

Investigating Payment Method Choice: A Study of UPI and Cash Usage Dynamics in Small-Scale Retail Environments

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ABSTRACT

Nowadays UPI has become an important source of digital money in our phones. Before that the market of digital money was replaced with plastic money like ATM card, Debit card , Credit card, paper money and metals such as coins of copper, silver and brass. Now time has changed into one small gadget that is our phones or we can say money in our phone . This has replaced digital money into digital payment. While UPI has revolutionized digital payment infrastructure—reaching over 17 billion monthly transactions and powering 62% of digital transactions by early 2025 — recent GST-related enforcement in places like Bengaluru and Hubballi has triggered a reversal among certain vendors who now refuse UPI due to concerns over tax scrutiny.

Nowadays because of UPI many cities has turned into cash free city and UPI cities, which have included the app such as phone pay, Google pay, Paytm. This has exchanged the cash system so people can do the payment with their phone but for small payments people are dependent on UPI but this is affecting the server getting more load on the system. In contrast, surveys indicate that over 73% of MSMEs report business growth through digital adoption, with UPI as the most preferred tool .

To reconcile these dynamics, the study employs mixed methods: face-to-face questionnaires, semi-structured interviews, and transaction observation across a representative sample of shops. This project shows the customers preferences of cash vs UPI in Small retail shops by considering factors like security, trust, Customer payment behavior, speed of the transaction, and way of using the UPI

Key words:

Unified Payments Interface, consumer behavior, merchants, UPI, Cashless Economy, Digital Payments, Fintech, Digital payments infrastructure, big tech, financial inclusion, UPI adoption, Merchant payment choice, shopkeepers adaptability, Informal retail , small merchants, Consumer convenience, digital finance, Financial inclusion.

INTRODUCTION:

In today's world we have many options to pay money. Earlier, local shops are used only cash for payment but due to advanced technology like smartphones We transfer money online through online sources like phone pay, Paytm etc., Those payments are called UPI. It became most common because of its easy payment process .So customers used it rather than carrying net cash. As people have adopted this digital payment system such as UPI. Many cities in India have achieved no cash payment such as Bangalore, Ludhiana,

Patna, Chennai and Hyderabad. The study has found that India at approximately 49% at all global real-time payment.

The role of the Indian government has also been important in driving this change. Digital India campaign promoted financial inclusion and digital literacy, ensuring that even small shopkeepers and street vendors could adopt QR-based UPI systems with low cost. The availability of low-cost smartphones and affordable internet data plans has also taken a big role in this digital payment transformation.

UPI has not only simplified payments but also impacted the banking system positively. Banks now collaborate their mobile applications with UPI (e.g., SBI's YONO app), allowing customers to do their transactions from home without visiting any branches. Customers can track their expenditure with real-time notifications, and receive instant confirmations. And also UPI offers small rewards such as cashback and discounts etc., that increase customer satisfaction and encourage them to use again to get rewards which attracts them to use again and again.

This project UPI payments vs cash In local shops shows how technology is transforming payments in India. Cash usage is simple, previously done worldwide, and easy to use, but it has some disadvantages like no maintenance of transactions ,no security, and inconvenience. On the other hand, UPI offers speed, convenience, transparency, making it attractive for both customers and shopkeepers.

In reality, both cash and UPI are working side by side. While UPI is driving India toward a digital economy, cash still provides a safety net. The choice depends on customer or consumer preference, shopkeeper adaptability, and availability of technology. However, this clearly shows that UPI is replacing cash as the preferred mode of payment in local shops, in India's financial journey.

This paper aims to find out the relationship between

- Identifies risks and confidence levels among consumers.
- To analyze shopkeepers' adaptability toward UPI-based transactions.
- Focuses on how merchants uses digital payments into business.
- To know whether digital adoption increases sales and customer base.
- To examine the role of government policies in promoting UPI usage.

METHODOLOGY and TOOLS:

This study has adopted a mixed methods approach of both primary and secondary data that has been utilized to understand customer and local shopkeepers regarding UPI payment and transaction of cash during payment.

