

# Study of Cash Management in Banking Sector in India

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## ABSTRACT

This study explores cash management practices in Indian banks amid a rising shift toward digital banking. By surveying 123 customers across public and private banks in urban and semi-urban areas, the research analyzes ATM usage, satisfaction levels, and digital payment preferences. Findings reveal strong digital adoption among youth, consistent reliance on cash services, and similar satisfaction across bank types. The study recommends a hybrid banking model combining physical infrastructure with digital innovation to meet evolving customer needs efficiently and inclusively.

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## INTRODUCTION

The Indian banking sector plays a pivotal role in the economic development of the country, acting as the backbone of financial transactions, savings, credit distribution, and wealth management. One of the most critical yet often overlooked areas within this system is cash management. Effective cash management is essential for maintaining liquidity, ensuring smooth operations, and providing uninterrupted services to customers. It involves forecasting cash flow, optimizing cash reserves, ensuring ATM availability, managing peak-period surges, and transitioning toward more efficient systems using digital technology.

India presents a unique landscape in this regard. While the country is witnessing rapid growth in digital transactions-propelled by platforms like UPI, internet banking, mobile wallets, and government initiatives like Digital India-cash still remains a dominant mode of transaction, particularly in semiurban and rural areas.

According to RBI reports, currency in circulation continues to grow annually despite the aggressive promotion of digital channels. This dichotomy poses a significant challenge for banks: how to efficiently

manage physical cash while promoting and transitioning to digital solutions.

In light of this, the study on cash management in the Indian banking sector becomes highly relevant. It reflects the ongoing struggle and evolution of financial institutions to strike a balance between maintaining physical cash services and encouraging digital adoption, ensuring customer satisfaction, operational efficiency, and regulatory compliance.

## CLARIFICATION OF THE RESEARCH TOPIC

The chosen research topic, "Study of Cash Management in Banking Sector in India," focuses on examining how banks manage their cash-related operations amidst a rapidly changing financial ecosystem. It includes both public and private sector banks, and considers the role of customers, technology, infrastructure, and regulations in shaping cash management strategies.

This topic becomes even more important as the expectations of customers evolve. Modern customers demand quick, safe, and convenient access to their funds, whether via ATMs, bank counters, or digital channels. Banks must not only meet these demands but also do so in a cost-effective and secure manner.

## NEED FOR THE STUDY

Despite the increase in digital adoption, cash remains indispensable, especially in semi-urban and rural areas where digital literacy, internet penetration, and infrastructure are still developing. For many customers, cash transactions provide a sense of security, familiarity, and ease.

However, cash handling involves several logistical challenges, such as transporting currency, maintaining ATM uptime, predicting cash demand, and dealing with counterfeit currency.

Poor cash management can lead to customer dissatisfaction, service disruptions, security risks, and reputational damage for banks. Therefore, studying the current practices and exploring ways to optimize them is vital for the sustainable growth of the banking sector.

## OBJECTIVES OF THE STUDY

- This research aims to fulfill the following objectives: To examine the existing cash management practices in Indian banks, including ATM services, cash counters, and related infrastructure.
- To assess customer satisfaction regarding cash handling efficiency and service delivery, especially during peak seasons such as festivals and salary disbursement times.
- To evaluate the impact of digital alternatives on traditional cash usage and customer preferences across different demographic groups.
- To recommend actionable strategies to banks for improving their cash management systems while integrating digital solutions and maintaining service reliability.

## SCOPE OF THE STUDY

This study is primarily focused on the urban and semiurban banking population in India. It includes a sample of 123 respondents, drawn from diverse professions and age groups, who use either public or private sector banks. The scope covers customer experiences related to:

- ATM usage and satisfaction
- Frequency of bank visits
- Handling of cash during high-demand periods
- Trust in cash vs. digital services

## PREFERRED PAYMENT METHODS

While the study does not directly address rural or underbanked populations due to limitations in sampling and accessibility, it offers a solid foundation for understanding general trends in cash management across a significant portion of India's banking population.

## RELEVANCE IN TODAY'S CONTEXT

Post-pandemic India has seen a remarkable acceleration in digital payments. However, cash has not diminished proportionally. Even in metros, ATMs are still heavily used, and bank branches experience crowding at month-end. Thus, the need to maintain efficient cash services alongside digital expansion is more critical than ever.

