fraud and misuse (3.23) shows positive responds.

Table 9: Level of satisfaction with UPI services

Factors	Highly satisfied	Satisfied	Neural	Dissa tisfied	Highly dissatisfied	Weighted mean
Convenience	19	31	10	0	0	4.15
Trust in app	7	30	22	0	1	3.7
Customer service	9	28	23	0	0	3.77
Availability of offers	4	21	22	9	4	3.2
Cost	8	33	16	1	2	3.73
Offers and Rewards	5	19	23	6	7	3.15
Overall satisfaction with UPI payments	8	34	16	2	0	3.8

The highest weighted mean score of 4.15 was recorded for convenience, indicating that most users are highly satisfied with the ease and convenience of UPI services. The weighted mean scores for overall satisfaction, customer service, cost, trust in the app, availability of offers, and cashback and rewards were 3.80, 3.76, 3.73, 3.70, 3.20, and 3.15 respectively. Overall, the table reveals that users are generally satisfied with UPI services, especially for convenience and ease of transactions.

Figure 3 : Level of satisfaction with UPI services



Customer Satisfaction Between Male and Female Respondents.

H_02: Male and female respondents do not differ significantly in their level of satisfaction towards UPI payments.

Table 10: Customer Satisfaction Between Male and Female Respondents.

Variable	Gender	Frequency	Mean	SD	*t*-value	*p*-value
Customer Satisfaction	Male	33	3.92	0.68	1.482	.144
	Female	27	3.65	0.72		

The mean customer satisfaction score was 3.92 (SD = 0.68) among male respondents and 3.65 (SD = 0.72) for female respondents. As the calculated t-value was 1.482 and the corresponding p-value was .144, which is greater than 0.05, the null hypothesis is accepted, indicating the difference in customer satisfaction between male and female respondents is not statistically significant.

Relationship between Customer Perception and Satisfaction towards UPI payments

$H_0 3$: Customer perception does not have a significant relationship with customer satisfaction towards UPI payments.

Table 11 : Relationship between Customer Perception and Satisfaction towards UPI payments

Variables	Mean	SD	R	p-value	Percentage Overlap ($r^2 \times 100$)
Customer Perception	27.85	4.26	.728	0.000	52.99
Customer Satisfaction	25.49	3.74			

The mean score for customer perception was 27.85 (SD = 4.26), while the mean score for customer satisfaction was 25.49 (SD = 3.74). The correlation coefficient between customer perception and customer satisfaction was found to be .728, indicating a strong positive relationship. The relationship was found to be statistically significant ($p < 0.001$). The percentage overlap value of 52.99 percent indicates that customer perception explains approximately 53 percent of the variation in customer satisfaction towards UPI payments.

Table 12: Problems faced in UPI payments

Problems	Frequency	Percentage
Network issue	26	43.33
Transaction failure	24	40.00
Delay in refund	5	8.33
Security concerns	3	5.00
App crashes	0	0
Limited merchant acceptance	2	3.33

Total	**60**	**100.00**

The analysis shows that network issues are the most common problem faced by UPI users, reported by 43.33 percent of the respondents. This is followed by transaction failures, experienced by 40 percent of the respondents. About 8.33 percent of the respondents reported delays in receiving refunds, while 5 percent expressed concerns regarding the security of UPI transactions. Only 3.33 percent of the respondents faced problems due to limited merchant acceptance of UPI payments, and none of the respondents reported app crashes as a major issue.

Findings

- ➢ The majority of the respondents (85%) were in the 21-30 years age group, indicating that young adults are the major users of UPI services.
- ➢ Out of the 60 respondents, 55 percent were male and 45 percent were female.
- ➢ Most of the respondents were graduates (53.33%), followed by postgraduates (23.33 percent).
- ➢ More than half of the respondents (56.67 percent) were employed, while 30 percent were students.
- ➢ The majority of the respondents (68.33 percent) had a monthly income between ₹20,000 and ₹30,000.
- ➢ Google Pay was the most preferred UPI application, used by 40 percent of the respondents, followed by PhonePe (30 percent) and Paytm (16.67 percent).
- ➢ About 41.67 percent of the respondents had been using UPI for 1 to 3 years, while 36.67 percent had been using it for more than 3 years, showing long-term usage and trust in UPI services.
- ➢ The majority of the respondents (43.33 percent) used UPI daily, indicating that UPI has become a part of their regular financial activities.
- ➢ The results of the Chi-square test indicated that gender was not significantly associated with the frequency of UPI usage.
- ➢ The main purpose of using UPI was shopping (46.67 percent), followed by bill payments (20 percent) and fund transfers (16.67 percent).
- ➢ Among the factors influencing UPI usage, convenience received the highest mean score (4.55), followed by ease of use (4.43) and speed of transaction (4.42).
- ➢ The respondents had a favourable opinion towards UPI payments, and "UPI payments are easy to use" received the highest weighted mean score (4.38).
- ➢ In terms of customer satisfaction, convenience recorded the highest weighted mean score (4.15), indicating high satisfaction with the ease of using UPI services.

- The independent sample t-test showed no significant difference in customer satisfaction between male and female respondents ($t = 1.482$, $p = 0.144$).
- The correlation analysis revealed a strong positive relationship between customer perception and customer satisfaction ($r = 0.728$, $p < 0.001$).
- The coefficient of determination showed that customer perception explained approximately 52.99 percent of the variation in customer satisfaction towards UPI payments.
- The major problems faced by respondents while using UPI were network issues (43.33 percent) and transaction failures (40 percent). Delay in refunds (8.33 percent) and security concerns (5 percent) were also reported by some respondents.

Suggestions

- UPI platforms should ensure faster refund processing so that customers can quickly receive their money when a transaction fails.
- Payment service agencies should strengthen security measures to increase user's confidence and reduce concerns about fraud and misuse.
- Digital payment providers should conduct awareness programs to educate people about the safe and effective use of UPI payments.
- Providers should increase rewards and cashback offers to encourage more people to use UPI payments regularly.

Conclusion

The rapid growth of UPI payments has significantly transformed consumer payment behaviour in India. The study found that customers in Kannur District have a positive perception and a satisfactory experience with UPI payment services. Most respondents use UPI regularly because it is convenient, easy to use, fast, and widely accepted by merchants and service providers. Google Pay emerged as the most preferred UPI application among the respondents. The study also found a strong positive relationship between customer perception and customer satisfaction, indicating that favourable perceptions lead to higher satisfaction levels. Although users face certain challenges such as network issues and transaction failures, these problems have not significantly affected the overall acceptance of UPI payments. Therefore, UPI has become an important part of daily financial transactions and is expected to play a major role in promoting a digital and cashless economy in the future.

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