

**A survey on the development and prospects for cryptocurrencies in the global market**

<sup>1</sup>**NITESH KUMAR MAHATO,**

*Gandhi Institute of Excellent Technocrats, Bhubaneswar, India*

<sup>2</sup>**SUBHRANSHU SEKHAR MALLICK,**

*Shibani Institute of Technical Education, Bhubaneswar, Odisha, India*

**Abstract:** The greatest benefit for humans in the twenty-first century is technology. The quickening pace of information and communication technology development makes day-to-day life more adaptable and efficient. Financial operations have also taken advantage of the opportunity by giving customers a range of choices and services. One such area that offers alternatives to investors and corporate enterprises is virtual money. In recent years, the use of virtual currency has extended throughout numerous systems. Cryptocurrency is a type of digital, virtual, or online money that employs encryption to ensure its security. The financial market has undergone significant changes because to cryptocurrencies. It contributes both positively and negatively to the global economy. Bitcoin, which was launched in 2008 and is one of several forms of crypto currencies now available, may have an impact.

**Keywords:** Crypto currency, Bitcoin, Global market, Virtual Currency,

**Block chain1 INTRODUCTION**

The term "virtual currency" refers to a medium of exchange existing entirely in intangible form that is not a legal tender but can be

substituted for legal tenders. Older forms of "currency" that are not "legal tender" include paper-based currency substitutes, such as military scrip and depression scrip. In recent times, the term "virtual currency" has developed an added connotation that it exists only in an electronic or digital form and is used only as a medium of exchange

A subset of virtual currency is "crypto currency," by which we mean an internet-based virtual currency in which the ownership of a particular unit of value is validated using cryptography. Its value varies by its movement in the market. As against commodity based currencies which derives its intrinsic value through the central authority, crypto currencies are not legal tender and, thus, their use requires the agreement among parties for a transaction. For example, Bitcoins have no physical presence and their ownership is by entries. Recently Securities and Exchange Board of India's (SEBI) formed 'Committee on Financial and Regulatory Technologies (CFRT)' which suggested that it is crucial to regulate transactions involving crypto currencies to ensure that India's public issue norms are not breached.

**2. OBJECTIVES OF THE STUDY**

To study the concept of crypto currency

To analyses different types crypto currencies

To identify the growth and future prospectus of crypto currency

**3. RESEARCH METHODOLOGY**

The study mainly includes literature review from various articles published in journals. The other secondary data sources include reports of the respective banks and other relative information published on the banks and other internet sites

**4 LIMITATION OF STUDY**

The major limitation of study is that it is based on secondary data and short span of time

**5 CRYPTO CURRENCIES**

Crypto currency is an internet-based medium of exchange which uses cryptographic functions to conduct financial transactions. Crypto currencies leverage block chain technology to gain decentralization, transparency, and immutability. A crypto currency is a digital currency that does not exist in form of coins or bills, only as book money. Crypto currencies can be sent directly between two parties via the use of private and public keys. These transfers can be done with minimal processing fees, allowing users to avoid the steep fees charged by traditional financial institutions.. The most important feature of a crypt currency is that it is not controlled by any central authority: the decentralized nature of the block chain makes crypto currencies theoretically immune to the old ways of government control and interference. Crypto currencies can be sent directly between two parties via the use of private and public keys. These transfers can be done with minimal processing fees, allowing users

to avoid the steep fees charged by traditional financial institutions. Today crypto currencies (Buy Crypto) have become a global phenomenon known to most people.

## **5. FEATURES OF CRYPTO CURRENCY**

Crypto currencies, virtual currencies, electronic coins, digital coins, digital tokens and block chain tokens are different names for the same thing. A cryptocurrency is a chain of digital signatures stored on a decentralized public ledger known as a blockchain (for an in-depth explanation, refer to the original Bitcoin whitepaper by Satoshi Nakamoto). Having a cryptocurrency means having a private key (similar to a password) giving the holder the ability to transfer the cryptocurrency to someone else. Private keys are stored in digital wallets. Crypto currencies are transferred from one owner to another by adding a transaction to the block chain

**5.1.4** Blockchains are kept secure from hacking through the work of validators, who validate transactions. Validators are given crypto currencies as reward/payment every time they validate a transaction (i.e. cryptocurrencies provide the economic incentive for people to become validators). Validators may also be awarded transaction fees paid by the sender.

### **Mechanism for validating transaction**

There are multiple **consensus mechanisms** for validating transactions. The main ones are:

**Proof-of-Work (PoW):** validators validate transactions by running an algorithm to solve a cryptographic puzzle. This is known as mining. Mining creates new coins. Validators are rewarded with new coins and transactions fees (if any).

**Proof-of-Stake (PoS):** validators validate transactions by staking (“depositing”) cryptocurrencies. No new coins are (usually) created. Validators are rewarded with transaction fees only.

