



IS INDIA READY FOR CRYPTO? STUDY ON PUBLIC PERCEPTION, REGULATION AND FINANCIAL TRANSFORMATION

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ABSTRACT

The rapid evolution of cryptocurrency has sparked global debates on its viability, regulation, and transformative potential in the financial ecosystem. This study explores whether India is prepared to adopt cryptocurrency at a larger scale by examining three critical aspects: public perception, regulatory landscape, and its potential to reshape the financial sector.

Through surveys and secondary data analysis, the report evaluates the awareness, acceptance, and concerns of Indian citizens regarding digital currencies. It also critically assesses the current regulatory framework and the role of institutions such as the Reserve Bank of India (RBI) and the Government of India in shaping crypto policy.

Lastly, the research investigates how cryptocurrencies could impact India's traditional banking systems, digital payments infrastructure, and financial inclusion efforts. The findings reveal a nation cautiously optimistic yet uncertain highlighting the need for balanced regulation, public education, and technological readiness to harness the benefits of this digital financial revolution.

CHAPTER 1 INTRODUCTION

• Background

I have undertaken the topic “Cryptocurrency” for research work. , Also I will be further adding sub-topics like:

- Are we ready to digitalize the monetary world?
- Why do banks oppose digital currency?
- Risks & benefits associated with digital money-transferring technology

This is my special interest for research study as digital money transferring is what we do on a day-to-day basis. In today’s world, we cannot think of a single thing without digitalization, digital money transferring also plays a vital role in the growth of the economy as going cashless not only makes life easier but also helps to authenticate and standardize transactions. This helps to reduce corruption and illicit money flows, leading to increased economic growth. The cost of printing and shipping currency notes has been reduced. As a result, it's a fascinating subject to investigate.

Digital currency is further classified into two parts- Centralized and Decentralized. It is as simple as that. Electronic currencies function in a variety of ways, depending on their purpose and usefulness.

The government usually has a lot of control over and backing for the centralized one. It is subject to the same movements and performs the same functions as the physical equivalent of the currency.

Unregulated decentralized money, on the other hand, is not governed by financial institutions such as banks and exchanges. There are virtual currencies that are speculative. These are built on solid projects that bring value or solve problems in the web domain, such as Ethereum or Bitcoins.

• Research problem

The research problem of the project titled "Study on Cryptocurrency and Digitalization of Monetary World" is to understand the potential of cryptocurrencies in transforming the traditional monetary system and the challenges and risks associated with this transformation. Specifically, the research problem seeks to answer the following question.

What are the historical and technological contexts of cryptocurrencies and their rise in popularity in recent years?

• Objective

The objective of the study titled "Study on Cryptocurrency and Digitalization of Monetary World" is to investigate the potential impact of cryptocurrencies on the traditional monetary system and the challenges and risks associated with this impact. The specific research problem addressed in this study is to understand the historical and technological contexts of cryptocurrencies and their rise in popularity in recent years.

By addressing this research problem, the study aims to provide insights into the origins and evolution of cryptocurrencies and the factors that have contributed to their growing popularity as a digital form of currency. The study may examine the technical features of different cryptocurrencies, their adoption by businesses and individuals, and their impact on the financial industry. The purpose of the study may be to inform policymakers, industry practitioners, and the general public about the potential benefits and drawbacks of cryptocurrencies and their role in the digitalization of monetary systems. Ultimately, the goal of the study may be to contribute to the body of knowledge on cryptocurrencies and provide guidance for the development of policies and regulations that promote the responsible use and adoption of cryptocurrencies.

• Scope and significance

The study entitled "Study on Cryptocurrency and the Digitization of the Monetary World" aims to examine the potential impact of cryptocurrencies on the traditional monetary system and the challenges and risks involved. The scope of the study includes an in-depth examination of the technical characteristics of different cryptocurrencies, their acceptance by companies and individuals, and their potential impact on the financial sector. The study also includes an analysis of the risks and challenges associated with using cryptocurrencies, such as B. their volatile prices and their potential use for illegal activities. The importance of the study lies in its potential to provide valuable insights into the role of cryptocurrencies in the digitization of monetary systems and their potential to transform the traditional financial sector. The study may be of interest to policymakers, regulators, industry professionals, and the general public as they seek to understand the impact of cryptocurrency growth on the global financial system. The study findings may have practical implications for the development of policies and regulations that encourage the responsible use and adoption of cryptocurrencies. By gaining a better understanding of the historical and technological relationships behind cryptocurrencies, the study can help develop more effective strategies to manage the risks and opportunities associated with this emerging digital currency.

• Key Concepts

1. Introduction to cryptocurrency

A cryptocurrency is a digital asset or form of money that uses encryption to authenticate and secure transactions and is typically decentralized, meaning it is not controlled by any central authority, such as a government or bank. Transactions are recorded in a digital ledger using strong encryption, which ensures the integrity and authenticity of each transaction, governs coin generation, and verifies ownership transfers. Cryptocurrencies do not exist in the physical world and are only available online.

Each cryptocurrency functions as a public financial transaction database that utilizes distributed ledger technology, typically a blockchain when integrated with decentralized governance. If a cryptocurrency is minted or manufactured before release, or if it is issued by a single issuer, it is considered centralized. Currently, there are over a thousand different cryptocurrencies on the market, with Bitcoin being the first decentralized cryptocurrency released as open-source software in 2009.

Since then, numerous other cryptocurrencies have emerged.

2. History of Cryptocurrency

Cryptocurrency is a new phenomenon on the global stage. E-cash, an anonymous cryptographic electronic money, was invented by an American cryptographer named David Chaum in 1983.

He later used Digi cash, an early type of cryptographic electronic payment that needed user software to extract bank notes and select particular encrypted keys before delivering them to a destination. The digital currency could no longer be traced by the issuing bank, the government, or any other third party.

How to Make a Mint: the Cryptography of Anonymous Electronic Cash, a research paper describing a Cryptocurrency system, was first published in 1996 on an MIT email list and then in 1997 in The American Law Review.

Bitcoin, the first decentralized cryptocurrency, was founded in 2009 by Satoshi Takemoto, an allegedly pseudonymous inventor. Its proof-of-work technique included SHA-256, a cryptographic hash algorithm.

Let's get into the depth of Cryptocurrency. There are in total ten major types of Digital currency i.e. Cryptocurrency.

