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A Study on Customer Payment Behaviour and Transaction Patterns of PhonePe Users in Bengaluru City

Surabhi S[1*]

[1]*Dayanand Sagar Business School*

[*]*Corresponding author*

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Abstract

The current research will focus on analysis of customers' payment behaviour and transaction trends by PhonePe users in Bengaluru City. Due to the increasing pace of advancement in technology, increasing use of smartphones, and increasing cashless transactions in India, digital payment services have gained immense importance in our daily transactions. The research seeks to understand customer transaction behaviour and identify the key factors which influence customers in adopting and using PhonePe. The study will follow descriptive and quantitative approach, and the data will be collected primarily through survey conducted on the basis of structured questionnaires distributed to the PhonePe users in Bengaluru City. The results reveal that majority of customers regularly use PhonePe service for their daily transactions including money transfer, bill payments, and UPI payments. Transaction patterns related to transaction value and timing are also discussed in the study. Additionally, the study brings to light some issues and obstacles including security risks, technical problems, and lack of better customer support and new features. The findings are beneficial for digital payment service providers, banks, and policy makers in helping improve customer experience, engage customers, and develop the Indian digital payments ecosystem.

Keywords: Digital Payments, PhonePe, Customer Payment Behaviour, Transaction Patterns, UPI, Digital Payment Adoption, Customer Satisfaction, Bengaluru City

Introduction

The growth of digital technology has greatly impacted the finance system of the world. In India, the growing usage of mobile phones, cheap internet access, and government's efforts for encouraging a cashless society have led to a great number of users adopting digital payment systems. Of the various available digital payments apps, PhonePe is considered to be one of the best because of the convenience provided by its interface and UPI-based services that ensure quick transactions. Digital payments are an essential part of our lives now.

The city of Bengaluru, which is famously referred to as the "Silicon Valley of India," is a good location to study digital payment behaviour owing to its highly advanced level of technological awareness and an equally active digital populace. PhonePe customers within Bengaluru make extensive use of the application to conduct transactions that include remittances, paying bills, shopping online, and topping up their phones. Customer payment behaviour and transactions need to be studied in order to understand how these transactions are conducted.

The objective of this study is to examine the behaviour of payments made by the customers of PhonePe and their transactions patterns in the city of Bengaluru. This study will be concentrating on transaction patterns, preference for payment method, and determinants of usage of digital payments such as convenience, security, reliability, and ease of use. This study will assist digital payments firms and financial institutions with policymaking efforts.

Background of the Study

Digital technology has revolutionized the entire process of financial transactions in the contemporary world. In India, due to the growing penetration of smartphones, better Internet connectivity, and various government efforts towards digitalization, individuals have been motivated to shift their focus from cash-based transactions to digital ones. Various digital payment apps like PhonePe, Google Pay, and Paytm have emerged as favourites because of the benefits that they offer to their consumers in terms of efficiency and convenience.

In terms of digital payment applications, PhonePe has made its mark as one of the prominent applications, offering a variety of services ranging from fund transfer, bill payments, mobile recharge, payments in online purchases, and other finance services. Bengaluru being a highly technological metropolis with people who are knowledgeable about technology presents an ideal location for studying digital payment behaviour. Increasing reliance on digital payment systems in daily activities underscores the necessity to examine consumer behaviour when using such platforms, including their transactional patterns and motivations behind their use.

This study’s background rests in analyzing the behavior and patterns related to transactions made by PhonePe users within Bengaluru city. The main elements that need to be focused on include transaction frequency, modes of payments used, and various factors that influence the choices people make while making these payments. Some of these influencing factors include convenience, security, trust, and ease of use.

Problem Statement

With the advent of digital payment solutions, the way money is transferred within India has undergone significant transformation. However, there still exists limited knowledge regarding the nature of the payment behaviour of customers as well as their transaction pattern, specifically while using particular payment apps, for instance, PhonePe. While the usage of digital payments has gained popularity, it is also observed that preferences among customers concerning the number of transactions carried out, choice of payment mode, and usage of services vary. The effect of various determinants like convenience, security, trust, easy usage, and promotions on customers' usage remains unclear.

