

Shaping the Future of Money: Public Perceptions on Central Bank Digital Currencies and the Digital Rupee

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Abstract

This research project examines public attitudes towards Central Bank Digital Currencies (CBDCs) and the Digital Rupee through surveys and data analysis. It uncovers a significant level of awareness and growing interest in digital currency concepts among respondents. Trust in central banks is highlighted as crucial for successful CBDC implementation. Positive attitudes towards adoption are noted, with perceived benefits including faster transactions and enhanced security. However, concerns about cybersecurity risks and privacy issues require attention. Collaboration between public and private sectors is emphasized for effective implementation. Overall, this study provides valuable insights for policymakers and financial institutions navigating the digital finance landscape, informing strategies to promote digital currency adoption and address potential challenges.

Keywords: Digital currency, CBDC, e-rupee, Digital rupee

1. Introduction

Digital currency, also known as electronic money or cyber cash, exists solely in digital or electronic form. Unlike physical currencies (such as banknotes and coins), digital currencies are accessible only through computers or mobile devices. They enable instant cross-border transactions and do not require intermediaries, making them cost-effective for currency exchange. The emergence of digital currencies has significantly transformed the global financial ecosystem, directly impacting traditional banking systems. The integration of digital currency into traditional banking operations and structures brings about multifaceted implications. It challenges established models and necessitates banks to adapt to evolving customer expectations. In this dynamic landscape, traditional banks encounter both opportunities and challenges. On one hand, digital currencies enable faster and more efficient transactions, expanding the global reach of cross-border payments, and fostering innovation through technological advancements.

2. Literature Review

(Manoj Kumar Singh, 2020) explores the multifaceted impact of various digital currency designs on financial supervision and the broader monetary system. This sets the stage for an examination of the complexities and challenges inherent in supervising digital currencies within the existing regulatory framework. One of the central themes addressed in the paper is the need for a nuanced approach to supervisory resource allocation in response to the proliferation of digital currency options.

(Banerjee & Sinha, 2023) the author addresses the Reserve Bank of India's (RBI) contemplation of introducing a Central Bank Digital Currency (CBDC). The abstract highlights India's significant role in the execution of CBDCs, particularly due to its position as a leader in technological advancements in digital payment methods.

(Narayanan, 2020) delves into the transformative impact of digital currency (DC) on modern economies. The paper begins by defining digital currency as a form of currency available in digital or electronic form, marking a departure from traditional physical currencies. The paper recognizes the pervasive influence of digitalization on money and payment systems, signaling a fundamental shift in the way value is exchanged and transferred.

(Kumar, 2021) the author explores the evolution of currency from physical cash to digital forms, framing central bank digital currency (CBDC) as a natural progression in the modernization of payment systems. This historical context provides the backdrop for an examination of CBDCs as a form of digital currency controlled by a country's central bank and backed by the government, positioning them as potential catalysts for further innovation and efficiency in the financial sector.

(Vyas, 2023) examines the transformative impact of the Reserve Bank of India's digital rupee (₹) and the Unified Payments Interface (UPI) on the country's payment landscape. Utilizing a qualitative methodology due to limited prior research, the study assesses the advantages and drawbacks of the digital rupee, highlighting its potential to enhance security and accessibility while also addressing concerns about disruption to the banking system and security risks.

OBJECTIVES OF THE STUDY

1. To study the awareness about the digital currency and its function among public
2. To assess the risks and opportunities associated with integrating digital currencies into existing financial frameworks.

3. Research methodology

The descriptive research design is opted to learn in detail about the awareness about the concept of digital currency and e payment practices in banking. This study is based on both primary and secondary data, whereas the primary data in the form of applied research and secondary data in exploratory form, which made this article more realist and practical towards the present perspective of respondents towards digital currency.

Sampling design: the design of sampling used is simple random sampling, the samples are collected is randomly out of suitable group of population.

Population and area of population: The group of population is concentrated on different age groups of young generation who belongs to the different localities in India with special reference to Karnataka.

Primary data: the data collected through an electronic mode i.e. through google forms with set of questionnaires and collecting the data directly from the suitable populations.

