



# AN ANALYSIS OF THE LEVEL OF AWARENESS, ADOPTION OF DIGITAL PAYMENT METHODS AND CHALLENGES IN COIMBATORE CITY OF TAMIL NADU

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## Abstract

India's transition toward a cashless economy has been driven by rapid digitalization, government initiatives, and the increasing adoption of digital payment systems like UPI (Unified Payments Interface), this shift has significantly enhanced financial inclusion, transaction efficiency, and transparency while reducing the reliance on physical cash. The benefits include lower costs of currency management, reduced corruption, and economic growth through the expansion of digital commerce. However, challenges such as cyber security risks, digital literacy gaps, infrastructure limitations, and financial exclusion persist. This study explores the impact of digitalization on India's economy, highlighting both the opportunities and obstacles in achieving a fully cashless society. Strengthening cyber security, increasing awareness, and improving digital infrastructure are essential to ensure that all sections of society can participate in and benefit from the digital economy. The findings emphasize the need for a balanced approach that fosters innovation while addressing security and accessibility concerns to create an inclusive and sustainable cashless ecosystem.

**Keywords:** Cashless Economy, UPI (Unified Payments Interface), Cyber security, Digital Payment, Digital Infrastructure

## INTRODUCTION

A cashless economy has revolutionised India in recent years, mostly due to the quick development of digitisation. Across the country, this shift is changing how transactions are carried out in an effort to lessen reliance on real cash. This transition, which seeks to reduce dependency on physical currency, is reshaping the way transactions are concluded across the nation. With a growing emphasis on digital platforms, mobile wallets, online banking, and government-led initiatives such as the Digital India campaign, India is looking forward to a time when financial transactions are more safe, transparent, and swift. The drive for a cashless society is an endeavour to

advance financial inclusion, reduce corruption, and boost economic efficiency in addition to being a technical revolution. However, this transition comes with its own set of challenges, including issues of digital literacy, internet accessibility, and cyber security. As India continues to accelerate its journey towards a cashless economy, it is essential to examine the impact of digitization on various sectors and the broader societal implications.

### **Why Cashless Economy is Important**

**Increased Financial Inclusion:** A cashless economy allows more people, especially in rural or underserved areas, to access financial services through digital platforms like mobile wallets and UPI. This promotes financial inclusion by enabling individuals who might not have access to traditional banking services to participate in the economy.

**Enhanced Convenience and Efficiency:** Digital transactions are fast, secure, and convenient. Consumers can make payments at the click of a button, avoiding the need to carry cash or visit physical locations. For businesses, digital payments streamline operations, reduce the need for cash handling, and speed up transactions.

**Transparency and Reduced Corruption:** Cashless transactions are traceable and recorded, reducing the risk of tax evasion, money laundering, and corruption. This helps promote accountability and transparency in both public and private sectors, as all financial activities can be tracked and audited.

**Improved Security:** Digital payments reduce the risk of theft and physical loss of cash. Payments are secured through encryption, PINs, or biometric authentication, making transactions safer compared to carrying or handling cash. This also lowers the chances of counterfeit currency in circulation.

**Economic Growth and Formalization:** A cashless economy encourages the formalization of the economy, where businesses and individuals are more likely to report their income and expenses. This helps in boosting tax revenues, improving government policies, and contributing to overall economic growth.

The shift to a cashless economy offers several benefits, such as reducing the cost of making and storing physical cash for the Reserve Bank of India (RBI), and curbing practices like black money. It can also contribute to lower crime rates, as crimes with financial motives become rarer. Moreover, adherence to labour laws can be better ensured, with wages being directly deposited into workers' bank accounts. Additionally, a cashless economy reduces banking service costs, enhances the effectiveness of monetary policy in managing inflation, and fosters economic growth in the country.

### **Drawback of a Cashless Economy**

**Exclusion of Technologically Inexperienced and Rural Populations:** A significant portion of India, especially in rural areas, lacks access to smartphones, internet, or basic digital literacy. As a result, these populations are excluded from participating in a cashless economy, exacerbating economic inequality.

**Cyber Security Risks:** With the increase in online transactions, the risks of cybercrimes like fraud, identity theft, and hacking grow significantly. Without robust cyber security measures, individuals and businesses could become targets for malicious actors, jeopardizing sensitive financial information.

**Privacy Concerns:** Digital transactions generate large amounts of personal data that can be tracked, stored, and analyzed. This raises concerns about privacy and surveillance, as individuals' spending habits and personal financial activities can be exposed to both governments and private companies.