Further, there are certain issues faced by the digital payment service providers in terms of customer interaction, transactional issues, security-related issues, and customer retention. It is important to study the ways in which the PhonePe customers interact with the app, factors affecting their interactions, and the patterns involved in the transactions they undertake. Thus, the objective of this study is to bridge the gap in the literature by analysing the behaviour and transaction patterns of the customers using the PhonePe app in Bengaluru City.

Objective of the Study

a. To study customer transaction frequency and payment preferences.

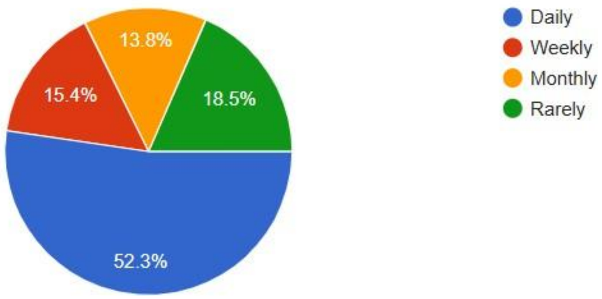
b. To identify factors influencing digital payment adoption.

c. To recommend strategies to increase user engagement and transaction volume.

Data Analysis and Interpretation

1. How often do you use PhonePe for transactions?

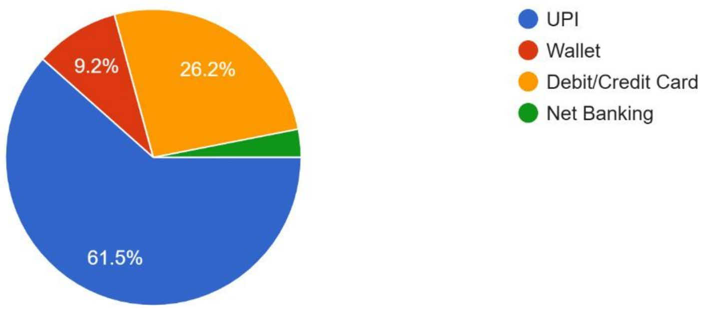
responses



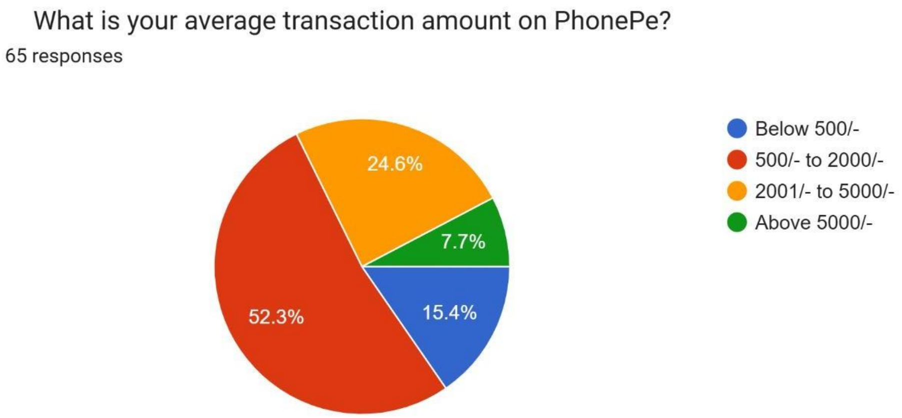
The graph given above represents the number of users who use PhonePe based on the frequency of use of this application by 65 users. More than half of these users use PhonePe regularly on a daily basis for their transactions, which shows that this platform has become an important part of daily transactional requirements of these users. Around 15.4% users use PhonePe weekly while 13.8% users use this application monthly.

Which payment mode do you prefer while using PhonePe?

