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The Factors Affecting Implementing Crypto Currencies In India

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Abstract:

Among other things, the technological revolution has revolutionized money. It has given birth to a new form of currency known as cryptocurrency. It is only available in electronic or digital form and can be exchanged via online media. Because of their increased privacy and lower transaction costs, virtual currencies have grown in popularity in recent years. The aim of this paper is to create awareness regarding cryptocurrency. And also this paper reveals that the general and specific issues of cryptocurrency while it is implemented in India. Ultimately it draws the implications to solve the issues of cryptocurrency when it is implemented in India and also suggest the procedures to invest money in cryptocurrency.

Key words: revolution, electronic, digital form, virtual currency, cryptocurrency.

Introduction of cryptocurrency:

A virtual payment device called a crypto currency does not require banks to confirm transactions. It is a peer-to-peer device that enables anybody, anywhere to send and receive payments.

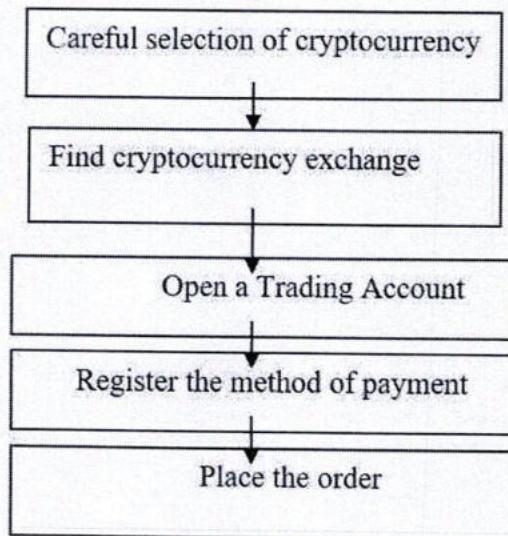
Cryptocurrency bills do not actually exist as physical objects that can be carried around and exchanged in the real world, but rather as digital records in a database on the internet that detail specific transactions. A public ledger keeps track of all transactions made with cryptocurrencies. Virtual wallets are where cryptocurrency is stored.

Due to the fact that transactions are confirmed through encryption, crypto currency has earned its name. This involves using advanced coding to store and transport crypto currency data between

wallets and to public ledgers. Encryption is used to provide safety and security.

There are numerous varieties of cryptocurrency that are used on various platforms, including peer-to-peer networks, social networks, social games, loyalty points, and cryptocurrency. Centralized cryptocurrency platforms and decentralised cryptocurrency platforms are the two basic types into which these platforms can be divided. The term "centralised cryptocurrency" refers to a system of digital money with a central repository that functions similarly to a central bank. Transferring the cryptocurrency value between people or locations is entirely under the administrator's authority in that repository. As opposed to this, decentralised cryptocurrencies are those that lack a single administration and a centralized repository. Decentralized cryptocurrency can be produced or obtained through computational work.

Procedures for investing money in cryptocurrency:



➤ Careful Selection of cryptocurrency:

Because such virtual currencies are generally purchased for the purpose of investment, the market for such virtual currencies is volatile and completely influenced by market conditions.

➤ Find cryptocurrency exchange:

There are numerous cryptocurrency exchanges, but not all of them operate in all countries. Different exchanges also provide different types of cryptocurrencies, accept various payment methods, and charge varying fees.

➤ Open a Trading Account:

Investment of cryptocurrency is similar to investment of shares in share market because trading account is an important for both markets.

➤ Place the order:

Ultimately, placing the order as per the consumer requirements.

General Factors Affecting Cryptocurrency:

1. Node count:

The number of nodes indicates how many active wallets are there on the network. It is a reliable predictor of a cryptocurrency's value. The number of nodes also demonstrates the strength of a bitcoin community, more nodes indicate stronger communities.

2. Production Cost:

Another element that affects the value of cryptocurrencies is their production costs. Each day, miners create new tokens and validate fresh network transactions using specialised gear or computers. Virtual tokens and a network fee are given to miners as compensation for their work.

The miner's network is an important activity forcing to work the decentralized cryptocurrencies. Therefore, the value of cryptocurrencies may rise if mining expenses rise. If the payouts are too small to offset the costs and turn a profit for the miners, it makes no sense for them to invest their resources in mining new cryptocurrency tokens. their resources mining new cryptocurrency tokens if the rewards are not big enough to cover the expenses and bring them profit. However, this isn't always the case and

isn't uniform across all cryptos, so make sure to research before committing.