Secondary Data: various articles on related topics and various official websites etc.

4. Data Analysis:

Have you heard about CBDCs (Central bank digital currencies) or digital currencies before?

Awareness of CBDC	Frequency	Percentage
Yes	95	84.82%
No	17	15.18%

Table: 1

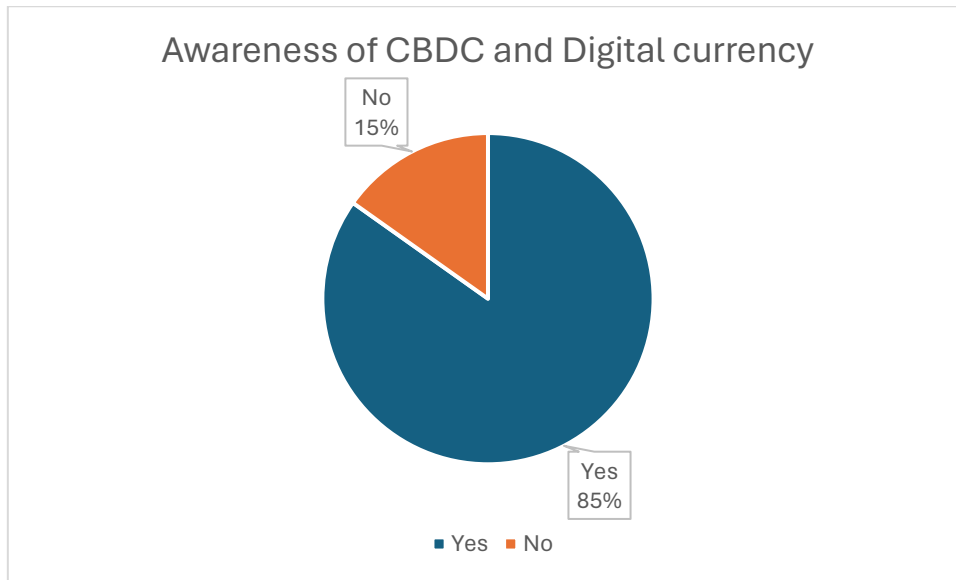


Figure: 1

INTERPRETATION

The graph represents the results of a survey conducted to assess awareness about **Central Bank Digital Currencies (CBDCs)** or digital currencies. Out of **112 respondents**, a significant majority (**84.8%**) indicated that they have heard about CBDCs or digital currencies before, as shown by the large blue section of the pie chart. In contrast, **15.2%** of respondents reported that they have not heard about these types of currencies, represented by the smaller red section. Overall, the graph highlights a relatively high level of awareness regarding CBDCs among the participants.

Have you heard about the concept of the Digital Rupee (₹)?