65 responses

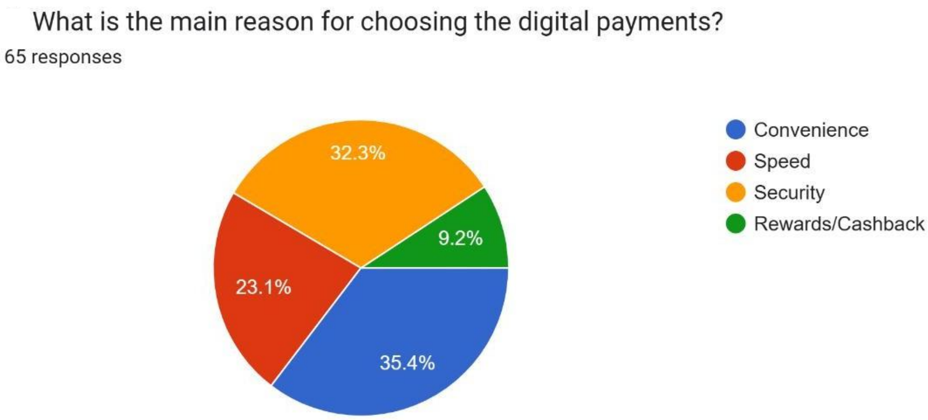


The chart shows that UPI is the most preferred payment method among PhonePe users, with 61.5% of respondents choosing it due to its speed, convenience, and ease of use. Debit/Credit cards are preferred by 26.2% of users, while 9.2% use wallets. These findings indicate that customers favour quick and secure payment methods, highlighting the growing adoption of UPI and supporting India's shift towards a cashless economy.

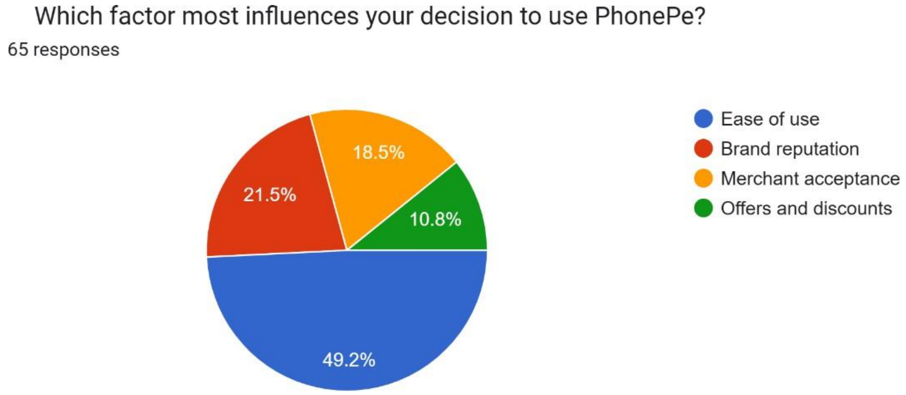


The chart shows that 52.3% of respondents usually transact between ₹500 and ₹2,000 through PhonePe, indicating that the platform is mainly used for medium-value daily transactions.

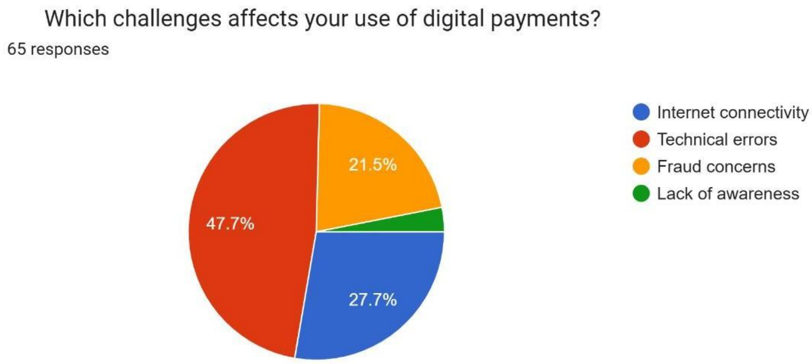
About 24.6% make transactions between ₹2,001 and ₹5,000, while 15.4% transact below ₹500. Only 7.7% make transactions above ₹5,000, suggesting that PhonePe is primarily preferred for routine and moderate-value payments rather than high-value transactions.