3. Crypto Exchanges:

A token's ability to be purchased and used by more individuals grows if it is listed on several different cryptocurrency exchanges. Any cryptocurrency token that requires two or more swaps will incur a fee for each swap, increasing the cost of the investment.

4. Cryptocurrency public ledger

Every bitcoin transaction is automatically recorded in a decentralised ledger that is not under the control of one organisation. Cryptography is used to secure every transaction, and everyone may view them from anywhere at any time.

5. Infancy stage

Since the cryptocurrency market is still in its infancy, few individuals are yet familiar with it. New markets have characteristics that make them naturally unpredictable. Then there are some

accounts known as "whales" that possess a lot of cryptocurrency coins and have a tendency to control markets in order to make money.

6. Market Cap:

The most direct measure of a coin's market worth is its market capitalization, or market cap. The most popular website right now for keeping tabs on cryptocurrency market caps and getting a sense of how well-liked each coin is Coin marketcap. It also provides the most well-known index in the cryptocurrency community for all pertinent cryptocurrency financial parameters.

Market Capitalization = Total Circulating Supply Of The Coins x Price of Each Coin

7. Regulations:

The likelihood of government regulation of cryptocurrencies like bitcoins is relatively high as they are on the verge of becoming more widely used. Regulations would make digital currency more centralised, which would have a significant effect on a cryptocurrency's valuation.

An Overview of the countries with the highest rates of cryptocurrency possession in 2022:

S.No	Name of the country	Rate of cryptocurrency in %
1.	Thailand	20.1
2.	Nigeria	19.4
3.	Philippines	19.4
4.	Turkey	18.6
5.	Argentina	18.5
6.	Indonesia	16.4
7.	Brazil	16.1
8.	Singapore	15.6
9.	South Korea	13.4
10.	Malaysia	13.2
11.	United States of America	12.1
12.	Greece	8.6
13.	Romania	7.9

14.	Taiwan	7.6
15.	Mexico	7.3
16.	Saudi Arabia	3.6
17.	Morocco	3.1
18.	Israel	3
19.	Russia	2

Source: **CEOWorld magazine, August 2022.**

Currently, 10% of the global population owns some form of cryptocurrency. Thailand has the highest proportion of cryptocurrencies in the world, with 20.1% of Thai internet users owning digital currencies. Nigeria ranks second in the world in terms of cryptocurrency adoption, with 19.4%, followed by the Philippines, which has a similar percentage. The United States ranks relatively low in the rankings, specifically 14th, with 12.7% of internet users owning cryptocurrencies. After Thailand, Nigeria and Philippines are ranked in second because they collected the same percentage, the two countries are in the same position. Turkey is ranked fourth on the list. In Turkey, 18.6% of internet users own cryptocurrency. Argentina is up next. Argentina ranks fifth on the list, with 18.5% of internet users owning cryptocurrencies. Indonesia ranks sixth on the list, with 16.4% of internet users owning cryptocurrencies. In Brazil, 16.1% of internet users own cryptocurrency. Singapore, South Korea, and Malaysia round out the top three. In Singapore, 15.6% of internet users own cryptocurrency. Singapore is ranked eighth in terms of cryptocurrency possession in 2022. Cryptocurrencies are owned by 13.4% of internet users in South Korea. The country is ranked ninth.

In Malaysia, 13.2% of internet users own cryptocurrency. Malaysia is ranked tenth in terms of cryptocurrency possession in 2022. Cryptocurrencies are becoming increasingly popular in Greece. The country appears to be no exception to this trend. More specifically, 8.6% of Greek citizens own some form of cryptocurrency.. Cryptocurrencies are owned by

7.9%, 7.6%, and 7.3% of internet users in Romania, Taiwan, and Mexico, respectively. The lowest rates of cryptocurrency ownership are found in Russia (2%), Israel (3%), Morocco (3.1%), and Saudi Arabia (3.6%).

Specific factors affecting to implement cryptocurrency in India:

Some financial issues and security concerns exist in the form of cryptocurrencies.

Threats to Security:

Hackers and malicious users can create as much virtual currency as they want if they break the system and understand the method of virtual currency creation. This will allow you to create fake virtual currency or steal virtual currency simply by changing the account balances.