Table: 2

Awareness of Digital Rupee	Frequency	Percentage
Yes	95	84.82%
No	17	15.18%

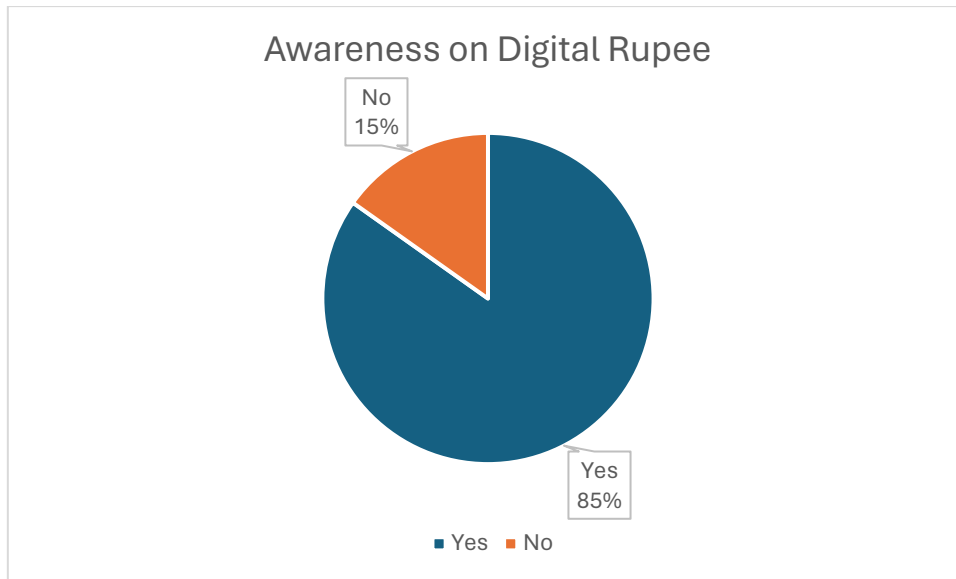


Figure: 2

INTERPRETATION

The graph represents the results of a survey conducted to gauge awareness about the concept of the **Digital Rupee (₹)**. Out of the **112 respondents**, a significant majority of **84.8%** indicated that they have heard about the Digital Rupee, while the remaining **15.2%** responded that they have not. The pie chart visually illustrates this division, with the blue section representing those who are aware and the red section representing those who are not familiar with the concept. Overall, it highlights the relatively high awareness level among the surveyed individuals regarding the Digital Rupee.

Would you be willing to use a Digital currency for everyday transactions?

Table: 3

Digital currency for everyday transactions	Frequency	Percentage
Yes	95	84.82%
No	17	15.18%

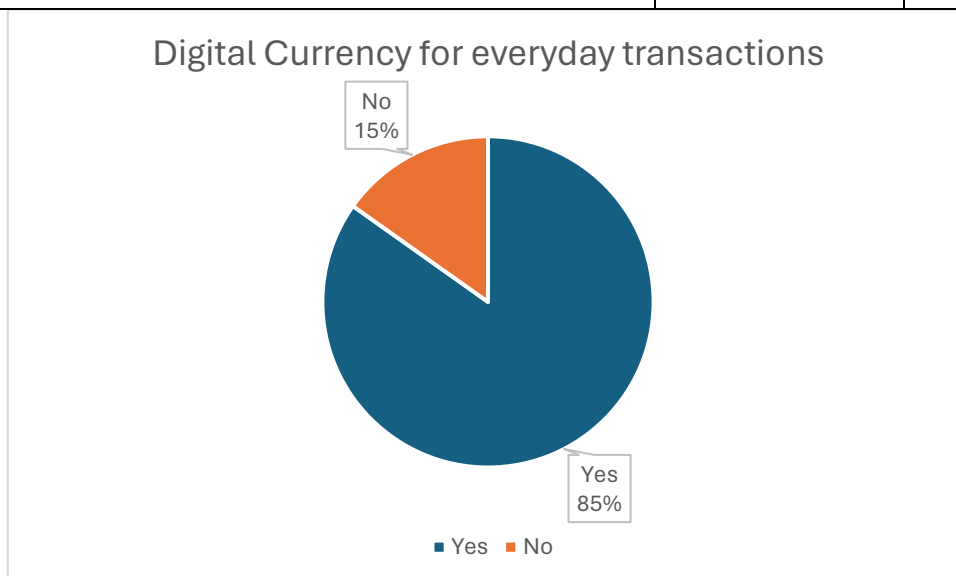


Figure: 3

INTERPRETATION

The graph illustrates responses to a survey question regarding the willingness to use digital currency for everyday transactions. Out of **112 participants**, the majority (approximately **82.1%**) expressed their openness to using digital currency, as indicated by the **blue section** of the pie chart. Conversely, a smaller proportion (around **17.9%**) responded negatively, represented by the **red section**. Overall, the data suggests a favorable attitude toward adopting digital currency for daily financial interactions.

What factors would influence your decision to adopt a Digital currency?

