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Future of Cryptocurrency in India

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Abstract: **The future of cryptocurrency in India is a subject of significant interest and debate. This abstract provides a concise overview of the potential trajectories for cryptocurrencies in the Indian context. India, as a rapidly developing economy, is poised to play a pivotal role in shaping the future of cryptocurrencies. However, the regulatory environment has been marked by uncertainty, which has influenced the adoption and growth of cryptocurrencies in the country. The Indian government has oscillated between skepticism and openness toward cryptocurrencies. The Reserve Bank of India's (RBI) ban on crypto transactions in 2018, subsequently overturned by the Supreme Court in 2020, highlighted the regulatory ambiguity. The future will depend on the government's willingness to establish clear regulations that balance innovation with security. The public perception of cryptocurrencies in India has evolved from initial skepticism to growing interest. As more Indians explore cryptocurrencies as an investment and transactional option, their influence on the regulatory discourse is likely to increase.**

Keywords: **Cryptocurrency, India, Regulation, Blockchain, Government, Public Perception, Startups, Security.**

I. Introduction

Finance Minister Nirmala Sitharaman made two announcements in Union Budget 2022-23 significant for the crypto asset industry of India. The Indian government will levy a 30% tax on the profit earned by crypto-assets, and the Digital rupee will be introduced in the fiscal year 2022-23. After being apprehensive and reluctant to adopt cryptocurrency, the Indian government has finally decided to open up to the virtual form of money. There is still confusion about the future of cryptocurrency, but these announcements have given a clear signal to crypto aficionados that **crypto is one step closer to being legal in the country**.

Cryptocurrencies have been in circulation since 2009 but for the last couple of years, unprecedented growth has been seen in this asset class. Crypto assets are very popular among younger investors who have a better appetite for risk and are enthusiastic about acquiring adequate financial education to reap the benefits of the ever-changing landscape of digital finance. According to a report by The Economic Times, **around 20 million Indians are dealing in cryptocurrency**.

As per the **2021 Global Crypto Adoption index** issued by Chainalysis, a company specializing in blockchain analysis, the world witnessed an 880% jump in crypto adoption. An index score of 0.37 garnered India second place in the index behind Vietnam. The Indian crypto market saw a growth of 641% in a year. Clearly, the crypto market world over is showing great potential and is emerging rapidly. It seems to be a promising industry for India too.

II. Origin

The concept of cryptocurrency was shared with the world by **Satoshi Nakamoto**, a pseudonym, more than a decade ago in the year 2008. Nakamoto published a white paper called **"Bitcoin: A peer-to-peer electronic cash system"** on the internet. The first cryptocurrency known as Bitcoin came into existence in the following year. The basic idea behind digital currency was to exclude the third party from the electronic transaction and let the sender and receiver have complete control over their money.

Since the inception of Bitcoin, a lot of cryptocurrencies have surfaced in the digital financial system. Currently, there are around 9000 different cryptocurrencies around the world like Ethereum, Tether, Dogecoin, Solana etc. Among all these cryptocurrencies Bitcoin remains the most famous and valuable one.

Technology Involved

Cryptocurrency is a virtual currency that is encrypted by codes using Blockchain technology. The encryption process makes the currency secure against counterfeit. At the moment cryptocurrencies are legal financial assets but they are not recognized as legal tender by countries except El Salvador which means, these assets hold value but cannot be used for the sale or purchase of commodities yet. Finance Minister Nirmala Sitharaman clarified in an interview that since cryptocurrency is not issued by a centralized authority it does not have the intrinsic value that makes a currency acceptable as a medium of exchange. So, **cryptocurrency is an asset, not a currency**.

III. Feasibility of Financial Transactions

Conventional financial transactions need several intermediaries besides the payee and the recipient of money such as the financial institutions holding the bank accounts of both the parties, the platform used for the transaction etc. All these players charge fees for providing their services making transactions expensive for customers. A greater number of intermediaries involved in the transaction process gives hackers more chances to steal sensitive personal information of people.

