



# International Journal of Innovative Research in Science Engineering and Technology (IJIRSET)

*(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)*



**Impact Factor: 8.699**

**Volume 15, Issue 3, March 2026**

# **The Role of Cash back and Rewards in Driving UPI Transaction Frequency: Evidence from Paytm, Phone Pe, and Google Pay Users**

**Parlapalli Sravanthi, Dr. Shakeela Banu C**

Department of MBA Candidate, CMS Business School, JAIN (Deemed-to-be University), Bangalore, India

Associate Professor, CMS Business School, JAIN (Deemed-to-be University), Bangalore, India

**ABSTRACT:** The financial transaction landscape in India has experienced a major transformation through the sudden growth of digital payment systems which establish UPI as the primary payment method used by people in the country. The applications Paytm and Phone Pe and Google Pay compete with each other by using cashback and reward-based incentives to bring in new users while keeping existing ones. The research investigates how these incentives drive UPI users to make more transactions while staying loyal to the platform. The researchers used a quantitative cross-sectional research design to gather primary data from 104 active UPI users who completed a structured Likert-scale questionnaire. The measurement instrument demonstrated strong internal consistency, with an overall Cronbach's Alpha of 0.915. The researchers used descriptive statistics and reliability testing together with Pearson correlation and regression analysis to assess the links between cashback incentives and transaction frequency and customer loyalty. The results indicate that cashback and reward-based incentives have a statistically significant positive impact on both transaction frequency ( $\beta = 0.3422$ ,  $p < 0.001$ ) and customer loyalty ( $\beta = 0.7187$ ,  $p < 0.001$ ). The influence on customer loyalty shows a strong effect which accounts for 51.5% of the total variance, while the effect on transaction frequency shows a moderate impact. The findings suggest that long-term user attachment develops through incentives which prove more effective than their capacity to boost transaction activity. Users keep using the product because of various factors which include convenience and trust plus the complete user experience. The study highlights the need for digital payment platforms to integrate incentive strategies with service quality improvements to achieve long-term user engagement and retention.

**KEYWORDS:** UPI, Cashbacks, Rewards, Transaction Frequency, Customer Loyalty, Fintech, Consumer Behaviour, Reward-Based Incentives, Google Pay, Phone Pe, Paytm, Digital Payment System.

## **I. INTRODUCTION**

The digital payment system in India has experienced major changes during the last ten years because of technological progress and more people using smartphones and better internet connections. The Unified Payments Interface (UPI) has become a popular payment system which allows users to make instant and inexpensive money transfers. Paytm and PhonePe and Google Pay have become essential tools for managing daily financial needs of users from various backgrounds.

The rising popularity of UPI has led to more intense competition between digital payment services. The platforms use cashback offers and rewards and referral benefits to both bring in new customers and keep existing customers. The financial rewards from these incentives create instant value for users which leads to users making more transactions because digital payments become more attractive than traditional payment methods.

Cashback and reward-based incentives function as external factors which direct user actions by enhancing their view of transaction worth. The method proves successful for short-term user engagement while it remains unknown about its effects on long-lasting user retention. Users choose to keep using a platform because of its convenience and users' trust and security and their complete user experience. The current research investigates how cashback and reward-based incentives affect UPI transaction frequency and customer loyalty among Paytm and Phone Pe and Google Pay users. The research results will show how users behave while helping build successful methods for increasing user involvement and keeping users in the digital payment system.

## II. RESEARCH OBJECTIVES

The primary objective of this study is to examine the impact of cashback and reward-based incentives on user behaviour in UPI platforms, particularly in terms of transaction frequency and customer loyalty.

The specific objectives of the study are as follows:

1. To understand the extent to which cashback and reward-based incentives influence the frequency of UPI transactions among Paytm, Google Pay and Phone pe users.
2. To understand whether incentive programs result in long- term transaction consistency or works temporarily.
3. To evaluate and compare the effectiveness of cashback and reward programs implemented by Paytm, Google Pay and Phone pe in encouraging the users.

## III. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

### 3.1 Digital Payments and Incentive-Based Behaviour

Digital payment systems experience rapid expansion which affects user behavior in India because UPI platforms have achieved widespread popularity. The research shows that digital payment platforms use cashback and reward-based incentives as their main approach to boost customer transaction rates. The study conducted by Jakati, Yeshwanth, and Tandan (2025) discovered that platform design and promotional mechanisms determine how users interact with the system and how much money they spend. Kumar, Vijayakumar, and Raghavendra (2025) discovered that users choose platforms which provide them better financial advantages through rewards and cashback programs. Gaur (2025) showed that rewards which organizations establish as structured systems will make users become habitual customers while increasing their transaction rates.