- Ethereum (E.T.H)
- Litecoin (L.T.C)
- Cardano (A.D.A)
- Polka.dot (D.O.T)
- Bit. coin Cash (B.C.H)
- Stellar. (X.L.M)

- Dogecoin. (D.O.G.E)
- Binance. Coin (B.N.B)
- Tether. (U.S.D.T)
- Monero. (X.M.R)

Ethereum

Ethereum (ETH), the first Bitcoin alternative on our list, is a decentralized software platform that allows contracts and decentralized apps (d-Apps) to be written and run without relying upon third-party downtime, fraud, control, or interference.

The goal of Ethereum is to build a decentralized financial services network that anybody in the world can use, regardless of nationality, ethnicity, or religious beliefs. This issue exacerbates the repercussions in some nations, as those without formal infrastructure or identification can obtain bank accounts, loans, insurance, and a variety of other financial services. Ethereum apps are powered by Ether, the platform's unique cryptographic token. Ether (ETH) is a cryptocurrency that may be used to send and receive payments on the Ethereum network. Developers who want to build and run apps on the platform, as well as investors who want to buy other digital currencies with ETH, use it the most. Ether, the second-largest digital currency by market capitalization after Bitcoin, was introduced in 2015, but it is still a distant second.

Litecoin

Litecoin (LTC), which initially appeared in 2011, was one of the first cryptocurrencies to follow in Bitcoin's footsteps, earning the nickname "the silver to Bitcoin's gold." Charlie Lee, an MIT graduate, and former Google developer, created it.

Litecoin is based on a source global Script that is used as a POW that can be decoded by consumer-grade central processing units in a decentralized payment network (CPUs). Litecoin is similar to Bitcoin in many aspects, however, it generates blocks faster, allowing for speedier transaction confirmation.

Cardano

Engineers, mathematicians, and cryptography professionals created Cardano (ADA), a research-based "Ouroboros proof-of-stake" cryptocurrency. Charles Hoskinson, one of Ethereum's five original founding members, was a co-founder of the project. After becoming disappointed with Ethereum's trajectory, he went on to help build Cardano.

Cardano's blockchain was established by the Cardano team after extensive testing and peer-reviewed research. The project's researchers have produced over 120 papers on blockchain technology, covering a wide range of issues. It is based on Cardano's findings. Cardano tends to stand out among its PoS counterparts as well as other major cryptocurrencies due to its stringent methodology. Since its blockchain is claimed to be capable of more, Cardano has been branded the "Ethereum killer." Cardano, on the other hand, is still in the development

stages. It has surpassed Ethereum in terms of PoS consensus, but it still has a long way to go in terms of DeFi applications.

Cardano aspires to become the world's financial operating system by building DeFi products akin to Ethereum's and offering solutions for chain interoperability, voter fraud, and legal contract tracing, among other things.

Polkadot

Polkadot (DOT) is a one-of-a-kind Proof-of-Stake cryptocurrency that attempts to make existing blockchains more interoperable. Its protocol integrates permission and non-permissioned blockchains, as well as oracles, allowing systems to work together in one place. Polkadot's relay chain is its most important component, as it allows multiple networks to connect. For some use cases, Para chains, or parallel blockchains with their native tokens are also an option.

Polkadot is different from Ethereum in that instead of merely generating d-Apps, developers can create their blockchain while still benefiting from Polkadot's network's security. Developers can utilize Ethereum to establish new blockchains, but they must develop their security mechanisms, which could expose new and smaller projects to attack, as the larger blockchain is, the more secure it is. Polkadot used the term "shared security" to describe this situation. Polkadot was founded by Gavin Wood, another of Ethereum's major creators who had opposing views on the project's future.

Bitcoin Cash

Bitcoin Cash is a hard fork of Bitcoin that was one of the first and most successful, with a long & illustrious history in the altcoin industry. The bitcoin industry has divided as a result of disagreements and disputes between developers and miners. Because digital currencies are decentralized, substantial changes to the code that underpins the token or coin in question require universal consent; the method for attaining this varies for every cryptocurrency.

When two organizations cannot agree, the digital currency is split, with the original chain remaining true to its original code and the new chain starting as a new version of the previous coin, replete with code changes. As a result of one of these splits, BCH was born in August 2017. The discussion that led to the formation of BCH was over scalability; the Bitcoin network's block size limit is 1 megabyte (MB). The block size of BCH has been increased from 1MB to 8MB, to allow larger blocks to accommodate more transactions and hence improve transaction speeds.

The Segregated Witness protocol, which affects block space, has been deactivated as well.

Stellar

Stellar (XLM) is an open blockchain network that links financial institutions to facilitate large-scale transactions and provide business solutions. Huge transactions between banks and investment firms that used

to take days involved several intermediaries, and cost a lot of money can now be performed virtually immediately and for a fraction of the cost.

Stellar is still a public blockchain that anybody can use, despite its advertising as an enterprise blockchain for institutional transactions. Any currency can be used in cross-border transactions using this method. The Lumen is Stellar's native currency (XLM). Users must have lumens to transact on the network. Jed McCaleb, a founding member of Ripple Labs and the architect of the Ripple protocol, launched Stellar. He and his co-founders founded the Stellar Development Foundation after leaving Ripple.

Dogecoin

Dogecoin (DOGE), dubbed the "first meme coin" by some, caused a sensation in 2021 when its price surged. The Dallas Mavericks, Kronos, and—perhaps most notably— SpaceX, Elon Musk's American aerospace company, all accept the currency, which has a Shiba Inu as its avatar. Billy Markus and Jackson Palmer, two software programmers, invented Dogecoin in 2013.

Binance Coin

Description Binance Coin (BNB) is a cryptocurrency that can be used to pay for Binance Exchange trading fees. It is the third-largest cryptocurrency in terms of market capitalization.

Those that pay for the exchange using the token can trade at a discounted rate.

Binance's decentralized exchange is likewise built on top of the Binance Coin blockchain. Changpeng Zhao founded the Binance Exchange, which is one of the most popular cryptocurrency exchanges in the world. Binance Coin was first issued on the Ethereum network as an ERC-20 token. It was given its mainnet after that. The network employs a PoS consensus model. On the 14th of March in the year 2022.

