

Digital Payment Adoption among Postgraduate Students in Varanasi: An Analysis of Usage Patterns, Preferences and Barriers

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Abstract

The research paper under study focuses on the adoption, preferences, and barriers by postgraduate students towards digital payment systems in Varanasi, which is one of the most important educational centers in India. As India ranks first in the world in the number of real-time transactions related to digital payments and as the digital payment infrastructure has been rapidly growing, it is important to understand the behavior of students with respect to financial inclusion and economic development. The paper examines the determinants of adopting digital payments among postgraduate students, their platforms of choice, how they use them, and the difficulties they encounter when replacing their conventional payment methods with digital solutions.

Keywords: Digital payments, postgraduate students, Varanasi, UPI, financial inclusion, payment behavior

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Introduction:

India is undergoing digitalization. As the number of internet band user's increases and they have more access to the digital means, individuals are increasingly adapting to digital methods of payment. Moreover, this process has been boosted with the digital India drive. The sole objective of the government is to expand the digital access points and to also provide various digital payment modes in their servicing. In the recent past, Indian railways and India Post Office have integrated various payment systems such as e wallet, IRCTC prepaid, BHIM, UPI, USSD, cards, NET banking, Bharat pay and pay later option. Government is not just implementing cashless operating structure, but also providing added benefit scheme to promote digital transaction. A primary benefit of becoming cashless is not just to minimize the inconvenience of carrying cash, but also to encourage digital habits. Infrastructure build, good internet connection, awareness and literacy are viewed as a

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foundation to such transition. The government has been undertaking numerous initiatives through introducing internet freely in the public areas, institutions to create awareness and to promote the use and access to the use of POS and other machines. There are also major private players with plenty of possibilities that come along with the more widespread adoption by masses. RBI is also motivating other private players to join in and enhance the payments infrastructure. Consequently, nowadays there are numerous platforms that can be used to make purchases online. Depending on the convenience, it may be a

mode of payment of any choice. The latest innovation is that the industry has the introduction of e wallets. It has become popular within a very short time due to the convenience it provides and much more acceptable among traders. In addition, individuals can now choose to connect their e wallets with their bank account thereby making this possible to deposit or withdraw money at their bank account. Also, other options such as BHIM, card payments, etc. are providing cash backs, or discounts on its use. The convergence and competition among the various payment options are also on the rise hence, favourable to the customers. It has thus provided a digital umbrella under which the people can transact. The past ten years have seen a surge in the number of digital users with the largest percentage being the youth between 15 to 64 years accounting to 64.9% of the population of India. The young generation is more inclined towards new technological progress and tend to search new ones to experiment. The purpose of this study is to evaluate the degree of digital adoption among youngsters and determine the satisfaction rates. To this end the study has been carried out among the Varanasi students.

Digital Payments: Modes and Trends:

E-payment is becoming the new means of conducting transaction. In most cases, when an individual makes a purchase and pays in order to get it done electronically, without cash involved, can be called as digital payments. Over time different modes have been developed with different utilization and applicability such as cheques to cards to e banking to e wallets and others. With more options on the user end now, a choice of mode is possible among various forms of payment to pay the services.

Different Modes of Digital Payment Options:

Various modes can be distinguished according to its unique features, functionality, technology and

application. Some of the digital payments mode that is used in India is as follows:

UPI Apps

The government basically launched Unified Payment Interface platform, which aims to integrate the various services offered by banks as well as many bank accounts he/she has consolidated all the bank accounts in a single application. It gives the user a convenient choice to combine all the bank accounts that person can make payments easily and at any bank account it desires to at any time it chooses to. BHIM, SBI UPI app, HDFC UPI app, Phone Pe app, I Mobile, and a lot more are some of the apps. Apps are compatible across all smart phones with internet connectivity. In this case, the user has to enrol into mobile banking and through generation of virtual ID, mobile number, Account no. and IFSC code or Aadhaar no., one can send and receive payment. One can also access services such as balance enquiry, transaction history, add bank account and account management. No extra charge is required by customers. Fund Transfer Limit is one lakh per transfer. It is a quicker way to meet all payment requirements but certainly needs a powerful internet connection and a smart phone.

