Prevalence of Cryptocurrency in India

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Abstract: Cryptocurrency is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it. Globally, cryptocurrencies are being termed as the 8th generation of currency for human civilization and are being heavily adopted by businesses and households. This study will evaluate the actual relevance and investing pattern of Indians in cryptocurrency.

Keywords: Cryptocurrency, Investment Pattern, NFT, Security and anonymity, Legality

1. Introduction

Cryptocurrency is decentralized digital money that is based on blockchain technology and secured by cryptography. To understand cryptocurrency, one needs to first understand three terminologies - blockchain, decentralization, and cryptography. In simple words, blockchain in the context of cryptocurrency is a digital ledger whose access is distributed among authorized users. This ledger records transactions related to a range of assets, like money, house, or even intellectual property. The access is shared between its users and any information shared is transparent, immediate, and "immutable". Immutable means anything that blockchain records is there for good and cannot be modified or tampered with - even by an administrator. Centralized money refers to the regular money that we use, which is governed by authorities like the Reserve Bank of India. Decentralization in cryptocurrency means there is no similar authority that can be held responsible for supervising the rise and fall of a particular cryptocurrency. This has many benefits over centralized money.

Characteristics of cryptocurrency

- Anonymity
- No intermediary or supervisory bodies Security No centralization
- Irreversible transactions

Working of Cryptocurrency

- Mining Cryptocurrencies (which are completely digital) are generated through a process called "mining". This is a complex process. Basically, miners are required to solve certain mathematical puzzles over specially equipped computer systems to be rewarded with bitcoins in exchange. In an ideal world, it would take a person just 10 minutes to mine one bitcoin, but in reality, the process takes an estimated 30 days.
- 2) Buying, selling, and storing Users today can buy cryptocurrencies from central exchanges, brokers, and individual currency owners or sell it to them. Exchanges or platforms like Coinbase are the easiest ways to buy or sell cryptocurrencies. Once bought, cryptocurrencies can be stored in digital wallets. Digital wallets can be "hot" or "cold". Hot means the wallet is connected to the internet, which makes it easy to transact, but vulnerable to thefts and frauds. Cold storage, on the other hand, is safer but makes it harder to transact.
- 3) Transacting or investing Cryptocurrencies like

Bitcoins can be easily transferred from one digital wallet to another, using only a smartphone.

- a) use them to buy goods or services
- b) trade in them
- c) exchange them for cash

If you are using Bitcoin for purchases, the easiest way to do that is through debit - card - type transactions. You can also use these debit cards to withdraw cash, just like at an ATM. Converting cryptocurrency to cash is also possible using banking accounts or peer - to - peer transactions.

Uses of Cryptocurrency

As a mode of Payment for goods and services

Explore unique new combinations of money and technology: Orchid is a VPN, which helps protect you when you're online, and a digital currency at the same time. Basically it's broken down into two parts, the Orchid VPN app and the OXT cryptocurrency, and it all runs on the Ethereum network.

Buy property in a virtual gaming world: Decentraland, which also runs on the Ethereum blockchain, is the first virtual world entirely owned by its users. Users can buy and sell land, avatar clothing, and all kinds of other stuff while partying in virtual nightclubs or mingling in virtual art galleries.

Explore decentralized finance, or DeFi: A wide variety of new players are aiming to recreate the entire global financial system, from Mutual - fund - like investments to loan - lending mechanisms.

Advantages and Disadvantages Advantages

They are private and secure: The blockchain technology that fuels cryptocurrencies ensures user anonymity. It also assures high levels of security through cryptography

They are decentralized, immutable, and transparent: The entire system functions on shared ownership, where data is available to all permissioned members and is tamper - proof.

They are a hedge against inflation: Cryptocurrency makes for a great investment in times of inflation.

Disadvantages

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<u>www.ijsr.net</u> Licensed Under Creative Commons Attribution CC BY They are prone to high risks and volatility due to ongoing scams and speculation

A major deterrent could be the fact that digital currency seems to have no inherent or underlying value. Cryptocurrencies are banned or their usage restricted in a lot of countries plays out as a significant risk.

