

A Comparative Study of Payments Systems Used by Businesses in the Akola Region

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Abstract: *The rapid advancement of financial technology has significantly transformed payment systems in India, shifting from traditional cash-based methods to modern digital platforms such as Unified Payments Interface (UPI), mobile wallets, and card-based transactions. This study aims to provide a comparative analysis of traditional and digital payment systems with a focus on customers and business units in the Akola region. The research is based on primary data collected through structured questionnaires from customers and business owners. The key findings of the study reveal that UPI is the most widely used and preferred payment method among both customers and businesses. A majority of respondents use digital payments regularly due to their convenience, speed, and ease of use. Digital payment applications such as Google Pay and PhonePe are highly popular among users. The study also finds that digital payments significantly improve business efficiency, enhance record-keeping, and increase customer satisfaction. However, several challenges were identified, including network connectivity issues, transaction failures, and concerns related to fraud and security, which act as barriers to full adoption. Despite these challenges, most respondents expressed a strong willingness to continue using digital payments in the future, indicating a growing acceptance of digital financial systems.*

The study concludes that while digital payments are rapidly gaining dominance and shaping the future of financial transactions, traditional methods such as cash continue to coexist, especially in semi-urban areas. The successful expansion of digital payment systems requires improvements in infrastructure, enhanced security measures, and increased digital literacy to ensure inclusive and sustainable growth.

Keywords: Digital Payments, UPI (Unified Payments Interface), Traditional Payment Systems, Business Efficiency, Customer Preference, Financial Technology (FinTech)

I. INTRODUCTION

Payment systems are a fundamental component of any economy, enabling the smooth transfer of financial value between individuals, businesses, and institutions. Over the years, these systems have evolved significantly from traditional methods such as cash and cheques to modern digital platforms driven by technological advancements. The efficiency, speed, security, and transparency offered by payment systems play a crucial role in enhancing business operations and economic development. In the Indian context, the payment landscape has undergone a remarkable transformation, particularly after the introduction of digital initiatives such as Unified Payments Interface (UPI), mobile wallets, internet banking, and card-based transactions. Government initiatives like Digital India and the push toward a cashless economy have further accelerated the adoption of digital payment systems. These modern systems provide several advantages, including instant transactions, improved record-keeping, reduced dependency on physical cash, and enhanced customer convenience. Despite the rapid growth of digital payments, the adoption is not uniform across all regions and sectors. While urban areas have quickly embraced digital transactions, semi-urban and rural regions continue to rely significantly on traditional payment methods due to factors such as limited infrastructure, lack of



digital literacy, trust issues, and fear of cyber fraud. The Akola region, being a semi-urban area, presents a unique scenario where both traditional and modern payment systems coexist, creating a hybrid payment environment.

This coexistence raises important questions regarding the preferences, challenges, and impact of different payment methods on business efficiency and customer satisfaction. Understanding these aspects is essential for evaluating how businesses adapt to technological changes and how payment systems influence operational performance. Therefore, this study aims to conduct a comparative analysis of traditional and digital payment systems used by businesses and consumers in the Akola region.

II. LITERATURE REVIEW

The evolution of payment systems has been widely studied in recent years, particularly with the rapid growth of digital technologies and financial innovations. Researchers have examined various aspects such as adoption, efficiency, security, and the impact of digital payments on businesses and consumers.

Rogers Everett M. (2003), in his Diffusion of Innovation Theory, explained how new technologies are adopted over time based on factors such as perceived usefulness, ease of use, and social influence. This theory is highly relevant in understanding the adoption of digital payment systems, as users tend to adopt these technologies when they perceive them as convenient and beneficial.

A study by Sathye Milind (1999) analyzed the adoption of internet banking and identified security concerns, lack of awareness, and resistance to change as major barriers. These findings remain relevant in the current digital payment environment, where similar challenges affect adoption rates.

Kumar Vinod (2017) examined the impact of demonetization in India and found that it significantly accelerated the adoption of digital payment systems. The study highlighted that government initiatives play a crucial role in promoting digital transactions, especially in developing economies.

According to Gupta Saurabh (2018), digital payments improve transparency, reduce transaction costs, and enhance financial inclusion. The study emphasized that digital payment systems contribute to better record-keeping and reduce the dependency on cash-based transactions.

A study conducted by Patil Vijay (2019) focused on rural and semi-urban areas and found that although digital payment adoption is increasing, traditional payment methods still dominate due to lack of infrastructure and digital literacy. This finding is particularly relevant to regions like Akola.

Reserve Bank of India (RBI) reports indicate a significant increase in digital payment transactions in India, especially through UPI. The reports highlight that digital payments have grown exponentially due to improved infrastructure, regulatory support, and increasing consumer awareness.

Research by Sharma Rakesh (2020) found that customer trust and perceived security are critical factors influencing digital payment adoption. The study revealed that concerns about fraud and data privacy continue to hinder widespread acceptance.

