

# International Journal of Multidisciplinary Research in Science, Engineering and Technology

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



**Impact Factor: 8.206**

**Volume 9, Issue 3, March 2026**



## International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

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

# A Study on the Influence of UPI and Digital Payment Systems on Consumer Purchase Decisions

Ms. S. Boomika<sup>1</sup>, Ms. S. Kanishka<sup>2</sup>

Assistant Professor Department of B.Com A&F/ M.Com (IB), Sri Krishna Arts and Science College, Coimbatore,  
Tamil Nadu, India<sup>1</sup>

UG Student, Department of B.Com A&F/ M.Com (IB), Sri Krishna Arts and Science College, Coimbatore,  
Tamil Nadu, India<sup>2</sup>

**ABSTRACT:** The rapid growth of UPI and digital payment platforms has significantly changed the way customers make purchases. This study explores the impact of UPI and other digital payment methods on customer buying behaviour. It examines how factors such as convenience, speed, cashback offers, security, and ease of use influence consumers' purchasing decisions. The study finds that digital payments have reduced dependency on cash and encouraged more frequent and sometimes impulsive buying due to seamless and quick transaction processes. UPI, in particular, has made small and large payments equally simple, increasing customer confidence and satisfaction. Promotional incentives and user-friendly mobile applications further motivate customers to prefer digital modes over traditional payment methods. However, concerns related to security, technical issues, and digital literacy still affect certain groups of users. Overall, the research concludes that UPI and digital payments play a significant role in shaping modern consumer buying behaviour and are contributing to the transition towards a more cashless economy.

## I. INTRODUCTION

In recent years, the way people make payments has changed dramatically with the growth of digital technology. The introduction of Unified Payments Interface (UPI) and other digital payment platforms has transformed traditional cash-based transactions into fast, convenient, and secure digital processes. With the increasing use of smartphones and internet connectivity, customers are now able to make payments anytime and anywhere with just a few taps on their mobile devices. UPI, in particular, has emerged as one of the most popular digital payment systems due to its simplicity, instant fund transfer facility, and user-friendly interface. It allows customers to link multiple bank accounts to a single mobile application, making transactions seamless and efficient. Features such as QR code payments, cashback offers, and zero transaction costs have further encouraged its widespread adoption among both urban and rural populations.

## II. REVIEW OF LITERATURE

Several studies have examined the growing adoption of UPI and digital payment systems and their influence on consumer behaviour. Researchers have highlighted that factors such as convenience, speed, ease of use, promotional incentives, and perceived usefulness play a major role in encouraging customers to shift from cash to digital modes of payment. Studies based on the Technology Acceptance Model (TAM) suggest that perceived ease of use and perceived usefulness significantly affect customers' intention to adopt UPI platforms. Additionally, cashback offers, discounts, and reward points have been found to positively influence purchase frequency and impulse buying behaviour.

At the same time, literature also identifies certain barriers that impact the adoption and continued usage of digital payments. Security concerns, fear of fraud, lack of digital literacy, and technical issues such as network failures can negatively influence customer trust. Research further indicates that demographic factors like age, income level, education, and location (urban vs. rural) play an important role in shaping attitudes toward UPI usage. Overall, existing studies suggest that although digital payment systems significantly influence buying behaviour, trust, security, and awareness remain key determinants of sustained adoption.



## International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

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

### III. RESEARCH METHODOLOGY

Research Design: Descriptive research design.

#### Data sources

Primary data collected via structured questionnaire (Google Forms); secondary data from journals and research articles.

Sample Size: 102 respondents.

Sampling Technique: Convenience sampling.

Tools Used:

- Percentage Analysis
- Anova analysis
- Chi square

Software: Microsoft Excel and SPSS.

### IV. RESULTS AND DISCUSSION

#### 4.1 Percentage analysis

Percentage analysis is one of the simplest and most widely used statistical techniques in research. It converts numerical data into percentage values, which makes comparison and interpretation easier. This method is especially useful in survey-based studies where responses need to be summarized clearly. In this study, Percentage analysis is used in this study to convert survey responses into simple, understandable values. It helps show what proportion of customers prefer UPI or changed their buying behaviour. This makes comparison and interpretation of data easy and clear.

Table Showing factors That Mainly Motivate to Use Digital Payments

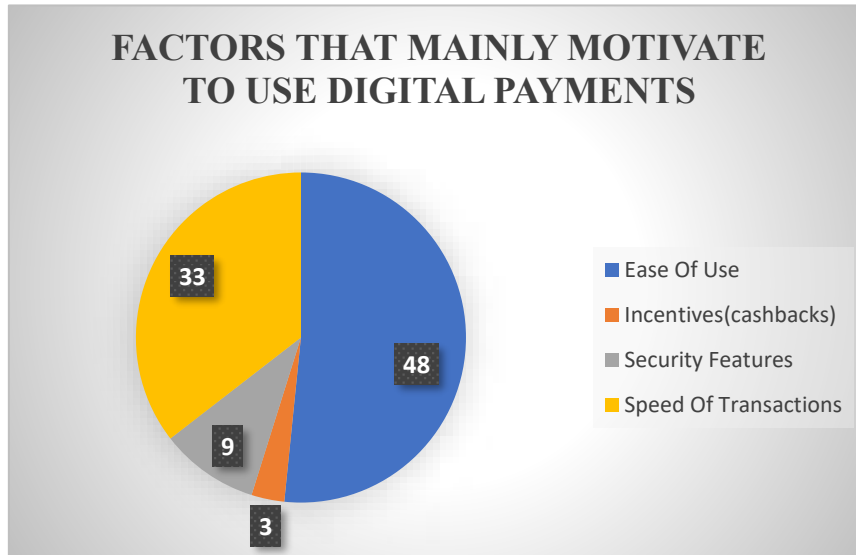
FACTORS THAT MAINLY MOTIVATE TO USE DIGITAL PAYMENTS	FREQUENCY	PERCENTAGE
Ease Of Use	48	51.61%
Incentives(cashbacks)	3	3.23%
Security Features	9	9.68%
Speed Of Transactions	40	35.48%
Grand Total	100	100.00%



## International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

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

Chart Showing Factors That Mainly Motivate To Use Digital Payments



### INTERPRETATION

Most respondents (51.61%) prefer digital payments for their ease of use, while transaction speed (35.48%) and security (9.68%) are also important factors. Incentives like cashbacks have little impact.

