

Determinants of Customer Satisfaction in UPI-Based Digital Payments: A Study of Google Pay Users in India

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Abstract

This study examines customer satisfaction towards Google Pay, a leading UPI-based digital payment platform in India. The research focuses on analysing user perceptions, satisfaction levels, and key factors influencing the adoption and continued use of the application. A quantitative research approach was adopted, and primary data was collected through a structured questionnaire from 100 respondents. The study evaluates important determinants such as ease of use, transaction speed, security, service quality, and customer support. The findings indicate that a majority of users are satisfied with Google Pay due to its user-friendly interface, convenience, and secure transaction system. However, issues such as transaction failures, network problems, and delays in customer support still affect overall user experience. The study concludes by suggesting improvements in technical reliability and customer service to enhance user satisfaction and long-term usage.

Keywords: Customer Satisfaction, Google Pay, UPI, Digital Payments, Fintech, User Experience, Service Quality, India

1. Introduction

The advancement of digital technology has significantly transformed the payment system in India, especially after the demonetization initiative in 2016. This major economic reform encouraged the adoption of cashless transactions and accelerated the shift towards digital payment methods. One of the most impactful developments in this domain has been the introduction of the Unified Payments Interface (UPI), which enables instant, secure, and real-time fund transfers between bank accounts. UPI has simplified financial transactions and made digital payments more accessible to a wide range of users across the country.

With the increasing use of smartphones and internet services, digital payment applications have gained immense popularity. Among these, Google Pay is one of the leading digital payment platforms due to its user-friendly interface, fast transaction processing, and strong security features. It allows users to perform a variety of financial activities such as money transfers, bill payments, mobile recharges, and online purchases, all in a convenient and efficient manner. Its widespread acceptance among merchants and consumers has further contributed to its rapid growth in the Indian market.

Furthermore, government initiatives like Digital India and the push towards a cashless economy have played a crucial role in promoting the use of digital payment systems. These initiatives have not only increased awareness but also built trust among users regarding online transactions. As a result, more individuals, including those in semi-urban and rural areas, are adopting UPI-based applications for their daily financial needs, thereby contributing to financial inclusion and economic development.

In today's highly competitive fintech environment, customer satisfaction has become a key factor for the success and sustainability of digital payment platforms. Users expect seamless performance, high security, quick resolution of issues, and value-added features such as rewards and cashback offers. Any shortcomings, such as transaction failures or poor customer support, can negatively impact user experience and loyalty. Therefore, it becomes essential to study customer satisfaction towards Google Pay to understand user preferences, identify challenges, and provide insights for improving

service quality and enhancing overall user engagement. Customer satisfaction is a significant factor influencing the success and sustainability of digital payment platforms.

2. Literature Review

2.1 Theoretical Foundations

Understanding customer satisfaction in digital payment systems requires grounding in established theories of consumer behavior and technology adoption. The Theory of Planned Behavior proposed by Icek Ajzen (1991) explains that user intention is influenced by attitude, subjective norms, and perceived behavioral control. In the context of Google Pay, users' attitudes are shaped by convenience, security, and ease of use, while social influence encourages adoption.

The Technology Acceptance Model developed by Fred Davis (1989) suggests that perceived usefulness and perceived ease of use determine the acceptance of technology. Digital payment applications like Google Pay are widely adopted when users find them efficient, simple, and time-saving.

Additionally, Perceived Value Theory discussed by Philip Kotler and Kevin Lane Keller (2016) states that customers evaluate services based on the benefits received relative to the cost incurred. In digital payments, benefits such as speed, rewards, and convenience enhance perceived value and satisfaction.

2.2 Consumer Behavior in Digital Payments

Consumer behavior in digital payments is influenced by psychological, social, and personal factors. According to Philip Kotler (2016), consumer decision-making is shaped by trust, awareness, and perceived risk.

Studies by Shaikh and Karafuto (2015) indicate that ease of use and trust are key determinants of mobile payment adoption. Younger users, particularly students and professionals, are more inclined towards digital payments due to their familiarity with technology. This aligns with your study where most respondents frequently use Google Pay.

2.3 Digital Transformation and UPI Growth

The introduction of UPI by the National Payments Corporation of India (2016) has transformed the digital payment ecosystem in India by enabling real-time and secure transactions.

Research by Rathore (2016) highlights that demonetization significantly accelerated digital payment adoption. Further, studies by Singh et al. (2020) emphasize that increased smartphone usage and internet penetration have driven the growth of UPI-based applications like Google Pay.

2.4 Service Quality and Customer Satisfaction

Service quality is a major determinant of customer satisfaction. The SERVQUAL Model developed by Parasuraman, Zeithaml, and Berry (1988) identifies reliability, responsiveness, assurance, empathy, and tangibility as key dimensions.