Moreover, with growing concerns about cybersecurity, digital fraud, and technical glitches, many customers still consider cash a safe and reliable option. Therefore, understanding their perspectives helps banks develop a hybrid approach-enhancing both digital infrastructure and traditional cash handling capabilities.

## STRUCTURE OF THE THESIS

The thesis begins with this Introduction, laying the groundwork for the study. It is followed by a Literature Review to explore theoretical frameworks and previous studies. Research Methodology details the survey design, data collection, and analysis approach. Data Analysis and Interpretation present key findings, while Conclusion and Recommendations summarize insights and propose improvements.

## LITERATURE REVIEW AND EXPLORATORY RESEARCH

The literature review aims to understand the existing body of knowledge related to cash management in the Indian banking sector and globally. It explores the evolution of cash handling practices, the growing influence of digital technology, customer behavior, and the role of regulatory bodies like the Reserve Bank of India (RBI). By evaluating past research, government reports, and industry analyses, this section also helps identify gaps in the current understanding and positions the present study within the broader academic and professional discourse.

## EVOLUTION OF CASH MANAGEMENT IN BANKS

Cash management has always been a core function of banks, encompassing the planning, collecting, handling, and controlling of physical currency to ensure liquidity and meet customer demands. Traditionally, banks managed cash through branch counters and manual registers. However, as economies expanded, the complexity of handling large volumes of cash increased. This gave rise to automated systems like ATM networks, cash deposit machines (CDMs), and vault management systems.

Srivastava (2018) highlights that banks moved toward automation to reduce human errors, improve speed, and ensure security. The introduction of ATMs in

India in the 1990s revolutionized how customers interacted with banks. Since then, cash withdrawal and deposit processes have been increasingly automated. Cash Usage Trends in Indian Banking

Despite the digital wave, India remains a predominantly cash-driven economy. According to the RBI Annual Report (2022), currency in circulation has continued to grow post-demonetization, indicating sustained reliance on cash, especially in rural and semi-urban areas.

Kaul (2020) observed that while mobile wallets and UPI are gaining ground in urban centers, physical currency remains critical for low-income groups, older populations, and small businesses.

Research by Mittal and Jain (2019) suggests that even digitally literate users do not completely avoid cash. They tend to use it during emergencies, for small value transactions, or in places with poor internet connectivity. This dual usage pattern indicates that banks must manage both cash and digital systems efficiently.

### **ROLE OF DIGITAL PAYMENT INFRASTRUCTURE**

The post-2016 demonetization and the government's push for a "Digital India" initiative gave a significant boost to cashless transactions. The introduction of UPI, Bharat QR, and mobile wallets significantly changed the payment ecosystem. The Deloitte Digital Banking Maturity Study (2022) reports a sharp rise in digital banking users in India, with nearly 60% of banking services now accessed via mobile devices.

However, the study also emphasizes that the growth in digital services has not led to a proportional decline in cash usage. Therefore, banks must optimize their hybrid infrastructure-ensuring that digital systems are well-integrated while also maintaining robust cash services for those who need them.

### **GLOBAL BEST PRACTICES IN CASH MANAGEMENT**

International trends show a progressive shift toward cashless economies. For instance, Sweden has less than 10% of all transactions conducted in cash, and many retail stores no longer accept physical money. Similarly, South Korea has adopted advanced real time settlement systems to eliminate the need for physical cash. In contrast, India's hybrid approach reflects a more gradual transformation due to socioeconomic and infrastructural challenges.

A study by KPMG (2021) suggests that for countries like India, replicating fully cashless models is impractical without first bridging digital literacy gaps, improving cybersecurity.

### **REGULATORY FRAMEWORK AND THE ROLE OF RBI**

The Reserve Bank of India plays a central role in regulating cash management. It oversees the circulation of currency, the functioning of the ATM network, and the security protocols around cash logistics. Key policies like the Cash Withdrawal Limits, Cash Recycling Machines (CRMs), and guidelines on ATM uptime have shaped how banks manage physical currency.

The RBI's Vision Document for Payment Systems 2025 aims for a "less-cash" society rather than a "cashless" one, recognizing the need for inclusivity in financial services. The document emphasizes improving digital infrastructure, financial literacy, and encouraging innovation in payment solutions, all while ensuring the physical cash network remains reliable.