**Dependence on Technology and Infrastructure:** A cashless economy is highly dependent on digital infrastructure, such as the internet and mobile networks. Any disruptions, such as network failures, technical glitches, or power outages, can halt financial transactions, leading to inconvenience and potential financial losses.

**Challenges for Small Businesses:** Small businesses, particularly in rural areas, may face challenges adopting digital payment systems due to costs associated with infrastructure setup, transaction fees, and maintenance of digital platforms. This could create a barrier to entry, affecting their competitiveness and growth.

## REVIEW OF LITERATURE

The transition to a cashless economy has been extensively studied, with researchers highlighting key factors influencing digital payment adoption. **Esawe (2022)** examined the behavioural intentions of e-wallet users, revealing that while digital payment awareness has grown through social media and advertisements, customer adoption remains moderate, with 58.8% of surveyed individuals still reluctant to use e-wallets. **Padmavathi et al. (2021)** found that convenience, record-keeping, time efficiency, and incentives such as cashback drive consumer preference for cashless transactions. Their study also emphasized the role of government initiatives, including prepaid cards and digital payment instruments, in encouraging adoption. However, challenges persist, as noted by **Aslam Hasan and Mohammed Atif Aman (2020)**, who identified barriers such as lack of awareness, internet dependency, and concerns over additional transaction fees that deter many from using digital payment systems. To address these issues, the Indian government has promoted multiple digital payment options, including UPI, online banking, and e-wallets, to increase financial inclusion and curb black money circulation. **Saviour (2019)** highlighted the growing use of mobile wallets, noting that smartphones have become an essential part of digital transactions, although taxation on high-value transactions may affect consumer behaviour. Similarly, **Sancheti (2018)** observed that customer's favours digital wallets like Paytm and Gpay due to instant transfers, security advantages, and promotional benefits such as rewards and cashback. Finally, **Chaudhari (2017)** underscored the infrastructural challenges of a cashless economy, arguing that internet accessibility remains a crucial barrier. He advocated for government intervention, including free Wi-Fi zones and mandatory digital payment adoption by cooperative societies. Overall, while digitalization has significantly improved transaction efficiency and transparency, addressing infrastructure limitations, cyber security concerns, and Digital literacy remains critical for achieving a fully cashless economy

## STATEMENT OF THE PROBLEM

The transition to a cashless economy in India, driven by digitalization, presents both opportunities and challenges. While digital payments enhance financial inclusion, reduce corruption, and improve economic efficiency, barriers such as cyber security threats, digital illiteracy, and infrastructure limitations hinder widespread adoption. Many rural and economically disadvantaged populations struggle with accessibility to digital platforms, exacerbating financial exclusion. Additionally, privacy concerns and cyber fraud risks deter some users from embracing digital transactions. The dependency on stable internet connectivity further complicates seamless implementation, particularly in remote areas. Small businesses and unbanked individuals face difficulties adapting to cashless systems, affecting their financial stability. Despite government initiatives like Digital India and UPI, a gap remains in public awareness and trust in digital transactions. Addressing these challenges is crucial for creating an inclusive, secure, and efficient cashless economy in India, this article explores the current state of digitization in India, its role in fostering a cashless economy, and the opportunities and challenges that lie ahead.

## Objective of the Study

1. To study the level of awareness and adoption of the digital payment methods among the respondents
2. To analyze the challenges in adopting digital payment methods

## METHODOLOGY

The study is based on primary data the required data were collected by adopting snowball sampling technical through a well-structured questionnaire in the form of google form this is the total sample came of 97respondents the collected data were analysed using statistical tools like chi square test correlation,

## Data Required

Primary data are used in this research. A questionnaire was prepared specifically for the study, which involved college students and working professionals with ages ranging from 18 to 30years. Convenience sampling technique is adopted to collect data and the total samples was 97.

## RESULTS AND DISCUSSION

Based on the responses received from the respondents, the demographic variables such as age, gender, education qualification and occupation so on. Accordingly gives the Majority of the respondents are Female 75(75.5%) as well as students 69 (70.3%) belonging to the age group of 18-23 (82%) Education qualification majority of the respondents are undergraduates 62(64%)

**Table 1: Demographic Details of the Respondents**

Variable	Particulars	No of Respondents	Percentage
Gender	Male	25	25
	Female	72	75
Age	18-23	80	82
	27-29	16	17
	Above 30	1	1
Educational Qualification	Under graduate	62	64
	Post graduate	32	3
	PhD	3	4
	Businessman	3	3
Occupation Businessman	Employee	17	18
	Farmer	1	1
	Others	3	3
	Profession	3	3
	Self-employee	1	1
	Students	69	70