It focuses on customers preference as well as shopkeepers adaptation towards UPI and transaction during payment. Data collected from the primary sources by using a sampling method. The data has been collected from the 90 to 100 customers by using questionnaires executed online surveys. Here we adopted a semi structured interview method to gather the information on trust &Challenges, Real-time payment system of money from the shopkeepers, road side vendors and from small business units. Totally all together the data is collected from the customers and small businesses regarding UPI payments to know the real time customers preferences and venders challenges.

This paper signifies cashless economics of India from the given angels:

In this rapidly increasing world UPI has transformed how people in India make payments, but cash continues to play a strong role in society. Many customers who are aware of the digital world prefer UPI because it is fast, convenient, and secure, while customers who are not aware of the digital world often rely on cash due to trust and habit. This contrast makes it important to study how customers are choosing between cash and UPI in everyday transactions.

For shopkeepers, UPI has brought new chances to grow their business. They can serve more customers, avoid the problem of handling loose change, and get instant payments. This study is needed to understand how shopkeepers are balancing these benefits and difficulties.

The study focuses on the comparison of UPI Payment and traditional cash transactions. After Covid it has become a trend of transaction of payment.

Adopting the digital payment system in both urban and rural areas. Adopted by different age groups, income level and education level.

Here, we can find the speed of the transaction during payment but in some areas local network and network issues are a big deal during payment. Consumers have to pay cash and sometimes no cash leaves that particular product.

This thing required some changes during digital transactions. Provide high speed network while transaction and also watch out the area's network issue from where it is focused on the network. This also focuses on cyber security and black mail because many of the cases are related to hacking payment. However the study is promoting cashless economics of India.

Review of literature: The article “ Study on Public’s Preference on Digital Payments and UPI Apps” by Kiran S , Published on 22.3.2024 of Volume 2 ET The public are preferring UPI (Unified Payment Interface) and adopting a digital payment system. The UPI system allows users to spend money transactions between finances and bank accounts. The article “Cash to Digital: UPI Adoption Among Micro Businesses in Mysore” by Dr.Nanda Kishore Shetty, Yashaswini M, Sharath Kumar M, Shashikanth, Published on 14 November 2024 of Volume 4 Journal of informatics Education and Research

This article shows the impact of the Unified Payments Interface (UPI) on the small businesses in Mysore, in India. The article “Analysis of Usage of UPI Payments in Banking Sector ” by Megha Joshi Published on 13 June 2023 of Volume 6 International Journal for Research in Applied Science and Engineering Technology. In Banking sectors, Banker's and customs are preferring UPI (Unified Payment Interface) and digital payment system which makes easy to handle the bank accounts and daily transaction. This digital payment system made easy for customers to handle their account number and loan , transaction. The article “A Study on the Impact of Upi Digital Payment System in Ludhiana City” by Kawalpreet Sharma, Published 5 May 2025 of Volume 13 -International Journal of All Research Education and Scientific Methods (IJARESM). The impact of the integrated payment interface (UPI) digital payment system in Ludhiana City, Punjab, India, in the midst of the increasing spread of electronic transactions. The article “Adoption of Unified Payment Interface (UPI): A Literature review” by Dusmant Kumar Sahoo, B. Chandra Mohan Patnaik, Ipseeta Satpathy by (KIIT University), Published on 2 of Volume 1 : The Unified Payment Interface (UPI) has revolutionized the digital payment landscape in India. India has become the fastest country in the field of adopting UPI (Unified Payment Interface) and digital payment systems.

The survey of customers and shopkeepers presented over here. The finding underscores that for UPI to completely displace cash in local shops, improving the underlying digital infrastructure's reliability—especially mobile network quality—is the most essential factor.

