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BLOCKCHAIN & CRYPTOCURRENCY

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ABSTRACT

The document's acknowledgment of the emerging phenomenon of cryptocurrencies. The increase in the value of cryptocurrencies available in the market and the increasing recognition in the arena are opening up some demanding situations and concerns for businesses and the business economy. The studies were carried out through the description of the technique, the evaluation of the literature and the research carried out. This article discusses the main developments in academic studies related to the current cryptocurrency scenario, a brief overview of cryptocurrency, cryptocurrencies across market capitalization, cryptocurrency trends in Asia, Cryptocurrency in India, Cryptocurrency Exchanges, cryptocurrency rules internationally. Cryptocurrency inside the surroundings, and Cryptocurrency Security. The dossier also covers the responses of governments and imperative banks to this phenomenon and the modern nation's legal definitions of cryptocurrencies in the chosen countries.

Keywords: Cryptocurrency, Bitcoin, Ethereum, Ripple, Virtual Currency, Blockchain, Cybersecurity, Blockchain Wallets, Distributed Ledger.

INTRODUCTION

As a growing decentralized structure and distributed computing paradigm underlying Bitcoin and different cryptocurrencies, blockchain has attracted attention in every study and application in recent years. Cryptocurrencies have transpired as one of the trending economic software structures. (Raju, 2018) Cryptocurrencies and their entire technical infrastructure are still sort of unknown to most people Cryptocurrency refers to a form of virtual asset that uses disbursed ledger, or blockchain, generation to permit a comfy transaction. [3] Blockchain, the center concept or the electricity behind the fulfillment of Bitcoin is one of the maximum trending and not unusual subjects for virtual forex in recent times.

Blockchain offers a number of features such as decentralization, verifiable record keeping,

persistent garage, performance, and security. Blockchain and its use are not best restricted to cryptocurrency however in numerous different fields as well. [1]

LITERATURE REVIEW

At the center of the economic common sense of cryptocurrencies lies the hassle of surmounting the double-spending hassle, which poses accounting and duty challenges that effective cryptocurrencies have sought to conquer. This discussion paper evaluates the salient literature to be able to better inform academic and practitioner inquiries on the double-spending issues in cryptocurrencies.

The U.S. Has approximately 1,600 cryptocurrencies. No cryptocurrency is certified as being known as silver due to the fact that none have been specified via the United States. Government as being felony tender. Cryptocurrencies are called virtual currencies because they possess some of the traits of cash. In this text, three issues related to cryptocurrencies are analyzed. First, bitcoins are considered, because they are the primary cryptocurrency. Secondly, an assessment of the processes by which the Federal Reserve and Sweden's main financial institution are evaluating the possibility of issuing some new forms of electronic forex, which are no longer but fully described. Third, an examination of the viability of blockchain, which has become an internal aspect of bitcoin, as a successful autonomous technology.

this paper is prompted by using a speculation that the lengthy-time period value of a cryptocurrency is determined with the aid of its future use as cash. For a cryptocurrency to be used as a medium of price, it has to fulfill three impartial functions: medium of change, a unit of account, and store of value. Currently, cryptocurrencies are held for funding purposes in place of being used for transactions and for that reason as a medium of change. For cryptocurrency to emerge as extensively adopted as a method of price, it first needs to go through a very volatile duration due to the fact speculative investors see long-run destiny cost within the cryptocurrency.[6] Cryptocurrencies, along with Bitcoin, were an essential component in some monetary activities. For example, Bitcoin is the primary payment approach for ransomware attackers and retailers on the Darknet. So, it is beneficial to understand the functions of cryptocurrencies and their monetary implications. In this studies, we use bitcoin, Ether, and XRP, the three cryptocurrencies with the highest marketplace values as of this writing, in addition to Libra, that is impending and topical, as examples to investigate their functions. Specifically, we argue that these cryptocurrencies are basically extraordinary due to variations in the following elements: the identity management of their ledger writers, their consensus algorithms, and their coin supply. We discuss how these elements determine cryptocurrency performance, which include safety, privacy, and economic influence.