Source: Primary data

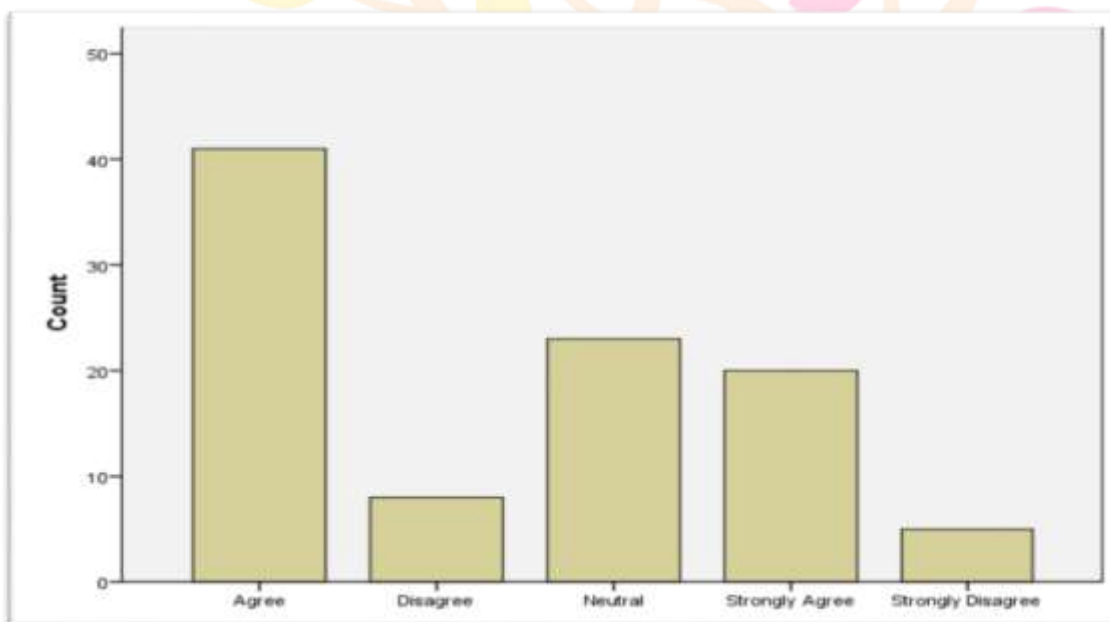
**Table 2: Respondents Awareness Level**

S.NO	Awareness Level	No. of Respondents	Percentage
1	Strongly agree	20	20
2	Agree	41	42
3	Neutral	24	23
4	Disagree	8	9
5	Strongly Disagree	5	6
	<b>Total</b>	<b>97</b>	<b>100</b>

Source: Primary data

The above table 2 show out of 97 respondents, 20% of respondents (20) are strongly agreed awareness of online transaction, 41% of respondents (42) are agreed, 24% of respondents (23) are accept as neutral, 9% of respondents (8) are disagreed, (6%) of respondents 5 strongly disagreed.

So, it is concluded that the most of the respondents 41 (42%) are agreed.

**Level of Awareness****Table 3 Challenges Faced By the Respondents**

S.No	Challenges	No. Of Respondents	Percentage
1	Cybercrimes	10	11%
2	Financial Loss	25	25%
3	Lack Of Process	33	34%
4	Others	29	30%
	<b>Total</b>	<b>97</b>	<b>100%</b>

Source: Primary Data

The above table 3 shows that out of 97 respondents, 11% (10) faced challenges in cybercrime, 25% (25) faced challenges in financial loss, 33% (33) faced challenges in the lack of process, and 30% (29) faced challenges from other sources. So, it is concluded that the majority of the 33 respondents (34%) faced challenges in the lack of process.