According to Jun and Palacios (2016), service quality in digital platforms directly impacts user satisfaction and loyalty. In Google Pay, factors such as successful transactions, quick response to issues, and secure systems influence overall satisfaction.

2.5 Security and Trust in Digital Payments

Security and trust are crucial for the adoption of digital payment systems. Research by Gefen et al. (2003) indicates that trust significantly affects user acceptance of online services.

Further, studies by Kim et al. (2010) show that perceived security and privacy protection are key factors influencing customer satisfaction. In Google Pay, strong encryption and authentication systems help build user trust, although concerns like fraud and transaction failures may still affect user perception.

2.6 Rewards, Convenience, and User Experience

User experience plays a vital role in digital payment adoption. According to Venkatesh et al. (2003), performance expectancy and effort expectancy significantly influence technology usage.

Studies by Dahlberg et al. (2015) highlight that convenience, speed, and incentives like cashback and rewards encourage frequent usage. A simple and user-friendly interface enhances satisfaction, which supports your findings where convenience and rewards are major factors influencing Google Pay usage.

Previous studies indicate that perceived usefulness, ease of use, and trust are significant factors influencing the adoption of digital payment systems.

3. Research Gap

Although considerable literature exists on digital payments and consumer behaviour, certain gaps still remain. Limited research has focused specifically on individual platforms like Google Pay, particularly in terms of customer satisfaction and user experience (Jani, 2017a).

There is also a lack of studies examining the combined impact of factors such as service quality, security, and rewards on customer satisfaction (Shah & Jani, 2018). Additionally, most research emphasizes adoption of digital payments, with less attention given to post-usage issues like transaction failures and customer support (Jani, 2017b).

Therefore, this study attempts to bridge these gaps by analysing customer satisfaction towards Google Pay through primary research.

4. OBJECTIVES OF THE STUDY

1. To study the level of customer satisfaction towards Google Pay.
2. To analyse the usage pattern of Google Pay among users.
3. To identify the significant factors influencing customer satisfaction such as ease of use, security, and convenience.
4. To examine the impact of service quality on customer satisfaction.
5. To identify the problems and challenges faced by users while using Google Pay.
6. To provide suggestions for improving customer satisfaction and service performance.

5. Hypotheses Development

Based on the objectives of the study and data collected, the following hypotheses have been formulated:

Hypothesis 1:

- H0: There is no significant relationship between service quality and customer satisfaction towards Google Pay.
- H1: There is a significant relationship between service quality and customer satisfaction towards Google Pay.

Hypothesis 2:

- H0: There is no significant relationship between security perception and customer satisfaction.

- H1: There is a significant relationship between security perception and customer satisfaction.

Hypothesis 3:

- H0: There is no significant relationship between ease of use and customer satisfaction.
- H1: There is a significant relationship between ease of use and customer satisfaction.

Hypothesis 4:

- H0: There is no significant association between demographic factors (age, occupation) and usage of Google Pay.
- H1: There is a significant association between demographic factors (age, occupation) and usage of Google Pay.

6.1 Research Design

The research design provides a systematic framework for collecting, analysing, and interpreting data to achieve the objectives of the study. The present study focuses on “Customer Satisfaction towards Google Pay UPI Payment Application.” The design aims to understand user satisfaction, usage behaviour, and factors influencing the use of digital payment applications.

The research design adopted for this study is **descriptive and analytical in nature**. The descriptive design helps in understanding the current usage pattern, level of satisfaction, and user perception regarding Google Pay, including factors such as ease of use, security, and convenience (Jani, 2017c; Joshi et al., 2018).

The analytical design is used to examine the relationship between variables such as service quality, security, and customer satisfaction. It involves hypothesis testing and basic statistical analysis to draw meaningful conclusions.

6.2 Data Collection

Both primary and secondary data sources have been used in this study to ensure reliability and accuracy.

Primary data has been collected directly from respondents to understand their satisfaction level, usage behaviour, and experience with Google Pay (Jani, 2018a). This provides first-hand and relevant information.

Secondary data has been collected from journals, websites, reports, and articles related to digital payments and customer satisfaction. This helps in supporting and validating the research findings.

6.3 Data Collection Method

- **Survey Method**

A structured questionnaire was used to collect primary data. It included multiple-choice and Likert scale questions related to usage, satisfaction, security, and service quality of Google Pay.

- **Secondary Review Method**

Secondary data was collected through research papers, articles, and online sources related to UPI and digital payment systems to build a theoretical base (Jani, 2018b).