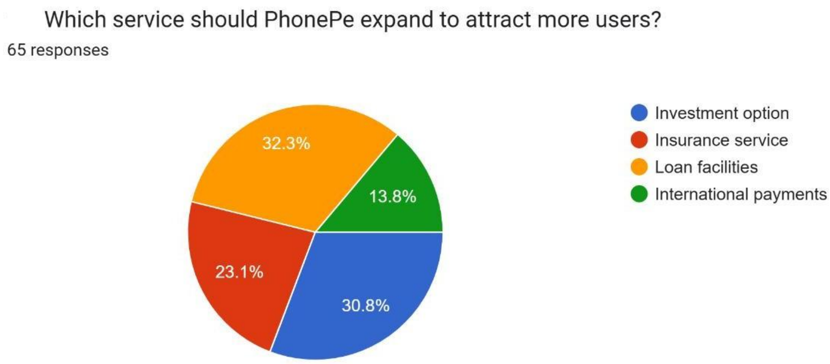
The chart shows that convenience is the primary reason for using digital payments, with 35.4% of respondents selecting it, followed by security (32.3%) and speed (23.1%). Only 9.2% of users are influenced by rewards or cashback offers. These findings indicate that customers mainly prefer digital payment systems for their convenience, safety, and efficiency rather than promotional benefits, highlighting the practical value of PhonePe in everyday transactions.



The chart indicates that ease of use is the most important factor influencing the choice of PhonePe, with 49.2% of respondents selecting it. Brand reputation (21.5%) and merchant acceptance (18.5%) also play significant roles in user preference. Only 10.8% are influenced by offers and discounts. These findings suggest that users value simplicity, convenience, and reliability more than promotional benefits when choosing a digital payment platform.



The chart shows that technical problems are the biggest challenge affecting digital payment usage, reported by 47.7% of respondents, followed by internet connectivity issues (27.7%). Fraud concerns account for 21.5%, while only a few respondents cite a lack of knowledge. These findings indicate that system reliability, network quality, and transaction security are the key factors influencing users' confidence and overall experience with digital payment platforms.



The chart shows that loan services are the most preferred expansion option for PhonePe, chosen by 32.3% of respondents, followed closely by investment services (30.8%). Insurance services are preferred by 23.1%, while international payment services receive the least preference at 13.8%. These findings indicate that users expect PhonePe to expand beyond digital payments by offering more comprehensive financial services to meet their evolving needs.

Testing of Hypotheses

This study examines whether PhonePe users exhibit identifiable transaction patterns and clear payment preferences. It tests whether factors such as convenience, security, ease of use, and trust significantly influence the adoption of digital payments. The research also investigates the relationship between user engagement and transaction frequency. In addition, it evaluates whether effective strategies and improved digital payment services can enhance customer satisfaction, increase platform usage, and improve long-term customer retention among PhonePe users in Bengaluru City.

Review of literature

1. Rahul Sharma & Priya Gupta (2023): Consumer Adoption of Digital Payments in Urban India

This study examined the factors influencing digital payment adoption in urban India. It found that convenience, speed, and ease of use are the primary reasons for adopting digital payment systems. The study also highlighted that digital literacy and smartphone usage encourage adoption, while security concerns and lack of trust remain challenges. It concluded that improving awareness and strengthening security measures can further increase digital payment usage.

2. Suresh Reddy & Anil Kumar (2023): Payment Behaviour of Millennials in India

This study focused on the payment behaviour of millennials in India. The findings showed that young consumers prefer mobile payment applications due to convenience and ease of use. Peer influence and promotional offers significantly affect their payment choices. The study concluded that user-friendly features, attractive rewards, and continuous innovation are essential for retaining millennial users and encouraging frequent digital transactions.

3. Neha Patel (2023): Customer Satisfaction in Mobile Payment Applications

This study analysed customer satisfaction with mobile payment applications. It found that service quality, reliability, transaction speed, and easy navigation are the main factors influencing user satisfaction. Cashback offers and rewards positively affect customer experience, while transaction failures and security concerns reduce satisfaction. The study concluded that improving service quality, customer support, and security can enhance user loyalty and long-term platform usage.

Research Methodology

This study adopts a descriptive and quantitative research design to analyse the customer payment behaviour and transaction patterns of PhonePe users in Bengaluru City. Primary data were collected through a structured questionnaire distributed using Google Forms. A convenience sampling technique was used to select 65 respondents who actively use PhonePe. The collected data include demographic details, transaction frequency, payment preferences, and factors influencing digital payment adoption. The data were analysed using Microsoft Excel with the help of percentage analysis, mean analysis, charts, and graphs. The findings were interpreted to understand user behaviour, transaction patterns, and factors affecting digital payment usage.