We also talk capacity studies subjects round those cryptocurrencies that can be still open. this paper researches the position of technological complication in original Coin Offering(ICO) successes and valuations. Using different system learning ways, we construct technology indicators from ICO whitepapers to seize technological sophistication for all cryptocurrencies. We discover that cryptocurrencies with high technology indicators are more likely to succeed and less likely to be excluded eventually. also, the period indicators explosively and really are awaiting the lengthy-run performances of the ICOs. Overall, the goods propose that technological complication is an essential determinant of cryptocurrency valuations.(12) A popular form of Govt. Is constantly defined as “ by using the Public, for the Public and to the Public. ” The primary specific of a government is to supply public services to its citizens for which it calls for means to finance its expenditure. Among others, taxation works as a primary force to fund public expenditure. Developments and Advancements in technologies, has enabled the Govt. To perceive new ways and opened new systems to collect levies. Among them, comes the curious state of affairs of taxation of Cryptocurrency. Unlike the edict foreign plutocrat, Cryptocurrencies are decentralized, counting on a peer- to- peer community that operates with none third- festivity intervention just like the Central Bank. 25) the effect of the creation of cryptocurrencies in all husbandry is bandied right then. The benefits of the operation of cryptocurrencies as well as the downsides of conventional digital payments are included. Cryptocurrency pretensions to revise the virtual bills business; but, it does supply upward push to numerous questions as to its figure, trust ability, and fortune opposition amongst the cryptocurrencies as nicely. In this paper, I try to answer the simple questions springing up because of the preface of cryptocurrencies, in addition to the profitable troubles it offers.(6) Using specific records from a medium- sized cryptocurrency trade in Asia, we establish 10 data about cryptocurrency exchanges and cryptocurrency buying and selling. 1) individualities keep cryptocurrency

portfolios of a small cost, 2) they trade veritably many cryptocurrencies, 3) their trading patterns are veritably concentrated, and 4) their buying and dealing horizon may be veritably short. Five) Cryptocurrency characteristics explain how a lot they're traded and the way long they're held in buyers' portfolios. 6) utmost of the trades do between individual investors and institutional investors and business makers play a minor function within the exchange. 7) It's hard to standard portfolio returns because buyers' portfolios aren't different sufficient, still eight) institutional buyers don't outperform person investors. 9) Individual buyers make duly buying and dealing opinions; within the sense that the cryptocurrencies they buy outperform those they vend. 10) The same is not genuine for institutional dealers.

OBJECTIVES OF THE STUDY

To understand the conception of cryptocurrency, To study the advantages and downsides of cryptocurrency To dissect the legal status, challenges and openings of cryptocurrency.

RESEARCH METHODOLOGY

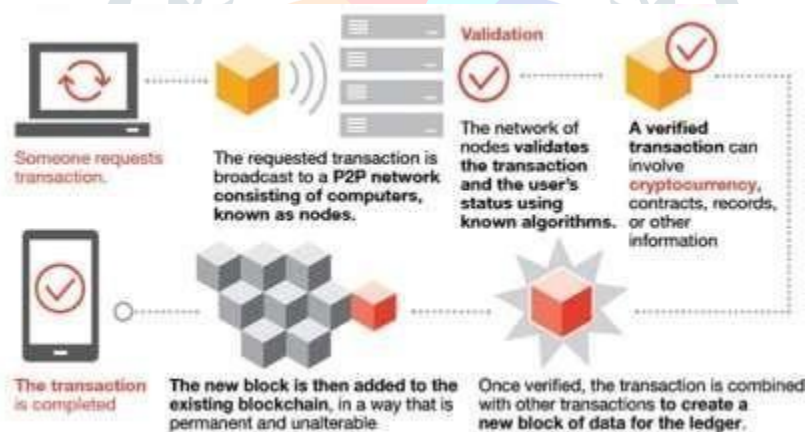
This paper uses the handiest secondary data that has been accumulated from Web of Science Core Collection(WOS), Science Citation Index Expanded(SCI- EXPANDED), Social Iores Citation Index(SSCI), Arising Sources Citation Index(ESCI) and pertaining to colorful sources similar as review papers, websites, finance reports and World Bank report.

CRYPTO CURRENCY: A BRIEF OVERVIEW

Blockchain

The blockchain is the decentralized distributed tally machine used to report statistics deals throughout a multiple computers. In other expressions, it's long hauls an translated chain of data held over a distributed network with an incommutable timestamp. It won recognition due to its capability to keep any virtual asset or sale no matter the enterprise.