Bitcoin

Bitcoin was created by Satoshi Nakamoto, a pseudonymous person or team who outlined the technology in a 2008 white paper. It's an appealingly simple concept: bitcoin is digital money that allows for secure peer - to - peer transactions on the internet. There will only ever be 21 million bitcoin. This is digital money that cannot be inflated or manipulated in any way. It isn't necessary to buy an entire bitcoin: you can buy just a fraction of one if that's all you want or need. When Bitcoin first appeared, it marked a major advance in computer science, because it solved a fundamental problem of commerce on the internet: how do you transfer value between two people without a trusted intermediary (like a bank) in the middle? By solving that problem, the invention of bitcoin has wide - ranging ramifications: As a currency designed for the internet, it allows for financial transactions that range across borders and around the globe without the involvement of banks, credit - card companies, lenders, or even governments. When any two people-wherever they might live-can send payments to each other without encountering those gatekeepers, it creates the potential for an open financial system that is more efficient, more free, and innovative.

Dogecoin

Software engineers Billy Marcus and Jackson Palmer created Dogecoin in late 2013. Palmer branded the cryptocurrency's logo using a meme popular at the time that featured the deliberately misspelled word "doge" to describe a Shiba Inu dog. It is considered both the first "meme coin", and, more specifically, the first "dog coin". With the help of Reddit, the site became an instant hit. Within two weeks, Dogecoin had established a dedicated blog and forum, and its market value has reached \$8 million, once jumping to become the seventh largest electronic currency in the world. Dogecoin is based on Scrypt algorithm, and the transaction process is more convenient than Bitcoin.

Dogecoin takes only 1 minute to confirm, while BTC takes 10 minutes. Those who bought Dogecoin before the big gains of 2021 have been well rewarded. Still, White is a little wary about buying Dogecoin, especially as an investment. The constant flow of new coins onto the market put unending downward pressure on the coin's value. It is, therefore, a highly inflationary cryptocurrency, dampening its attractiveness for long - term investment. Consequently, it is more suitable as a transacting currency rather than a long - term investment.

2. Analysis of Data Collected

The questionnaire allowed a real time evaluation of the prevalence of cryptocurrencies in India. The questionnaire was sent to varying age groups and people from different regions, communities and jobs so as to get a diverse dataset. This allowed an overall understanding of the situation of cryptocurrency in India. Every question analyzed different aspects and allowed inferences and established correlations between various factors.

The age of the individual was directly linked to the risk aversion, income and net worth of the individual. This seems very literal as people who are just starting their careers lie in the lower income brackets and tend to have lower self made net worth. Younger people in the recent years have seen an increase in financial literacy and tend to save and invest wisely. They are also extremely open to using new financial tools such as cryptocurrency as 80% of the respondents who responded affirmative to investing in cryptocurrency belonged to the 18 - 30 age group. This group has a lot of investing years left and are far away from their investment withdrawal horizon which induces them to invest in risky investments to gain higher profits.

Individuals belonging to older age groups such as 30 - 45 seemed to have good income levels and high net worths. This implied high levels of disposable income and increased savings levels. This age group has generally started financial planning to save up for requirements such as education for offsprings and retirement. They tended to invest small sums in cryptocurrency as a form of diversification and experimentation. Overall, this age group is somewhat comfortable with investing unto 10 - 15% of their savings in cryptocurrency.

The oldest age groups which are 45 - 60 and 60+ were extremely against diversifying into cryptocurrency. This again was attributed to the extreme risk and moreover the lack of knowledge. From comments, there were many who described cryptocurrency as a western scam and even a Ponzi scheme. Non investing in cryptocurrency for this age group is extremely rational as they are very close to the withdrawal stage for their investments. They mostly preferred government backed securities and tended towards risk free investments such as bonds, banks and equity till a certain limit. This age group had the highest net worth and the highest income as well which implies that a large scale campaign to get the high net worth individuals into cryptocurrency will allow country wide implementation.

3. Future of Cryptocurrency

As a mode of payment for daily goods and services

While paying for things in cryptocurrencies doesn't make sense for most people right now, more retailers accepting payments might change that landscape in the future. We're likely still a long way off before it'll be a smart financial decision to spend bitcoin on goods or services, but further institutional adoption could bring about more use - cases for everyday users, and in turn, have an impact on crypto prices. Nothing is guaranteed, but if you buy cryptocurrency as a long - term store of value, the more "real world" uses it has, the more likely demand and value will increase.

NFT - Non Fungible Token

NFTs represent digital ownership of a wide range of irreplicable intangible items, and have drawn the attention of celebrities and big companies ranging from American Express to Gucci. Total NFT sales hit \$25 billion in 2021,

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compared to \$94.9 million the year before, according to data collected by DappRadar, an app store for decentralized applications. We can speculate on what value cryptocurrency may have for investors in the coming months and years (and many will), but the reality is it's still a new and speculative investment, without much history on which to base predictions. No matter what a given expert thinks or says, no one really knows. That's why it's important to only invest what you're prepared to lose, and stick to more conventional investments for long - term wealth building.