AEPS

This service is called Aadhaar enabled payments, this payment system does not require the customer to have his/her debit or credit card to make payments to any merchant, all the customer needs is his/her Aadhaar number. In this case money is directly transferred out of one bank account and into the bank account of the payee. The customer can use the service by connecting Aadhaar card to bank account. It is not necessary to carry any card or mobile to conduct transactions. It operates on the biometric authentication system whereby the customer must punch in their biometric into the POS point of sale device and the transaction carried

out after the authentication. It involves the use of ones biometric to finalize the deal. This is unlike the debit or credit cards which have extra charges. It also enables the individual to deposit and withdraw cash. But the process requires the physical presence of the person to make transaction. It does not permit other person to conduct business on your behalf.

USSD

USSD banking is a payment method offered to non-smart phone users. Nevertheless, some segment of the population still relies on basic feature phone and this provides them with a huge facility. This means that they will not need to be connected to the internet to access the service and consequently decreasing the level of digital divide. It is built on the telecommunication system where the user only has to dial *99# and can access numerous financial and non-financial services such as balance checking, payment, change of MPIN and MMID. This can be found on basic feature phone through dialling. To receive the service, the user must register their mobile number. Its transaction limit is 5000 per day. But it will charge customer Rs. 2.5 per operations.

E-Wallets

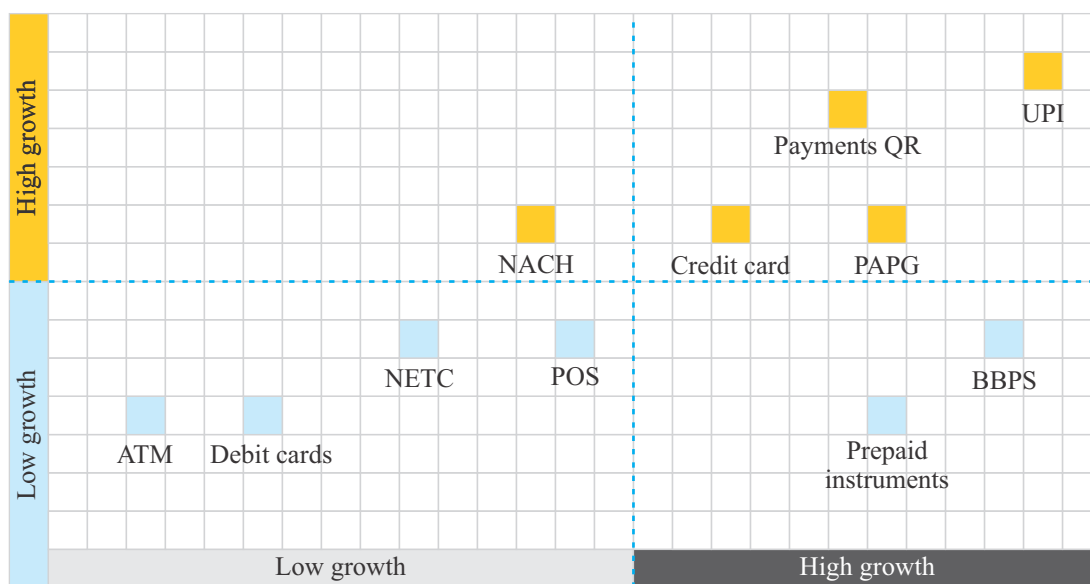
E-wallet is a just a digital wallet. It is an easier

method of carrying wallet without necessarily carrying money. E-wallets are typically accessible to smart phone users. E-wallets have been increasing their number of services. This includes making payment of electricity bill, charging the phone, purchasing tickets, charging the metro card, purchasing the stationery and lots more. Besides this the most profitable thing it offers is the cash back it gives on digital payments. To make payments with the digital wallet, it is necessary to have a mobile number or a QR code. Popular e-wallets are State bank buddy, ICICI pockets, free charge, Paytm etc. Lately, the wallets are connected with the bank account such that the wallets are easy to use to make direct payment using bank account. However, e-wallets are also limited to some extent. It does not require the use of PIN or a password to carry out the transaction. It is easy to make payment using your e-wallet without the permission of one.