Figure 1: Blockchain Works



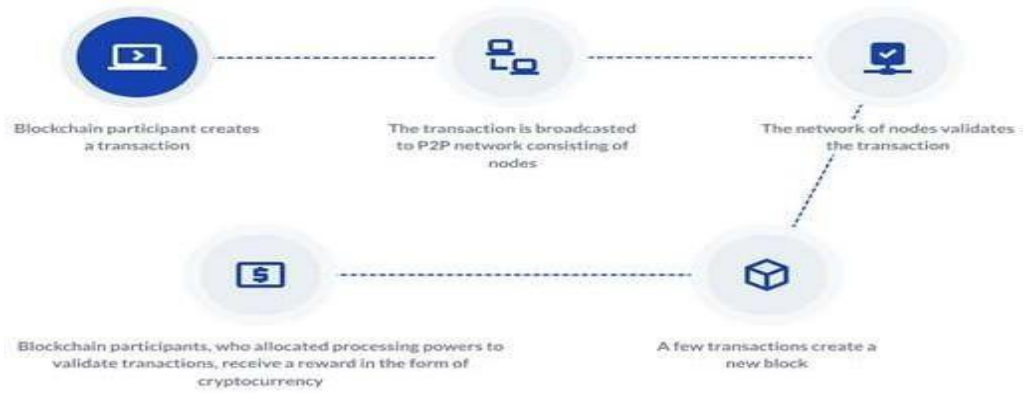
Source: <https://themarketblogs.wordpress.com/>

Cryptocurrency

Cryptocurrency is decentralized digital cash, based on blockchain technology. You may be familiar with the most popular versions, Bitcoin and Ethereum, but there are greater than 5,000 different cryptocurrencies in movement, in keeping with Coin Lore. You can use crypto to

shop for ordinary goods and services, although many humans put money into cryptocurrencies as they could in different belongings, like shares or precious metals. While cryptocurrency is a singular and interesting asset elegance, buying it may be volatile as you must take on an honest amount of studies to absolutely recognize how every system works

Figure 2: Cryptocurrency Works



Source: <https://mlsdev.com>

Cryptocurrency is a critical part of the blockchain. Distributed tally period is erected at the agreement algorithms regulating the arrival of new blocks. All actors in the P2P community ought to take delivery of a block for it to be registered within the blockchain. There are multitudinous forms of agreement with PoW (evidence-of-work), PoS (evidence-of-stake), DPoS (delegated evidence-of-stake), and PoA (evidence-of-authority) a many of the maximum popular.

Types of Cryptocurrencies

There are three big types of cryptocurrencies- Bitcoin, altcoins, and commemoratives. Bitcoin is tone-explicatory- it's the crypto coin that everyone generally talks about. Altcoins are generally derivations of Bitcoin, but there are lots of standalone coins, too. Eventually, commemoratives are astronomically speaking used for dApps.[26]

Figure 3: The Evolution of Cryptocurrency



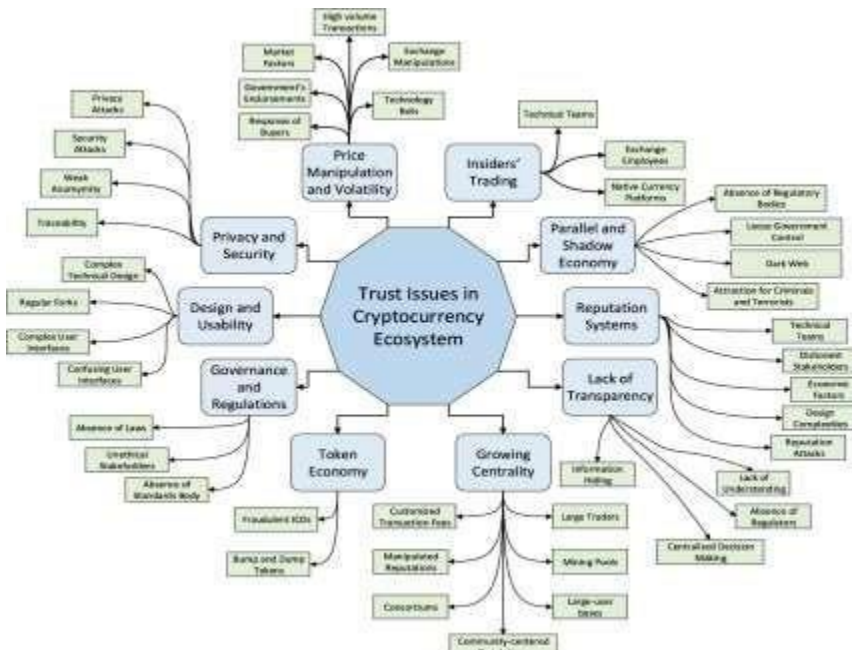
Source: <https://www.dreamstime.com/>

Cryptocurrency Ecosystem

The current growth inside the blockchain-based cryptocurrency environment has been attracting researchers, developers, investors, regulators, and speculators to expand new economic and enterprise models for change, funding, and taxation. Currently, the cryptocurrency

atmosphere is immature with multifaceted agree with issues in any respect degrees from technology providers to customers and governments.