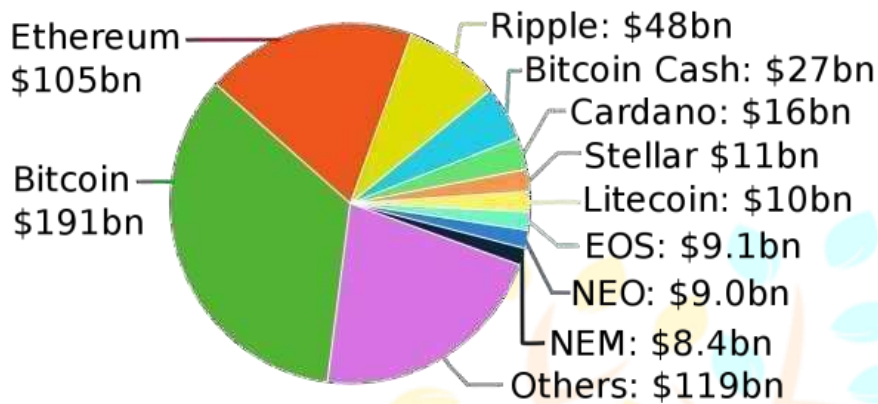
Tether

Tether (USDT) was one of the first and most widely used stablecoins, which attempt to By tying their market value to a currency or other external reference point, they can reduce volatility. Tether and other stable cryptocurrencies try to smooth out price variations to attract users who may be wary about digital currencies in general, particularly significant ones like Bitcoin, which have seen periods of extreme volatility. Tether's worth is inversely related to the US dollar's value. This method allows users to change funds from various cryptocurrencies to US dollars in a fraction of the time it takes to convert to regular cash.

Tether is a blockchain-enabled platform that simplifies the use of fiat currency in the digital world. It was launched in 2014 and bills itself as a "blockchain-enabled platform...to make it easier to digitally use fiat currency." This coin efficiently allows users to interact with traditional currencies while avoiding the volatility and complexity that digital currencies are known for.

Monero: Monero XMR is an untraceable, secure, and private cryptocurrency. This open-source coin was first released in April 2014, and it quickly gained popularity among cryptography enthusiasts. The development of this coin, which is entirely funded by donations, is driven by the community.

Monero was built with a strong emphasis on decentralization and scalability, and it uses a concept called "ring signatures" to provide complete privacy. With this method, a group of cryptographic signatures appears, at least one of which is genuine, but the genuine one cannot be identified because they all appear to be authentic. Monero has gained a shady reputation as a result of its extraordinary security systems, and it has been tied to illicit enterprises all over the world. Though Monero is a good candidate for anonymous illicit transactions, the secrecy it provides is also beneficial to dissidents in authoritarian countries around the world.



Source: https://en.wikipedia.org/wiki/List_of_cryptocurrencies#/media/File:Market_capitalizations_of_crypto_currencies.SVG

After examining the concept, history, and various types of cryptocurrencies, it is important to consider the potential impact of digitization on the world of money. The digital currency has already revolutionized payment systems and has enabled peer-to-peer exchanges of value previously not possible. These currencies are increasingly becoming important pillars of large, cross-border social and trading platforms that are transforming the way payments and user data interact. They have the potential to affect currency competitiveness, the international monetary system, and the function of government-issued public money.

The current digital revolution has the potential to bring significant changes to traditional currency exchange mechanisms. Instant peer-to-peer transfers are now possible using previously inaccessible digital currencies. Cryptocurrencies that cross national borders have the potential to transform the way payments and user data interact. Analysts predict that the global cryptocurrency market will triple in size and reach \$5 billion by 2030.

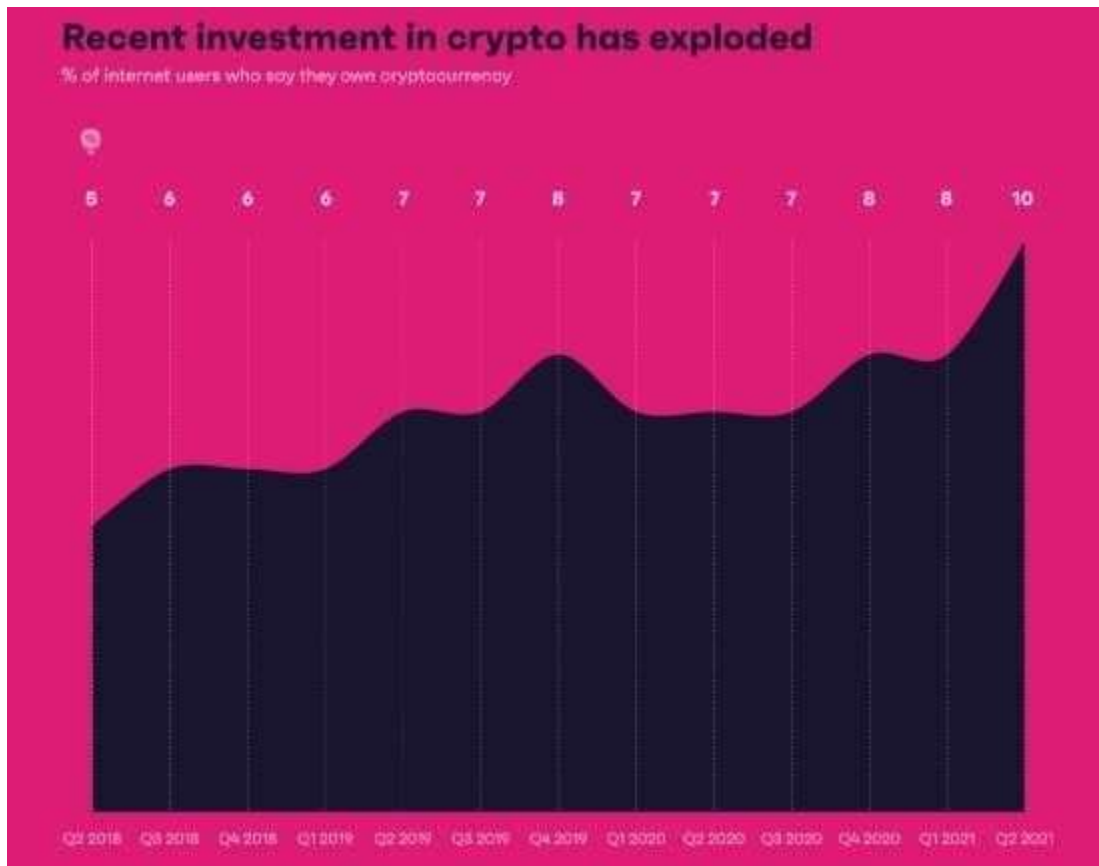
The rise of cryptocurrencies has attracted a diverse range of investors, including ordinary people who view this new asset class as an opportunity to supplement their portfolios with potentially more profitable, albeit riskier, assets. However, this rapid growth has also raised concerns about regulation, environmental impact, and other complexities that must be addressed to fully understand consumer sentiment and predict behavior regarding the uncertain future of cryptocurrencies.