Credit cards

Credit cards are still very strong in terms of global payments, transaction value on credit cards have steadily grown online and in-store but there is still a shift towards more transactions being made in digital wallets. Moreover, the increased support of credit cards in UPI and various ecosystems provides new opportunities.

Trends in Digital Payment



Source: RBI; NPCI; PwC Analysis

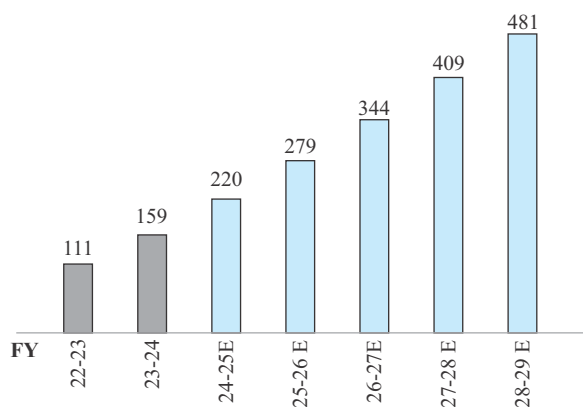
Fig 1: Mapping of payment instruments with respect to growth and adoption

It is expected that in the next few years the digital payments market in India will further increase (Fig 2). PwC India predicts that by FY 2028-29, the volume of digital transactions will be over 3 times and it will have grown to 481 billion transactions

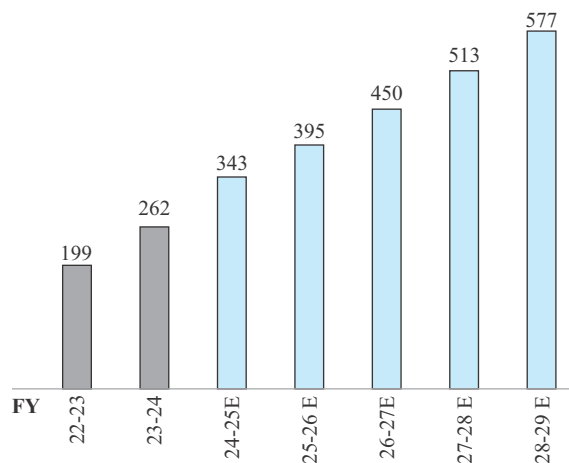
compared to 159 billion transactions in FY 2023-24. These transactions will only increase to twice that amount which now stands at INR 262 trillion (US\$3.2 trillion) to INR 577 trillion (US\$6.9 trillion) in the same time frame.

Overall digital payments market*

Transaction volume (in billion)



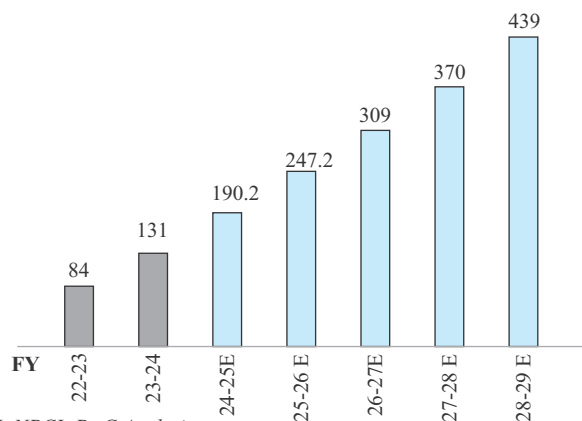
Transaction value (in INR trillion)