Research Design

The study adopts a descriptive and quantitative research design to analyse the customer payment behaviour and transaction patterns of PhonePe users in Bengaluru City. A descriptive design helps in understanding users' payment preferences, transaction frequency, and usage patterns, while the quantitative approach enables the collection and analysis of numerical data through structured questionnaires. Primary data is collected from 65 respondents using a convenience sampling method. The collected data is analysed using percentage analysis, charts, and simple statistical techniques in Microsoft Excel. This research design provides a systematic and reliable approach to understanding customer behaviour and identifying factors influencing the adoption of digital payment services.

Sample Size

The sample size for this study consists of 65 PhonePe users from Bengaluru City. The respondents were selected using the convenience sampling method, as it allowed the researcher to collect data easily within the available time and resources. The sample includes individuals from different age groups, occupations, and income levels to obtain diverse opinions on digital payment behaviour. Primary data were collected through a structured questionnaire distributed using Google Forms. A sample size of 65 respondents is considered adequate for analysing customer payment behaviour, transaction patterns, and factors influencing the adoption and usage of PhonePe in the selected study area.

Sampling Technique

The study uses a non-probability convenience sampling technique to collect data from PhonePe users in Bengaluru City. This method was selected because it is simple, cost-effective, and suitable for academic research conducted within a limited time. Respondents were chosen based on their availability and willingness to participate in the survey. The sample included students, working professionals, and business owners who regularly use PhonePe for digital transactions. Data were collected through a structured questionnaire distributed both online and offline. Convenience sampling enabled the researcher to gather relevant information efficiently and analyse customer payment behaviour and transaction patterns effectively.

Scope of the Study

This study focuses on analysing the customer payment behaviour and transaction patterns of PhonePe users in Bengaluru City. It examines how frequently customers use PhonePe, their preferred payment methods, and the factors influencing digital payment adoption, such as convenience, security, trust, and ease of use. The study also identifies the challenges faced by users and explores their expectations for future financial services. The findings will help PhonePe, other digital payment providers, financial institutions, and policymakers understand customer needs, improve service quality, enhance user satisfaction, and develop strategies to increase digital payment adoption and long-term customer retention.

Limitations of the Study

1. The study is limited to 65 PhonePe users in Bengaluru City, so the findings cannot be generalized to all digital payment users in India.

2. The research is based on primary data collected through questionnaires, and the responses may be influenced by the personal opinions and perceptions of the respondents.

3. The study focuses only on PhonePe users and does not compare customer behaviour with users of other digital payment platforms such as Google Pay or Paytm.

4. The research was conducted within a limited time period, which may not reflect changes in customer behaviour over time.

5. The study considers only selected factors affecting digital payment adoption and may not include all external influences such as government policies, economic conditions, or technological advancement

Data Analysis and Interpretation

Data analysis and interpretation involve examining the collected data to identify meaningful patterns, relationships, and trends that support the research objectives. In this study, data collected from 65 PhonePe users through structured questionnaires were analysed using Microsoft Excel. Percentage analysis, tables, bar charts, and pie charts were used to present the findings clearly. The analysis focused on transaction frequency, payment preferences, average transaction value, factors influencing digital payment adoption, and user satisfaction. The interpreted results helped identify customer behaviour, preferences, and challenges while using PhonePe, providing valuable insights for improving digital payment services and enhancing the overall customer experience.

Findings of the Study

1. The study found that most respondents use PhonePe regularly for their daily financial transactions. A majority of users preferred the application for money transfers, bill payments, and online purchases because of its convenience and speed. This indicates that PhonePe has become an important digital payment platform for routine financial activities among users in Bengaluru.

2. The findings reveal that UPI is the most preferred payment method among respondents, followed by debit and credit cards. Users choose UPI because it offers faster transactions, ease of use, and secure payments. This highlights the growing acceptance of UPI-based transactions and the increasing shift towards a cashless economy in India.