### **CASH DEMAND FORECASTING AND ATM MANAGEMENT**

One of the lesser-explored areas in cash management is forecasting cash demand. Banks need to anticipate usage spikes-like during festivals, salary days, or emergencies-to ensure sufficient cash is available at branches and ATMs. Poor forecasting leads to ATM outages, customer dissatisfaction, and operational inefficiencies.

Research by Economic Times (2023) noted that during Diwali and Holi, many Indian ATMs run dry due to poor cash planning. This affects customer trust and puts pressure on frontline banking staff. Advanced cash forecasting models, as used in Western banks, combine transaction history, weather data, local events, and behavioral analytics to predict cash needs. Indian banks are slowly adopting such tools, but usage is still limited.

### **CUSTOMER BEHAVIOR AND EXPECTATIONS**

Several studies indicate that customer satisfaction in banking is influenced by availability, convenience, and security-all of which are critical in cash services. Customers expect round-the-clock access to cash, minimal downtime at ATMs, and protection against fraud. Inconsistent cash services, especially during peak periods, damage the bank's reputation.

Kaul (2020) argues that banks must segment customers based on their cash or digital usage preferences and offer customized solutions. For instance, tech-savvy urban customers might appreciate app-based cash delivery, while older customers might prefer more physical touchpoints like well-functioning ATMs or helpful counter staff.

### RESEARCH GAP

While there is extensive literature on digital banking, relatively fewer studies capture the customer’s perspective on cash management in India. Most reports focus on transactional data or infrastructure growth but fail to delve into how customers perceive cash service efficiency, trust in ATM reliability, or readiness for a cashless future. This research aims to fill that gap by focusing on customer-centric insights, especially in semi-urban and urban areas where cash and digital systems often coexist.

### CONCLUSION

The review of literature highlights the dual nature of India’s banking ecosystem, where digital

advancements and traditional cash practices must coexist. While automation and digitalization are transforming how banks operate, the need for efficient and secure cash handling remains strong. Customer preferences, RBI regulations, global trends, and technological innovations all play vital roles in shaping cash management strategies.

This study contributes to the existing literature by adopting a user-focused approach to understand how cash is perceived, accessed, and evaluated in day-today banking. It emphasizes the necessity of a balanced, inclusive, and adaptive model-where digital systems complement rather than replace physical.

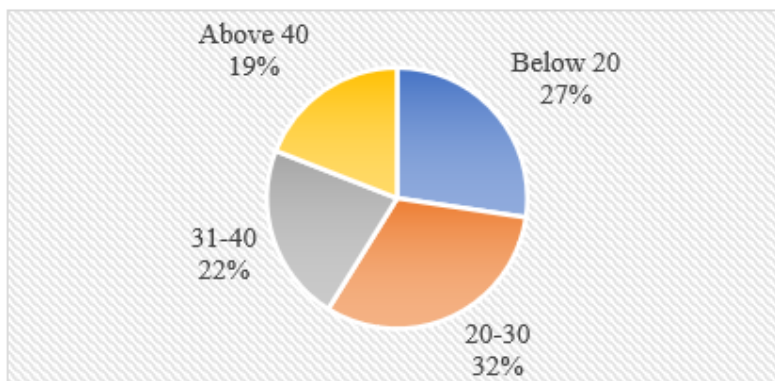
### METHOD

Survey Parameter	Most Common Response	Approx. Frequency	Unique Responses
Age Group	20–30 years	70	Below 20, 20–30, 30–40, Above 40
Profession	Students	50	Students, Private Sector, Govt. Employees, Business Owners
Type of Bank Used	Public Sector Banks	65	Public, Private, Cooperative, Payment Banks
Type of Account Operated	Savings Account	95	Savings, Current, Fixed Deposit, Recurring Deposit
Bank Visit Frequency	Monthly/Rarely	75	Weekly, Monthly, Rarely
Satisfaction with Cash Handling	Satisfied	65	Very Satisfied, Satisfied, Dissatisfied
Cash Handling During Festivals	Sometimes	50	Always, Sometimes, Rarely
ATM Cash Availability	Often Available	70	Always, Often, Rarely, Never
Most Used Cash Service	ATM Withdrawal	85	ATM Withdrawal, Cash Deposit
Delays in Cash Services	Rare Delays	55	Never, Rarely, Sometimes, frequently
Cash Management Security	Secure	65	Secure, Somewhat Secure, Not Secure
Preferred Daily Payment Method	UPI/Wallet	60	UPI/Wallet, Cash, Debit/Credit Card, Net Banking
Support for Cashless Banking	Support (with conditions)	55	Yes, (with alternatives), No