Figure 4: Cryptocurrency Ecosystem



Source: <https://www.semanticscholar.org>

BEST CRYPTOCURRENCIES BY MARKET CAPITALIZATION

capitalization as tracked through Coin Market Cap, a cryptocurrency statistics, and analytics issuer

These are the 10 biggest trading cryptocurrencies by using business

Table 1: Cryptocurrencies by Market Capitalization

Cryptocurrency	Market Capitalization
Bitcoin	\$608.6 billion
Ethereum	\$240.4 billion
Tether	\$61.8 billion
Binance Coin	\$48.6 billion
Cardano	\$37.6 billion
XRP	\$27.4 billion
USD Coin	\$26.9 billion

Dogecoin	\$24.9 billion
Polkadot	\$12.5 billion
Binance USD	\$11.5 billion

Source: <https://www.nerdwallet.com/>

Data current as of July 23, 2021.

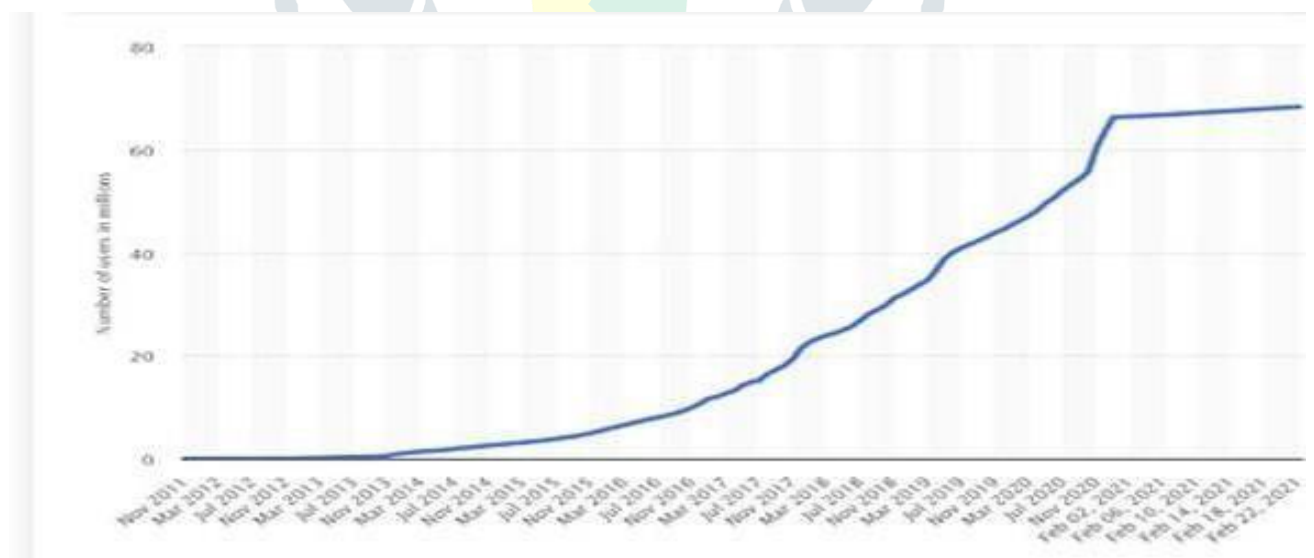
Top 5 Cryptocurrencies of 2021, From Bitcoin to Dogecoin, cryptocurrencies have seen a significant jump in popularity and adoption in 2021.