S.No.	Survey Question	Options	Percentage
I	What do you feel is the main disadvantage of UPI payments?		
		Network issues	51.90%
		Transactions failures	23.10%
		Fraud risks	19.20%
		Lack of awareness	5.80%
II	What is the main advantage of UPI payments for you?		
		Convenience	36.50%
		Safer than carrying cash	44.20%
		Time saving	19.20%
		Discounts and offers	0.00%
III	Do you find UPI more secure compared to cash?		
		Yes	50.00%

		No	17.30%
		Sometimes	32.70%
IV	Has UPI helped you reduce cash dependency?		
		Yes	44.20%
		No	26.90%
		Partially	28.80%
V	Do you think UPI is promoting digital literacy?		
		Yes	55.80%
		No	11.50%
		To some extent	32.70%
VI	Do you recommend UPI over cash to others?		
		Yes	32.70%
		No	19.20%
		Sometimes	48.10%
VII	In your daily purchases, what percentage do you pay through UPI vs Cash?		
		Mostly UPI	42.30%
		Balanced	32.70%
		Mostly cash	25.00%

The Core Benefit of UPI: Security & Ease: Leading Benefit is Security (44.2%): The key reason for UPI uptake is not the discounts but the belief that it offers security compared to carrying cash (44.2%). This belief is supported by 50.0% of participants who directly agree that UPI is safer than cash. Motive for Enhancing Digital Literacy (55.8%): A strong majority feel UPI fosters literacy (55.8%). This validates UPI's function as a driver of inclusion motivating users to develop new abilities since the advantages (security, ease) are extremely attractive.

The Primary Obstacle: Network Dependability: Key Drawback is Network Problems (51.9%): More than half of the participants identify Network problems as the drawback. This is an observation: the issue is largely technical infrastructure rather than behavioral (fear of fraud or lack of knowledge). External Context: This result corresponds with studies that highlight weak connectivity particularly in non-Tier 1 regions as a major barrier, to comprehensive digital payment adoption.

Recommendation is Conditional (48.1%): The significant percentage of users suggesting UPI Occasionally (48.1%) directly results from the network problems. Users endorse it solely when they trust the network will be stable emphasizing that cash remains a "fallback" option.

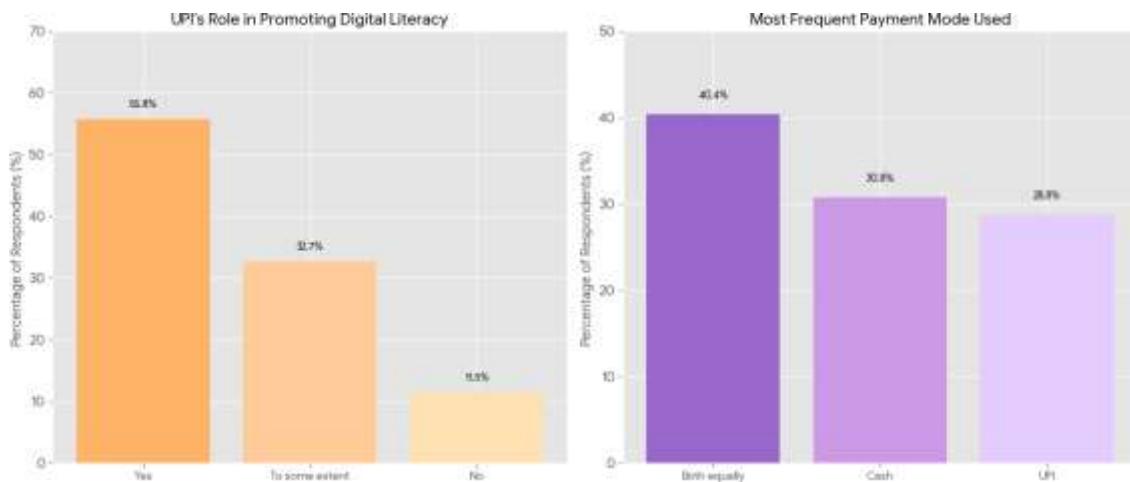
Payment Behaviour: A Hybrid Model: Frequency vs. Volume: There is a subtle but important difference in usage. The largest group uses Both equally (40.4%) when asked for frequent usage (e.g., small, quick transactions). The largest group pays Mostly UPI (42.3%) when asked for daily purchases (which often refers to larger, planned transactions).

This indicates that UPI has secured the value aspect of transactions yet cash remains predominant, in the volume of micro-transactions where quickness and complete dependability're crucial.

