



FinTech *for the* Last Mile

Financial Inclusion in the Era of Amrit Kaal

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CONSUMER PROTECTION POLICIES FOR DIGITAL CURRENCY USERS IN INDIA

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ABSTRACT

India's digital payment ecosystem has undergone a profound transformation with the emergence of the Central Bank Digital Currency (CBDC) or the Digital Rupee (₹), alongside platforms such as UPI and mobile wallets. This shift has enhanced transactional speed, accessibility, and financial inclusion. However, the rapid digitalization of financial services has simultaneously increased risks related to fraud, data misuse, privacy breaches, technological failures, and user vulnerability. Ensuring robust consumer protection is therefore central to maintaining trust and facilitating the sustainable adoption of digital currencies. This paper examines the consumer protection landscape in India, focusing on regulatory instruments such as the Digital Personal Data Protection Act (2023), RBI guidelines, cybersecurity protocols, and the RBI Ombudsman Scheme. Key challenges including fragmented grievance mechanisms, low public awareness, privacy concerns, and insufficient safeguards for low-value users are highlighted. Drawing from global best practices and India's evolving CBDC experience, the study proposes a strengthened consumer protection framework emphasizing transparency, cyber resilience, streamlined grievance redressal, and enhanced digital literacy. The paper concludes that a user-centric approach is essential for ensuring safe, inclusive, and sustainable digital currency adoption in India.

Key Words: Central Bank Digital Currency, cyber-security, RBI, Digitalization

1. Introduction

The digitalization of the Indian financial system has been one of the most significant developments in recent decades. The introduction of UPI, mobile wallets, and the launch of the Digital Rupee (₹) have substantially reshaped transaction mechanisms, making them faster, more transparent, and more convenient. As India moves toward becoming a digitally empowered economy, the adoption of digital currencies has gained strategic importance for enhancing financial inclusion and reducing reliance on physical cash.

Despite these advancements, digital transactions expose consumers to new and evolving risks. Fraudulent activities, misuse of personal data, identity theft, technical failures, and low digital literacy increasingly threaten user confidence. As digital currency adoption expands across socio-economic segments, especially among first-time digital users, ensuring strong consumer protection becomes indispensable. A comprehensive policy framework is therefore required to safeguard user rights, maintain system integrity, and support secure and inclusive digital currency usage.

2. Conceptual Background

The term “digital currency” in India refers to a broad spectrum of electronic value-based instruments used for financial transactions. These include private digital payment systems—UPI applications, mobile wallets, prepaid payment instruments, and internet banking—as well as the state-issued CBDC or Digital Rupee. The Digital Rupee, unlike privately issued cryptocurrencies, holds sovereign backing and legal tender status as it is issued by the Reserve Bank of India (RBI). This distinction is crucial because consumer protection mechanisms vary significantly depending on whether the instrument is centrally regulated or operated by private service providers.

With the expansion of digital transactions, consumers face unique risks such as phishing attacks, unauthorized access, technical system failures, and privacy breaches. Digital interfaces may also be challenging for new or low-literate users, creating opportunities for exploitation. Without adequate legal safeguards, regulatory oversight, cybersecurity measures, and public awareness initiatives, these risks can undermine public trust and widen the digital divide. Thus, the conceptual foundation for consumer protection rests on four pillars: regulatory frameworks, legal protections, cybersecurity standards, and user awareness.

3. India’s Consumer Protection Policy Framework

India has established multilayered consumer protection architecture for digital payments, spearheaded by the Reserve Bank of India and supported by national cybersecurity regulations and data protection laws.

3.1 Regulatory Safeguards by the RBI

The RBI plays a central role in defining operational, security, and consumer protection standards. Its Digital Payment Security Controls mandate secure

protocols, strong authentication practices, and tokenization to safeguard user data. Transparency requirements prohibit hidden charges and restrict unauthorized data sharing by payment intermediaries. Furthermore, the RBI's zero liability and limited liability policy ensures users are protected from unauthorized transactions, provided they report incidents within prescribed timelines. This framework reinforces consumer trust by shifting the burden of system faults or negligence to the service provider.

3.2 Consumer Protection Embedded in CBDC Design

The Digital Rupee incorporates privacy-by-design principles, offering graded anonymity for low-value transactions while maintaining stronger identity checks for high-value transfers. Secure wallet infrastructure, offline payment functionality, and robust reconciliation systems ensure operational integrity even in low-connectivity environments. The CBDC's interoperability with existing platforms such as UPI further enhances inclusivity by providing a seamless user experience.

3.3 Data Protection and Cyber-security Laws

The Digital Personal Data Protection Act (2023) represents a major advancement in safeguarding user data. It mandates consent-based data collection, minimal data retention, and imposes stringent penalties for unauthorized processing or breaches. Complementing this, the IT Act and CERT-In guidelines require compulsory reporting of cyber-security incidents and enforce adherence to national cyber-security standards. Together, these frameworks strengthen public trust in digital financial services.

4. Important Aspects of Consumer Risks in Digital Currency Systems

Despite comprehensive frameworks, several risks persist for digital currency users in India. Fraud remains one of the most prevalent threats, with phishing schemes, fake applications, QR-code fraud, and social engineering tactics frequently targeting unsuspecting users. First-time and rural users, often lacking awareness of safe digital practices, are particularly vulnerable.

Concerns regarding data privacy continue to escalate. Many users do not fully understand how digital payment platforms collect, store, or share their personal and financial information. Although policies exist, enforcement varies across service providers, compromising transparency and user confidence.

Technical risks such as system outages, server failures, and delayed settlements interrupt transactions and may cause financial distress. As the CBDC is still in a pilot phase, uncertainties related to offline transaction vulnerabilities, device malfunctions, and operational testing further contribute to user apprehension. Limited digital literacy exacerbates these problems, increasing the likelihood of mistaken transactions and reducing users' ability to engage effectively with grievance mechanisms.

5. Suggestions for Policy

India must strengthen its consumer protection landscape to support the secure and inclusive adoption of digital currency. A comprehensive "Digital Currency Consumer Protection Code" should be introduced, clearly outlining user rights, obligations of service providers, refund procedures, offline transaction guidelines, and privacy standards. Such codification would enhance uniformity and transparency across diverse digital platforms.

Cyber-security must be reinforced through mandatory AI-driven fraud detection, real-time monitoring of suspicious activities, and stronger authentication mechanisms. These protocols should be uniformly implemented across all digital payment and CBDC platforms to ensure systemic resilience.

References

1. BIS. (2021). *Central bank digital currencies: System design and interoperability considerations*. Bank for International Settlements.
2. CERT-In. (2022). *Cyber-security Guidelines for Digital Payment Systems*. Government of India.
3. Government of India. (2023). *Digital Personal Data Protection Act, 2023*. Ministry of Electronics and Information Technology.
4. Reserve Bank of India. (2022). *Concept Note on Central Bank Digital Currency (CBDC)*. RBI Publications.
5. Sharma, R., & Singh, A. (2020). Consumer trust and digital payment adoption in India. *Journal of Financial Innovation*, 8(2), 45–58.