*Includes UPI, cards, BBPS, NETC and PPIs

Source: RBI; NPCI; PwC Analysis

Fig 2: Overall digital payments market

Transaction volume of UPI (in billion)

Source: RBI; NPCI; PwC Analysis

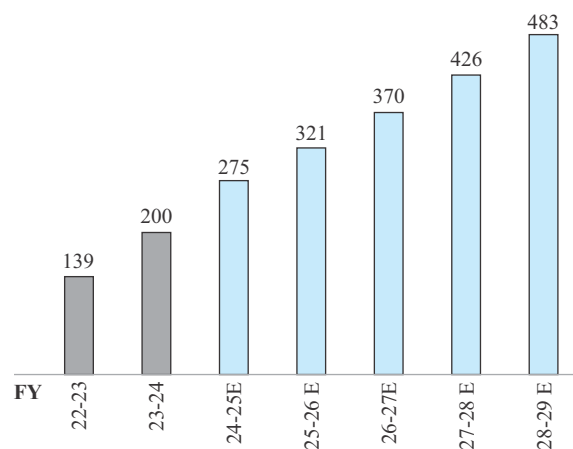
Transaction value of UPI (in INR trillion)

Fig 3: Volume and Value of transactions in UPI

The figure 3 also has bar charts illustrating an increase in the volume and value of transactions conducted in Unified Payments Interface (UPI) in India between the fiscal year (FY) 22-23 and anticipated amounts in FY 28-29.

The volume of UPI transactions is expected to reach 439 billion in FY 28-29.

By FY 28-29, it is expected that UPI transaction value will come to INR 483 trillion.

Growth of Digital Payment Indicators in Volume

Table 1: Growth of Digital Payment Indicators in volume

Indicators	Year (value in Crore)							
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	CAGR
RTGS	10.78	12.44	13.66	15.07	15.92	20.78	24.26	12%
Credit Transfers	421.41	587.93	1184.81	2065.06	3178.68	5779.35	9836.95	57%
Debit Transfers	205.82	37.88	49.14	89.57	104.57	121.89	153.43	-4%
Card Payments	348.64	474.86	617.69	723.84	577.87	617.83	633.45	9%
PPPI	196.37	345.91	460.72	533.18	493.66	657.83	746.67	21%
TDP	1183.02	1459.02	2326.02	3412.4	4370.68	7197.68	11394.8	38%

Note: RTGS= Real Time Gross Settlement; PPPI= Pre- Paid Payment Instruments; TDS= Total Digital Transactions; CAGR=Compounded Annual Growth Rate; %=percentage
Source: Compilation of RBI's Reports from financial year 2017 to 2023

Digital indicator growth in volume refers to the increase in transactions via digital modes. The increase in digital mode of payments in volume as shown in the table 1 illustrates the ever-increasing growth in all types of payments between 2016-17 and 2022-23. The average annual growth of the same was checked using CAGR. Table shows that the average growth in total digital payments is 38

per cent in a year. Out of the indicators, credit transfers had the highest growth per year of 57 per cent then PPI had 21 per cent and RTGS had 12 per cent. This growth was as a result of development of infrastructure, the i.e. provision of internet connectivity, etc. Table also shows that the number of debit transactions is decreasing by an average of 4 per cent in a year owing to the presence of a

variety of digital transactions such as online banking, UPI, POS, apps; nearly all banks are providing their consumers with their own apps to transact on different modes.

Growth of Digital Payment Indicators in Value

An increase in the indicators of digital payments in terms of value implies that the price and

significance of the same is rising. Table 2 indicates an increase in indicators of digital payments in value. It indicates that digital modes increase in total value by an average of 9 per cent per year. Amongst all indicators, the highest in the case of average annual growth of credit transfer is 22 per cent; i.e. every year credit transfer is growing by 22 per cent.