The cryptocurrency request started 2021 on the reverse of substantial earnings in December 2020. The overall request cap of cryptocurrencies jumped from roughly\$ 500 billion to\$ 752 billion in the last month of2020.2021 started as a ‘ game- changing ’ time for the cryptocurrency request as a dramatic swell in demand for cryptocurrencies led to a substantial jump in the value of digital means. The overall request cap of digital currencies jumped from\$ 750 billion in January to a record high of roughly\$2.5 trillion in May 2021. Despite the rearmost dip, the total request cap of cryptocurrencies is swimming near\$1.4 trillion, which is over by further than 85 in the last six months.(4)

Cryptocurrency Users Statistics and Cryptocurrency Demographics

A blockchain portmanteau, or cryptocurrency portmanteau, is a device, medium, or other operation or service that can protect your cryptocurrency. This portmanteau not handiest stores your cryptocurrency statistics but also encrypts the information and utmost effective lets in you to log in together with your credentials to grease a clever agreement, crypto sale, or other fairly binding sale. nearly 70 million people use a blockchain portmanteau transnational. About a third of Nigerians use a cryptocurrency, while 1 in 5 in Vietnam and the Philippines do

Figure 5: Number of Blockchain wallet users worldwide from November 2011 to February 22, 2021. (In millions)



Source: Statista

TOP 10 CRYPTOCURRENCIES TRENDING IN ASIA

Asia is arising as considered one of the biggest crypto requests inside the international.

With it being the house to India and China, the most vibrant transnational locales. It's primed to grow to be the chief within the crypto transnational. Asia has been the primary business for numerous cryptos and exchanges. Coin Market Cap, the largest destination online for crypto costs, in a tweet gave an overview of the top 10 cryptos in Asia.

1. Xenon Pay II (X2P)
2. Moonstar (MOONSTAR)
3. IRON Titanium Token (TITAN)
4. SHIBA INU (SHIB)
5. Mozart Finance (MELODY)
6. Bitcoin (BTC)
7. Safe Energy (ENERGYX)
8. Keep Network (KEEP)
9. SafeMoon (SAFEMOON)
10. Baby Doge Coin (BabyDoge)

CRYPTOCURRENCY IN INDIA

Cryptocurrency is a recent and significant invention in the financial assiduity. The purpose is to give forex that is not tied, created, or patronized by using a central authority. Cryptocurrency uses blockchain generation as a financial platform. The cryptocurrency relinquishment degree has bettered, and the request has grown dramatically(2) Though India becomes regularly buying and dealing bitcoin as early as 2015, the cryptocurrency made its real debut as edict cash in November 2016 whilst the Modi- led government demonetized 86 percent of paper foreign plutocrat.(5) As in line with data from blockchain analytics company Chain analysis, Indian investments in the cryptocurrency have surged to USD 6.6 billion in 2021, driven by a shift inside the considering youthful dealers – stirring far down from gold and other precious essences. Another motive is the

safety and translucency handed by using this technology. According to a record, over 10 million crypto dealers have been added by means of India in 2021. This is noteworthy in mild enterprise that the civil authorities plan to put a ban on using cryptocurrency. still, nothing may be stated conclusively except the law regulating digital forex is passed. 9) Cryptocurrencies continue to draw a variety of attention from investors, entrepreneurs, controllers, and utmost people. numerous current public conversations of cryptocurrencies were brought on with the aid of the substantial adaptations of their charges, claims that the request for cryptocurrencies is a bubble with no abecedarian value, and also worries roughly delusion of nonsupervisory and criminal oversight [11]

CRYPTOCURRENCY REGULATIONS ACROSS THE WORLD

Cryptocurrency has been around for a long time now. still, its mainstream relinquishment has boosted recently with 2020 being a remarkable time to add to its significance. But 2021 is a major drive as countries across the globe have tried accepting cryptocurrency in some form or the other. also, these countries have also been working on cryptocurrency regulations to govern the process of swapping through crypto. We still are yet to witness transnational regulations on cryptocurrency. still, looking at the evolving geography of crypto, it's relatively apparent that we may witness it soon. moment, we will know about different countries that have managed to set government regulations on cryptocurrency

Cryptocurrency Regulations in India

While there have been signs and symptoms in 2017 and 2018 that India were allowing about much lower prohibitive cryptocurrency programs, the rearmost reviews suggest a trade of course. In July 2019, an inter-ministerial commission supported a mask ban on cryptocurrencies except for proposed dependable digital foreign plutocrats. The blurled, contended draft tab counseled captivity time for folks who “ mine, induce, save, vend, deal in, difficulty, transfer, dispose of, or use cryptocurrency inside

the home of India. ” Although that draft bill didn't make it to the congress bottom, India's aversion to cryptocurrency maintains and, in overdue 2020, leaks suggested that the government was drafting a new tab to ban cryptocurrency buying and selling. While it has come down tough on cryptocurrency from a nonsupervisory station, India's authorities has stated that it's open to exploring the capability of blockchain generation to enhance its financial services assiduity [8]