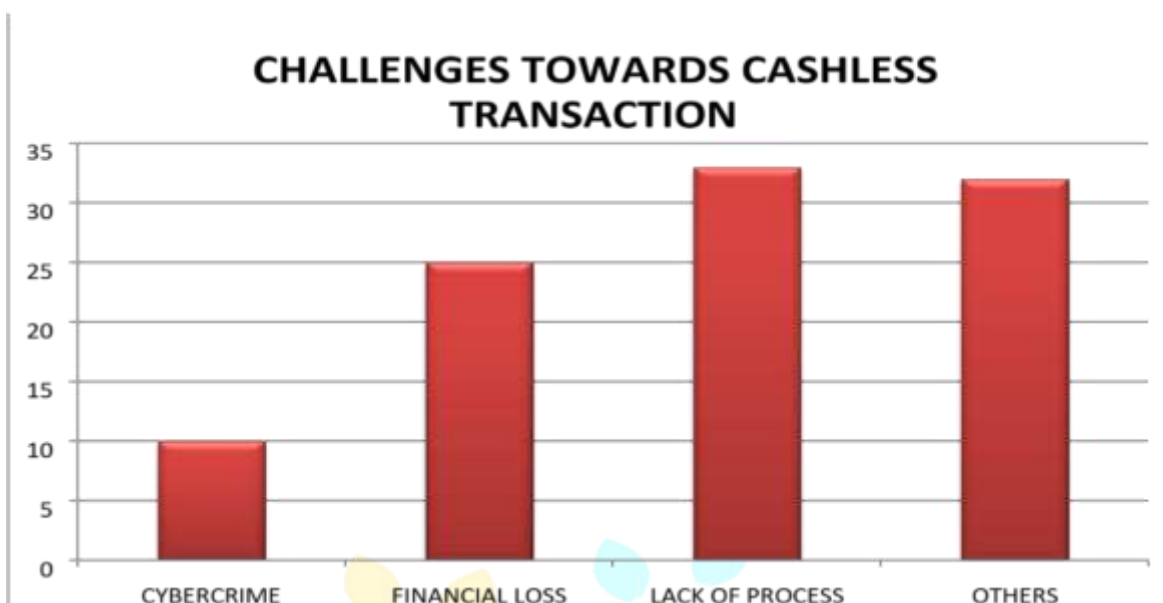


Table5: Usage of UPI Application by the Respondents

S.NO	UPI Applications	No. Of Respondents	Percentage
1	GOOGLE PAY	80	82%
2	PAYTM	12	13%
3	BHIM	3	3%
4	OTHERS	2	2%
	<b>TOTAL</b>	<b>97</b>	<b>100</b>

Source: Primary Data

The above table 4.12 shows out of 97 respondents, 82% of respondents (80) are using Google pay, 13% of respondents (12) are using Pay TM, 3% of respondents (3) are using BHIM, 2% of respondents (2) are using other applications. So, it is concluded that the majority of the respondents 80 (82%) are using Google pay.