### 3.2 Role of Incentives in Influencing User Behaviour

Cashback and reward-based incentives create a strong impact which impacts how users make decisions and conduct their financial transactions. Studies focusing on younger users indicate that they are more responsive to incentive-based strategies which lead them to select immediate financial rewards above all other considerations which include security and privacy (Kanwal & Singh, 2024). Zehra Khan Mazhar Akhlaque Haque and Singh 2024 discovered that rewards make users more satisfied which leads to them making additional purchases. Thomas Gopi and Sujith 2024 showed that incentives function as both financial benefits and mental driving forces which lead users to use digital payment systems more often.

### 3.3 Platform Strategies and User Engagement

The research explores how various platforms implement incentive programs to increase user interactions. Sandra (2024) conducted a study which compared Google Pay and Paytm and discovered that platforms which provide continuous cashback rewards achieve better user retention and repeating transactions. Vidani (2024) stated that while user incentives succeed in drawing new customers organizations must develop trustworthy services which maintain user loyalty throughout time. Bhavya (2024) and Bapat (2024) established that users continue to use platforms because of their simple operation and perceived advantages while Dam and George (2024) showed that users develop trust which leads to more engagement through open reward systems. The earlier research conducted by Chavan and Gore and Bhutkar (2021) and by Husain (2021) demonstrated how promotional strategies help organizations increase their digital payment transactions.

### 3.4 Research Gap

The research about digital payment systems has expanded since its inception yet there are still several fundamental research gaps present. The existing research studies concentrate their efforts on studying how users adopt digital payment systems instead of measuring their actual payment activities which demonstrate true user behavior. The existing research has studied cashback and reward-based systems on multiple UPI platforms throughout the same research but it has not investigated their effectiveness through direct comparison. The research from the past demonstrates that incentives drive more transactions but there exists a research gap about their ability to sustain customer activity over extended periods or their capacity to boost usage for limited time periods. The current research study investigates these research gaps through its study of transaction patterns and its assessment of incentive systems across different major UPI platforms.

#### IV. RESEARCH METHODOLOGY

##### 4.1 Research Design and Hypothesis

The current research uses quantitative methods to study how cashback and reward-based incentives impact UPI transaction patterns of Paytm and Phone Pe and Google Pay users. The research used a cross-sectional method to collect data through a structured questionnaire at one specific time. The research investigates how incentive-based strategies impact transaction frequency and customer loyalty while assessing whether these effects last or fade away over time.

The study investigates how incentives affect user behaviour through the testing of specific hypotheses. The hypotheses show how cashback and reward-based incentives affect important behavioural outcomes which include transaction frequency and customer loyalty.

*Table 1 Framing of Hypothesis*

Hypothesis	Statement
H <sub>01</sub>	Cashback and reward-based incentives do not have a significant impact on the frequency of UPI transactions among users of Paytm, Phone Pe, and Google Pay.
H <sub>11</sub>	Cashback and reward-based incentives have a significant impact on the frequency of UPI transactions among users of Paytm, Phone Pe, and Google Pay.
H <sub>02</sub>	Cashback and reward-based incentives do not have a significant impact on customer loyalty among users of Paytm, Phone Pe, and Google Pay.
H <sub>12</sub>	Cashback and reward-based incentives have a significant impact on customer loyalty among users of Paytm, Phone Pe, and Google Pay.

##### 4.2 Sampling and Data Collection

The study used direct information from 104 UPI users who participated in the research. The study's target population consists of Indian users who belong to various age groups and different professions and income brackets. The researchers used convenience sampling because they needed to reach participants who had limited time.

Researchers collected data through an online structured questionnaire which they shared via digital platforms. The questionnaire included screening questions to ensure that only active UPI users participated in the study. The method successfully captured information which demonstrated actual user behavior through reliable responses.

##### 4.3 Variables of the Study

The study includes clearly defined variables to examine the relationship between incentives and user behaviour.

- **Independent Variable:** Cashback and reward-based incentives offered by UPI platforms such as Paytm, PhonePe, and Google Pay.
- **Dependent Variables:**
  - Transaction frequency (how often users perform UPI transactions)
  - Customer loyalty/transaction consistency (whether users continue using the platform regularly or only during promotional periods)

These variables help in understanding both short-term engagement and long-term usage behaviour.

##### 4.4 Measurement Instrument

The primary method for gathering data used a structured questionnaire as its main instrument. The questionnaire design employed a five-point Likert scale which included Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, which allowed respondents to choose from Strongly Disagree to Strongly Agree. The study included demographic sections and usage pattern sections and cashback and reward perception sections and transaction frequency sections and customer loyalty sections.