CRYPTOCURRENCY EXCHANGES

Still, you 'll need to apply a cryptocurrency trade, If you 're searching to buy or vend cryptocurrencies. These online immolations frequently oils also to a stockbroker, furnishing you with the gear to buy and vend digital currencies like bitcoin, ethereum, and dogecoin. The stylish crypto exchanges make it clean to protect for and vend the currencies you need with low freights and sturdy protection functions. [24]

Table 2: Comparison Between Centralized, Decentralized and P2P Cryptocurrency Exchanges

Features	Centralized	DEX	P2P
Fiat to Crypto Trading	Supported	Not Supported	Supported
Crypto to Crypto Trading	Supported	Supported	Supported
Smart Contract	No	Yes	No
Escrow Protection	Optional	No	Must
Trade matching Engine	Yes	No	Yes
Atomic Swap	No	Yes	No
Splitted Trading	Yes	No	No

Source: <https://www.bitdeal.net>

THE BENEFITS THAT CRYPTOCURRENCIES OFFER OVER FIAT MONEY ARE SEVERAL

A cryptocurrency or crypto virtual asset is truly a digital form of cash that exists only digitally. The foremost difference between crypto and the virtual cash that we formerly use on each day foundation(credit score/ disbenefit cards, e-banking, etc.) is that a cryptocurrency isn't issued by way of any government or bank, is specifically decentralized and is primarily grounded on blockchain technology

CRYPTOCURRENCY SECURITY

While nevertheless no longer completely understood through the general public the world over, it's long hauls important to fete that numerous banks, governments, and global businesses are privy to cryptocurrencies, and they are assaying and assessing their use and emergence as a doable currency on an ongoing

recognize the bitcoin we fete currently turned into built-on the substantiation- of- work principle that deals may be securely reused on a decentralized peer- to- peer network, without the want for a primary series group, the mining and transaction strategies aren't completely cozy. In verity, conspiring actors can put upon the issues discovered within the process. Then are five crucial protection enterprises that can affect in presumably dangerous assaults and pitfalls with using cryptocurrencies Selfish Mining

- Double Spending
- Wallet Software/Distributed Denials of Service Attacks
- Acquiring Greater Than 50% Computing Power
- Time jacking

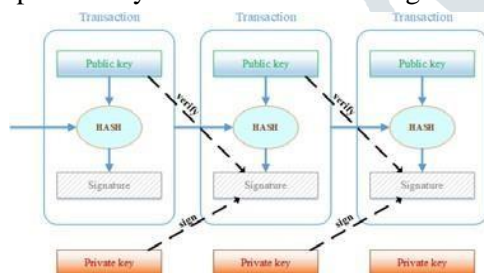
Table 3: Benefits of Cryptocurrencies

Traits of money	Gold	Fiat (US Dollar)	Crypto
Fungible (Interchangeable)	High	High	High
Non-Consumable	High	High	High
Portability	Moderate	High	High
Durable	High	Moderate	High
Highly Divisible	Moderate	Moderate	High
Secure (Cannot be counterfeited)	Moderate	Moderate	High
Easily Transactable	Low	High	High
Scarce (Predictable Supply)	Moderate	Low	High
Sovereign (Government issued)	Low	High	Low
Decentralized	Low	Low	High
Smart (Programmable)	Low	Low	High

Source: <https://panos.writeas.com/cryptocurrencies-the-evolution-of-money>

A. Bitcoin essentials

Bitcoin rudiments In his now notorious work, Satoshi Nakamoto showed a result to the problems that the perpetration and usability of digital currency faced, especially the double-spending problem (14). While the true identity of Nakamoto is a point of speculations, what's known is that until 2010 he remained active on the Bitcoin design, and also he stepped back and gave the design to the community for farther development (13). He proposed a system with P2P distributed timestamp garçon that serves as a creator of the computational evidence of the chronological orders of deals (12). An electronic coin is defined as a chain of digital autographs. Each transaction is defined as a set of digitally inked hash of the former sale and the public key of the coming proprietor. The private key is used for subscribing the sale,



and the public key is used for verification of the transaction, as shown in Fig. The public key is kept in the portmanteau, which can be enforced in software, tackle, or online.

The Bitcoin tally is defined as a state transition system, conforming of a state that shows the power status of all existing Bitcoins and a state transition function, in the form of a sale. The affair of the state transition function is a new state (15). The results of this process are state changes of the sender and philanthropist if the sender has enough bitcoins to make a sale or an error, else.