### DISCUSSION OF FINDINGS

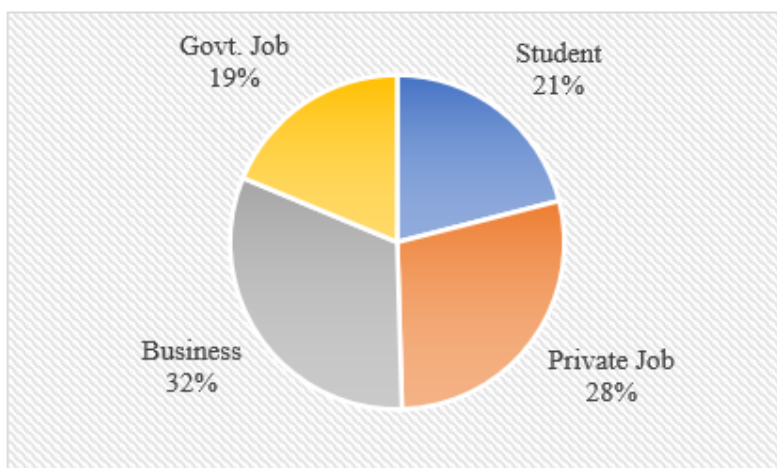
#### What is your age group:

adaptable to technological changes and prefer digital modes of banking. This demographic plays a crucial role in driving the adoption of modern cash management services.



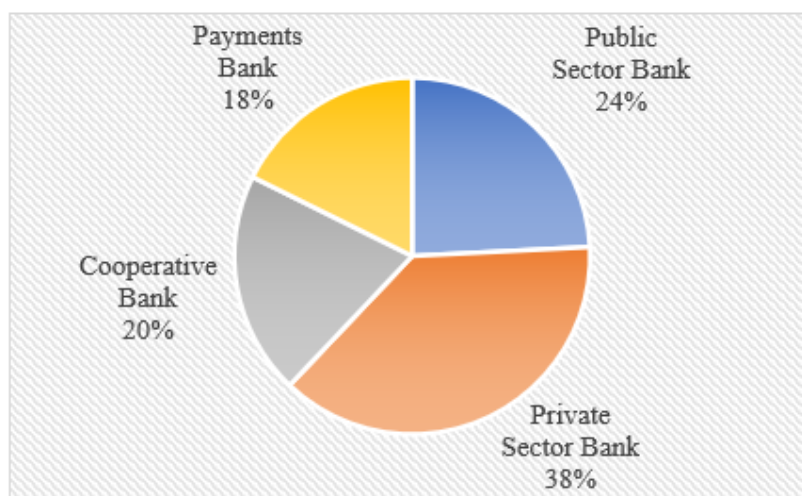
**What is your Profession:**

Most of the respondents are students and private sector employees.



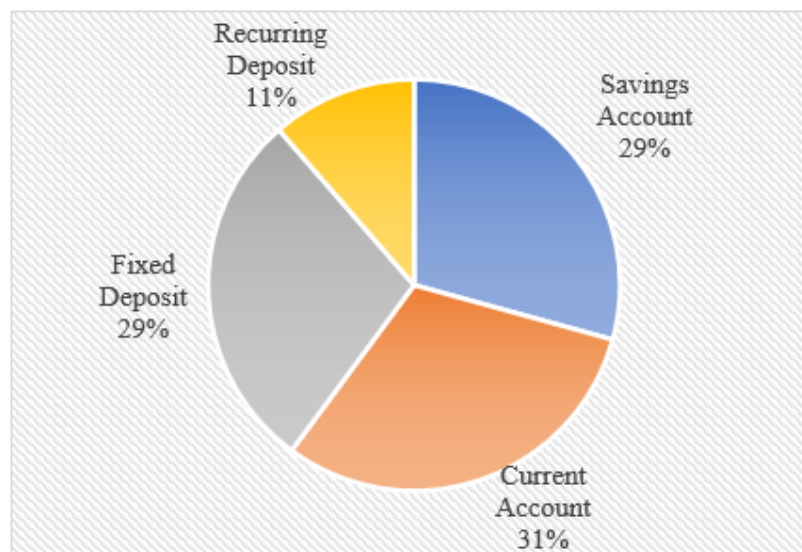
**Which type of bank do you use Primarily:**

