A Study of Cryptocurrency, Bitcoin and the Upcoming

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Abstract

An encrypted cryptocurrency is a peer-to-peer network for providing digital barter, is a technology developed Ten years ago.

Cryptocurrencies the most popular and first was Bitcoin, are making the future development easier as an innovative technology, to well established and stable financial payment system that has been placed for many decades. While traditional fiat currency is not likely to be replaced by cryptocurrencies. Cryptocurrency may restructure the digital trade market by creating a free-flowing trade market regime without fees. A SWOT analysis of bitcoin is introduced, which clarify some of the recent event and movement supports to a shift in economic paradigm.

Keyboard: Cryptocurrency, Bitcoin, Bipay, Exchange Rates, Currency, Covid-19.

I. INTRODUCTION

The World's most common and well-known cryptocurrency is Bitcoin, has been increasing. The first cryptocurrency mainstream is Bitcoin, created by Satoshi Nakomoto. In 2009 Bitcoin was created with the goal of an alternative to a legacy bank, using blockchain distributed ledger technology as its backbone. By using a cryptocurrency, users can transact value digitally without third-party oversight.

To generate distinctive hashes that are finite in number works on the theory of solving encryption algorithms for Cryptocurrency. Merge with a network of computers cross-checking transactions, users can exchange hashes as if exchanging physical currency. There is a limited number of bitcoins that will ever be generated, preventing an extravagance and ensuring its rarity. Life-giving material Water, even its requirement, is commonly considered as being free or of less cost because its existing or available in large quantities. It would be more valuable than diamondsif water was limited. Those in favor of bitcoins and cryptocurrencies are so because they do not want the government or the central banks to exercise so much control over their money or currency. The Bitcoin transaction on the blockchain takes to get confirmed. One block process takes around 10 minutes for the computers to calculate.

This longest blockchain is the reason for what has occurred even as their nodes vanished.

With blockchain, there is full transparency of how many are being used. According to high authorities, to transfer cryptocurrency it should go through many layers before the transaction, with blockchain coming in we can skip all the layers of government, all the layers of burracy,go through and take the easy routes, and thus possibly why the government is little of afraid of cryptocurrency. The system is designed in such a way that we can transfer the value efficiently. Other a person can

know that transaction is done on a particular time with such value but the identity of the person, which person transferred to which person is not revealed to others. When we use cash of 1k/2k there is no trace of it, here we can completely trace how the money went and ultimately to know how the value is used, with is right regulation we can keep a complete check on the trace of the fund and see whether it was used in the right manner that is where the regulations will help the country to use the positives of the blockchain technology, to use the positives underlying trends

The act of manufacturing unit of a cryptocurrency (together with bitcoins) through a few types of attempts. The attempt is required in order that human beings cant simply create infinite quantities of digital currency, which might devalue it. In bitcoin, mining calls for computing power. Here is a unique description of the ways mining works. Bitcoin mining is the method of making pc hardware do mathematical calculations for the Bitcoin community to affirm transactions and boom security. As praise for his or her services, Bitcoin miners can gather transaction charges for the transactions they affirm, alongside newly created bitcoins. Mining is a specialized and aggressive marketplace where the rewards are divided up in accordance with how a whole lot of calculation is done. Not all Bitcoin customers do Bitcoin mining, and it is now no longer a clean manner to make money.

On January 1, 2020, Bitcoin (BTC) opened at \$7,194.89 USD. 3 hundred sixty-5 days later, that cost nearly quadrupled to \$29,001.72 USD at the give-up of December 31, 2020. We trust that 2021 will be the year that crypto turns into extensively followed not just for hypothesis however also for bills and different utilities. We anticipate that progressed guidelines and corporations like rectangular and PayPal will drive crypto to become a frequent shape of bills globally.

BitPay placed the various Inc. 5000 listings for 2020, demonstrating a sturdy annual increase for 3 years directly. BitPay filed paperwork with the U.S. workplace of the Comptroller of the forex (OCC) to create a national bank named the BitPay country-wide accept as true with a financial institution. In November 2020, BitPay changed into ranked 341 on Deloitte's generation fast 500TM, a rating of the quickest-developing technology, media, telecommunications, lifestyles sciences, and strength tech organizations in North America. That equal month, BitPay changed into selected as a finalist for pink Herring's pinnacle 100 North the award of the united states, one of the generation industry's most prestigious prizes.

II. MOTIVES TO SHOP FOR BITCOIN

A. Good motives to shop for Bitcoin

Depending on your economic situation, those are probably sound motives to the region a few cash into Bitcoin.

1. You need to make investments cash you may find the money for to lose

Regardless of our budgets, all of us have an amount of money in thoughts that we can find the money to lose without it having an extreme effect on lifestyle or long-time period economic goals. If you're threat-tolerant, you will in all likelihood positioned that money into investments for the chance to check it grow -- understanding you're additionally OK if it shrinks. Crypto values are volatile, even for a mainstay like Bitcoin. In that manner there are periodic primary upswings, however, you furthermore may have with a purpose to climate dropping cash if the price swings down.