Legal Aspect in India

Until the 2022 Union Budget announcement, the fate of cryptocurrency in India was largely undecided. In the Budget, the Indian Finance Minister's announcement on levying a 30% tax on gains on the transfer of virtual digital assets, which includes cryptocurrency, was initially seen as an endorsement of cryptocurrencies. It set off the debate on whether or not the tax on cryptocurrency indicates the government has recognised it as a legitimate form of currency.

However, this isn't true and there have also been speculations that a ban on private cryptocurrencies would follow the launch of the RBI's own official digital currency. Something to this effect was openly stated by RBI Deputy Governor T Rabi Sankar in February 2022, when he said it was advisable for India to ban cryptocurrency. Will this turn out to be similar to the government's ban on cryptocurrency in 2018 (which was overturned by India's Supreme Court in 2020) remains to be seen. The views on cryptocurrency amongst the lawmakers are mixed and there seems to be heated discussions about the same during parliamentary sessions. The government is trying to develop its own cryptocurrency which will ease out foreign trade and reduce foreign exchange pressures.

4. Conclusion

Whether cryptocurrency is the future of money or not, one thing is clear: It is not advisable for anyone to invest in it without doing enough research. Investing in cryptocurrencies is not a new phenomenon. But with the recent surge in popularity and value, coupled with falling returns on bank deposits, more people are looking for cryptocurrency advice.

If you have decided to invest in cryptocurrencies, ensure that you start with the leading cryptocurrencies like bitcoin, as newer ones may not have sufficient liquidity (you may not be able to sell them when you want to). The market is rife with scamsters. Hence using authorized platforms to buy or trade cryptos is important, especially while starting out.

Investing in cryptocurrency is a risky venture. You need to be aware that there is a high chance of losing your money. If you are not comfortable with the risk, it's better to stay away from it. There are many ways you can profit from cryptocurrency – buying coins, trading coins, mining coins, and so on. The last one requires the maximum resources but also has the potential for higher returns while buying or trading can be done more easily. Cryptocurrencies are also highly volatile, so it is recommended to start small and diversify your investments. Simply put, do not place all your eggs in one basket. As a beginner, it helps if you initially rely on expert advice and gradually grow your own expertise by researching the subject. For this type of research to be successful, it is also important to develop an understanding of your country's historic and current policies on cryptocurrency. And as always, don't invest more than you can afford to lose. If used rightly, cryptocurrencies are the next revolution in currencies with their deregulated and security features. Indian individuals are extremely risk averse and this can be seen with the questionnaire where even high net worth individuals and financially aware individuals were not willing to invest in cryptocurrencies.

Overall, with the help of this research project, I was able to practically analyze the prevalence of cryptocurrencies in India amongst various age, culture, region and income levels. This project has provided me with a great learning opportunity and practical exposure for my knowledge of economics.

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 the global priorities over time/articleshow/88299711. cms https: //www.studocu. com/row/document/taita taveta university/information technology/cryptocurrency as applied i n blockchain/29177956

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Author Profile

Harsh Mittal is a school student interested in the world of finance. He spends his free time researching on finance and the stock market. Additionally, he is interested in the world of cryptocurrency and aims to work as a venture capitalist or investment banker.

Results







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Cryptocurrency in India

This questionnaire is part of an empirical research project being undertaken by Harsh Mittal. Your personal information such as name or email will not be published. The research project is a real time evaluation about the prevalence of cryptocurrency in various social classes and regions in India.

*Required

 Name of Respondent * Mark only one. I wish not to disclose name Other:
 2) Age of Respondent * Mark only one . 0 - 18 18 - 30 30 - 45 45 - 60 60+
 3) Annual Income * Mark only one. 0 - 2, 50, 000INR 2, 50, 000 - 5, 00, 000INR 5, 00, 000 - 15, 00, 000INR 15, 00, 000 - 1, 00, 00, 000INR 1, 00, 00, 000INR+
 4) Net Worth * Mark only one. 1, 00, 000 - 10, 00, 000INR 10, 00, 000 - 1, 00, 00, 000INR 1, 00, 00, 000 - 10, 00, 00, 000INR 10, 00, 00, 000INR
 5) Forms of Savings Used * <i>Check all that apply.</i> No savings Cash

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Savings	Bank	account	
Duvings	Dunk	account	

Commodities such as Gold and Silver Debt and Bonds

Equity and Stocks Mutual Funds

Insurance and Mediclaim Policies Cryptocurrency

Real Estate

6) Do you invest in Cryptocurrency *

Mark only one.