The questionnaire required respondents to answer several open-ended questions which allowed them to express their opinions and share their experiences that provided extra information about their research results.

#### 4.5 Data Analysis Techniques

The collected data was analysed through statistical methods which were used to investigate variable relationships and to evaluate the proposed hypotheses. The analysis included:

- Descriptive statistics to summarise respondent characteristics
- Reliability analysis (Cronbach's Alpha) to test internal consistency
- Correlation analysis to examine relationships between variables
- Regression analysis to determine the impact of incentives on transaction behaviour
- t-tests and ANOVA to analyse differences across demographic groups

These techniques enabled researchers to complete a full assessment of user patterns and the success of cashback and reward-based customer acquisition methods.

### V. RESULTS

#### 5.1 Demographic Profile

The research study uses data from 104 users who currently operate UPI platforms as its research material. A majority of the respondents belong to the 18–25 age group, accounting for 72 respondents (69.2%), followed by the 26–35 age group with 16 respondents (15.4%), the 36–45 age group with 8 respondents (7.7%), and respondents aged 46 and above constituting 8 respondents (7.7%). The data shows that younger users represent the biggest group of people who use digital payment methods.

In terms of platform usage, Phone Pe emerged as the most widely used platform, with 68 respondents (65.4%), followed by Google Pay with 24 respondents (23.1%), Paytm with 8 respondents (7.7%), and other bank-based applications used by 4 respondents (3.8%). The data shows that users choose to use platforms which already exist because those platforms provide greater user acceptance and better reward systems.

The demographic distribution highlights that younger users are more actively engaged in UPI transactions and are more responsive to cashback and reward-based incentives compared to older users. The trend shows that people who use digital technology more tend to adopt digital payment systems at higher rates.

#### 5.2 Descriptive Statistics and Reliability Analysis

The study measured responses through descriptive statistics which showed that respondents agreed at a moderate to high level with cashback and reward-based incentives and their transaction behaviour, while transaction frequency showed the highest average score of 3.68, followed by cashback and rewards at 3.54 and customer loyalty at 3.45. The low standard deviation values show that respondents answered with consistent patterns. The reliability analysis using Cronbach's Alpha method demonstrated strong internal consistency across all constructs which showed values of 0.90 for cashback and rewards, 0.86 for transaction frequency, and 0.84 for customer loyalty, while the overall scale achieved 0.915 which confirmed the reliability of the measurement instrument.

*Table 2 Descriptive Statistics and Reliability Analysis*

Construct / Variable	N	Mean	Std. Deviation	Min	Max	Cronbach's Alpha ( $\alpha$ )
Cashback & Rewards	104	3.54	0.62	2.10	4.80	0.90
Transaction Frequency	104	3.68	0.58	2.20	4.90	0.86
Customer Loyalty	104	3.45	0.60	2.00	4.70	0.84
<b>Overall Scale</b>	104	—	—	—	—	0.915

The results show that transaction frequency has the highest mean value, indicating that users actively engage in UPI transactions. The average score for cashback and rewards shows strong results which demonstrate that incentives have a major impact on how users behave. The average value of customer loyalty shows a small decrease which shows that users maintain their relationship with the brand over time. The respondents showed consistent responses because the standard deviation values remained low. The high Cronbach's Alpha values show that the measurement scale has trustworthy results which researchers can use for their analysis.

### 5.3 Correlation Analysis

Correlation analysis was conducted to examine the relationship between cashback and reward-based incentives, transaction frequency, and customer loyalty. The results of the study establish both the strength of relationships and the direction of relationships between its main variables.

*Table 3 Correlation Analysis*

Variables	Cashback & Rewards	Transaction Frequency	Customer Loyalty
Cashback & Rewards	1	0.3319	0.7177
Transaction Frequency	0.3319	1	0.4605
Customer Loyalty	0.7177	0.4605	1

The results show a moderate positive relationship between cashback and rewards and transaction frequency ( $r = 0.3319$ ), indicating that incentives have a noticeable but not very strong impact on how often users transact. A strong positive relationship is observed between cashback and customer loyalty ( $r = 0.7177$ ), suggesting that incentives play a significant role in influencing users to stay with a platform. The relationship between transaction frequency and customer loyalty is moderate ( $r = 0.4605$ ), indicating that users who transact more frequently also tend to be more loyal. Overall, the findings suggest that cashback and rewards have a stronger influence on loyalty than on transaction frequency.

### 5.4 Regression Analysis

Cashback and reward-based incentives' effect on transaction frequency and customer loyalty was checked through regression analysis.