2. You need to apply it to shop for things

You would possibly need to buy Bitcoin to apply as foreign money (as in opposition to funding). For example, you will in all likelihood make purchases thru systems that alternate crypto or provide higher fees when you pay with crypto. If you want to make a buy or ship cash internationally, you may discover Bitcoin gives an extra favorable trade charge than USD.

3. You price decentralization of foreign money

Depending on in which you stay and your records with economies across the world, you are probably cautious of authorities-regulated currencies and valuable banks.

Because of its volatility, cryptocurrency isn't the ideal way to such things as hyperinflation or authorities corruption that positioned citizens' cash at threat. But you will in all likelihood determine it's an extra becoming region for some of your belongings than conventional economic institutions.

B. Bad motives to shop for Bitcoin

On the alternative hand, you can now no longer need to shop for Bitcoin if both of those is your essential motivation.

1. You need to get wealthy

We generally tend to generally listen to approximately Bitcoin withinside the information while the price of the foreign money skyrockets.

Those stories -- and the shortage of interest to similarly dramatic drops withinside the coin's price -- make the funding a magnet for everybody who hopes to get wealthy fast without effort.

However, there's no assure of riches with any funding, least of all with an unregulated asset that's more youthful than maximum TikTok stars. It's proper that the foreign money has accelerated notably in price typical considering its inception, however with simply 12 years of marketplace records to attract on, no affordable professional could make a prediction approximately

the long-time period potentialities for this funding. If your purpose is boom, your cash might be more secure with conventional inventory brokers -- in which the marketplace has extra than one hundred years to lower back up its reliability for long-time period gains.

2. You suppose it's a secure shop of price

Many economic professionals laud Bitcoin as a manner to defend your cash from inflation over time. The argument is that cryptocurrency isn't tormented by authorities' actions -- like printing too much cash or geopolitical conflicts -- in an effort to lower the really well worth of normal, authorities-issued currencies.

But cryptocurrency is an issue to primary marketplace swings primarily based totally on call for and hypothesis. Compared with USD, this poses an extra sizeable threat to the price of your wealth than authorities' actions.

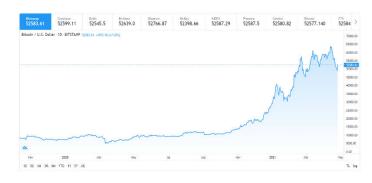
C. Should you purchase Bitcoin?

Bitcoin may be profitable funding in case you technique it with affordable expectancies and allocate your cash cautiously.

Before shopping for Bitcoin, make certain your simple budget is on strong ground. That manner having sufficient cash to cover your regular expenses -- plus 3 to six months' really well worth of financial savings to your emergency fund. It's additionally a sincere concept to make a contribution to a pension plan. Bitcoin won't assure you the headline-grabbing riches it's well-known for, so steady your very own economic destiny first.

III. BITCOIN PRICE DATA

The Bitcoin rate as in step with April 2021 is \$52,387.sixty-two USD with a 24-hour buying and selling quantity of \$56,631,667,383 USD. Bitcoin is up 5.44% withinside the remaining 24 hours. The modern-day CoinMarketCap rating is #1, with a stay marketplace cap of \$979,208,827,998 USD. It has a circulating delivery of 18,691,606 BTC cash and a max. deliver of 21,000,000 BTC cash.



The pinnacle exchanges for buying and selling in Bitcoin are presently Binance, Huobi Global, OKEx, ZBG, and Bybit.





IV. BITCOIN INCREASE DURING PANDEMIC COVID-19 PERIOD

On January 1, 2020, From around \$7,000 to around November 27, 2020, \$17,000 on bitcoin has increased throughout the Covid-19 pandemic. In September 2020, bitcoin has visible a steep rise —on September 25, 2020, from \$10,665, On November 25, 2020, to \$19,028, earlier than dropping to around \$17,000 stage.

"In the pandemic, many Indians have misplaced jobs, and this has led them to put money into cryptocurrency to earn facet income.

Moreover, lots of the latest professions have emerged in this space – humans have become traders, technical analysts, or crypto influencers. Many assist their buddies and own circle of relatives to put money into crypto due to the fact now no longer anyone knows crypto. There are diverse crypto use instances which have emerged in India, and feature affected Indians in a nice manner," stated CEO of WazirX, Nischal Shetty.

"Increasing rate of Bitcoin additionally creates a nice sentiment, and has driven retail buyers to leap in," he stated.