In conclusion, while the world of money is rapidly digitizing, it remains to be seen if we are fully ready to embrace the potential of cryptocurrencies. As the market continues to evolve and grow, it is important to carefully consider the benefits and challenges associated with this innovative form of currency.

The contemporary investment in Cryptocurrency has accelerated: (fig.1.1)

According to the data presented, there has been a notable increase in the number of older customers investing in cryptocurrency, with consumers over 35 years old accounting for almost half (47 percent) of those planning to invest in Bitcoin in the next six months in the United States. For many of these existing and potential investors, cryptocurrency offers a new way to manage their finances, and they also appreciate the financial independence it provides compared to traditional banking.

While investors see many advantages to cryptocurrency, there are also concerns regarding its use. A significant proportion of people feel that the following are the most significant advantages and disadvantages of cryptocurrency.



IJNRD
Research Through Innovation

Investors see many benefits, but some have their worries

% who say the following are the biggest benefits/drawbacks of cryptocurrency



[cryptocurrency](#)

(Fig.2.2) Source: GWI Zeitgeist June 2021 | Base: 5,398 internet users aged 16 to 64 who have heard of cryptocurrencies previously across four markets, 626 of whom are currently investing in cryptocurrency and 963 of whom are considering it.

<https://www.gwi.com/connecting-the-dots/future-of-cryptocurrency>

Traditional finance is struggling to keep pace with the growing demand for cryptocurrencies, exemplified by the U.S. Bank's recent introduction of a bitcoin custody service that enables hedge funds to engage in digital currency trading. While increased institutional investment provides more opportunities for ordinary investors, it also places pressure on digital currencies to operate outside of traditional finance.

The influx of institutional capital into cryptocurrencies has started to alter the market's power structure over the past few years. Initially, consumers were drawn to cryptocurrency as a means of disrupting the aristocratic, institutionalized world of banking by creating a widely accessible method of moving money and paying for goods and services, regardless of personal circumstances. Unlike traditional banks, dealing in crypto did not even necessitate an address; all that was needed was an internet connection. The cryptocurrency was theoretically based on self-regulation by normal users, who secured and updated the transaction log - the blockchain

- allowing anyone with a computer to mine coins

However, as of 2021, the future of cryptocurrency looks very different. Bitcoin miners are no longer the sole beneficiaries of its success, nor are they the only ones mining it. Over time, a few businesses have encircled the mining network, providing the enormous amounts of processing power and electricity required to mine at scale, making it extremely difficult for individual users to participate. At the same time, the discovery that large corporate expenditures, such as one by Tesla, which caused the price of Bitcoin to rise 20% in a single day, put even more doubt on the market's democratic nature.

In addition to enterprises entering the market, crypto trading and mining have piqued the interest of government regulators like never before. Governments have done very little to regulate or manage the Bitcoin market since its inception compared to established investment categories. For the most part, cryptocurrency has been allowed to spread around the world as a decentralized financial asset.

Despite its meteoric rise in recent years, cryptocurrency remains volatile, both in terms of price and public perception. This is a moment of contradictions to navigate for the typical investor, government authorities, and those working to make crypto greener. If there's one thing we can be sure of, it's that the market in 5 years will be unrecognizable to us as it is now.

One of the biggest risks associated with the increased use of digital money is payment fraud. Payment fraud can take many different forms and generally refers to any illegal or unauthorized transactions carried out by a cybercriminal. Among the most common types of payment fraud are fraudulent payments, payments made illegally, internal manipulation, data theft, embargoes, and sanctions violations. Since money is not physically moved, it is impossible to determine who is on the other side of a transaction. This allows fraudsters to obtain access to sensitive information or defraud consumers using digital currency.

Although payment security has improved, the sophistication with which attackers conduct fraud has increased as well. Payments fraud is still on the rise and shows no signs of slowing down. Cybercriminals are becoming more devious than ever before, always discovering new flaws and developing new ways to manipulate digital currency. Scammers are relentless in their attempts to hack into payment systems. If a certain method presents difficulties, they will simply pivot and move their focus to alternate payment ways. While the potential benefits of digital currency are enormous, it is essential to be aware of the risks and take appropriate measures to protect oneself against fraud.

Digital currency is gaining popularity among people and businesses worldwide due to its numerous advantages over traditional fiat cash. Below, we have listed seven essential benefits of digital currency over cash, including:

Security

Digital currency transactions are irreversible once authorized, providing excellent protection against fraud compared to fiat currencies, which are less secure due to personal information requirements and chargebacks. Blockchain technology empowers digital currencies, making them hard to forge or duplicate.

Decentralized and autonomous

Digital currencies are not controlled by a central authority, providing more control over how money is managed compared to fiat currencies. You have direct, instant access to your digital currency wallet, just like the one in your pocket. This eliminates the hoops you have to jump through to transfer fiat currency from one bank to another.

Fast online payment methods

Digital currency payments are not only simple to make online via mobile devices, but they also work the same way regardless of the amount or distance, unlike fiat currencies, which can take days or weeks to process.

Peer-to-peer transactions

Digital currencies are peer-to-peer, eliminating the need for third parties to handle transactions.

Minimal fees

Digital currency fees are peer-to-peer, eliminating the need for middleman entities to enable transactions, saving money on costs compared to transferring fiat currencies.

Discrete and confidential

Digital currency transactions are not recorded and managed by third parties like credit reporting agencies, banks, collectors, and marketers as with fiat currency, providing increased privacy.

Safer for merchants

Digital currency transactions are validated in seconds, providing increased security for merchants and fewer bounced checks and attempted chargebacks. More retailers are incorporating digital currency into their operations, recognizing it as the future of commerce.

