

Digital Asset Adoption in the Indian Financial Landscape: A Comprehensive Assessment of Current Trends, and Influencing Factors in Money Management

Ms. Mona Saini, Ms. Sapna Saini

Research Scholar,
Desh Bhagat University.

Dr. Manoj Kumar

Professor,
Desh Bhagat University.

Abstract:

*Digital assets refer to any form of content or information that exists in a digital format and has value. These assets can include a wide range of digital files, such as documents, images, videos, audio files, software, and more. Digital assets can be both personal and business-related, and they are typically stored and managed electronically. This study aims to evaluate the current state of digital asset adoption within the dynamic landscape of the Indian financial sector. Furthermore, the research aims to uncover the underlying factors influencing the adoption of digital assets. The adoption rate of digital assets, including cryptocurrencies, DeFi, and NFTs, has seen significant growth in 2021 and 2023. **Practical implication:** This comprehensive assessment not only contributes to the academic understanding of the digital financial landscape but also offers practical implications for policymakers, financial institutions, and businesses seeking to navigate the evolving terrain of digital asset utilization in India.*

Keywords:

digital assets, blockchain, cryptocurrency, smart contract, and financial inclusion.

Introduction:

Digital assets refer to any form of content, data, or information that exists in a digital format and holds economic value. These assets can include various types of data, such as images, videos, audio files, documents, and software, as well as cryptocurrencies and other digital currencies. Digital assets are characterized by their intangible nature and reliance on digital technology for creation, storage, and transfer. Digital assets are stored and transferred electronically, often utilizing blockchain technology for secure and transparent transactions. The value of digital assets is derived from factors such as scarcity, utility, and demand, and they have become increasingly significant in the modern economy as technology continues to shape the way we create, share, and exchange value in the digital realm.

Definition Of Digital Assets:

Digital assets include all types of valuable electronic or digital products, such as non-fungible tokens (NFTs) and cryptocurrencies. These resources are often found, stored, and exchanged inside digital frameworks using blockchain technology. Digital assets are subject to trading, buying and selling in the same way as traditional assets.

Due to its many benefits and unique properties, the popularity of digital assets is increasing. In the digital age, it offers many benefits. Firstly, they make transactions quick and easy as they are easily accessible and transferable. Unlike physical assets, digital assets are easily transferred and accessible because they exist in computer form. Additionally, because they do not require physical space, they are often more economical to manage and maintain. Increased traceability and transparency are also made possible by digital assets as their movements can be tracked on a blockchain or another digital ledger. Secure, and impenetrable records of ownership and transactions are guaranteed by this technology. In general, the growing importance of digital assets in the contemporary economy can be attributed to their speed, ease of use, accessibility, and openness.

Review of Literature:

(Hardi & Arifin, 2023) focuses on examining the correlation between the integration of information and communication technology (ICT) and the comprehension of digital transformation in relation to the growth of assets in micro, small, and medium enterprises (MSMEs).

(Attencia & Mattos, 2022) explores the integration of technology in the management of intelligent assets through an analysis of multiple case studies, examining the technologies employed and investigating factors that may influence the adoption of technology in asset management.

(Farghaly, & Hagra, 2022) give answer to the query "Digital Asset Adoption?" is not mentioned in the provided paper. The researcher aim was to interoperability challenges between Building Information Modelling (BIM) and Asset Management (AM) towards the adoption of Digital Twins (DT).

(AL Mandlawi, 2020) investigates the impact of managerial decisions on the adoption of digital technology within organizations, with a specific focus on AM systems. AM systems play a pivotal role in replacing traditional managerial controls, affecting operations and maintenance processes. The provided paper is about digital technology adoption in the context of asset management and the impact of managers.

(Toygar et al., 2013) explores whether there is a pressing need for recognizing a distinct category of assets in the digital realm and whether the term "Digital Assets" accurately captures the essence of various digital materials.

(Van Niekerk, 2007) the importance of an "asset orientated solution" for digital asset management and presents a new methodology for approaching DAM.