Concerns about cryptocurrency system collapse:

The unrestricted issuance of crypto money in a variety of online community will cause economic problems because it is not based on demand and supply. On the other side, it will suffer from inflation and economic issues, which will lead to the virtual currency system collapsing.

Impact on real-world monetary systems:

Because some virtual currency systems are linked to real-world monetary systems, they may have an impact on the demand and supply of real-world money. Allowing users to buy virtual and real goods and services with virtual currency on some platforms, for example, may reduce the

demand for real money. Users will no longer rely on real money to buy what they want, but will instead use virtual money. On the other hand, some platforms allow users to exchange virtual currency for real currency, which increases demand for real world currency. This fluctuation will have an impact on real monetary systems.

Laws governing data privacy and security:

Some virtual currency providers collect information and data about their users. Platforms that allow credit card purchases of virtual currency must also consider these laws when storing credit card information. Such information must be kept and stored in accordance with strict privacy and security guidelines. Otherwise, the virtual currency provider may be in violation of data privacy and security laws.

Taxation:

Taxation laws in the virtual currency industry vary by country. Some countries tax income generated by virtual currency transactions, while others have only considered taxation law. If the RBI notifies such an instrument, any trading in it will be subject to the Foreign Exchange Management (FEMA) Act, 1999. If cryptocurrency, such as bitcoins, is purchased for investment purposes, it is classified as a capital asset. Any profit made from the transfer of a bitcoin is taxable as capital gain.

However, if the taxpayer's bitcoin transactions are significant and frequent, it may be determined that the taxpayer is trading in bitcoins, and the income would be taxable as business income under the Income Tax (IT) Act.

Forms of cryptocurrency:

Bitcoin (BTC):

Bitcoin is unquestionably the market leader in the crypto sector. It also happens to be the first

cryptocurrency. Bitcoin was created in 2009 by a person (or possibly a group) going by the pseudonym Satoshi Nakamoto. There are slightly more than 19 million Bitcoin tokens in circulation as of June 2022, compared to a capped limit of 21 million. Every day, nearly a thousand new bitcoins are mined, bringing Bitcoin ever closer to its maximum finite number.

Bitcoin was created to be completely independent of any government or central bank. Instead, it is based on blockchain technology, which is a decentralised public ledger that keeps a digital record of every Bitcoin transaction. Bitcoin established the fundamental system of cryptography and consensus — i.e., peer-to-peer (P2P) verification — that is the foundation of most other cryptocurrencies.

Ethereum (ETH) :



Ethereum, like Bitcoin, is a blockchain network. However, Ethereum was designed as a programmable blockchain, which means it was created to allow network users to create, publish, monetize, and deploy decentralised applications rather than to support a currency (dApps). The native Ethereum currency, Ether (ETH), was created as a means of payment on the Ethereum platform. It may be useful to consider ETH as a type of fuel that powers the Ethereum blockchain. Because many ICOs are built on the Ethereum blockchain, Ethereum has aided in the launch of many. Ethereum has also been the driving force behind the rise in non-fungible tokens (NFTs). Many people directly compare Ethereum and Bitcoin because they are the two most well-known blockchains and cryptocurrencies.

The current market value of Ethereum is Rs.1,48,853

Tether (USDT):



Tether was the first cryptocurrency to be marketed as a stablecoin, a type of cryptocurrency known as fiat-collateralized stablecoins. The tether's value is tied to a fiat currency, in this case the US dollar. Tether is the world's largest stablecoin; by 2022, tether will have traded for the majority of cryptocurrencies.

Tether, like other stablecoins, is intended to provide users with stability, transparency, and lower transaction fees. Tether, unlike some cryptocurrencies, was not intended to be a speculative investment; instead, investors who wanted to avoid the extreme volatility of the crypto market used USDT.

- The current market value of Ethereum is Rs. 86.9900

USD Coin (USDC):

USD Coin (USDC) is a digital stablecoin that is backed by the US dollar. It is based on the blockchains Ethereum, Stellar, Algorand, and Solana. The Centre consortium, which includes its two main founding members, Circle and Coinbase, was the first to create USDC. Each USDC token is backed by a \$1 reserve and is audited on a regular basis by Grant Thornton, a major accounting firm. USDC was introduced in September 2018, and Visa announced in March 2021 that it would facilitate the use of USDC for settlement on its payment network.