Table: 4

Factors for Adoption	Frequency	Percentage
Ease of use	41	36.61%
Security features	23	20.54%
Trust in the central bank	48	42.86%

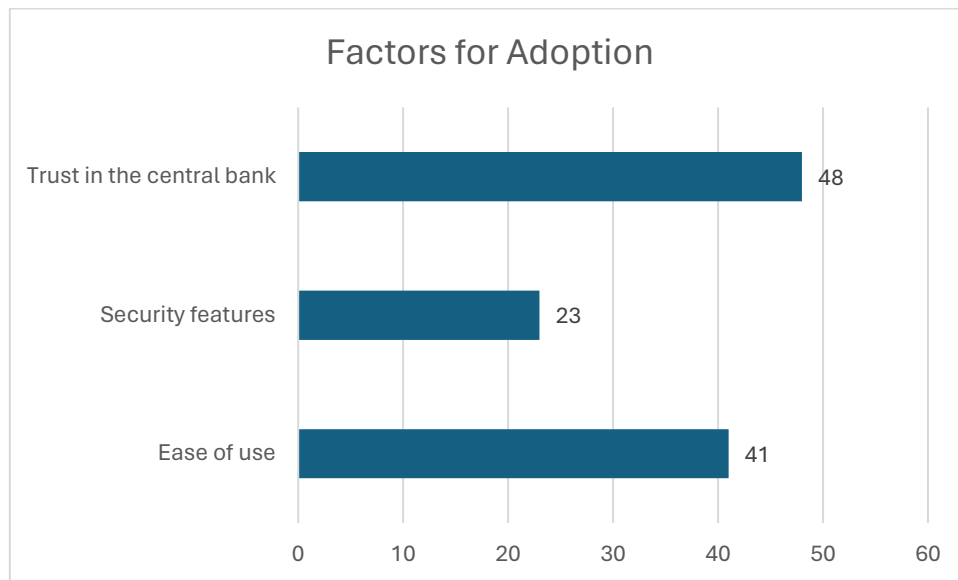


Figure: 4

INTERPRETATION

The graph depicts the factors influencing respondents’ decisions to adopt a digital currency. Among the **112 participants**, **trust in the central bank** emerges as the most significant factor, with **42.9%** selecting it. **Ease of use** follows closely at **36.6%**, highlighting the importance of a user-friendly experience. Meanwhile, **security features** are the least influential, garnering **20.5%** of responses. Overall, these insights shed light on the key considerations for digital currency adoption.

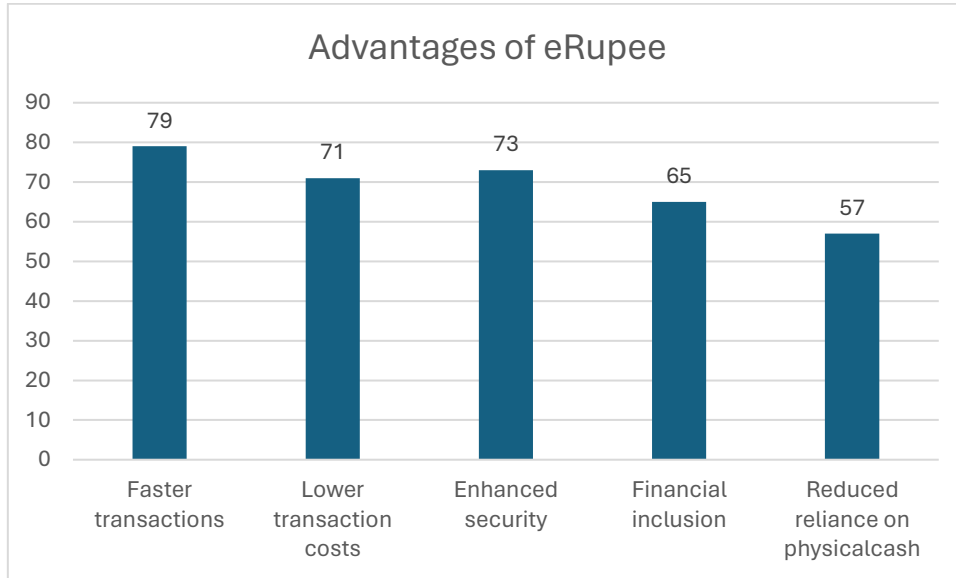
What advantages do you think the Digital Rupee could offer? (Select all that apply)

Advantages of eRupee	Frequency	Percentage
Faster transactions	79	70.50%
Lower transaction costs	71	63.40%
Enhanced security	73	65.20%