Public sector banks are the most commonly used among respondents.



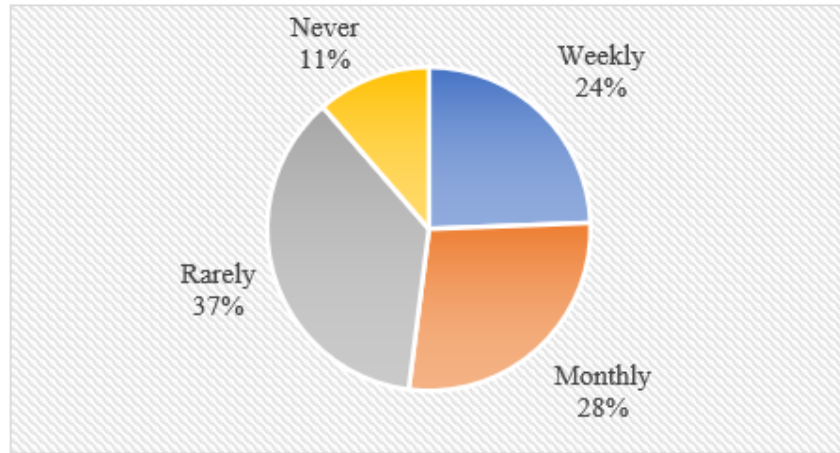
**What type of account do you mainly operate:**

Savings accounts are the most frequently used type.



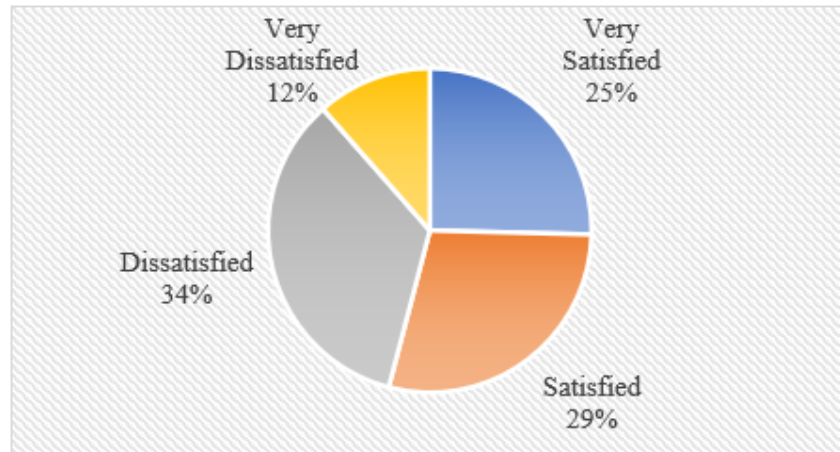
**How often do you visit your bank for cash related services:**

A majority visit banks monthly or rarely.



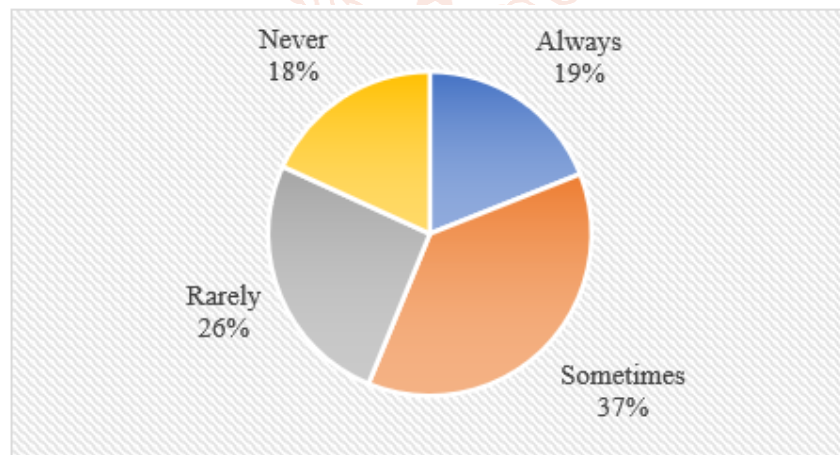
**How satisfied are you with your bank's cash handing efficiency:**

Most respondents are satisfied or very satisfied.