Bitcoin transactions

Each Bitcoin deal Each sale is determined with its hash value representing a sale identifier and a set of inputs and labors. Each affair of the sale can only be used once as an input in the entire blockchain (13). The attempt to represent the same affair doubly leads to the double-spending problem and is interdicted in the network. However, it's called an unspent sale affair (UTXO), and if it has been substantiated, If the affair of the sale hasn't been substantiated ahead. A sale can have multiple inputs and only over to two laborers. Multiple inputs can be used to combine lower quantities of coins being transferred, and labor can be either a quantum transferred to the other party or the change that's transferred back to the sender (14). Bitcoin distributed tally describes all deals and hands in the network. Every knot in this P2P network keeps a dupe of the tally record (15). still, he can do that by intimately publicizing this sale and it's over to the network to corroborate its correctness, If one stoner wants to send some quantum of coins to another. still, a stoner can try to manipulate the network and issue further than one sale of the same coin to the different druggies (double-spending problem). also, the same stoner can set up several cases to confirm his original intent and therefore perform a Sybil attack.

B. Proof-of-work and blockchain

These situations are averted (or at least minimized) in the Bitcoin network by demanding evidence-of-work from each node that verifies the sale. The bumps have to do some heavy calculations to prove that they're valid members of the network. As long as the total computational power of the honest bumps is lesser than the computational power of the bushwhacker, the system will remain harmonious and all legal deals will do.

A set of deals, together with the hash of the previous block and a nonce, declares a block. A timestamp garçon makes a hash of a block and intimately announces it,

therefore proving that the data inside the block must have been at the time of mining. The timestamp garçon has to corroborate that the timestamp of the block is lesser than the timestamp of the former block in the chain and lower than two hours into the future. The important property of the blockchain is that the deals can be traced back at any time in history.

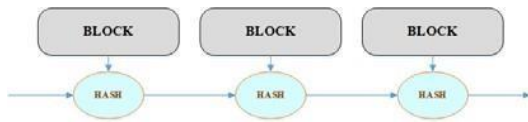


Figure 2. The blockchain scheme

The evidence-of-work mining scheme Bitcoin uses is analogous to Hash cash (16) and grounded on the SHA-256 hash function (17). The evidence-of-work is done by incrementing a nonce in the block until the value is produced that has the needed number of zero bits on the morning of the block hash. Once it's done, it can not be undone without repeating the calculations still, also all the following blocks would have invalid hashes if it is somehow changed by a vicious bushwhacker. The rule is that the longest chain that has the maturity agreement in the network is the correct one, so if the bushwhacker wishes to change a block, he needs to have enough computational power to overcome the voting of the maturity of honest bumps, therefore entering the race problem. The deals within a block are mined in Merkle tree (19), (20). A Merkle tree is a type of double tree with numerous leaf nodes, and a root of the splint bumps is a hash of its children. Fig. 4 shows a Bitcoin block composed of a Merkle tree of sale hashes. Any inconsistency in the tree will reflect nearly in the chain, so the Merkle tree is vital for long-term maintainability (15). This is done to free up the storehouse space demanded to store the blockchain on the bumps. The current size of the Bitcoin blockchain is about 144.8 GB (21). After the transactions are incorporated in a block and this block is vindicated, the network discards all hashes in a tree except the root hash included in the block title. Bitcoin introduced a Simplified Payment Verification (SPV), which doesn't require the bumps to keep a full record of deals, but only the dupe of the blockheads of the longest chain (14).

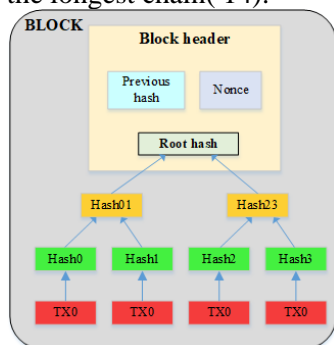


Figure 3. A Bitcoin block with hashed transactions into a Merkle tree

C. Bitcoin scalability problem

With a block size of 1 MB, Bitcoin has severe scalability issues. The quantum of deals that can be supported with this block size is lower than seven deals per second (tps) (21). In comparison, the payment network Visa achieved 47,000 tips during the 2013 leave and presently pars with hundreds of millions per day (22). To achieve a similar rate on the Bitcoin network with 1 MB block size, assuming that the sale is 300 bytes in size, it would bear an outturn of 8 GB per Bitcoin block every ten twinkles, which would lead to over 400 TB of data per time (19). This would largely polarize the Bitcoin network to support only those bumps with such storehouse capacities, and this is veritably contrary of what Bitcoin and blockchain are intended for. Several results were suggested in order to attack this issue efficiently. As a result, a number of soft and hard spoons of Bitcoin passed. A soft chopstick is any change that's backward compatible, i.e. enabling the old software to fete recently created blocks as valid. A hard chopstick, on the other hand, is a software update introducing a new rule to the network, therefore rendering the old software unfit to fete new blocks [23].