Financial transactions over the internet involving cryptocurrencies happen through a peer-to-peer network without any interference from a third party such as a state or financial institutions. With the help of Blockchain technology the sender and receiver freely do a financial transaction. Elimination of intermediaries makes the transfer of cryptocurrency cost-effective and safer.

The currency of any country remains valid through the promise made by the central bank of that country. People trust the central bank to be a guarantor while making transactions. This trust fuels economic activities. In the case of crypto transactions, cryptographic proof generated by advanced technology replaces the trust and eliminates the need for any centralized authority making the process completely decentralized.

The decentralization of cryptocurrency makes it acceptable to users across the web. The process is completely democratic and transparent as every transaction gets recorded and distributed through blockchain. The blockchain acts like a distributed ledger system having all the records of every cryptocurrency user in code.

Crypto transactions involve public and private keys. The public key gets updated with each transaction and the related information like details of payee and receiver, amount of transaction etc. gets stored in the blockchain. The private key is unique for each user. All this information is secured by encryption.

IV. How secure is cryptocurrency?

The security that cryptographic proof provides to digital asset transactions is not easy to break. Every transaction that gets initiated in the crypto-financial system needs to be verified by the majority of the ledger network distributed across the internet. The transaction gets rejected if this does not happen. Also, transactions are verified through mining, a process of solving complex algorithms. This process consumes a lot of energy making it expensive and takes a significant amount of time to get noticed if anything is fishy.

Any user from any part of the world able to access the web can transfer crypto, there is no geographical barrier or conversion fee. The utility of digital money has been recently witnessed by the world amid the ongoing Russia-Ukraine war. People from all around the world extended their support to Ukraine by making cryptocurrency donations. Ukraine's Deputy Digital Transformation minister, Alex Bornyakov confirmed that the country has raised around $100 Million to withstand the Russian invasion.

The supply of the currency is limited because new currency only comes into circulation when blockchain miners verify any transaction. The demand for cryptocurrency is increasing each passing day because more people are getting aware of the potential of this asset. Limited supply and more demand for cryptocurrency make the crypto market highly volatile and risky.

Scepticism surrounding Cryptocurrency

The state and the central bank of India remained sceptical about the crypto market for many reasons. The role crypto-assets can play in enabling money laundering and terrorist activities was one such reason. Cybercrimes have put a challenge before the system. The virtual nature of the crypto industry makes one think that it would be vulnerable to hacking and scamming. The advancement of technology has provided better security features but the virtual landscape is not immune to exploitation.

Reserve Bank of India, in 2013, cautioned traders about the risk virtual currency carries with it. In April 2018, the central bank banned crypto assets and directed banks to stop any transaction related to virtual currency. The Internet and Mobile Association of India (IAMAI) challenged the decision in the Supreme court. The **ban on cryptocurrency was declared unconstitutional** because it was in interference with **Article 19 (1)(g)** of the Indian Constitution which guarantees every citizen of India the freedom to practice any legitimate profession to earn a living.

Crypto transactions inherently eliminate the state from the equation. The stability of the crypto-based financial system thrives on decentralization making it secure and less vulnerable to any kind of manipulation. Thus, the character of cryptocurrency is opposite from the current monetary system exercised across nations that depends on a centralized authority responsible for its regulation.

The Digital rupee, also known as **Central Bank Digital Currency (CBDC)**, is in the pipeline to be launched in the fiscal year 2022-23. It seems beneficial for the global remittance economy. It would effectively reduce the time consumed during global transactions. Besides this, it is early to predict the relevance of CBDC.

V. Conclusion

Acceptance of the digital currency system by the Indian state is a prudent move considering the pace at which the crypto financial system is expanding itself. Although, it would be a challenge for the state to devise a mechanism that lets cryptocurrency function without losing its essence.

VI. References

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