Financial inclusion	65	58%
Reduced reliance on physical cash	57	50.90%

Table: 5

Figure: 5



INTERPRETATION

The graph illustrates the key benefits that respondents associate with this digital currency. Notably, **faster transactions** emerge as the most significant advantage, with **70.5%** agreement. This aligns with the growing need for efficient and swift financial transactions in our increasingly digital world. Additionally, the recognition of **enhanced security** and **lower transaction costs** underscores the importance of trust and cost-effectiveness in adopting a digital currency. The focus on **financial inclusion** by **58%** of participants reflects the potential impact of the Digital Rupee in reaching underserved populations. Lastly, the acknowledgment of **reduced reliance on physical cash** suggests a shift towards a more convenient and modern payment ecosystem. Overall, this analysis provides valuable insights into the perceived benefits of the Digital Rupee.

Are there any concerns or disadvantages you associate with the Digital Rupee?

Table: 6

Disadvantages of eRupee	Frequency	Percentage
Privacy issues	70	62.50%
Cybersecurity risks	72	64.30%
Dependency on technology	54	54%
Lack of awareness	55	55%
Impact on traditional banking	45	45%

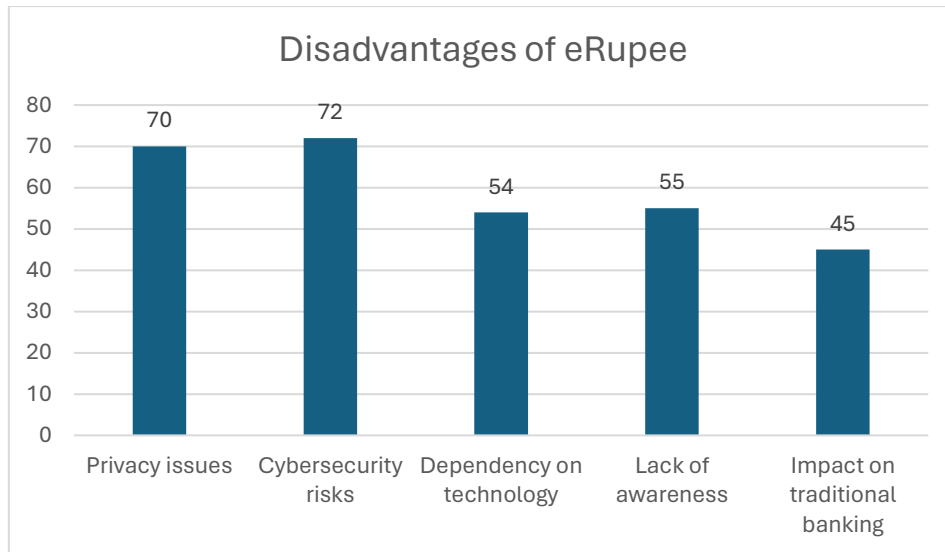


Figure: 6

INTERPRETATION

The graph depicts the concerns or disadvantages associated with the **Digital Rupee**, as identified by **112 respondents**. Among the respondents, **64.3%** expressed **cybersecurity risks** as their primary concern, while **62.5%** cited **privacy issues**. Additionally, **48.2%** were apprehensive about **dependency on technology**, **49.1%** mentioned **lack of awareness**, and **40.2%** were concerned about the **impact on traditional banking** due to the digital nature of the currency. Overall, the graph highlights the multifaceted considerations surrounding the adoption of the Digital Rupee.

On a scale of 1 to 5 (1 being very negative and 5 being very positive), how would you rate your perception of the Digital Rupee?