Table 2: Growth of Digital Payment Indicators in value

Indicators	Year (value in Crore)							CAGR
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
RTGS	9.82	11.68	13.57	13.12	10.56	12.87	14.99	6%
Credit Transfers	1.33	1.89	2.61	2.86	3.35	4.27	5.5	22%
Debit Transfers	0.08	0.04	0.06	0.06	0.09	0.1	0.13	7%
Card Payments	0.07	0.09	0.13	0.14	0.13	0.17	0.22	18%
PPPI	0.01	0.01	0.02	0.02	0.02	0.03	0.03	17%
TDP	11.31	13.71	16.38	16.2	14.15	17.44	20.87	9%

Note: RTGS= Real Time Gross Settlement; PPPI= Pre- Paid Payment Instruments; TDS= Total Digital Transactions; CAGR=Compounded Annual Growth Rate; %=percentage

Source: Compilation of RBI's Reports from financial year 2017 to 2023

Review of Literature

S. No	Author (s)	Year	Findings	Research Gaps
1.	Patel & Kumar	2023	Mobile wallets are more preferred than traditional net banking among youth	Study does not address long term loyalty towards specific apps
2.	Verma & Saxena	2023	Cash back offers are the biggest motivator for first – time users	Effect of Cash back wearing off on sustained usage needs study
3.	Mehta & Sharma	2023	Technical Glitches discourage frequent usage among postgraduate users	Longitudinal impact of system improvements was not studied
4.	Chauhan & Singh	2022	Brand loyalty towards Google pay and Phone Pe significantly influences choice	Brand switching behaviour under incentives not analyzed
5.	Gupta et al.	2022	Identify security concerns and transaction failures as major barriers for students	Study does not consider behavioural aspects like peer influences
6.	Singh & Raj	2021	Digital literacy was found to positively affect the frequency of online payments	Focused only on urban students; rural differences ignored
7.	Tiwari & Sharma	2021	Trust in banking institutions correlates with app usage	Third- Party app trustworthiness not separately studied
8.	Dubey & Pandey	2021	Fear of fraud still persists even with strong regulatory frameworks	Psychological factors such as anxiety were not measured
9.	Anand & Kaur	2020	Awareness about fraud protection increases willingness to use online payment systems	An actual usage behaviour post – awareness campaign needs study
10.	Kumar & Patel	2020	Cyber security fears reduce adoption rates	Few studies on risk –mitigation strategies
11.	Smith & Lee	2020	Students prefer mobile payments due to convenience	Limited focus on security risk in student demographics
12.	Li & Zhang	2019	Cash back incentives significantly increase usage	Cultural influences on preferences unexamined
13.	Brown et al.	2019	Trust in payment platforms drives adoption	Lack of cross - cultural comparisons

Objectives

- To assess the role of demographic variables on the adoption and usage patterns of online payment systems.
- To identify the most preferred online payment platforms and to understand their usage frequency and adoption rate.
- To examine the key factors influencing student's

choice of online payment platforms.

- To identify the technical and operational challenges faced by PG students.
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Research Methodology

Because the study was empirical in nature, we focused on determining the usage patterns, preferences, barriers and digital payment adoption

among postgraduate students in Varanasi region. We collected primary data to fulfil the objectives of this study. The field study was done among the postgraduate students of selected Varanasi colleges, Accordingly 100 respondents were selected by using convenience sampling technique. A set of questionnaire also developed for the respondents to understand their usage patterns, preferences, barriers and adoption behaviour towards digital payment. Questions that were asked

to understand the student behaviour towards digital payment include age, gender, literacy and various factors that influence adoption behaviours towards digital payment. The quantitative data was codified for statistical purpose and analysed accordingly. The analysis was carried out using the various analysis tools which include descriptive statistic.