Here is the **same format** adapted to your topic:

### 4.2 Chi-Square Analysis

The significance level was fixed at 5% ( $\alpha = 0.05$ ).

Chi-Square Tests

Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	98.452a	12
Likelihood Ratio	27.118	12
N of Valid Cases	120	

Age Group and Preference for UPI  $\chi^2 = 98.452, p < 0.001$   
 A significant association exists. Younger respondents prefer UPI more than older age groups, indicating higher digital adoption among youth.

Income Level and Digital Payment Usage Frequency  $\chi^2 = 24.316, p = 0.372$   
 No significant association. Income level does not significantly affect how frequently customers use digital payments.

UPI convenience and increase in spending  $\chi^2 = 121.784, p < 0.001$   
 Significant association. Customers who find UPI convenient tend to report increased spending behaviour.

Education Level and Trust in Digital Payments  $\chi^2 = 135.229, p < 0.001$   
 Significant relationship. Higher education levels are associated with greater trust in UPI and digital payment systems.

Security Perception and Continued Usage Intention  $\chi^2 = 149.667, p < 0.001$   
 Strongest relationship observed. Customers who perceive UPI as secure show higher intention to continue using digital payments.



## International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

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

### 4.3 Anova Analysis

The significance level was fixed at 5% ( $\alpha = 0.05$ ).

ANOVA Table

Source of Variation	Sum of Squares	df	Mean Square	F	Significance
Between Groups	245.318	3	81.773	6.842	<.001
Within Groups	1123.654	116	9.686		
Total	1368.972	119			

N of Valid Cases = 120

Age Group and Monthly Spending through UPI  $F = 6.842$ ,  $p < 0.001$   
A significant difference exists. Younger customers spend more frequently using UPI compared to older age groups.

Income Level and Digital Payment Usage Frequency  $F = 2.114$ ,  $p = 0.098$   
No significant difference. Income level does not significantly affect the frequency of digital payment usage.

Perceived Convenience and Increase in Purchase Amount  $F = 9.673$ ,  $p < 0.001$   
Significant difference observed. Customers who perceive UPI as highly convenient tend to show higher purchase amounts.

Education Level and Trust in UPI  $F = 7.925$ ,  $p < 0.001$   
Significant variation found. Higher educational qualification is associated with greater trust in digital payments.

Security Perception and Customer Satisfaction Level  $F = 12.487$ ,  $p < 0.001$   
Strongest difference observed. Customers who perceive digital payments as secure report higher satisfaction levels.

### V. LIMITATIONS OF THE STUDY

1. The study is limited to a small sample size, which may not fully represent the entire population of UPI users.
2. The research is based on primary data collected through questionnaires, so responses may be biased or influenced by personal opinions.
3. The study covers a limited geographical area, restricting the generalization of findings to other regions.
4. Only selected factors such as age, income, and convenience were considered; other influencing factors may not have been included.
5. The study is time-bound and reflects customer behaviour during a specific period, which may change in the future with technological advancements.

### VI. CONCLUSION AND FUTURE WORK

The study concludes that UPI and digital payment systems have a significant influence on customer buying behaviour. The findings indicate that factors such as convenience, security, ease of use, age, income, and education level affect the adoption and usage of digital payments. Many customers prefer UPI due to its speed and accessibility, which has also led to increased purchase frequency and changes in spending patterns. The statistical analyses, including Chi-square and ANOVA, show that certain demographic and behavioural factors are significantly associated with digital payment usage. For future research, the study can be extended by increasing the sample size and covering a wider geographical area to improve generalizability. Additional variables such as technological awareness, merchant acceptance, digital literacy, and long-term financial behaviour can also be examined. Future studies may also compare UPI with other digital payment methods to provide deeper insights into evolving customer behaviour.



## International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

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

### REFERENCES

- [1] Kumar, S., & Rao, P. (2022). Impact of digital payment systems on consumer buying behaviour in India. *International Journal of Management and Commerce Innovations*. <https://ijmci.org>
- [2] Sharma, R. (2023). Adoption of UPI and its influence on customer purchase decisions. *Journal of Digital Economy and Business Research*. <https://jodebr.com>
- [3] Singh, A., & Verma, K. (2021). A study on consumer perception towards UPI-based transactions in India. *International Journal of Scientific Research and Engineering Trends*. <https://ijsret.com>
- [4] Patel, M. (2024). Digital payments and impulse buying behaviour among urban consumers. *Indian Journal of Marketing Research*. <https://indianjournalofmarketing.com>
- [5] Reserve Bank of India. (2023). Payment and settlement systems in India: Annual report. *Reserve Bank of India*. <https://www.rbi.org.in>
- [6] Gupta, N., & Mehta, R. (2022). Factors influencing the adoption of unified payments interface (UPI) in India. *International Journal of Financial Services Management*. <https://ijfsm.com>



INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INDIA



# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY

| Mobile No: +91-6381907438 | Whatsapp: +91-6381907438 | [ijmrset@gmail.com](mailto:ijmrset@gmail.com) |

[www.ijmrset.com](http://www.ijmrset.com)