III. RESEARCH METHODOLOGY

The present study adopts a descriptive and analytical research design to examine and compare traditional and digital payment systems used by customers and business units in the Akola region. The descriptive approach is used to understand the existing payment practices and preferences, while the analytical approach helps in evaluating the impact of different payment systems on business efficiency and customer behavior. The study is based on both primary and secondary data sources. Primary data was collected through structured questionnaires administered to respondents, including both customers and business owners. The questionnaire was designed to capture information related to payment preferences, usage patterns, challenges faced, and perceptions regarding digital payment systems. Secondary data was collected from various sources such as research papers, journals, books, and official publications of institutions like the Reserve Bank of India to support and validate the findings.



For the purpose of the study, a convenience sampling method was used. The total sample size consisted of 126 respondents, out of which 74 were customers and 52 were business units operating in the Akola region. The respondents were selected from different age groups, occupations, and types of businesses to ensure diversity in the data collected. The collected data was analyzed using simple statistical tools such as percentage analysis, tabulation, and graphical representation including bar charts and pie charts. These tools helped in presenting the data in a clear and systematic manner, making it easier to interpret and compare the results. The scope of the study is limited to the Akola region and focuses on both traditional payment methods such as cash and cheques, and modern digital payment systems such as UPI, mobile wallets, and card payments. However, the study has certain limitations, including a relatively small sample size and geographic restriction, which may affect the generalization of the findings. Additionally, the responses are based on individual opinions and may be subject to bias. Despite these limitations, the methodology provides a reliable framework for understanding the adoption, challenges, and impact of payment systems in a semi-urban context.

Table :Summary of Research Methodology

Sr. No.	Particulars	Details
1	Research Design	Descriptive Research
2	Data Collection	Primary & Secondary
3	Primary Source	Questionnaire
4	Secondary Source	Journals, Books, Reports
5	Sampling Method	Convenience & Purposive
6	Sample Size	52 Businesses, 74 Customers
7	Area of Study	Akola Region
8	Tools Used	Percentage, Tables, Charts
9	Limitations	Time, Small Sample, Limited Area
10	Scope	Study of Payment Systems & Efficiency

Objectives of the study

- To study different payment systems used by businesses
- To compare traditional and digital payment methods.
- To analyze customer preferences and usage behavior .
- To identify challenges in digital payment adoption.
- To evaluate the impact on business efficiency .
- To understand future trends in payment systems.

IV. Data Analysis and Interpretation

Objective 1: To study different payment systems used by businesses

Out of 52 businesses surveyed, 32 businesses (62%) reported UPI as their primary payment method, while 13 businesses (25%) mainly relied on cash and 7 businesses (13%) used other modes such as cards or digital wallets. This indicates that digital payment systems, particularly UPI, have gained significant acceptance among businesses due to their efficiency and ease of use. However, the continued use of cash highlights its importance as a reliable and universally accepted payment method, especially in situations where digital infrastructure may be limited.

Objective 2: To compare traditional and digital payment methods

Among the 76 customers surveyed, 64 respondents (84%) preferred digital payment methods, whereas 12 respondents (16%) continued to prefer traditional methods such as cash. This comparison clearly shows the growing dominance of



digital payments due to their convenience, speed, and accessibility. Nevertheless, the continued preference for traditional methods by a small group reflects concerns related to trust, familiarity, and technological dependency.

Objective 3: To analyze customer preferences and usage behavior

The analysis of customer behavior reveals that 58 respondents (76%) primarily use UPI for transactions, while 49 respondents (64%) reported frequent usage of digital payments. Additionally, 61 respondents (80%) prefer applications such as Google Pay and PhonePe, and 64 respondents (84%) consider digital payments to be convenient. These findings indicate a

strong behavioral shift toward digital payment systems, driven by user-friendly interfaces, quick transaction processing, and widespread smartphone usage.

Objective 4: To identify challenges in digital payment adoption

Despite the increasing adoption of digital payments, several challenges persist. Out of 76 respondents, 43 respondents (56%) reported network-related issues, 23 respondents (30%) experienced transaction failures, and 10 respondents (14%) expressed concerns regarding fraud and security. This highlights that technological limitations and security risks remain significant barriers, affecting user confidence and limiting the full potential of digital payment systems.

Objective 5: To evaluate the impact on business efficiency

The findings show that 39 out of 52 businesses (75%) observed an improvement in operational efficiency after adopting digital payment systems, while 13 businesses (25%) did not report significant changes. The improvement is mainly attributed to faster transaction processing, reduced cash handling, and better financial record-keeping. This demonstrates that digital payments play a crucial role in enhancing overall business performance.

Objective 6: To understand future trends in payment systems

Regarding future adoption, 68 out of 76 respondents (90%) expressed their willingness to continue using digital payment systems, while 8 respondents (10%) remained uncertain. This indicates a strong positive outlook toward digital payments, suggesting that their usage will continue to grow in the coming years as trust, infrastructure, and awareness improve.