3. Favoritism and Criticism of Cryptocurrency

Favoritism

In light of Standard Chartered's recent study on cryptocurrency, which predicts a bright future for Ethereum, it is worth exploring why BTC's long-standing favoritism is gradually shifting towards ETH. BTC has been regarded as the only viable asset and the only one deserving of capital allocation since the emergence of Digital Assets (DA) in Traditional Finance. This is due to several reasons:

Firstly, Bitcoin was the first cryptocurrency and digital asset, giving it a long history and more market data to analyze. Therefore, it is considered more reliable than many other cryptocurrencies and has weathered more "crypto winters" and crashes than any other DA. Despite the price fluctuations, the industry is considered very stable, which is crucial according to Nassim Taleb's "Lindy Effect."

Secondly, BTC was created as a response to the 2008 financial crash and the irresponsible behavior of "too big to fail" banks and institutions, the debt-creating system of fractional reserve banking, quantitative easing, and the revolving door between regulation and politics. This led to widespread distrust in the system, leaving taxpayers worse off than before. Bitcoin was designed to be the polar opposite of this - a peer-to-peer network with no single point of failure or intermediary, where the asset being traded is cryptographically secure and hard-capped at 21 million BTC, making it digitally rare and deflationary.

Lastly, Bitcoin maximalists have always believed that Bitcoin is the only blockchain that will survive due to the use case mentioned above. This group has opposed more forward-thinking contributors who wanted to build on the foundations of blockchain technology to create a more transparent and efficient internet.

Bitcoin has preserved a clear and easy-to-understand goal by sticking to Satoshi's original vision, making it easier to buy into the mission. In contrast, Ethereum has struggled to define its mission even for some of its creators. Bitcoin has remained unchanged on purpose, as the network's key developers and contributors selected to preserve the network true to Satoshi Nakamoto's initial concept.

Criticism

The mainstream adoption of cryptocurrency, specifically Bitcoin, has been a challenge despite its existence for over a decade. Michael Falk, an author of *Get to Work for Our Future*, provides an insightful assessment of the challenges that remain in the recent CFA Institute publication "Crypto Dreamin'? The Good, the Bad, and the Ugly."

Governments view cryptocurrencies as a threat as they can potentially render income tax obsolete. The idea of the "social compact" is ingrained in most people, and restricted or privatized governance is not appealing to the majority. Cryptocurrencies are not democratic as there are dominant actors in mining, ownership, and trades.

There is no one-person, one-vote system. Despite being decentralized in many ways, cryptocurrencies lack democratic checks, which is a concern for many.

Bitcoin transactions are not entirely secure, and privacy is not guaranteed by default. Control-freak governments and credit card companies are pushing people towards digital transactions for profit, taxation, and monitoring. Advocates for privacy should focus on altcoins like Monero and Dash.

Usability is crucial for adoption. Price volatility and transaction fees might benefit speculators and exchanges, but prospective users might avoid cryptocurrencies that are too complex or inconvenient. Cryptocurrencies are more popular in countries like Argentina and Venezuela because of hyperinflation and currency instability. Fear of failure is a barrier for many potential cryptocurrency users. Despite efforts to improve security, exchanges are still prone to vulnerabilities. Customers often outsource cryptocurrency storage to exchanges, which provides easy access to the traditional financial sector but also exposes them to risks.

It's worth noting that some of the concerns highlighted by Falk and other critics of cryptocurrency are not unique to the industry. Traditional financial systems have their own set of issues, such as inflation, corruption, and centralization. Cryptocurrencies offer an alternative, and while they are not perfect, they have the potential to address some of the shortcomings of traditional finance.

CHAPTER 2

LITERATURE REVIEW

Although I acknowledge the potential risks of digitization, my research aims to demonstrate the benefits of cryptocurrency and digital finance. From my perspective, governments should consider implementing monetary digitization to foster economic growth, as previous instances of countries embracing crypto networks have resulted in benefits such as innovation, investment, job creation, and increased tax revenue. The adoption of Bitcoin as a digital asset can bring about two commercial advantages: access to new markets and improved treasury management.

Furthermore, the bitcoin industry's response to legislation and regulation indicates that it is not a completely decentralized system solely reliant on blockchain technology.

During my research, I reviewed several articles on this topic.

S.No.	Name of the Article	Author	References
1.	What is Cryptocurrency- Forbes	Kate Ashford & John Schmidt	https://www.forbes.com/advisor/investing/what-is-cryptocurrency/
2.	Examining the interrelatedness of NFTs, DeFi tokens, and Cryptocurrency	Sitara Karim	https://www.researchgate.net/publication/356466926_Examining_the_Interrelatedness_of_NFTs_DeFi_Tokens_and_Cryptocurrencies
3.	What Is Cryptocurrency? Here's What Investors Should Know	Kevin Voight, Andy Rosen	https://www.nerdwallet.com/article/investing/cryptocurrency
4.	A New Era of Digital Money	Tobias Adrian and Tomaso Mancinigriffoli	https://www.imf.org/external/pubs/ft/fandd/2021/06/online/d/digital-money-new-era-Adrian-mancini-griffoli.htm
5.	Three ways digital currencies could change global trend	Yan Xiao and Ziyang Fan	https://www.weforum.org/digital-international-trade/

Article 01: What is Cryptocurrency? - By Kate Ashford & John Schmidt

Cryptocurrency refers to a type of decentralized digital currency that operates through blockchain technology. While Bitcoin and Ethereum are the most well-known examples, there are currently over 5,000 different cryptocurrencies in circulation. Cryptocurrencies can be purchased in the same manner as stocks or precious metals and can also be used to purchase everyday goods and services. Peer-to-peer networks and cryptocurrency exchanges are two common methods for buying cryptocurrencies. However, it is important to note that investing in cryptocurrency can be a high-risk endeavor due to its susceptibility to significant price fluctuations. The process of mining involves releasing new units of Bitcoin into circulation in exchange for confirming transactions. The majority of cryptocurrencies employ either proof of work or proof of stake mechanisms to verify transactions.

Article 02: Examining the interrelatedness of NFTs, DeFi tokens and Cryptocurrency- By Sitara Karim

According to their analysis, NFTs have become distinct from other markets. To investigate diversification opportunities among blockchain markets during periods of the medium, extremely low, and extremely high volatility, this study employs Ando et al.'s (2018) quantile connectedness approach. By identifying the most effective diversification options among blockchain assets for mitigating the risk associated with highly volatile digital assets, this study contributes to the existing literature. Moreover, this study offers valuable strategies to investors, portfolio managers, and policymakers, such as risk absorption and safeguarding investments against extreme market events.