☐ Yes □ No

7) If you invest in cryptocurrency, how much of your portfolio is invested in cryptocurrency (in terms of %). If you do not, please respond 0%.

8) Reasons for not investing in cryptocurrency *

Check all that apply.

Risk Averse Inadequate knowledge

Extreme volatility and major price [uctuations I invest in cryptocurrency

9) If you were to invest in cryptocurrency or already do, which of the following would you hold

Check all that apply.

Bitcoin Ethereum

Utilitarian coins such as XRP and Cardano Corporation backed coins such as Binance Coin Memecoins such as Dogecoin and Shiba Inu

I do not wish to invest in cryptocurrency

10) General feelings towards cryptocurrency and its future in India.

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Name of Respondent	Age of Respondent	Annual Income	Net Worth	Forms of Savings Used	Do you invest in Cryptoc	If you invest in crypto If you do not, please	Reasons for not investing in cryptocurrency	If you were to invest in cryptocurrency or already do, which of the following would you hold ?
I wish not to disclose name	0 - 18	1, 00, 00, 000INR+	10, 00, 00, 000INR	Cash, Savings Bank account, Commodities such as Gold and Silver, Debt and Bonds, Equity and Stocks, Mutual Funds, Insurance and Mediclaim Policies, Real Estate	No	0%	Risk Averse, Extreme volatility and major price fluctuations	Bitcoin
I wish not to disclose name	30 - 45	15, 00, 000 - 1, 00, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Equity and Stocks, Mutual Funds, Cryptocurrency	Yes	20%	I invest in cryptocurrency	Bitcoin, Utilitarian coins such as XRP and Cardano, Memecoins such as Dogecoin and Shiba Inu
I wish not to disclose name	18 - 30	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	Cryptocurrency	No	0%	Inadequate knowledge	Bitcoin, Ethereum
I wish not to disclose name	0 - 18	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	Cash, Savings Bank account, Debt and Bonds, Equity and Stocks, Mutual Funds	No	0%	Risk Averse, Extreme volatility and major price fluctuations	I do not wish to invest in cryptocurrency
I wish not to disclose name	30 - 45	15, 00, 000 - 1, 00, 00, 000INR	1, 00, 00, 000 - 10, 00, 00, 000INR	Cash, Savings Bank account, Commodities such	No	0%	Risk Averse	Bitcoin