3. The study found that convenience, ease of use, and transaction security are the major factors influencing the adoption of PhonePe. Most respondents preferred the platform because it provides quick, reliable, and secure transactions. Promotional offers and cashback schemes had a comparatively smaller influence on users' decision to continue using the application.

4. The research identified technical problems, internet connectivity issues, and security concerns as the major challenges faced by users. These problems occasionally interrupt transactions and reduce customer satisfaction. Improving system reliability, network performance, and fraud prevention measures can significantly enhance users' confidence and overall digital payment experience.

5. The findings show that users expect PhonePe to expand beyond digital payments by introducing additional financial services. Loan services, investment options, and insurance products were the most preferred future offerings. Expanding these services can improve customer engagement, increase platform usage, and strengthen PhonePe's position in the digital financial services market.

Suggestions / Recommendations

1. PhonePe should continue strengthening its security features by implementing advanced fraud detection systems, multi-factor authentication, and regular security updates. Educating users about safe digital payment practices and fraud prevention can increase customer trust and confidence, encouraging more users to adopt and continue using the platform for everyday financial transactions.

2. The company should focus on reducing transaction failures, application errors, and payment delays by improving server performance and application stability. Regular software updates, faster processing, and better network optimization will provide a seamless payment experience, increase customer satisfaction, and reduce technical issues that discourage users from using digital payment services.

3. PhonePe should introduce additional financial services such as personal loans, investment options, insurance products, and wealth management solutions. Expanding beyond payment services will help meet customers' evolving financial needs, increase user engagement, improve customer retention, and position PhonePe as a comprehensive digital financial platform.

4. The company should provide faster and more responsive customer support through 24/7 live chat, quick grievance resolution, and multilingual assistance. Efficient customer service can resolve user issues promptly, improve customer satisfaction, reduce frustration during transaction failures, and build long-term trust and loyalty among PhonePe users.

5. PhonePe should conduct awareness campaigns, financial literacy programs, and promotional activities to educate users about digital payment benefits and platform features. Personalized rewards, cashback offers, referral programs, and user engagement initiatives can encourage regular usage, attract new customers, and improve long-term customer retention and satisfaction.

Conclusion

This study concludes that PhonePe has become one of the most preferred digital payment platforms among users in Bengaluru City due to its convenience, speed, ease of use, and secure transaction process. Most respondents regularly use the application for money transfers, bill payments, and other daily financial activities, with UPI being the preferred payment method. Although technical issues and security concerns remain challenges, users continue to rely on PhonePe because of its reliability and user-friendly features. The study also highlights the demand for additional financial services such as loans and investments. Overall, the findings provide valuable insights for improving customer satisfaction, increasing user engagement, and supporting the continued growth of digital payment platforms.

Declaration of Conflicting Interests

The authors declare no potential conflicts of interest with respect to the research, authorship and publication of this article.

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References

a. Sharma, R., & Gupta, P. (2023). Consumer adoption of digital payments in urban India. Journal of Digital Finance, 12(2), 45–58.

b. Reddy, S., & Kumar, A. (2023). Payment behaviour of millennials in India. International Journal of Business Research, 15(1), 78–91.

c. Patel, N. (2023). Customer satisfaction in mobile payment applications. Journal of Financial Technology, 10(3), 112–126.

d. Singh, R., & Verma, S. (2022). Factors influencing digital payment adoption in India. International Journal of Commerce and Management, 18(4), 95–108.

e. Gupta, A., & Mehta, P. (2022). Consumer behaviour towards UPI-based payment systems. Journal of Business Studies, 14(2), 67–81.

f. Reserve Bank of India. (2024). Annual Report 2023–24. Reserve Bank of India.

g. National Payments Corporation of India. (2024). UPI Product Statistics. National Payments Corporation of India.

h. PhonePe Private Limited. (2024). Annual Report 2023–24. PhonePe.

i. Kothari, C. R. (2019). Research Methodology: Methods and Techniques (3rd ed.). New Age International Publishers.

j. Malhotra, N. K. (2020). Marketing Research: An Applied Orientation (7th ed.). Pearson Education.