## Usage of UPI applications by the respondents

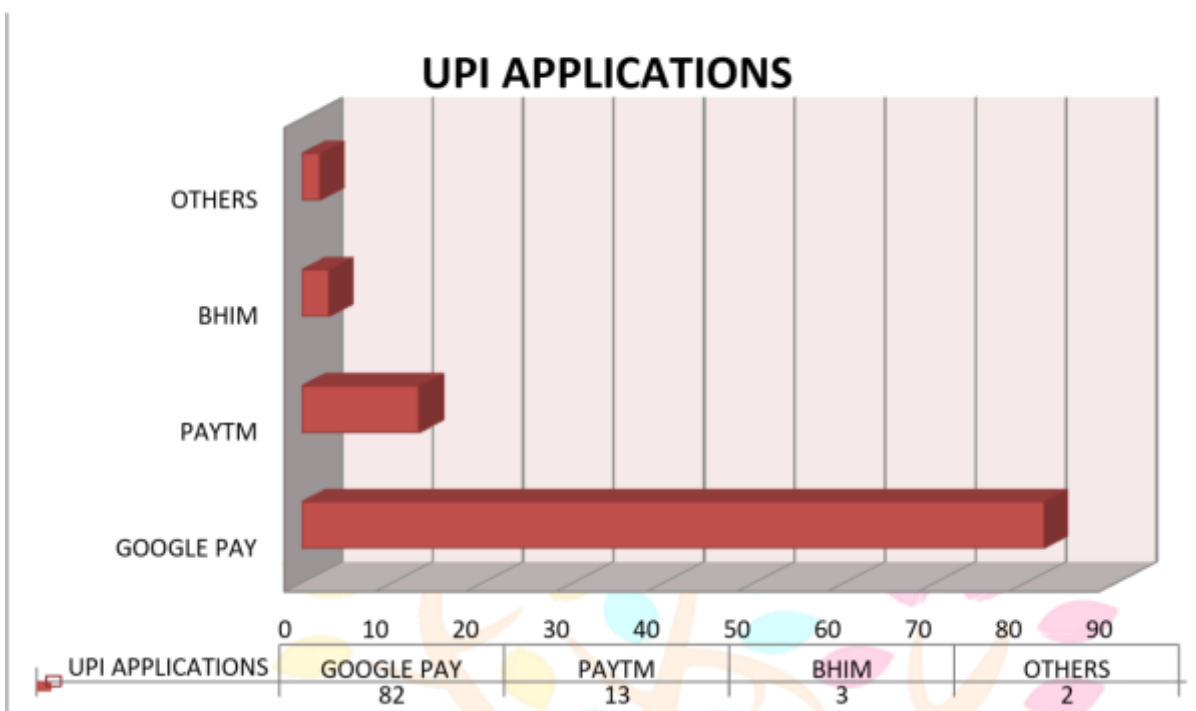


Table 4 Chi-square Test

Chi-square Tests					
	Value	Df	Asymptotic significance (2-sided)	Exact sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	6.004a	1	0.014		
Continuity Correction <sup>b</sup>	4.866	1	0.027		
Likelihood Ratio	6.536	1	0.011		
Fisher's Exact Test				0.015	0.012
Linear-by-Linear Association	5.942	1	0.015		
N of Valid Cases	97				

**Source: Primary data**

Since the p-value (0.014) is less than the Level of significance (0.05). So we reject the null hypothesis and conclude that there is an association between gender and the impact of demonetization and that there is a need for some assistance for cashless transaction

**Table 3: Chi-square Test**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2sided)
Pearson Chi-Square	.018 <sup>a</sup>	1	0.894	
Continuity Correction <sup>b</sup>	.000	1	1.000	
Likelihood Ratio	0.017	1	0.895	
Fisher's Exact Test				1.000
Linear-by-Linear Association	0.017	1	0.895	
N of Valid Cases	97			

**Source: Primary data**

Since the p-value (0.894) is greater than the Level of significance (0.05). So we accept the null hypothesis and conclude that there is no association between gender and the impact of demonetization that cash less transaction has increased.

**Table 4 Correlation**

		SALARY 1	Which of the following payment methods do you use?
SALARY1	Pearson Correlation	1	-0.125
	Sig. (2-tailed)		0.223
	N	97	97
Which of the following payment methods do you use?	Pearson Correlation	-0.125	1
	Sig. (2-tailed)	0.223	
	N	97	97

**Source: Primary data**

Since the p-value (0.223) is greater than 0.05, the salary does not have a significant impact on the types of payment methods used.

**MAJOR FINDINGS**

**Decreased Cash Usage:** UPI contributed significantly to reducing the reliance on physical cash, which improved efficiency and security in financial transactions.

**Cost Savings for the Government:** By promoting digital payments, UPI reduced the creation and circulation of physical currency, saving costs for the Indian government that could be redirected to other sectors.

**Boost to E-commerce and GDP:** The adoption of UPI led to increased online activities, such as shopping, food delivery, and medical services, contributing positively to India's GDP and creating new job opportunities.

**Privacy and Security Concerns:** As digital payments grow, privacy and security concerns also rise, with risks of fraud, identity theft, and data breaches, especially among older or less tech-savvy individuals.

**Digital Divide in Rural Areas:** The need for smartphones and a stable internet connection creates barriers for people in rural and semi-urban areas, limiting access to digital payment systems.

**Public Wi-Fi to Bridge the Gap:** Providing public Wi-Fi, particularly in marketplaces and rural areas, can help bridge the digital divide and allow more people to use digital payments without worrying about connectivity or data costs.

**Cybersecurity Measures:** Strengthening cybersecurity protocols is vital to protect users from fraud and cybercrimes. The government can support this by offering education on data protection and implementing stronger cyber laws.

**Combating Corruption and Black Money:** Digital payments ensure traceability of transactions, helping to curb corruption and black money by making it more difficult for people to evade taxes or engage in illegal financial practices.

## Conclusion

Strengthening the security features of payment apps, such as two-factor authentication and Realtime fraud detection, would help build trust among users, especially the elderly or those unfamiliar with digital security risks. The government or private companies could provide subsidies for smartphones or data plans for low-income individuals to ensure they're not excluded from the cashless payment ecosystem. One of the major complaints about digital payment systems is the inconsistency and slow speed of transactions, often due to server issues, for people without smartphones or reliable internet, more offline solutions could be developed. For example, USSD-based mobile banking or cashless payments via feature phones can provide more inclusive access to digital payments. Having more accessible customer support, especially in local languages, can help those facing difficulties in using these systems. Dedicated helplines or in-person assistance could make a big difference. A large-scale, nationwide awareness campaign (using TV, radio, social media, and even community outreach) would help educate citizens, especially older people and those less familiar with technology, on how to safely use digital payment systems.

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