*Table 4 Regression Analysis*

Dependent Variable	Independent Variable	$\beta$ (Coefficient)	Standard Error	t-value	p-value	R <sup>2</sup>
Transaction Frequency	Cashback & Rewards	0.3422	0.0963	3.5537	0.000577	0.110
Customer Loyalty	Cashback & Rewards	0.7187	0.0690	10.4100	1.00771E-17	0.515

The regression results show that both cashback and reward-based incentives lead to greater transaction volume and better customer retention for the business. The coefficient for transaction frequency shows that incentives lead to higher usage with a moderate effect size because the p-value shows statistical significance at 0.000577. The explanatory power of the model shows low value because it only explains 11 percent of the total transaction behavior, which means other factors also impact customer transactions.

The relationship with customer loyalty shows much greater strength because the relationship shows a coefficient value of ( $\beta = 0.7187$ ) together with an extremely low p-value (1.00771E-17). The cashback and rewards system shows a higher R<sup>2</sup> value (0.515) which demonstrates that this system accounts for a major part of customer loyalty variation.

The research results demonstrate that cashback and reward-based incentives work better to build customer loyalty because the incentives show more power to keep users active than they do to boost customer activity.

### 5.5 Hypothesis Testing Summary

The regression results show that cashback and reward-based incentives lead to an increase in both transaction frequency and customer loyalty because their statistical results showed positive effects with  $\beta$  values of 0.3422 and 0.7187 respectively and p values below 0.001. The study rejected the null hypotheses ( $H_{01}$  and  $H_{02}$ ) while accepting the alternative hypotheses ( $H_{11}$  and  $H_{12}$ ). The study results demonstrate that incentives drive user actions with greater impact on customer loyalty than on their transaction activities.

## VI. DISCUSSION

### 6.1 Overview of the Study Findings

The present study aimed to examine the role of cashback and reward-based incentives in influencing UPI transaction behaviour among users of Paytm, Phone Pe, and Google Pay. Digital payment systems in India continue to grow because customers find these platforms attractive through their various incentive programs. The study results demonstrate that cashback and rewards create a strong effect on user behavior, which researchers study through their analysis of how often users make transactions and how loyal they remain as customers. The impact of this behavior shows different strengths across user behavior patterns, which requires researchers to study how incentives operate during both short-term and long-term periods.

### 6.2 Influence on Transaction Frequency

The regression results demonstrate that cashback and reward-based incentives produce positive effects which reach statistical significance when they impact transaction frequency ( $\beta = 0.3422$ ,  $p = 0.000577$ ,  $R^2 = 0.110$ ). The results show that users will complete more transactions because they receive incentives. The  $R^2$  value shows that user behavior can be explained through incentives but only demonstrates their limited impact. The study shows that users will increase their transaction frequency because of cashback offers but their payments depend on customer convenience and transaction speed and platform usability and system reliability. The result shows that incentives work as a secondary element which supports the main reason people make transactions.

### 6.3 Influence on Customer Loyalty

In contrast, the impact of cashback and rewards on customer loyalty is much stronger and highly significant ( $\beta = 0.7187$ ,  $p < 0.001$ ,  $R^2 = 0.515$ ). This study demonstrates that incentives function as powerful tools which successfully retain users on specific platforms. The consistent provision of rewards to users results in positive platform perception which leads to increased platform usage. The increased explanatory power demonstrates that incentive-based strategies account for a major portion of loyalty behavior. The research findings demonstrate that incentives create stronger user ties for organizations than they do for enhancing customer purchasing behavior.

### 6.4 Behavioural Differences Across Users

The study demonstrates how different demographic groups exhibit distinct behavior patterns. Younger users, especially those aged 18 to 25, exhibit higher transaction rates and stronger reaction to rewards. Their experience with digital platforms enables them to understand online rewards better than other users. Older users display a preference for using platforms that provide them with protection and trustworthiness rather than receiving financial rewards. The findings demonstrate that users behave differently because different user groups have different responses to incentive-based methods.

### 6.5 Short-Term vs Long-Term Impact of Incentives

The study shows that incentive systems produce two types of impacts which include short-term and long-term effects. Cashback and rewards are effective in attracting users and increasing transaction activity in the short term, especially during promotional periods. The way users continue to use the platform depends on their complete experience with the system and their assessment of platform performance and their level of trust. Users will decrease their usage of a system when they stop receiving incentives because the system lacks essential elements. The findings show that organizations need to maintain high service standards together with their incentive programs to achieve permanent customer commitment.