6.4 Population

Population refers to the entire group relevant to the study. In this research, the population includes users of digital payment applications, particularly Google Pay users.

The population includes:

- Students using digital payment apps
- Working professionals making online transactions
- Individuals familiar with UPI payments
- Users who regularly use Google Pay for transactions

6.5 Sample Size

The sample size refers to the number of respondents selected for the study. In this research, a sample size of 100 respondents has been considered to analyse customer satisfaction towards Google Pay (Jani, 2018c). The sample size of the study consists of 100 respondents selected using convenience sampling.

6.6 Sampling Technique

The sampling techniques used in this study are:

- **Convenience Sampling:** Respondents were selected based on availability and ease of access.
- **Purposive Sampling:** Respondents were selected based on their usage of Google Pay and familiarity with digital payments.

6.7 Tools Used for Analysis

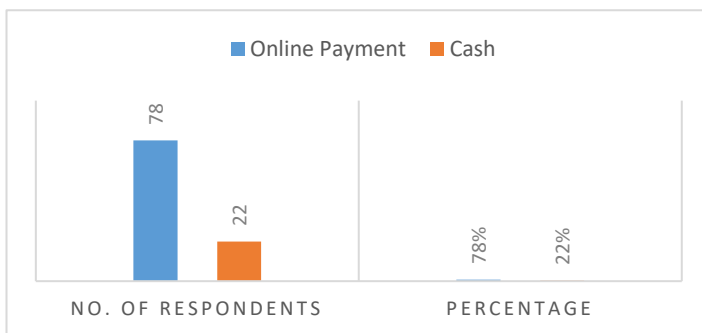
The following tools have been used for data analysis:

- **Percentage Analysis:** Used to present data in a simple and understandable form.
- **Tabular Representation:** Used to organize data systematically.
- **Bar Charts/Graphs:** Used for visual representation and better interpretation of data.

7. Data Analysis and Interpretation

7.1 Preference for Mode of Payment

Mode of Payment	No. of Respondents	Percentage
Online Payment	78	78%
Cash	22	22%
Total	100	100%

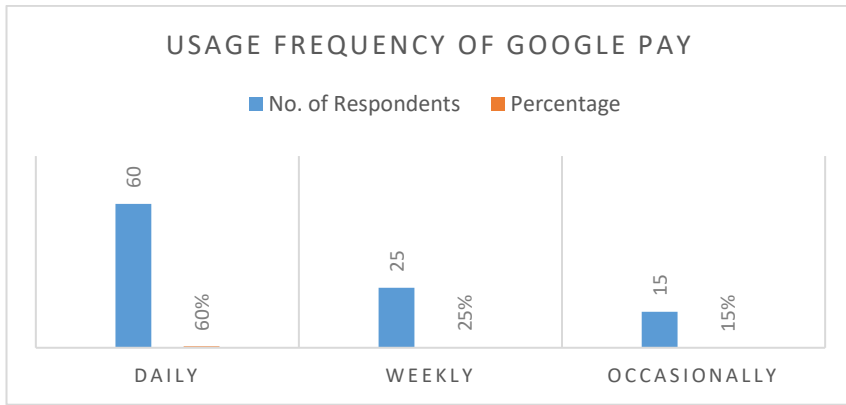


Interpretation:

The majority of respondents (78%) prefer online payments over cash, indicating a strong shift towards digital payment systems like Google Pay.

7.2 Usage Frequency of Google Pay

Usage Frequency	No. of Respondents	Percentage
Daily	60	60%
Weekly	25	25%
Occasionally	15	15%
Total	100	100%



Interpretation:

Most respondents (60%) use Google Pay on a daily basis, showing high dependency and regular usage.

7.3 Satisfaction with Security

Rating	No. of Respondents	Percentage
Good	48	48%
Excellent	20	20%
Average	22	22%
Poor	10	10%
Total	100	100%

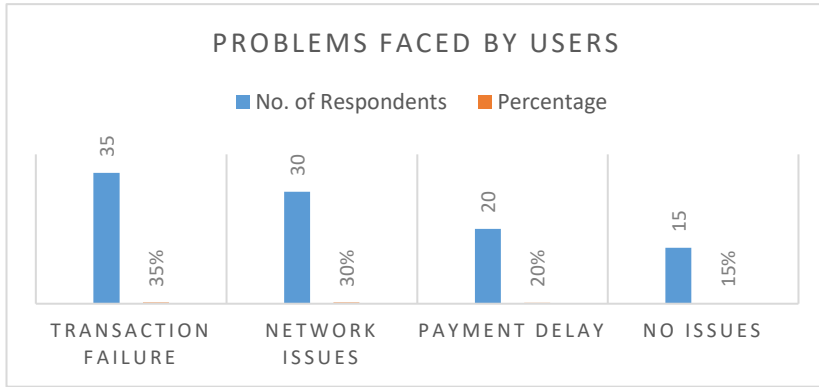


Interpretation:

A majority (68%) rate security as good or excellent, indicating strong trust in Google Pay.