Article 03: What Is Cryptocurrency? Here's What Investors Should Know-By Kevin Voigt and Andy Rosen

A cryptocurrency, also known as "crypto," is a digital asset that can be traded without the need for intervention from a central monetary authority like a bank or government. Cryptography techniques are used to create cryptocurrencies, ensuring the secure buying, selling, and exchanging of these digital assets. Bitcoin and many other cryptocurrencies rely on blockchain technology, which records transactions in a tamper-resistant manner and tracks the ownership of assets. Blockchain technology has resolved the issue that had previously hindered the development of exclusively digital currencies, as users are now unable to duplicate their holdings and spend them twice.

Cryptocurrency units can take the form of coins or tokens, depending on their intended use, with some designed for trading purposes.

Article 04: A New Era of Digital Money- By Tobias Adrian and Tommaso Mancini Griffoli

Extensive and affordable access to digital money and mobile transactions could benefit approximately 1.7 billion people who do not have access to traditional banking services. Shortly, businesses could transfer their employees' paychecks into digital wallets, enabling them to send money to their families in other countries at a lower cost and with greater efficiency. The World Bank reports that wiring fees can reach up to 7% of the transaction's value, and reducing them to 2% could increase remittances to low-income countries by \$16 billion annually.

Article 05: Three ways digital currencies could change global trade- By Yan Xiao and Ziyang Fan

To fully realize the potential of payment technology advancements, it is necessary to embrace trade digitization. Currently, the digital currency market is valued at over \$2 trillion and comprises more than 15,000 different types. Digital currencies could provide alternative credit information for trade finance, which could help close the \$1.7 trillion global trade financing gap that disproportionately affects small and medium-sized enterprises

(SMEs) without strong financial records with banks. Moreover, digital currencies could potentially help to address de-risking issues. De-risking poses challenges to global trade participation for countries with significant anti-money laundering (AML) and counter-terrorism financing (CTF) risks, which can lead to increased transaction costs for buyers and sellers in certain countries. While digital currencies are unlikely to help with AML and CTF issues, they can provide alternative payment methods that facilitate connections between consumers and businesses in high-risk nations with buyers and sellers in other countries.

CHAPTER 3

RESEARCH METHODOLOGY

• Approach

In this research inquiry, both primary and secondary data sources were used to gather information. Primary data was obtained through various approaches such as interviews, surveys, and experiments, and was considered the most valuable type of information for research as it is collected directly from the source. The data collection strategy was determined by the research's purpose and target audience.

For instance, in the case of a market survey, the purpose and sample population must be decided ahead of time to determine the best data collection approach. Primary data can be quantitative or qualitative, such as charts, graphs, diagrams, tables, or transcripts of participants' conversations. It is essential to scrutinize the data's organization and format to draw valid conclusions.

In this study, a questionnaire was used as the primary source of data to examine consumers' tastes and preferences regarding cryptocurrencies and digitization. The survey was distributed to students, businesspeople, and homes, and the age group between 18 and 21 years old generated the most answers.

Secondary data was also utilized in this research, which refers to information that has been derived from primary sources and is previously collected. It is primarily used to increase the sampling size and improve the efficiency and speed of an existing document. Secondary data comes from various sources, including the government, public departments, libraries, and census data.

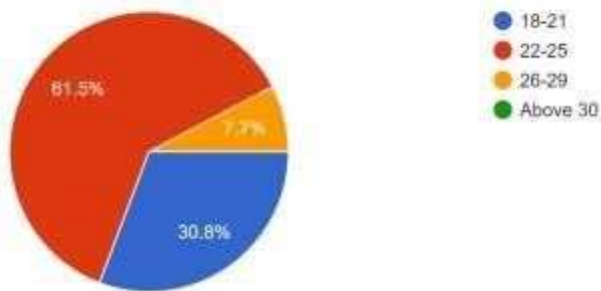
• Data Analysis and Interpretation

In the form of pie charts and tables, some given data, its analysis, and interpretation are presented.

The total number of responses I got was 39.

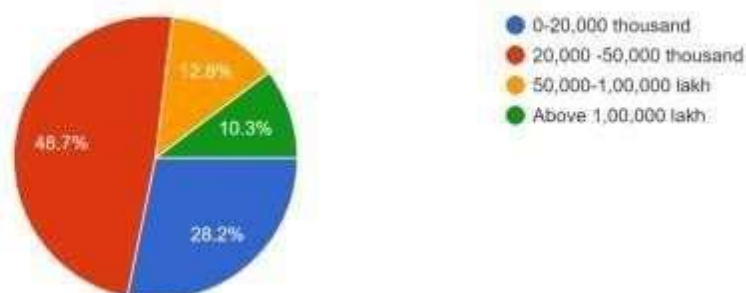
Age Group?

39 responses



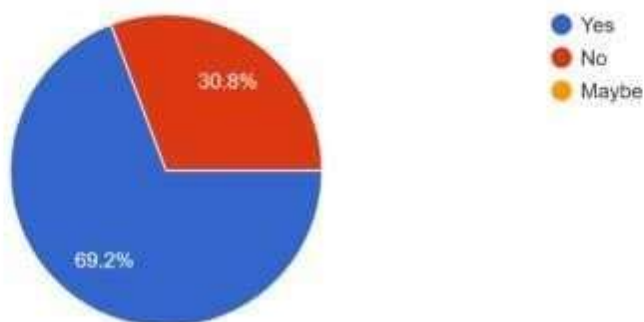
What is your Income level?

39 responses



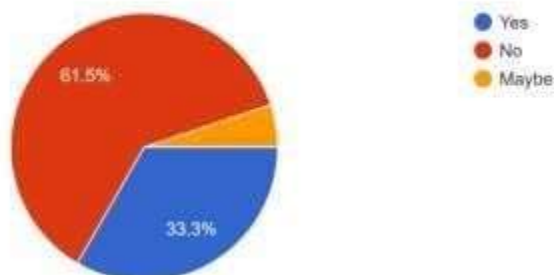
Have you heard about or read about Cryptocurrencies such as Bitcoin and Ethereum?