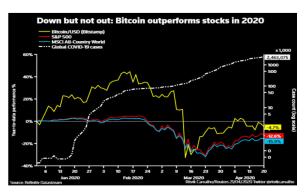
The contemporary increase-driven bitcoins near the very best stage of \$19,783 that it completed in past due 2017.

But in case the Indian currency additionally depreciates, will the rate of bitcoin see the shoot up.

"During the pandemic, a number of cash printing has come about globally main to inflation. The inventory markets have additionally been very shaky. People understand that inventory marketplace situations rely on organizations that have, again, been laid low with the pandemic. So humans flow their cash to make certain that its price is extra or much less conserved in a deflationary asset like gold withinside the conventional machine, or Bitcoin withinside the virtual machine. Bitcoin has a constrained delivery, and is visible as a shop of price," stated Shetty.

Providing his suggestions on whether or not buyers ought to encash or keep their investments in India in cryptocurrencies at this excessive stage, Shetty stated, "What I'm seeing is, humans are actually taking observe of crypto. A lot of those who had sold crypto in 2017 at excessive rates, and held it throughout, are

becoming activated, and anyone approximately what they ought to do – keep it or promote it. In the case of bitcoin, 60-70 in step with cent of buyers keep it as a long-time period funding, a small percent of them holds it for the medium time period, and a completely small percent holds it for the quick time period."



Cryptocurrency Comparison table

	Bitcoin (BTC) ¹	Bitcoin cash (BCH) ¹	Ether (ETH) ¹	Litecoin (LTC) ¹	EOS (EOS) ³	Stellar (XLM) ⁴	NEO (NEO) ⁵
Launch	2009	2017	2015	2011	2018	2014	2014
Circulating supply	>17 million	>17 million	>102 million	>58 million	>906 million	>18 billion	65 million
Maximum supply	21 million	21 million	No upper limit	84 million	No upper limit	No upper limit	100 million
Current mining/release rate	12.5 per block	12.5 per block	3 per block	25 per block	Up to 5% inflation per year	Up to 1% inflation per year	Up to 15 million per year
Transactions per second (maximum)	7	60	20	56	2800	1000	1000
Network	n/a	n/a	Ethereum	n/a	EOS.IO	Stellar	NEO
Block time (approximate)	10 minutes	10 minutes	15 seconds	2 minutes 30 seconds	0.5 seconds	5 seconds	15 seconds

V. DIFFERENIATING BITCOIN AND OTHER CRYPTOCURRENCIES

Bitcoin was the first decentralized cryptocurrency launched in 2009. Just like any physical currency, it can still be exchanged, Cryptocurrency is virtual currencies that operate without depending on banks and government.

While the marketleader remains by bitcoin , cryptocurrencies including cash bitcoin, goldbitcoin , NEO, stellar (XLM), EOS , ripple, litecoin, ether could face problem in the upcoming due to increasing expanded applications, demandand advance technology.

A. Bitcoin-BTC

Bitcoin was one of the first cryptocurrencies, currency based on blockchain networking. It waslaunchedin 2009 by a group of people under the pseudonym of Satoshi Nakamoto tosecurepaymentsacross a peer-to-peernetwork. It

aimstoremove the need for a trusted third party, democratisemoneyandmake surethattransactionsareanonymous.

Strength: User Autonomy.

Weakness: Online merchant with the small group only accepts bitcoin.

B. Bitcoincash - BCH

In 2007 Bitcoin Cash was launched, Bitcoin cash isa fork of the original Bitcoin. A fork can be described as an alternate version of an original coin. Decentralized ledger system which runs bitcoin known as the blockchain, seven transactions per second can process its maximum, crypto for everyday transactions making it a less-than-ideal.

Strength: Comparing to Bitcoin its transaction is faster.

Weakness: Transaction data speed.

C. Ripple (XRP)

XRP is the currency of ripple founded in 2004, Its works on the swift payment and consumes more time, in XRP the transaction speed is high and at the international level it has worked as more significant and many growing institutes are joining with ripple. Investors of ripple are renowned investors such as Accenture, standard chartered bank, etc.. but the XRP is not a decentralized network.

Strength: Open source technology.

Weakness: It should be very transparent in the market of XRP.

D. Stellar (XLM)

Stellaris an open-source distributed network blockchain that is publically owned there is no particular owner. This makes the owners easy to manage. XLM is used for payment and transfer value, if we want to make any transfer of value it can be done by XLM. The stellar coin is ranked as 17th. XLM coin cannot be mined, stellar is created in limited number. Future prediction according to wallet investors its value on upcoming 5 years it can be around \$10 but its value may also fall down because cryptocurrency moves exponentially

Strength: Provides multi-currency transactions. **Weakness**: It's not completely decentralized.

E. Ether (ETH)

The Ether tokens can be used to make payments by transferring them between accounts on the Ethereum blockchain mining nodes to compensate for the computations performed. Ether is symbolized by ETH and decentralized digital money unlikely the Bitcoin (BTC), Ether is not under any authority/government, Itcan be used for making payments, storing value, and providing collateral.