Data Analysis

Table 3: Gender Distribution

Gender	Frequency	Percentage (%)
Female	53	53
Male	47	47
Total	100	100

The above table show that female respondents constitute **53%**, while male respondents account for **47%** of the total sample. This balanced composition ensures that the findings of the study

are not biased toward a particular gender and reflect a broad perspective of postgraduate students regarding online payment usage.

Table 4: Residential Location

Residential Location	Frequency	Percentage (%)
Rural	13	13
Semi- Urban	29	29
Urban	58	58
Total	100	100

The analysis of residential location reveals that a majority of respondents (58%) belong to urban areas, followed by semi-urban areas (29%), while only 13% are from rural areas. This indicates that digital payment adoption is more prominent among

students residing in urban and semi-urban regions, possibly due to better internet connectivity, technological infrastructure, and greater exposure to digital financial services.

Table 5: Age

Age	Frequency	Percentage (%)
18- 20 years	14	14
20- 22 years	40	40
22- 24 years	38	38
25+ years	8	8
Total	100	100

The age distribution indicates that most respondents fall within the 20–22 years (40%) and 22–24 years (38%) categories. This suggests that online payment platforms are predominantly used by young adults in their postgraduate phase, who

are generally more tech-savvy and comfortable with digital transactions. A relatively smaller proportion of respondents are aged above 25 years (8%).

Table 6: Family Income (Monthly in INR)

Family Income	Frequency	Percentage (%)
25001- 50000	13	13
50001- 75000	13	13
75001- 100000	12	12
Above 100000	21	21
Below 25000	41	41
Total	100	100.0

The family income analysis shows that 41% of respondents belong to households earning below ₹25,000 per month, followed by 21% earning above ₹1,00,000. This indicates that online payment platforms are widely used across income

groups and are not limited to higher-income households. Digital payments appear to be inclusive and accessible even to students from lower-income backgrounds.

Table 7: Digital Payment Usage Frequency

Digital Payment Usage	Frequency	Percentage (%)
Daily	76	76.0
Monthly	4	4.0
Occasionally	3	3.0
Rarely	4	4.0
Weekly	13	13.0
Total	100	100.0

The data clearly reveals a high level of adoption of digital payment systems among postgraduate students. A significant majority (76%) use online payment platforms daily, followed by 13% using

them weekly. Very few respondents reported rare or occasional usage. This demonstrates that online payment systems have become an integral part of students' daily financial activities.

Table 8: Preferred Payment Platform

Payment Platform	Frequency	Percentage (%)
Google Pay	54	54.0
Paytm	12	12.0
Phone Pe	22	22.0
All of above	12	12.0
Total	100	100.0

The analysis of preferred platforms shows that Google Pay is the most popular platform, preferred by 54% of respondents. This is followed by Phone Pe (22%) and Paytm (12%). Additionally, 12% of

respondents reported using all available platforms. The dominance of Google Pay may be attributed to its user-friendly interface, reliability, and widespread merchant acceptance.

Which online payment system do you prefer the most?			Gender		Total
			Female	Male	
All of above	How often do you use online	Daily	2	8	10
	payment systems?	Rarely	1	1	2
		Weekly	0	1	1
		Total	3	10	13
Google Pay	How often do you use online	Daily	21	20	41
	payment systems?	Occasionally	2	0	2
		Rarely	2	0	2
		Weekly	6	2	8
Total	31	22	53		
Paytm	How often do you use online	Daily	1	4	5
	payment systems?	Monthly	2	1	3
		Weekly	3	1	4
		Total	6	6	12
Phone Pe	How often do you use online	Daily	11	8	19
	payment systems?	Monthly	1	0	1
		Occasionally	1	0	1
		Weekly	0	1	1
Total	13	9	22		
Total	How often do you use online	Daily	36	40	76
	payment systems?	Monthly	3	1	4
		Occasionally	3	0	3
		Rarely	3	1	4
		Weekly	9	5	14
Total	54	47	100		

The cross-tabulation analysis reveals that both male and female respondents show high daily usage across platforms, particularly Google Pay and Phone Pe. Google Pay records the highest daily usage among both genders, reinforcing its

dominance. Female respondents marginally outnumber males in total usage, indicating a strong acceptance of digital payments among female postgraduate students as well.