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				SJI (2022), 7				
				as Gold and Silver, Equity and Stocks, Mutual Funds, Real Estate				
I wish not to disclose name	30 - 45	15, 00, 000 - 1, 00, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Cash, Savings Bank account, Mutual Funds, Cryptocurrency	Yes	5%	Extreme volatility and major price fluctuations, I invest in cryptocurrency	Bitcoin, Ethereum, Utilitarian coins such as XRP and Cardano
I wish not to disclose name	18 - 30	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	Savings Bank account	No	0%	Inadequate knowledge	Bitcoin, Ethereum, Corporation backed coins such as Binance Coin
Divya	30 - 45	2, 50, 000 - 5, 00, 000INR	1, 00, 000 - 10, 00, 000INR	Insurance and Mediclaim Policies	No	0%	Inadequate knowledge	Bitcoin, I do not wish to invest in cryptocurrency
M. K. Mittal	60+	15, 00, 000 - 1, 00, 00, 000INR	1, 00, 00, 000 - 10, 00, 00, 000INR	Savings Bank account, Commodities such as Gold and Silver, Insurance and Mediclaim Policies	No	0%	Inadequate knowledge	I do not wish to invest in cryptocurrency
Darshana	60+	5, 00, 000 - 15, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Cash	No	0%	Inadequate knowledge	I do not wish to invest in cryptocurrency
Kriti	0 - 18	1, 00, 00, 000INR+	10, 00, 00, 000INR	Equity and Stocks, Mutual Funds, Real Estate	No	0%	Extreme volatility and major price fluctuations	Bitcoin
I wish not to disclose name	0 - 18	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	No savings	No	0%	Risk Averse, Inadequate knowledge	Bitcoin
I wish not to disclose name	45 - 60	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	No savings	No	0%	Inadequate knowledge	Ethereum, I do not wish to invest in cryptocurrency
I wish not to disclose name	30 - 45	5, 00, 000 - 15, 00, 000INR	1, 00, 00, 000 - 10, 00, 00, 000INR	Savings Bank account, Commodities such as Gold and Silver, Equity and Stocks, Insurance and Mediclaim Policies, Real Estate	No	0%	Risk Averse, Inadequate knowledge, Extreme volatility and major price fluctuations	I do not wish to invest in cryptocurrency
Roshani Gokulka	30 - 45	5, 00, 000 - 15, 00, 000INR	1, 00, 00, 000 - 10, 00, 00, 000INR	Savings Bank account, Real Estate	No	0%	Risk Averse	Bitcoin
I wish not to disclose name	30 - 45	5, 00, 000 - 15, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Savings Bank account, Equity and Stocks, Insurance and Mediclaim Policies, Real Estate	No	0%	Inadequate knowledge	I do not wish to invest in cryptocurrency
I wish not to disclose name	30 - 45	5, 00, 000 - 15, 00, 000INR	1, 00, 000 - 10, 00, 000INR	Savings Bank account, Mutual Funds, Insurance and Mediclaim Policies	No	0%	Inadequate knowledge	I do not wish to invest in cryptocurrency
I wish not to disclose name	0 - 18	0 - 2, 50, 000INR	1, 00, 000 - 10, 00, 000INR	Cash, Savings Bank account	No	0%	Inadequate knowledge	Bitcoin, Utilitarian coins such as XRP and Cardano, Corporation backed coins such as Binance Coin
I wish not to disclose name	0 - 18	2, 50, 000 - 5, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Insurance and Mediclaim Policies, Cryptocurrency, Real Estate	Yes	75%	I invest in cryptocurrency	Bitcoin, Ethereum, Utilitarian coins such as XRP and Cardano
I wish not to disclose name	18 - 30	5, 00, 000 - 15, 00, 000INR	10, 00, 000 - 1, 00, 00, 000INR	Cash, Savings Bank account, Commodities such as Gold and Silver, Equity and Stocks,	No	0%	Inadequate knowledge	Utilitarian coins such as XRP and Cardano, Corporation backed coins such as Binance Coin, Memecoins such

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				Mutual Funds				as Dogecoin and Shiba Inu
I wish not to disclose name	18 - 30	15, 00, 000 - 1, 00, 00, 000INR	1, 00, 00, 000 - 10, 00, 00, 000INR	Savings Bank account, Commodities such as Gold and Silver, Debt and Bonds, Equity and Stocks, Mutual Funds, Insurance and Mediclaim Policies, Cryptocurrency	Yes	20%	I invest in cryptocurrency	Bitcoin, Utilitarian coins such as XRP and Cardano, Corporation backed coins such as Binance Coin, Memecoins such as Dogecoin and Shiba Inu
I wish not to disclose name	45 - 60	1, 00, 00, 000INR+	10, 00, 00, 000INR	Cash, Commodities such as Gold and Silver, Debt and Bonds, Equity and Stocks, Mutual Funds, Insurance and Mediclaim Policies, Real Estate	No	0%	Risk Averse, Extreme volatility and major price fluctuations	I do not wish to invest in cryptocurrency
I wish not to disclose name	45 - 60	15, 00, 000 - 1, 00, 00, 000INR	10, 00, 00, 000INR	Cash, Savings Bank account, Debt and Bonds, Mutual Funds, Cryptocurrency, Real Estate	Yes	3%	I invest in cryptocurrency	Bitcoin, Ethereum
I wish not to disclose name	60+	2, 50, 000 - 5, 00, 000INR	10, 00, 00, 000INR	Cash, Savings Bank account, Commodities such as Gold and Silver, Debt and Bonds, Equity and Stocks, Mutual Funds, Insurance and Mediclaim Policies, Real Estate	No	0%	Risk Averse, Extreme volatility and major price fluctuations	Utilitarian coins such as XRP and Cardano, Corporation backed coins such as Binance Coin, Memecoins such as Dogecoin and Shiba Inu
I wish not to disclose name	60+	1, 00, 00, 000INR+	10, 00, 00, 000INR	Cash, Equity and Stocks, Cryptocurrency, Real Estate	Yes	35%	I invest in cryptocurrency	Bitcoin, Ethereum, Utilitarian coins such as XRP and Cardano, Corporation backed coins such as Binance Coin

Illustrations



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