### 6.6 Overall Interpretation

The research proves that cashback and reward-based incentives function as effective mechanisms which drive UPI transaction behavior. The study shows that user behavior toward different aspects of testing should be assessed through multiple methods. The study found that incentives create a moderate impact on transaction frequency but they produce a stronger influence on customer loyalty. The study shows that organizations need to link their incentive programs with elements which include convenience and trust and user experience. Digital payment platforms which successfully implement these components will attain continuous user participation and extended business development.

## VII. CONCLUSION

The study concludes that cashback and reward-based incentives play a significant role in influencing UPI transaction behaviour among users of Paytm, PhonePe, and Google Pay. The findings show that incentives have a positive and statistically significant impact on both transaction frequency and customer loyalty, with a stronger effect observed on loyalty. While cashback and rewards encourage users to engage more frequently, their ability to drive sustained usage depends on additional factors such as convenience, trust, and overall user experience. This indicates that incentives act as an important trigger for user engagement but are not the sole determinant of long-term behaviour. Therefore, digital payment platforms must focus not only on promotional strategies but also on enhancing service quality to ensure continued user adoption and retention.

## VIII. LIMITATIONS AND FUTURE SCOPE

The study has certain limitations that should be considered while interpreting the results. The analysis is based on a relatively small sample size of 104 respondents, which may limit the generalizability of the findings across the entire population of UPI users in India. The use of convenience sampling and self-reported data may also introduce bias, as responses are based on individual perceptions and may not fully reflect actual behaviour. In addition, the study focuses only on major platforms such as Paytm, PhonePe, and Google Pay, without considering other emerging digital payment applications. Future research can address these limitations by using a larger and more diverse sample, adopting probability sampling techniques, and including a wider range of platforms. Further studies can also explore additional factors such as trust, perceived value, and habit formation, and may use longitudinal approaches to better understand the long-term impact of cashback and reward-based incentives on user behaviour.

## REFERENCES

1. Jakati, S., Yeshwanth, T. N., & Tandan, P. (2025). The Impact of Digital Payment Platforms on Spending Habits. *International Scientific Journal of Engineering and Management*, 04(07), 1–9. <https://doi.org/10.55041/isjem04798>
2. Kumar, T. K. S., Vijayakumar, R., & Raghavendra, B. (2025). Analyzing the Impact of Rewards and Transaction Costs on Customer Payment Method Preferences. *Advances in Computational Intelligence and Robotics Book Series*, 153–162. <https://doi.org/10.4018/979-8-3373-1200-2.ch007>
3. Gaur, J. N. (2025). A Review paper on Influence of Incentive-Based Schemes on Credit Card Adoption in Delhi-NCR. *Journal of Informatics Education and Research*, 5(2). <https://doi.org/10.52783/jier.v5i2.3131>
4. Kanwal, J., & Singh, J. (2025). Impact Of Digital Payment Systems On Consumer Spending Habits. *European Economics Letters*, 15.
5. Thomas, I. T., Gopi, G., & Sujith, T. S. (2024). Impact Of User Satisfaction On Continuous Usage Intention: A Study Among Google Pay Users In Kerala. *Educational Administration: Theory And Practice*, 30(3), 2071-2079.
6. Zehra, F., Khan, F. S., Mazhar, S. S., Akhlaque, N., Haque, E., & Singh, A. (2024). Exploring consumer preferences and behaviour toward digital payment gateways in India. *Int. J. Exp. Res. Rev*, 41, 158-167.
7. SANDRA, R. (2024). *UPI TRANSACTIONS-A SURVEY ANALYSIS ON USER PERCEPTIONS AND COMPARISON OF G PAY AND PAYTM* (Doctoral dissertation, St. Teresas College).
8. Vidani, J. (2024). To study effectiveness of online payment modes. *Available at SSRN 4849748*.
9. BHAVYA, D. (2024). *CONSUMER TRUST AND PERCEIVED USEFULNESS ON ADOPTION INTENT OF M PAYMENTS IN INDIA* (Doctoral dissertation, City University).
10. BAPAT, A. V. (2024). *A Micro-level study on UPI (unified payments interface) as a payment* (Doctoral dissertation, Goa University).
11. Dam, D. S., & George, B. Customer Perceptions About the United Payment Interfaces (UPI) Based Mobile Payment Apps in India. *Available at SSRN 4890320*.
12. Chavan, S., Gore, P., & Bhutkar, G. (2021, December). User survey of UPI-enabled payment apps. In *International Conference of the Indian Society of Ergonomics* (pp. 1457-1469). Cham: Springer International Publishing.
13. Husain, A. (2021). *Cashless Transaction Systems: A Study of Paradigm Shift in Indian Consumer Behaviour* (Doctoral dissertation, DAYALBAGH EDUCATIONAL INSTITUTE).



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