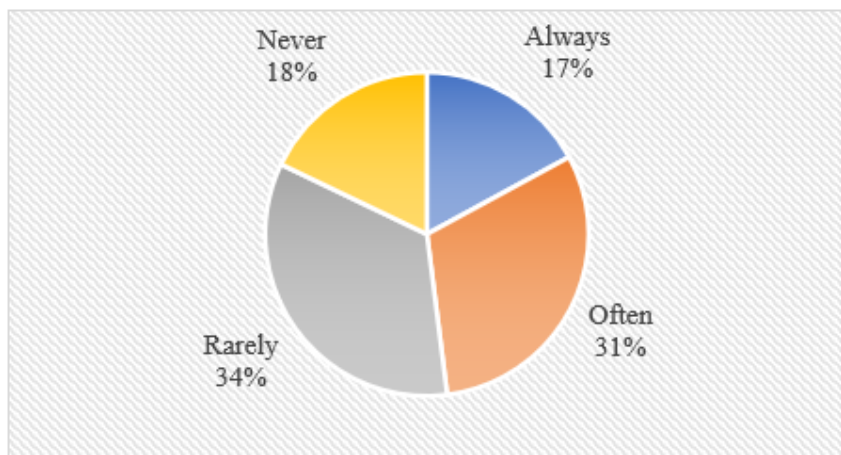
**Does your bank handle cash effectively during peak seasons like festivals:**

Responses are mixed, with "sometimes" being the most common.



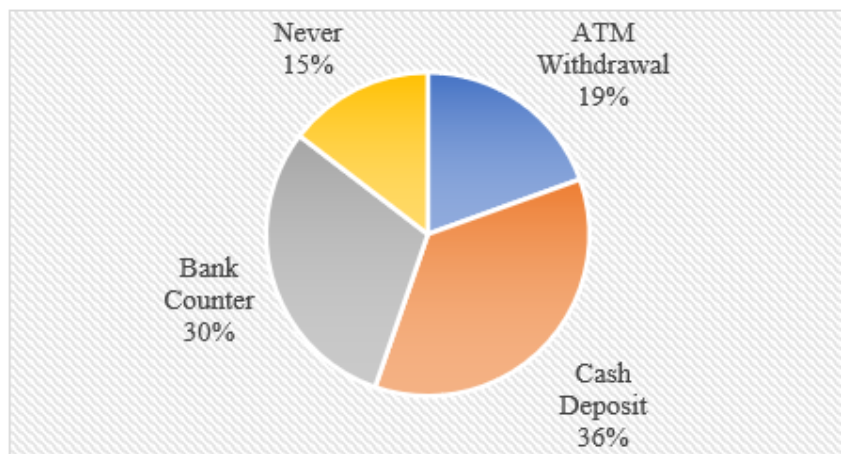
**Are ATMs in your locality generally well-stocked with cash:**

Most participants stated that ATMs are “often” or “always” stocked.



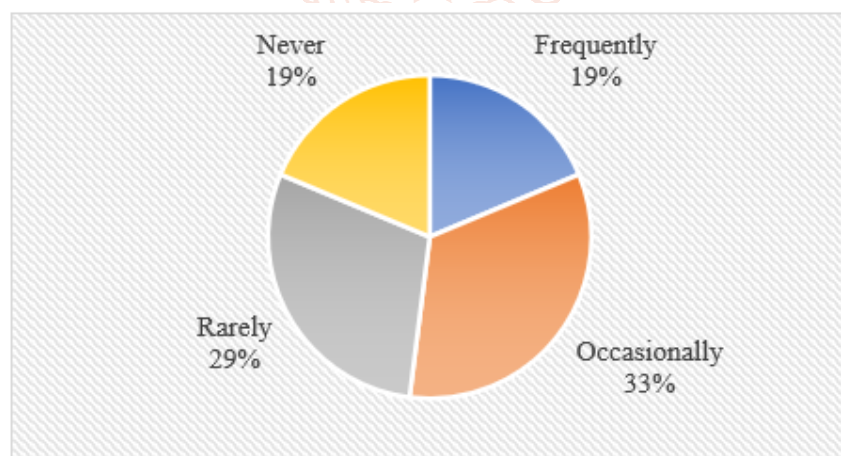
**Which cash service do you use the most:**

ATM withdrawals are the most commonly used cash service.