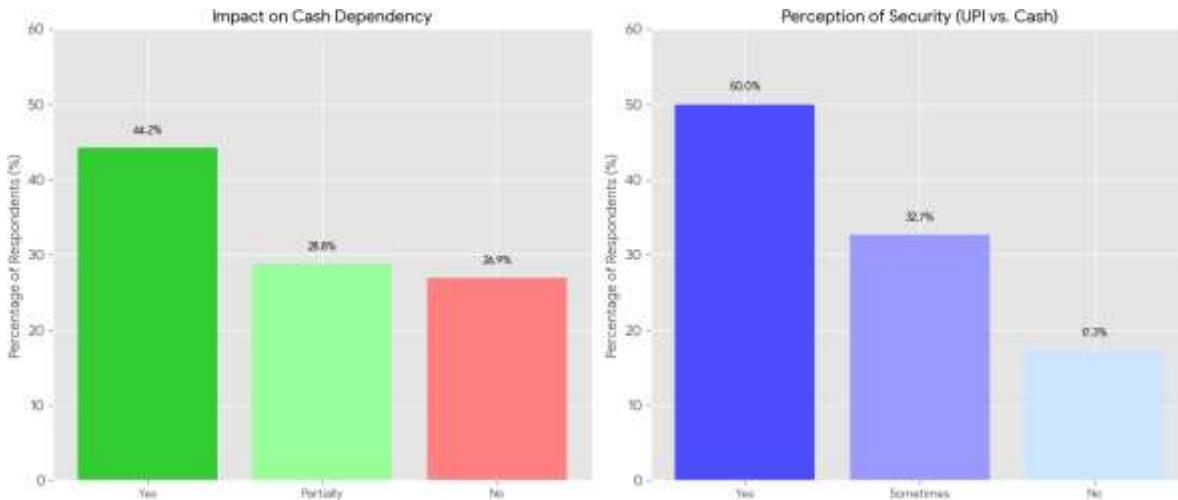
Impact on Cash Dependency: Reduction is Clear (73.0%): A combined 73.0% of respondents (44.2% "Yes" + 28.8% "Partially") have reduced their cash dependency. This demonstrates UPI's success in achieving the national objective of a less-cash economy. The fact that 26.9% still report No reduction in cash dependency is likely the segment most affected by the Network issues (51.9%) and resulting Transaction failures (23.1%), forcing them to carry cash for reliability.

The data clearly shows that the issue of network connectivity is the most significant perceived drawback:

Category	Key Finding/Dominant Response	Percentage
Main Advantage of UPI	Safer than carrying cash	44.20%
Main Disadvantage of UPI	Network issues	51.90%
Perception of Security	Find UPI more secure (Yes)	50.00%
Impact on Cash Use	Helped reduce cash dependency (Yes)	44.20%
Digital Literacy	Promotes digital literacy (Yes)	55.80%
Payment Frequency	Use Both equally	40.40%
Payment Volume	Pay Mostly UPI	42.30%
Education Level (Largest Group)	Undergraduate	36.50%

Figure 1: UPI Advantages vs. Disadvantages

This figure directly contrasts the core benefits perceived by users against the primary challenges they face when using UPI. While **Safety** is the primary driver for adoption, **Network issues** present the biggest hurdle, affecting over half of the users.

Figure 2: Security, Perception, and Behavioral Impact

This figure examines the user's perception of security and the tangible impact UPI has had on their cash habit. A clear majority of 50% feel UPI is more secure, which directly translates into a significant reduction in cash dependency for 73% of the respondents ("Yes" + "Partially").

Figure 3: Digital Literacy and Payment Habits

This figure looks at UPI's broader socio-economic impact and how it is integrated into the daily payment routine. UPI is widely seen as a tool for **Digital Literacy** (88.5% combined), yet in terms of *frequent* use, people still rely on a **balanced approach** ("Both equally" being the top choice), suggesting situational use based on reliability.

The Hybrid Reality of Local Payments

The study indicates that while the Unified Payments Interface (UPI) has been overwhelmingly successful in establishing itself as a **secure, convenient, and transformative tool** (driving digital literacy and reducing cash dependency), its primary barrier to full cash replacement in the local retail environment remains the **technical reliability of the digital infrastructure**.