(Frey et al., 2005) discussing importance of digital asset management (DAM) in organizations and the challenges faced in implementing DAM solutions. It also explores the use of DAM in small graphic design firms and the use of technical meta-data in the newspaper industry.

Research Gap:

The existing studies have left a gap in understanding the current trends in the adaptation of digital assets and the factors that influence this adaptation. This deficiency in research prompted our selection of the study topic: "Digital Asset Adoption in the Indian Financial Landscape: A Comprehensive Assessment of Current Trends and Influencing Factors in Money Management."

Research Problem:

Despite the increasing relevance of digital assets in the contemporary financial landscape, there is a significant gap in the understanding of the current trends and determinants of digital asset adoption, particularly in the context of the Indian financial market. Consequently, this research aims to address the following problem: What are the current trends in the adoption of digital assets in the Indian financial landscape, and what factors significantly influence the decision-making process in money management within this context?

Research Methodology:

The research design employed for the present study is descriptive. It relies on secondary data collected from various national and international journals, websites, and newspapers. Simple percentage and trend analysis are applied to analyze the gathered secondary data.

Objective Of the Study:

The objectives of the study are:

- ◆ Identify the types of digital assets being used for money management.
- ◆ Evaluate the current level of adoption of digital assets in the Indian financial landscape.
- ◆ Find out the factors influencing the adoption of digital assets among individuals and businesses.

Types Of Digital Assets:

The fields of finance and money management use a variety of digital assets. These assets are divided into several groups according to their attributes. The following are different kinds of digital assets employed for money management:

- Cryptocurrencies: Cryptocurrencies are a form of digital or virtual currency, typically based on blockchain technology, and often used as a means of financial transactions, an

investment asset, and a way to transfer value across borders. However, their value can be highly volatile, and regulatory environments vary across jurisdictions. Before doing whatever is associated with cryptocurrencies, users should be extra careful and do a lot of study.

- **Digital currencies:** Digital currencies are virtual or digital representations of value that run on decentralized networks, usually built on blockchain technology, and employ data encryption for security. Being a decentralized ledger, blockchain keeps track of each transaction that occurs over a computer network, guaranteeing immutability, security, and transparency.
- **Digital tokens:** digital tokens serve as versatile digital assets that leverage blockchain technology to enhance various aspects of financial management, including fundraising, asset tokenization, decentralized finance, and cross-border transactions. However, the evolving regulatory landscape highlights the importance of addressing legal and compliance considerations in the tokenized finance space.
- **Cryptocurrency exchange:** Digital platforms that facilitate the buying, selling, and trading of cryptocurrencies and other digital assets.
- **Digital wallets:** A digital wallet refers to a software application or electronic device that allows individuals to store and manage their financial assets in digital form. Financial transactions like making payments, receiving funds, and managing different types of digital assets can all be done using digital wallets. Users should select a digital wallet according to their needs, the type of digital assets they want to handle, and the level of security they require. Capabilities and features of digital wallets may vary. Users should also take note of the regulatory landscape surrounding digital assets in their jurisdiction to guarantee that they comply with applicable regulations.
- **Digital securities:** the representation of financial instrument in digital form, including stocks, bonds, and other traditional securities.
- **Blockchain-based Financial Instruments:** Blockchain-based financial instruments refer to digital assets that leverage blockchain technology to manage and facilitate various financial processes. Blockchain is a distributed, decentralized ledger system that makes transaction recording secure, open, and robust to modification. When applied to financial instruments, blockchain can enhance efficiency, transparency, and security in managing finance.
- **Digital commodities:** digital form of commodities, such as gold or silver, often issued on blockchain platforms.
- **Non-Fungible tokens (NFTs):** Using blockchain technology, Non-Fungible Tokens (NFTs) are distinct digital assets that represent ownership or provide evidence of the authenticity of an asset or piece of content. NFTs are non-fungible, which means that each token is unique and cannot be traded for another token of the same kind, in contrast to cryptocurrencies like Bitcoin and Ethereum, which are fungible and can be swapped one-to-one.
- **Smart contracts:** Smart contracts, on the other hand, are autonomous agreements where the contractual terms are encoded directly into the software, enabling self-execution. Blockchain platforms are digital ledgers that are resistant to hacking and decentralized. Smart contracts enable the automation and execution of predefined rules without the interference of intermediaries.
- **Robo-Advisors:** Digital platforms known as "robo-advisors" use automated processes and algorithms to manage investment portfolios and provide financial advice. They