Customer Analysis: The analysis of customer responses indicates that digital payment methods, particularly UPI, are the most widely used, accounting for approximately 70–80% of total transactions. A majority of respondents reported using digital payments regularly, either always or occasionally, reflecting a strong adoption trend. Among the various digital platforms, applications such as Google Pay and PhonePe are the most popular due to their ease of use and accessibility. Additionally, more than 84% of users consider digital payments to be convenient, highlighting their efficiency and time-saving nature. However, despite these advantages, several challenges persist. The most common issues faced by users include network connectivity problems, transaction failures, and concerns related to fraud and security. Interestingly, nearly 90% of respondents expressed their willingness to continue or increase the use of digital payments in the future. Overall, the findings suggest that while customers strongly prefer digital payment systems for their convenience and speed, technical issues and security concerns continue to affect their level of trust.

Business Analysis: The analysis of business responses reveals that most businesses in the Akola region accept both traditional and digital payment methods, with UPI emerging as the most preferred mode of transaction. Digital payments have significantly contributed to improving business operations by enhancing transaction efficiency, maintaining accurate records, and increasing customer satisfaction. Businesses benefit from faster payments and better financial tracking, which supports smoother day-to-day operations. However, despite these advantages, several challenges hinder the complete adoption of digital systems. Common issues reported by businesses include network connectivity problems, delays in transaction processing, and concerns regarding fraud and security risks. As a result, many businesses continue to rely on cash transactions alongside digital methods to ensure reliability and avoid disruptions. The findings indicate that although businesses are progressively shifting toward digital payment systems, traditional methods remain relevant due to their dependability and ease of use.

Out of 52 businesses, 75% of businesses use modern payment systems, including UPI and other digital methods, while 25% rely on traditional payment methods such as cash. This indicates a strong shift toward digital payments among



businesses due to their efficiency and convenience. However, the continued use of cash reflects its reliability and importance in situations where digital infrastructure or connectivity is limited.

V. FINDINGS OF THE STUDY

The study reveals that digital payment systems, particularly UPI, have become the most preferred mode of transaction among both customers and businesses in the Akola region. A significant majority of customers use digital payments regularly due to their convenience, speed, and ease of use. Applications such as Google Pay and PhonePe are widely adopted, indicating a strong inclination toward mobile-based payment solutions. At the same time, traditional payment methods like cash continue to play an important role, especially in situations where digital infrastructure is unreliable. The study also finds that digital payments have a positive impact on business operations by improving efficiency, enabling better recordkeeping, and enhancing customer satisfaction. However, several challenges hinder the complete adoption of digital payment systems. The most common issues identified include network connectivity problems, transaction failures, and concerns regarding fraud and security. Despite these challenges, a large proportion of respondents expressed willingness to increase their use of digital payments in the future, indicating a growing acceptance and trust in digital systems. Overall, the findings say that the region is in a transitional phase where both traditional and digital payment systems coexist, with a gradual shift toward digitalization.

VI. CONCLUSION

The study concludes that digital payment systems are playing a transformative role in reshaping the financial transaction landscape in the Akola region. While traditional payment methods such as cash continue to be relevant, digital payments are increasingly preferred due to their efficiency, convenience, and ability to enhance business operations. The adoption of digital payment systems has led to improvements in transaction speed, financial record-keeping, and customer satisfaction. However, challenges such as technical issues, lack of infrastructure, and security concerns continue to limit their full potential. The coexistence of traditional and digital payment systems reflects a transitional stage in the economy, where gradual adoption is taking place. With appropriate measures such as improved infrastructure, enhanced security, and increased awareness, digital payment systems are expected to dominate in the future. Thus, the study highlights the importance of creating a secure, reliable, and inclusive digital payment ecosystem to support sustainable economic growth.

Suggestions :

For Businesses

Businesses should adopt multiple digital payment methods such as UPI, debit/credit cards, and mobile wallets to provide flexibility to customers.

They should ensure proper internet connectivity and backup systems to avoid transaction failures during peak hours.

Businesses must focus on maintaining secure payment systems to reduce the risk of fraud and build customer trust.

Small businesses should maintain digital transaction records for better financial management and transparency.

Training should be provided to staff to improve digital payment handling skills and customer support.

Businesses should encourage customers to use digital payments by offering discounts, cashback, or incentives.

For Customers

Customers should increase their awareness and knowledge of digital payment systems to use them effectively and safely.

They should follow security practices such as not sharing OTPs or PINs and using trusted payment applications.

Customers should ensure they have stable internet connectivity before making transactions to avoid failures.

They should use multiple payment options instead of depending only on one method.

Customers should regularly check their transaction history to avoid errors or fraud.

Participation in digital literacy programs can help customers become more confident in using digital payments.



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