39 responses



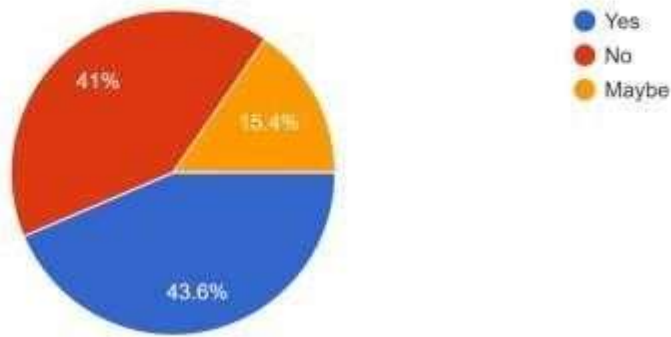
Do you own Cryptocurrency?

39 responses



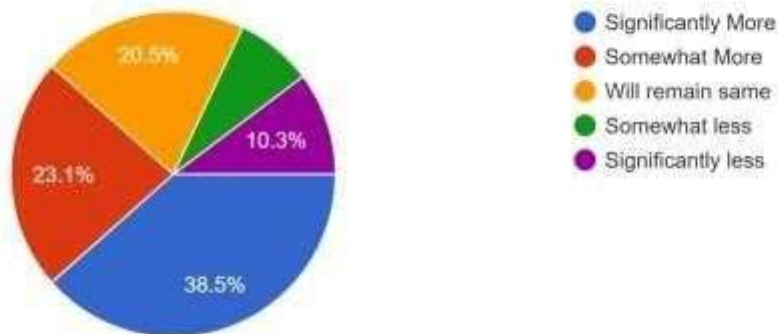
Are you going to invest in Cryptocurrency this year?

39 responses



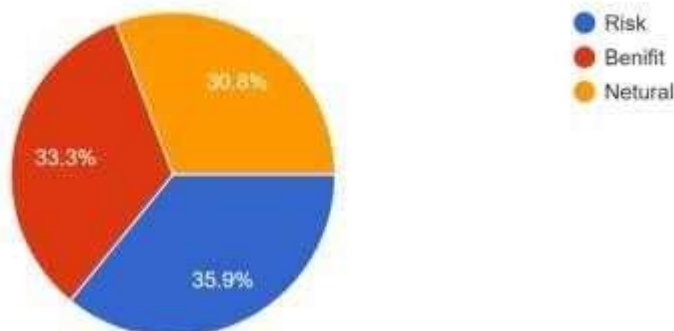
In the coming five years, do you think that cryptocurrency will mean more or less than it is today?

39 responses



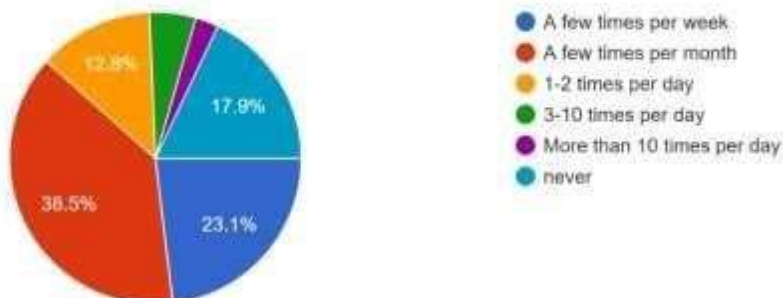
Do you think of cryptocurrency or digital money transferring as a risk or benefit?

39 responses



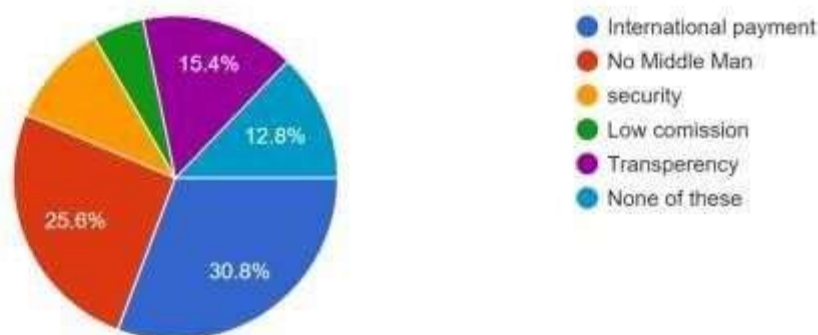
How often do you check the price of your cryptocurrencies?

39 responses



What are the main advantages of cryptocurrencies in your opinion?

39 responses



The analysis of the responses received from the Google Form survey shows that most of the participants fall within the age group of 22-25 years old, indicating a significant interest in cryptocurrencies among young adults. Moreover, the responses suggest that people from all income ranges have participated, with individuals earning between 20,000-50,000 being the majority. The survey also shows that 69.2% of the participants have a good understanding of cryptocurrencies, indicating that people are making efforts to educate themselves about this emerging technology. However, despite their knowledge, only 33.3% of the participants actually own cryptocurrencies, suggesting that some may be skeptical about investing in them.

Furthermore, the survey reveals that people are interested in investing in cryptocurrencies, but some are still confused about whether they should do so. Many participants believe that the worth of cryptocurrencies will increase in the coming years, but some may perceive digital money transferring as more of a risk than a benefit due to a lack of proper knowledge and understanding.

The survey also shows that people are regularly checking the price of cryptocurrencies, indicating that they are interested in the market trends. This suggests that more awareness and education about cryptocurrencies are needed to address any skepticism or negative opinions towards them. Finally, the survey reveals that most participants believe the main advantage of cryptocurrency is international payment, indicating that they see practical uses for this technology.

In conclusion, the survey responses suggest a significant interest in cryptocurrencies among young adults from various income groups. However, there may be skepticism and confusion about investing in them, and more awareness and education may be needed to address these concerns. Additionally, participants believe that the main advantage of cryptocurrencies is in facilitating international payments, suggesting that this technology has practical uses beyond just investment.

CHAPTER 4

FINDINGS

After analyzing the survey results, it is clear that a significant portion of our population, particularly those in the age group of 22-25 and 18-21, have knowledge about digital money and are interested in investing in cryptocurrency. This trend is consistent with India's status as the country with the most crypto owners in the world, with over 10 crore individuals owning cryptocurrencies. The survey also found that 69.2% of respondents had some knowledge of cryptocurrency. Overall, the survey responses suggest a complex landscape of opinions and beliefs towards cryptocurrencies, with a need for more education and awareness to address skepticism and uncertainty.