Table 10: Factors Influencing Usage of Online Payment Systems
Descriptive Statistics

Factors	N	Minimum	Maximum	Mean	Std. Deviation
Did the convenience factor influence you to use the online payment systems?	100	3	5	4.21	.683
Cash back and rewards inspires you to use online payment systems?	100	1	5	3.54	1.073
The major concern of online payment systems is security.	100	1	5	4.04	.948
The app's user interface greatly impacts the preference 100for using online payment systems.	100	1	5	3.92	.783
Multiple payment options such as (UPI, Wallets, and Cards) is important in an online payment systems.	100	1	5	4.00	.812

The descriptive statistics of influencing factors reveal that convenience is the most significant factor, with a high mean score of 4.21, indicating strong agreement among respondents. Security concerns also play a crucial role, reflected by a mean score of 4.04, suggesting that students are highly conscious about transaction safety.

Other important factors include multiple payment options (Mean = 4.00) and user interface design (Mean = 3.92). Cash back and rewards, though influential, have a comparatively lower mean score (3.54), indicating that functional benefits are valued more than promotional incentives.

Table 11: Technical and Operational Challenges in Usage of Online Payment Systems**Descriptive Statistics**

Technical and Operational Challenges	N	Minimum	Maximum	Mean	Std. Deviation
Experienced payment failures while using online payment systems.	100	1	5	3.75	.865
Faced delayed refund issues with online payment systems.	100	1	5	3.38	1.066
Transaction errors occur frequently while using online payment systems.	100	1	5	3.24	1.001
Does customer support services are effective in resolving online payment issues?	100	1	5	3.52	.986
Are you satisfied with the technical support provided by the online payment service providers?	100	1	5	3.77	.937

The analysis of technical challenges indicates that respondents moderately agree that they experience payment failures (Mean = 3.75) and delayed refund issues (Mean = 3.38). Transaction errors also received a moderate response (Mean = 3.24), suggesting occasional technical difficulties. However, satisfaction with technical support (Mean = 3.77) and customer service effectiveness (Mean = 3.52) indicates that service providers are generally successful in resolving issues, though there is still scope for improvement.

Conclusion

The present study examined the adoption, usage patterns, and factors influencing the choice of online payment platforms among postgraduate students. The findings reveal that digital payment systems have become an essential part of students' daily financial activities, with a significant majority using them on a daily basis. This highlights the deep penetration and acceptance of online payment platforms in students' lives.

The study shows that Google Pay is the most preferred online payment platform among students,

followed by Phone Pe and Paytm. The preference for Google Pay may be attributed to its convenience, simple user interface, and wide acceptance. The analysis further reveals that students from urban and semi-urban areas demonstrate higher adoption rates, indicating the role of infrastructure and digital awareness in influencing usage.

Among the factors influencing the choice of online payment platforms, convenience emerged as the most significant factor, followed by security, multiple payment options, and user-friendly interface. Cash back and rewards, although important, were found to be relatively less influential compared to functional and safety-related aspects. This suggests that students prioritize ease and reliability over promotional benefits.

The study also identified certain technical and operational challenges, such as payment failures, delayed refunds, and transaction errors. However, respondents expressed moderate satisfaction with customer support and technical assistance provided by service providers, indicating that while issues

exist, they are generally manageable.

Overall, the study concludes that online payment platforms are widely accepted among postgraduate students, driven mainly by convenience, security, and technological efficiency, despite the presence of occasional technical challenges.

Suggestions

Based on the findings of the study, the following suggestions are offered:

Enhancement of Security Measures:

Online payment service providers should continuously strengthen security features to address users' concerns and build greater trust among students.

Improvement in Technical Reliability:

Issues related to payment failures, transaction errors, and delayed refunds should be minimized through better system upgrades and real-time monitoring.