Table: 7

Perception of Digital Rupee	Frequency	Percentage
1	5	4.46%
2	23	20.54%
3	29	25.89%
4	19	16.96%
5	36	32.14%

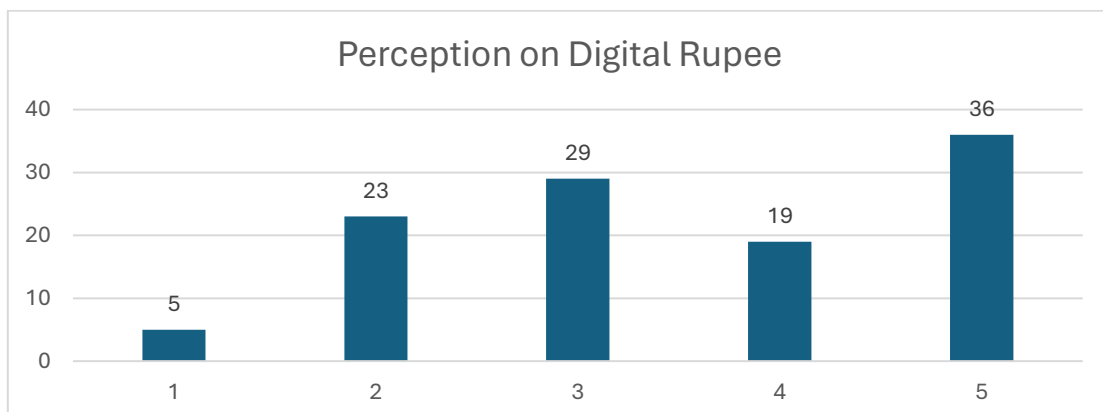


Figure: 7

INTERPRETATION

The bar graph represents the perceptions of **112 participants** regarding the **Digital Rupee**. Only 5 participants (4.5%) expressed a very negative perception, 23 respondents (20.5%) fell into this category, indicating a somewhat negative perception, The second-highest response rate was for this rating, with 29 participants (25.9%) having a neutral perception, 19 participants (17%) viewed the Digital Rupee positively and The highest number of responses (36 participants or 32.1%) indicated a very positive perception of the Digital Rupee. Overall, the majority of participants leaned toward a positive perception, with a significant number rating it as very positive.

5. Findings

The study presents a comprehensive overview of public perceptions and attitudes towards Central Bank Digital Currencies (CBDCs) and the Digital Rupee, shedding light on various aspects of awareness, trust, adoption readiness, perceived benefits, concerns, and expectations. It reveals a notable level of awareness among respondents regarding CBDCs and the Digital Rupee, indicating growing visibility and interest in digital currency concepts. Moreover, the high level of trust expressed in central banks underscores confidence in the financial system, which is essential for the successful implementation of CBDCs. Respondents generally exhibit a positive attitude towards digital currency adoption, citing factors such as trust in the central bank, ease of use, and security features as influential in their decisions. Perceived benefits associated with the Digital Rupee include faster transactions, enhanced security, lower costs, financial inclusion, and reduced reliance on physical cash, aligning with the objectives of digital currency initiatives. However, concerns such as cybersecurity risks, privacy issues, and the impact on traditional banking highlight the importance of addressing potential challenges to ensure successful adoption. Additionally, the study emphasizes the significance of collaboration between the public and private sectors for effective CBDC implementation, reflecting the complexity and interdependence of stakeholders in the digital currency ecosystem. Overall, these findings provide valuable insights for policymakers, central banks, and financial institutions as they navigate the evolving landscape of digital finance and work towards the adoption of innovative payment solutions.

6. Conclusion

In shaping public perceptions and understanding. While awareness levels vary across demographics and regions, there exists a general trend towards increased curiosity and interest in CBDCs and digital currencies. However, significant gaps in knowledge persist, highlighting the need for robust outreach efforts by central banks and regulatory authorities.

Digital currencies offer the potential to revolutionize the way we transact, invest, and store value, presenting opportunities for financial inclusion, efficiency gains, and innovation. However, their widespread adoption poses significant challenges to traditional financial institutions, regulatory frameworks, and economic stability. The impact of digital currency on traditional financial systems will depend on how stakeholders navigate these opportunities and challenges. Collaboration between policymakers, regulators, financial institutions, and technology innovators will be crucial in harnessing the potential benefits of digital currencies while mitigating risks to financial stability and consumer protection. As digital currencies continue to evolve, proactive adaptation and strategic planning will be essential for ensuring a smooth and sustainable integration into the global financial ecosystem.

7. Reference

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