Strength: Adaptability

Weakness: transaction speed is slow.

F. Litecoin (LTC)

Litecoin is a lite version of bitcoin, if we assume bitcoin as 'gold' then litecoin is 'silver'. Litcoin doesn't require any devices, it can be easily mined by our computer GPU or directly by using its hash power. Stored easily unlike bitcoin hot storage, cold storage, or wallet is stored. Charle Lee created Litecoin having the aim to make a lite version of bitcoin. Miner should wait for a long time to mine the litecoin.

Strength: User friendly when compared to other cryptocurrencies.

Weakness: Litcoin is not widely accepted.

G. EOS (EOS)

EOS coin is a smart contract platform that has been described as "Ethereum on Steroids."

This platform resolves many of the issues other blockchains have not mastered that aims to build a decentralized application.

It provides great scalability when compared to another blockchain.

It can do dozen of a transaction within a seconds.

Strength: EOS is Scalability.

Weakness: Lots of competitors for EOS.

H. NEO (NEO)

Da Hongfei and Erik Zhan founded AntShares in China in 2014 and In June 2017 was rebranded "NEO". Neo supports smart contracts and dapps. Neo is an open-source project with the main aim to automate and digitize smart contraction creation. The market ranking of NEO is ranked 16.

Strength: Security from regulators. **Weakness**: Not completely decentralized.

VI. FUTURE OF CRYPTOCURRENCY

A. Upcoming of Cryptocurrencies will combine with the Internet of Things.

As a data-driven system, IoT is all about making business based on the data collected by smart devices. By using public-key cryptography to quickly authenticate users and devices in our IoT system. Using blockchain technology we can use smart contracts to build trust among the different IoT processes and eventually trusted intermediaries and reduce system costs.

B. Upcoming Of Cryptocurrency - 2021 and Beyond

If the present news is any indication, then the upcoming cryptocurrency is a very promising one.



- Elon Musk, the founder of SpaceX, currently announced that his company **Tesla** invested \$1.5 billion in bitcoin and plans to start accepting the currency as the transaction.
- Using BitPayUsers of Google Pay, Samsung Pay and Apple Pay can now make payments with cryptocurrency.
- while PayPal already allows its users to buy, sell and hold cryptocurrency. Mastercard has indicated that it will begin supporting select cryptocurrencies on its payment network,
- Social media, **Facebook** continues to work on its the cryptocurrency is known as "Diem" and a blockchain-based payment system.
- The bank in the U.S, Bank of New York Mellon, announced that it will begin funding bitcoin and other digital currencies.
- In the US, Massachusetts Mutual Life Insurance is one of the oldest insurance companies bought \$100 million into bitcoin in December 2020.
- Germany's, Deutsche Bank, created a Deutsche Bank Digital Asset Custody prototype, "a fully integrated custody platform for institutional clients and their digital assets, providing seamless connectivity to the broader cryptocurrency ecosystem."

VII. RESULTS

- A. Top 6 cryptocurrency Billionaires 2021
- 1. Sam Bankman-Fried \$8.7 BILLION NET WORTH
- 2. Brian Armstrong \$6.5 BILLION NET WORTH
- 3. Cameron Winklevoss, Tyler Winklesvoss \$3 BILLION NET WORTH EACH
- 4. Michael Saylor \$3.4 BILLION NET WORTH LAST YEAR: \$2.6 BILLION
- 5. Chris Larsen \$3.4 BILLION NET WORTH LAST YEAR: \$2.6 BILLION
- 6. Jed McCaleb \$2 BILLION NET WORTH

VIII. CONCLUSION

Hold up in houses people are trying and experimenting with everything digitally some of those are investors who have found refuge in virtual currencies and the lockdown has pushed up trading volumes in popular cryptocurrencies such as Bitcoin. A marketplace for Bitcoin and other currencies packs full reported a whopping 883% growth in crypto trading between January to May 2020 from around two million dollars to 22 dollars.

Wazi a Mumbai-based crypto exchange grew 400% in march 270 percent in April 2020 on a month-on-month basis. Crypto got a second wind after the supreme court on March 4th struck downthe virtual ban on trading announced by the reserve bank of India in April 2018. The RBI has prohibited banks and financial institution from providing services supporting digital currencies like bitcoin after a string of fraud was on earth post-2016 demonetization soon after cryptocurrency exchanges filed a lawsuit in the supreme court and won the case in March this year even after the ban has been scrapped, large banks have not supported cryptocurrency trading completely but in a blow to estimated 1.7 million digital traders the government is planning to bring in a law to ban trading cryptocurrencies. The Indian traders were already hurting due to the lack of regulations in the sector as they waited for clarity from the government and the RBI for a change the industry was flouring during the lockdown.

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