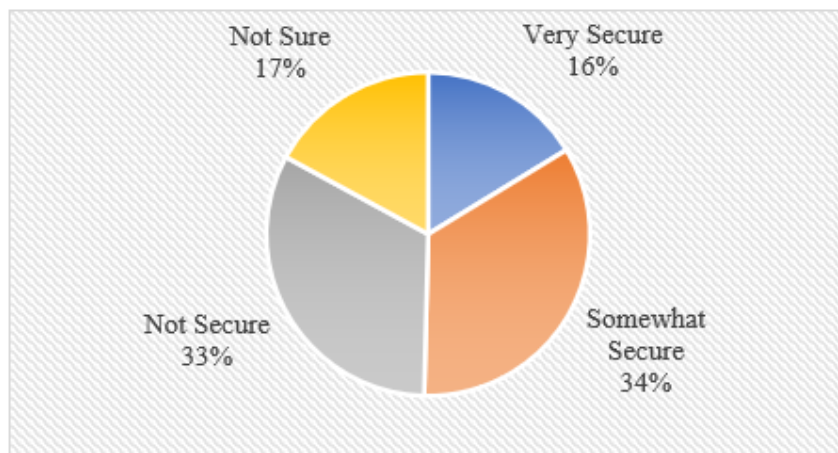
**Have you ever faced delays in cash deposit or withdrawal at your bank:**

Most respondents reported occasional or rare delays.



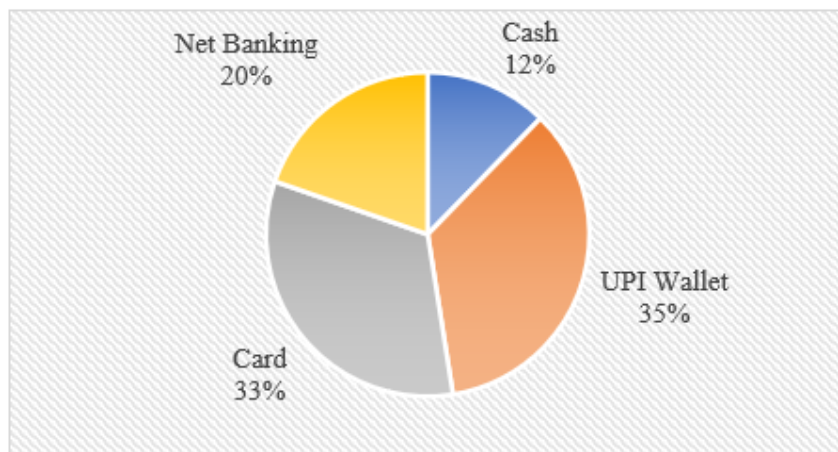
**How secure do you feel about your bank’s cash management process:**

Most respondents feel secure or somewhat secure



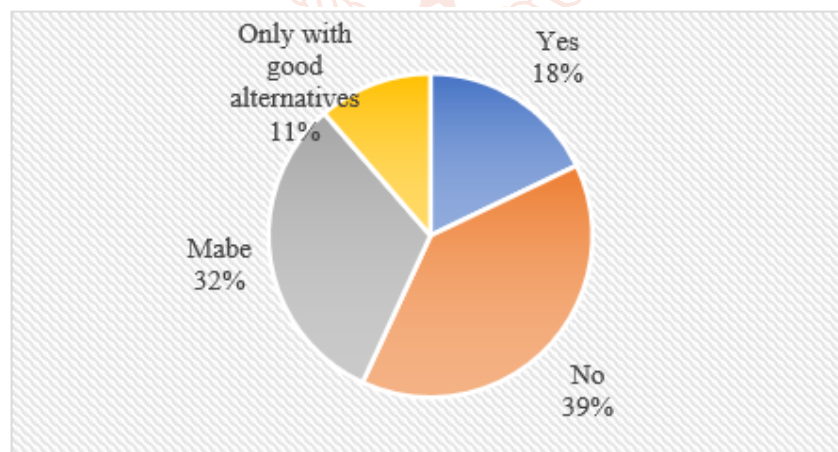
**What is your preferred payment method for daily transactions:**

UPI/Wallets are the most preferred mode of payment.