User Interface Optimization:

Payment platforms should focus on making their applications more intuitive and user-friendly to enhance the overall user experience.

Effective Customer Support:

Faster and more responsive customer support systems should be developed to resolve user issues efficiently and improve satisfaction levels.

Awareness in Rural Areas:

Digital payment providers and educational institutions should promote awareness programs in rural areas to encourage wider adoption of online

payment systems.

Balanced Promotional Strategies:

While cash back and rewards attract users, service providers should ensure that promotional offers do not compromise service quality or system stability.

References

- i. Anand, M., & Kaur, J. (2021). Fraud awareness and online payment adoption among
 - a. postgraduate students. *Cyber security Journal*, 5(3), 112-125.
- ii. Anand, P. (2020). Adoption of Digital Wallets among University Students in North India. PhD Thesis, University of Delhi. Focuses on student-specific usage patterns and preferences.
- iii. Brown, J., Thomas, M., & Wilson, K. (2019). The role of trust in the adoption of digital payment platforms: A cross-cultural perspective. *Journal of Financial Technology*, 12(3), 45-62.
- iv. Chauhan, N., & Singh, K. (2022). Brand loyalty in mobile payment applications among students. *Marketing Insights Journal*, 5(4), 27-41.
- v. Dubey, R., & Pandey, M. (2021). Security perceptions in online payment systems: A student centric view *Cyber security and Privacy*, 2(3), 15-28.
- vi. Gupta, V., Singh, R., & Mishra, P. (2022). Challenges in online payment systems: A student perspective. *International Journal of E-Business Research*, 18(1), 45-59.
- vii. Kumar, R., & Patel, S. (2020). Cyber security concerns and their effects on mobile payment adoption: An empirical analysis. *Information Systems and Security Journal*, 9(4), 200-215.
- viii. Li, S., & Zhang, Y. (2019). Incentivizing usage: The impact of Cashback offers on digital payment adoption. *International Journal of E-Commerce Studies*, 8(2), 120-134.
- ix. Mehta, P., & Sharma, D. (2023). Impact of technical issues on online payment behaviour *Journal of Information Systems and Technology Management*, 20(1), 34-47.
- x. National Payments Corporation of India (NPCI). (2023). UPI Product Statistics. Provides data on UPI transaction volumes, growth, and user demographics. <https://www.npci.org.in>

- xi. Patel, N., & Kumar, D. (2023). Mobile wallets vs. net banking: A comparative study among students. *Journal of Financial Services Marketing*, 28(1), 12-25.
- xii. Reserve bank of India's (2017, 2018, 2019, 2020,2021,2022, 2023). Payment and Settlement systems and Information Technology. Annual Reports retrieved from: https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/ORBIAR202021_F49F9833694E84C16AAD01BE48F53F6A2.
- xiii. Reserve Bank of India, Payment and Settlement System Act, 2007, PDF available at <https://rbidocs.rbi.org.in>.
- xiv. Singh, A., & Raj, M. (2021). Impact of digital literacy on online payment adoption among youth. *Indian Journal of Commerce and Management Studies*, 12(4), 30-38.
- xv. Smith, A., & Lee, R. (2020). Mobile payment adoption among university students: The role of convenience and security perceptions. *Journal of Consumer Research in Technology*, 15(1), 78-91.
- xvi. The Indian Payments Handbook 2024-2029, https://www.pwc.in/assets/pdfs/indian-payment_handbook-2024.pdf
- xvii. Tiwari, S., & Sharma, V. (2021). Institutional trust and digital payment adoption. *International Journal of Bank Marketing*, 39(5), 789-806.
- xviii. International Journal of Bank Marketing, 39(5), 789-806.
- xix. Verma, A., & Saxena, R. (2023). Cashback offers as catalysts for online payment usage among first-time users. *Journal of Digital Commerce*, 6(1), 50-64.