belong to financial technology or fintech, which uses technology to provide efficient and reasonably priced investment management services. Robo-advisor's work is based on online questionnaires to gather data regarding the user's investment preferences, risk tolerance, and financial objectives. The computer then uses this data to create a diversified investment portfolio.

The Adoption of Digital Assets in The Indian Financial Landscape:

Table 1: Show The Adoption of Digital Assets In The Indian Financial Market.

Adoption of digital assets in the Indian financial landscape (In million USD (US\$))				
Sr. No.	Year	Cryptocurrency	Decentralized finance	Non- Fungible tokens
1	2017	9.8	0	0
2	2018	12.5	0	0
3	2019	10.5	0	0
4	2020	44.4	0.2	0
5	2021	204.9	39.7	5.2
6	2022	134.1	37.7	6.5
7	2023	277.7	165	11.4
8	2024	343.5	203.5	15.8
9	2025	387.7	222.6	19
10	2026	413.6	230.6	20.7
11	2027	440.1	235.4	21.5
12	2028	467.2	237	22

(Source: Statista Market Insights, Aug 2023)

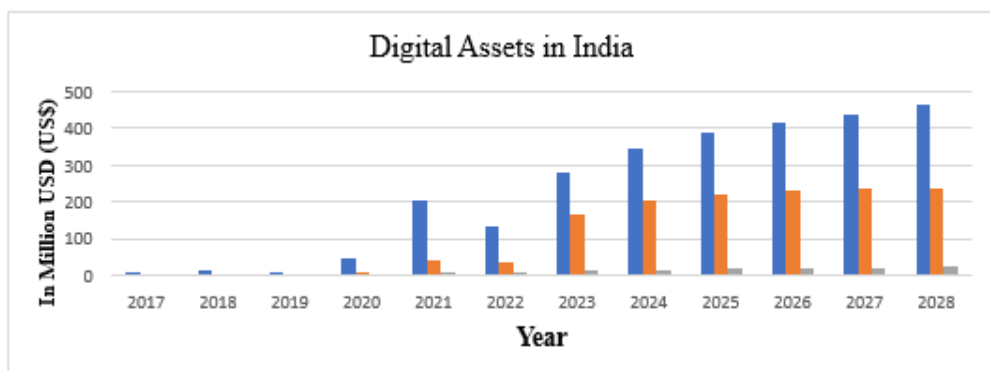


Figure 1: Show The Adoption of Digital Assets in The Indian Financial Market.

The above tables show the growth rate in the three categories of digital assets namely Decentralised Finance (DeFi), cryptocurrency, and non-fungible tokens (NFTs). Here are some key points:

- There is a significant increase in the adoption of cryptocurrencies from 2017 to 2028.
- The adoption started at 9.8 million USD in 2017 and reached 467.2 million USD in 2028.
- DeFi adoption shows a gradual increase over the years.
- Although it started at a minimal value of 0.2 million USD in 2020, it reached 237 million USD in 2028.
- It started at 0 million USD in the initial years and reached 22 million USD in 2028.
- NFT industry of India experiencing expansion, and this growth indicates that people are becoming more interested in accepting digital assets.