USDC is a stablecoin that operates on the Ethereum and other blockchains. It is linked to the United States dollar. A USDC, like the stablecoin tether (USDT), is worth one US dollar — the guaranteed 1:1 ratio.

Binance (BNB)

Binance is one of the largest cryptocurrency exchanges in the world. The Binance Coin (BNB) was created as a utility token for use on Binance

as a medium of exchange. It was originally built on the Ethereum blockchain, but it is now hosted on Binance's own blockchain platform. Originally used to get discounts on Binance trading fees, BNB can now be used for payments, booking travel, entertainment, online services, and financial services.

As one of the top five cryptocurrencies by market capitalization in 2022, BNB has a diverse set of use cases and real-world applications. However, as with other digital assets, this crypto platform has encountered regulatory challenges both domestically and internationally.

The Ripple Ledger Network's native coin is XRP. It is intended to be used as a low-cost bridge between fiat currencies for a wide range of global transactions as a medium of exchange and value transfer.

XRP:

XRP allows for the creation of a system that outperforms many established cryptocurrencies and fiat transmission technologies. This has resulted in a world-class payment system that reduces intermediary processes while increasing overall benefit to users.

Ripple Labs, Inc. invented XRP. While some people use the terms XRP and Ripple interchangeably, they are not interchangeable. Ripple is a global money transfer network that is used by financial institutions. XRP is a cryptocurrency designed to operate on the Ripple network.

Cardano (ADA):

Cardano is a Solid evidence blockchain platform that supports smart contracts. Cardano is notable for its emphasis on academic research, high transaction-per-second (TPS) throughput, and Ouroboros, an energy-efficient consensus mechanism. The Cardano network's native coin,

ADA, is used to facilitate transactions and execute smart contracts.

Cardano bills as a third-generation blockchain platform in order to position itself as a serious contender. Cardano uses proof of stake (PoS), which eliminates the need for the complicated PoW calculations and high electricity consumption required for mining coins like Bitcoin. This has the potential to make Cardano's network more efficient and sustainable than other cryptocurrency networks.

Solana (SOL):

Solana, a blockchain platform that generates the cryptocurrency, has made strides in decentralised finance (DeFi), particularly with its smart contract technology — programmes that run on the platform based on predefined conditions. Smart contracts are similar to paper contracts, but they do not involve any middlemen. Solana was also the driving force behind the Degenerate Ape Academy, an NFT that will open in August 2021. Solana's proof-of-history (PoH) consensus is one of the most important innovations it brings to the table. This mechanism increases the protocol's scalability, which improves usability.

SOL is intended to make the development of dApps easier. It aims to improve scalability by combining a proof-of-history (PoH) consensus with the blockchain's underlying proof-of-stake (PoS) consensus.

Dogecoin (DOGE):

Dogecoin is widely recognised as the first joke cryptocurrency; it was launched in 2013 as a satirical response to Bitcoin. Nonetheless, the currency drew public attention and a significant amount of investment. In April 2019, Elon Musk tweeted that he liked Dogecoin, which helped raise Dogecoin's profile as a legitimate cryptocurrency. Dogecoin is an altcoin that, like Bitcoin and Ethereum, operates on a blockchain

network using a PoW system. However, the number of coins that can be mined is limitless (versus the 21 million-coin cap on Bitcoin).

Dogecoin has primarily been used on Reddit and Twitter as a tipping system to reward the creation or sharing of high-quality content.

Conclusion of the Study:

The Reserve Bank of India is working to introduce a central bank digital currency (CBDC) in India. "The design of the CBDC must be consistent with the stated objectives of monetary policy, financial stability, and efficient operations of currency and payment systems," according to the Reserve Bank of India's Annual Report on Working 2022.

The government of India has imposed a 30% fixed tax rate on all crypto trading income, with the goal of introducing the Digital Rupee in 2022-23. The Digital Rupee, that is expected to be India's first Central Bank Digital Currency (CBDC) proposal, will be a virtual representation of the rupee that is fully controlled and monitored by the central government. These currencies typically have the full trust and support of the issuing authority. As a result, the Reserve Bank of India will continue to be the guarantor of the Digital Rupee, as it is for regular notes and coins. It has stated that losses on such crypto-assets cannot be carried forward. This means that any losses incurred while trading these assets will not be offset by other sources of income and will be carried forward to successive periods.

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