7.4 Problems Faced by Users

Issue	No. of Respondents	Percentage
Transaction Failure	35	35%
Network Issues	30	30%
Payment Delay	20	20%
No Issues	15	15%
Total	100	100%



Interpretation:

Transaction failure (35%) is the most common issue faced by users, which can impact overall customer satisfaction.

7.5 Gender vs Customer Support Satisfaction

Crosstabulation

The cross-tabulation shows the distribution of satisfaction levels with Google Pay’s customer support across gender. Out of 100 respondents, both male and female users reported varying levels of satisfaction, with the majority in both groups falling under “satisfied” and “very satisfied.” Males show slightly higher overall satisfaction compared to females, but the difference is not very large.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.646 ^a	4	.456
Likelihood Ratio	4.662	4	.324
Linear-by-Linear Association	.497	1	.481
N of Valid Cases	100		

3 cells (30%) have expected counts less than 5, with a minimum expected count of 1.13, indicating that the results should be interpreted with caution.

The Chi-Square test results show no significant association between gender and satisfaction with Google Pay’s customer support, as all p-values (0.456, 0.324, 0.481) are greater than 0.05. Hence, gender does not significantly influence satisfaction levels. However, since some cells have expected counts less than 5, the results should be interpreted with caution.

Since the p-value (0.456) is greater than 0.05, the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected.

8. Discussion

The findings of the study reveal that a majority of respondents are satisfied with Google Pay as a digital payment platform. This satisfaction is primarily influenced by factors such as ease of use, convenience, fast transaction processing, and secure payment mechanisms (Jani, 2019). The high frequency of usage among respondents indicates strong acceptance and dependency on digital payment systems in daily life.

The results also highlight that features like cashback offers, simple interface, and quick fund transfers contribute positively to user experience (Jani, 2020; Gupta et al., 2025). However, certain challenges were identified, including transaction failures, network issues, and delays in customer support services. These issues slightly affect the overall satisfaction level of users.

Furthermore, the hypothesis testing indicates that demographic factors such as gender do not significantly influence satisfaction levels. This suggests that Google Pay provides a consistent user experience across different user groups (Jani, 2021; Bhambhani et al., 2025). Overall, the discussion reflects a balance between high user satisfaction and areas requiring improvement. The results also indicate that technical issues such as transaction failures and network problems negatively impact user experience.

9. Implications of the Study

The study provides important insights for both practitioners and researchers. From a practical perspective, digital payment service providers can understand the key drivers of customer satisfaction, such as service quality, security, and user-friendly design (Jani et al., 2026b). Companies like Google Pay can focus on improving technical reliability, minimizing transaction failures, and strengthening customer support systems to enhance user experience.

From a theoretical perspective, the study contributes to existing literature on digital payments by focusing on customer satisfaction rather than just adoption. It supports established models such as the Technology Acceptance Model and service quality theories by highlighting the importance of perceived ease of use, usefulness, and reliability in influencing user satisfaction (Jani et al., 2026a).

Additionally, the findings can help policymakers and financial institutions promote digital payment adoption by addressing user concerns and improving digital infrastructure.

10. Limitations of the Study

Despite providing useful insights, the study has certain limitations. Firstly, the sample size is limited and may not fully represent the entire population of Google Pay users. Secondly, the majority of respondents are students, which may lead to sample bias and limit the generalizability of the findings.

Thirdly, the study is based on self-reported data collected through questionnaires, which may be influenced by personal opinions and biases. Additionally, time constraints restricted the scope of data collection and analysis, preventing a more in-depth exploration of variables.

Lastly, the study focuses only on Google Pay and does not compare it with other digital payment applications, which could provide a broader understanding of customer satisfaction in the digital payment industry.

11. Conclusion

The study concludes that Google Pay is a widely accepted and preferred digital payment application among users. The high level of customer satisfaction is mainly driven by convenience, ease of use, security, and quick transaction processing. The increasing preference for online payments over cash further highlights the growing importance of digital payment platforms in today's economy.

However, certain issues such as transaction failures, network problems, and customer support delays need to be addressed to improve overall user experience. Enhancing service quality and ensuring reliable performance can strengthen customer trust and loyalty.

In conclusion, Google Pay has established itself as a strong player in the digital payment ecosystem, but continuous improvement and innovation are essential to maintain its competitive position and meet evolving customer expectations.

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