The Factors Influencing the Adoption of Digital Assets Among Individuals And Businesses:

The factors influencing the adoption of digital assets among individuals and businesses: -

Many factors influence the use of digital assets in India. Some of the important variables that influence both customers and businesses to adopt digital assets are as follows:

- **Security and Trust:** The most important thing is security. High-profile hackers and scammers can damage trust in digital assets. As businesses grow and security measures improve, more organizations may be encouraged to use digital assets.
- **Regulatory Landscape:** A supportive and clear legal framework is essential. Hostile or unclear regulations can hinder the adoption of digital assets, while clear regulations can build trust among both individuals and enterprises.
- **Education or market awareness:** A major hurdle may be a lack of knowledge and awareness. Initiatives for education from government agencies as well as business players might aid in explaining digital assets and boost uptake.
- **Perceived Value and Use Cases:** When users perceive strong propositions of value along with instances of use, they are more likely to accept digital assets. For instance, using bitcoins to conduct cross-border transactions can be more economical and efficient.
- **Technology and infrastructure:** A crucial role are played by the ease of use and availability of the supporting infrastructure, which consists of technologies like smartphones, internet connectivity, wallets, exchanges, and payment gateways. Adoption rates tend to be higher where better-developed technology infrastructure.
- **Financial Inclusion:** Banking services for those who are not banking could be offered provided by digital assets. Initiatives that focus on financial inclusion may drive adoption in regions with limited access to traditional banking services.
- **Market liquidity:** A liquid market is necessary for the adoption of digital assets, which leads to easier buying, selling, and price discovery. More liquidity often attracts more market players.

- **Social and cultural factors:** Adoption can be influenced by cultural attitudes toward new technologies and financial systems. Some cultures may be more resistant to the adoption of digital assets.
- **Institutional Partnership:** The involvement of institutional investors and traditional financial institutions can achieve credibility and stability in the digital asset market, thereby promoting widespread adoption.
- **Technological advancements:** the application of blockchain technology, smart contract, and scalability solutions capabilities can enhance the functionality and appeal of digital assets, which leads to more attractive to users.
- **Community and developer support:** the adoption and success of digital assets depends on a strong, dedicated community, and developer support. It helps ensure ongoing improvements, innovation, and a sense of community trust.
- **Global economic conditions:** Economic factors, such as inflation, currency instability, or economic crises, can drive interest in alternative assets like cryptocurrencies, and blockchain as a hedge against traditional financial risks.
- **Government initiatives:** The rate at which people and organizations adopt these technologies can be greatly impacted by government programs, incentives, and rules that assist the development and adoption of digital assets.

Understanding these factors and addressing potential challenges can contribute to a more favourable environment for the adoption of digital assets.

Findings Of the Study:

- The overall adoption of digital assets, including cryptocurrencies, DeFi, and NFTs, is increasing.
- In 2021 and 2023, significant spikes in adoption, suggesting potential market developments or increased awareness during those years.
- The projections for 2024 to 2028 continue to show positive growth in all three categories, with cryptocurrencies leading in terms of adoption.
- The adoption of these assets is influenced by multifaceted factors such as security and confidence, financial inclusion, regulatory landscape, education, market awareness, perceived value and use cases, technology, and infrastructure, as well as social and cultural considerations.

Suggestions and Recommendations:

- The increasing adoption of digital assets in India suggests a changing landscape in the financial sector, with a shift towards decentralized and digital forms of value.
- Market dynamics and regulatory frameworks and will likely play a crucial role in shaping the future trajectory of digital asset adoption in the country.

Conclusion:

To sum up, the adoption rate of digital assets, including cryptocurrencies, DeFi, and NFTs, has seen significant growth in 2021 and 2023.

Such growth means there was a greater sense of potential market growth during this period. In the coming years, from 2024 to 2028, all three categories are expected to increase positively, with cryptocurrency usage leading to a rise.

Blockchain, digital tokens, digital wallets, digital security, and cryptocurrencies are just a few alternatives available to India, a key player in the digital asset market. Many factors, including security and confidence, financial inclusion, the legal environment, education, market knowledge, perceived value and use cases, technology and infrastructure, and cultural and social issues, impact the adoption of these assets. Learning how all of these factors relate to one another is vital because their relationship varies depending on the scenario and location.

Limitations Of the Study:

- The study is relying on secondary data exclusively from India.
- The examination specifically concentrates on the timeframe from 2021 to 2023, potentially overlooking enduring patterns.
- The study may not account for unforeseen developments or shifts in market dynamics that could impact the adoption of digital assets during the years 2024 to 2028.

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