**Would you support a shift to a completely cashless banking system in the future:**

Most respondents support or conditionally support going cashless.



**OVERALL FINDINGS**

The study on “Cash Management in the Banking Sector in India” reveals several key insights based on responses from 123 participants. The findings highlight changing trends in banking behaviour, preferences, and satisfaction levels, especially regarding cash-related services.

A significant portion of the respondents belong to the 20–30 age group, showing that young and tech-savvy users are the most engaged with banking services. The majority are students and private sector employees, indicating that the banking needs are more personal and income-related rather than business-oriented.

Public sector banks are still the most widely used, which shows continued trust in government-backed institutions. Most respondents operate savings accounts, further emphasizing personal use over business or investment banking.

When it comes to physical visits to banks for cash services, a large number of users visit monthly or rarely. This points to a clear shift toward digital banking and reduced dependence on branch-based services. ATM withdrawals remain the most frequently used cash service, although digital methods like UPI and wallets are now preferred for daily payments.

Overall satisfaction with cash handling is high, with most users stating they are satisfied or very satisfied. However, during peak periods like festivals, service consistency varies. Many respondents reported that banks “sometimes” manage well, suggesting room for better planning and responsiveness. ATM cash availability is generally good, with most users finding them often or always stocked. Still, occasional shortages highlight the need for improved supply chain management in certain areas.

Delays in cash deposits or withdrawals are reported as rare or occasional, indicating generally acceptable service levels. Additionally, most users feel secure or somewhat secure about the bank’s cash management systems, which shows strong customer trust.

The study also reveals that while digital payments are on the rise especially UPI and wallets there is cautious optimism toward a completely cashless system. A majority support or conditionally support this shift, provided reliable digital alternatives are in place.

In conclusion, the findings show a strong move toward digital banking, with continued reliance on cash for specific needs. Users appreciate the convenience and security of current systems but expect improvements during high-demand periods and in ATM servicing. The banking sector must focus on enhancing digital infrastructure while maintaining robust cash management services to meet the evolving needs of customers.

## CONCLUSION

The study highlights the evolving nature of cash management in the Indian banking sector, driven by technological advancements and changing customer preferences. It is evident that while traditional

banking methods-especially cash services-still hold importance, there is a strong shift toward digital platforms, particularly among the younger population. Most respondents rely on savings accounts and public sector banks, showing continued trust in conventional banking institutions.

ATM withdrawals remain the most used cash service, but digital payment modes like UPI and wallets are increasingly becoming the preferred method for daily transactions. This reflects a broader national trend towards a less-cash economy. The overall satisfaction with cash handling and ATM availability is positive, although some inconsistencies remain during peak seasons and in specific areas.

Security perception among customers is largely strong, and support for a cashless banking system is growing, with users showing openness provided digital alternatives are reliable and secure. To meet customer expectations, banks must enhance their digital infrastructure while ensuring seamless and efficient cash services. The findings suggest that a balanced approach, integrating both physical and digital banking solutions, is essential for the Indian banking sector to maintain customer trust and improve operational efficiency.

## ACKNOWLEDGMENT

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## REFERENCES

- [1] RBI Reports and Publications on Cash Management and Digital Banking Trends in India.
- [2] Annual Reports of Public and Private Sector Banks (SBI, HDFC, ICICI, etc.).
- [3] Khan, M.Y., & Jain, P.K. (2018). Financial Management. Tata McGraw-Hill.
- [4] Vasant Desai (2016). Banks and Institutional Management. Himalaya Publishing House.
- [5] Research articles from journals like The Indian Journal of Finance and International Journal of Banking and Finance.
- [6] Data from NPCI on UPI and digital payments.