CONCLUSION

The emergence of Bitcoin has sparked a debate roughly its unborn and that of other cryptocurrencies. Despite Bitcoin's rearmost problems, its fulfillment for the reason that its 2009 release has inspired the creation of occasion cryptocurrencies including Ethereum, Litecoin, and Ripple. A cryptocurrency that aspires to crop as part of the mainstream fiscal device could have to fulfill veritably divergent criteria. While that possibility seems far out, there is little question that Bitcoin's success or failure in managing the demanding situations it faces may also determine the fortunes of different cryptocurrencies within the times in advance. (3) Cryptocurrency continues to be loaded in its early ranges and many people are nonetheless skeptical about it but it's long hauls right then to live and has been acclimatized into our lives and will be currency employed by everybody that is stylish a count of time. With the acceptance and how extensively talked about it is, the future of Cryptocurrency is sure to be bright.

Reference:

- [1] Härdle, W. K., Harvey, C. R., & Reule, R.C. (2019, April 29). Understanding Cryptocurrencies. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?a_bstract_id=3360304.
- [2] AdamBaron(2019)<https://www.investopedia.com/articles/forex/091013/future-cryptocurrency.asp>
- [3] BilalJafar(2021)<https://www.financemagnates.com/cryptocurrency/news/top-5-cryptocurrencies-of-2021/>
- [4] Bradley Dunseith (2017) <https://www.india-briefing.com/news/cryptocurrency-bitcoin-india-usage-regulation-15343.html/>
- [5] Li, X., & Whinston, A. B. (2019, December 30). Analyzing Cryptocurrencies. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?a_bstract_id=3500276
- [6] Chohan, U. W. (2017, December 23). The Double Spending Problem and Cryptocurrencies. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?a_bstract_id=3090174
- [7] Crypto Regulations in India. (2021, March 25). Retrieved from <https://complyadvantage.com/knowledgebase/crypto-regulations/cryptocurrency-regulations-india/>
- [8] Does Cryptocurrency Attract Tax in India? Here's What We Know. (2021, July 20). Retrieved from <https://www.india-briefing.com/news/what-are-the-tax-implications-for-cryptocurrency-assets-in-india-22610.html/>
- [9] Francis, J. C. (2019, April 12). Bitcoins, Cryptocurrencies and BlockChains. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3371051
- [10] Giudici, G., Milne, A., & Vinogradov, D. (2019, September 17). Cryptocurrencies: Market analysis and perspectives. Retrieved from <https://link.springer.com/article/10.1007/s40812-019-00138->
- [11] S. Nakamoto, "Bitcoin: a peer-to-peer electronic cash system," 2008, available at: <https://bitcoin.org/bitcoin.pdf>
- [12] Ethereum Community, "A next-generation smart contract and decentralized application platform," WhitePaper, available at: <https://github.com/ethereum/wiki/wiki/White-Paper>
- [13] A. Back, "Hashcash – a denial of service counter-measure," 2002, available at: <http://www.hashcash.org/papers/hashcash.pdf>
- [14] Bitcoin Blockchain Size, <https://charts.bitcoin.com/chart/blockchain-size>
- [15] J. Poon and T. Dryja, "The bitcoin lightning network: scalable off-chain instant payments," 2016, available at: <https://lightning.network/lightning-network-paper.pdf>
- [16] Luke Conway (2021) <https://www.investopedia.com/best-crypto-exchanges-5071855>
- [17] Kishore Jain, D. (2020, August 03). The Economics of Cryptocurrencies - Why Does It Work? Retrieved from https://papers.ssrn.com/sol3/papers.cfm?a_bstract_id=3644159
- [18] Laura M (2021) <https://www.bitdegree.org/crypto/tutorial/types-of-cryptocurrency#:~:text=In%20total%2C%20there%20are%20three,are%20mostly%20used%20for%20dApps.>