According to financial experts, the global blockchain market is expected to grow to \$39.17 billion by 2025, and the value of the global cryptocurrency industry is predicted to triple by \$5 billion by 2030. As such, investors, businesses, and brands will not be able to ignore the increasing popularity of cryptocurrencies for long.

Bitcoin, the most valuable cryptocurrency in terms of market capitalization, is an excellent predictor of the crypto market in general. In 2021, its price experienced substantial fluctuations, hitting a new all-time high of \$68,000 in November, following prior highs of over \$60,000 in April and October. It is recommended that individuals restrict their cryptocurrency investments to less than 5% of their total portfolio due to the volatility of the market.

Cryptocurrencies are becoming more popular and mainstream, with greater institutional buy-in and interest from governments around the world. As such, individuals and businesses need to stay informed and up-to-date on the latest developments in this rapidly evolving field.

CHAPTER 5

CHALLENGES

Cryptocurrency has long been hailed as the future of finance, and in 2020, traditionally cautious and risk-averse institutions finally joined this complex alternative asset class. The two most well-known cryptocurrencies, Bitcoin (BTC) and Ethereum (ETH) have experienced significant price fluctuations over the past year, drawing a lot of attention. However, as the number and variety of digital currencies continue to grow, risk management is no longer just for the "big boys." In 2018, there were over 1,500 cryptocurrencies, but now there are over 4,500.

Risk managers often compare financial products and cryptocurrencies when evaluating how to manage cryptocurrency risks. However, dealing with cryptocurrency requires awareness of at least seven distinct issues.

- The first issue is diversity, as the confusing array of cryptocurrencies differs in a variety of ways.

- The second issue is valuation difficulties, as the valuation method may not hold up to rigorous scrutiny and may have inconsistencies.
- The third issue is regulatory and legal dilemmas, as cryptocurrencies are unregulated and lack the same legal protection as traded financial instruments.
- The fourth issue is data and modeling obstacles, as a lack of transaction data makes analyzing the factors that drive Bitcoin risk and returns problematic.
- The fifth issue is illiquidity and trading costs, as limited liquidity and extreme volatility continue to plague cryptocurrency markets.
- The sixth issue is custody, clearing, and settlement problems, as custodial solutions must incorporate multi-layered security measures.
- The seventh issue is the risk associated with cryptocurrency derivatives, which are typically used to expand exposure rather than mitigate risk. Cryptocurrency derivatives are frequently used for price bets and are typically exchange-the-difference contracts, also known as contracts-for-differences.

Institutional interest in cryptocurrencies is dependent on continuing advances in prime brokerage and institutional-grade custodial solutions, as well as more regulatory certainty. Cryptocurrency markets are less liquid and more expensive than regular markets, making effective price discovery a difficult task. Risk managers must be aware of the various aspects of different cryptocurrencies when measuring, regulating, and monitoring risks.

CHAPTER 6

CONCLUSION

The rise of cryptocurrencies has been a game-changer in the global financial system. Cryptocurrencies are a digital form of currency that can be exchanged without the need for intermediaries such as banks or financial institutions. The most well-known cryptocurrency, Bitcoin, was created in 2009 and has since gained tremendous popularity. However, cryptocurrency prices are known to be volatile, and trading them has a significant level of risk.

Despite the risks associated with trading cryptocurrencies, many speculators have been following their progress. This is because cryptocurrencies are compact and convenient to transport, making them an ideal choice for international transactions. However, for cryptocurrencies to be used on a larger scale, they must establish the necessary level of confidence.

Cryptocurrencies' growth may be hampered if they do not attain this degree of trust.

It is important to note that cryptocurrencies are still in the early stages of development. It is unknown when they will be ready to trade on international exchanges. However, several cryptocurrencies have already gained significant attention. Some countries have even begun issuing their digital currencies, which may serve as a foundation for future developments in the cryptocurrency world.

Bitcoin, in particular, has been the subject of much debate. Despite its shortcomings, such as its volatile price and limited transaction capacity, Bitcoin is still regarded as a technological marvel. It has provided a monetary option to underprivileged countries and paved the way for economic success. Individuals will have additional options for managing their finances as a result.

As cryptocurrencies continue to gain popularity, they may serve as a basis for the development of other cryptocurrencies. Bitcoin, for example, may inspire other digital currencies to adopt similar features or improve upon its shortcomings. However, regardless of whether Bitcoin sees significant changes, cryptocurrency is expected to enter the financial scene and have a long-term impact on the global financial environment.

One potential benefit of cryptocurrencies is that they provide a decentralized alternative to traditional financial systems. This means that they are not controlled by a central authority, such as a government or financial institution. Instead, transactions are verified by a network of users, making them more transparent and secure.

However, the decentralized nature of cryptocurrencies has also led to concerns about their use in illegal activities, such as money laundering and terrorism financing. Regulators are therefore seeking to develop policies and regulations to ensure that cryptocurrencies are used responsibly and do not pose a threat to the financial system.

In conclusion, cryptocurrencies have the potential to revolutionize the global financial system. They provide a decentralized alternative to traditional financial systems, which may increase transparency and security. However, their volatile prices and the risks associated with trading them may limit their adoption on a larger scale. As cryptocurrencies continue to evolve, regulators need to develop policies and regulations to ensure their responsible use.

CHAPTER 7

RECOMMENDATIONS

The rise of cryptocurrencies has indeed been a game-changer in the global financial system, and it is clear that they have the potential to revolutionize the way we conduct financial transactions. However, as you have

correctly noted, there are risks associated with trading cryptocurrencies, and caution must be exercised by anyone who chooses to invest in them.

That being said, I would recommend that individuals who are interested in cryptocurrencies should do their research and fully understand the risks involved before investing any funds. It's important to keep in mind that the cryptocurrency market is highly volatile and can be affected by a wide range of factors, including market sentiment, regulation, and technological advancements.

Additionally, I would recommend that investors consider diversifying their portfolios and not putting all of their investment capital into cryptocurrencies. While cryptocurrencies may have the potential for significant gains, they are also subject to significant fluctuations in value, which can result in large losses.

Finally, I would urge regulators to continue developing policies and regulations to ensure that cryptocurrencies are used responsibly and do not pose a threat to the financial system. As cryptocurrencies continue to evolve, it will be essential to strike a balance between promoting innovation and protecting investors and the wider public.

CHAPTER 8

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