Cryptocurrencies can be created by mining (e.g. bitcoin) or by simply allocating coins to an address (e.g. Ripple’s XRP). The latter is known as pre-mining. It is convention to refer to non-mined coins as pre-mined, even though doing so is technically incorrect if the coin is not mine-able, such as Ripple’s. The term pre-mined comes from the practice by block chain developers of creating mine-able coins for themselves before releasing the block chain’s source code to the public, allowing the public to mine.

## **TYPES OF CRYPTO CURRENCY**

### **Bitcoin**

Bitcoin is the pioneer of cryptocurrencies. The digital currency was launched in 2008. The inventor goes by the pseudonym Satoshi Nakamoto. Bitcoin is a peer-to-peer (P2P) network based on blockchain technology. All transactions with Bitcoin occur completely digital, encrypted, and without third parties. Every transaction is recorded in the blockchain to be tracked this way. The blockchain is a distributed ledger, meaning that it is a form of digital cash ledger used as proof that a transaction took place. Bitcoin (BTC) is traded publically since 2009 and has achieved an unrivaled price development. Bitcoin has a market capitalization of more than USD 136 billion and is thus responsible for more than half of the total volume of around 257 billion. During peak times, Bitcoin reaches a trading volume of up to 5 billion dollars a day.

### **Ethereum**

Ethereum is a distributed ledger, which makes it possible to install, manage, and conduct so-called decentralized applications (dApps) in one’s own ledger. Ethereum uses the cryptocurrency Ether (ETH) as a form of payment to process transactions. Ethereum also popularized the principle of “smart contracts.” These are automated contracts that fulfill themselves once pre-defined conditions are met. Usually, this is a pre-determined amount of Ether that needs to be paid for the contract to be fulfilled. Ethereum co-founder Vitalik Buterin is something like the poster child of the crypto-scene. Today, Ethereum processes around 500,000 transactions a day – more than all other crypto currencies combined.

### **Bitcoin Cash**

Bitcoin Cash (BCH) is a cryptocurrency that resulted from a split of Bitcoin, on 1 August 2017. Reason for this split was the block size increase for the Bitcoin blockchain from 1 MB to 8 MB. This increase allows Bitcoin Cash to process up to eight times as many transactions in the same time as Bitcoin, which is limited to a maximum of seven transactions per seconds due to constraints in the program code. Bitcoin Cash has the third largest market capitalization of all cryptocurrencies at USD 28 billion. On average trading days, almost USD 4 billion worth of Bitcoin Cash is traded. Bitcoin Cash started at an issue price of just under USD 280 per BCH. The digital currency is currently listed at around USD 1,700 per BCH.

### **Ripple**

Ripple (XRP) is a decentralized blockchain network for global payment transactions. It is a public database with a register of account balances. Every Ripple user can view the register, which contains not only account balances but also offers to buy and sell goods and currencies, in real time. The Ripple network can handle about 1,000 transactions per second. The network supports any fiat currency (dollar, euro, yen) as well as cryptocurrencies such as Bitcoin. Ripple is a favorite for many large banks. In April of 2017, the company announced that 75 banks were already using the payment network, including industry giants like Bank of America, the major Swiss bank UBS, and the Spanish institute BBVA. Ripple was able to win over banks for two main reasons: international payments can be processed faster via the blockchain and transaction costs are significantly lower than before.

#### **Dash**

Dash is a peer-to-peer based open-source cryptocurrency. Its function is comparable to that of Bitcoin. Compared to Bitcoin, however, transactions are not publicly visible in the blockchain; instead, they are private. In addition, 10% of income from the mining of new coins is retained for development and marketing work. However, Dash is heavily criticized in the crypto world. For one, Dash does not solve any of the software problems that cryptocurrencies have to deal with. The main point of criticism, however, is of the founder's actions when launching the digital currency. When Dash first launched under the name Darkcoin, 2 million coins were created and distributed among the founders within two days.

#### **Litecoin**

Litecoin (LTC), like Bitcoin, is a peer-to-peer network and an open source software project. Litecoin exists since 2011, making it one of the oldest cryptocurrencies." The primary difference between Litecoin and Bitcoin is in the creation of new blocks in the blockchain. While Bitcoin creates new blocks every 10 minutes, Litecoin can create them every 2.5 minutes, which allows for quicker transaction confirmation. As a result, the maximum amount of coins is significantly greater.

#### **Monero**

Monero (XMR) is an up-and-coming cryptocurrency. It is a decentralized and anonymous digital currency which, unlike Bitcoin, does not enable tracking of transactions. While Bitcoin's blockchain lets every transaction be attributed to a wallet, Monero does not, which is intended to strengthen the users' anonymity..

#### **NEO**

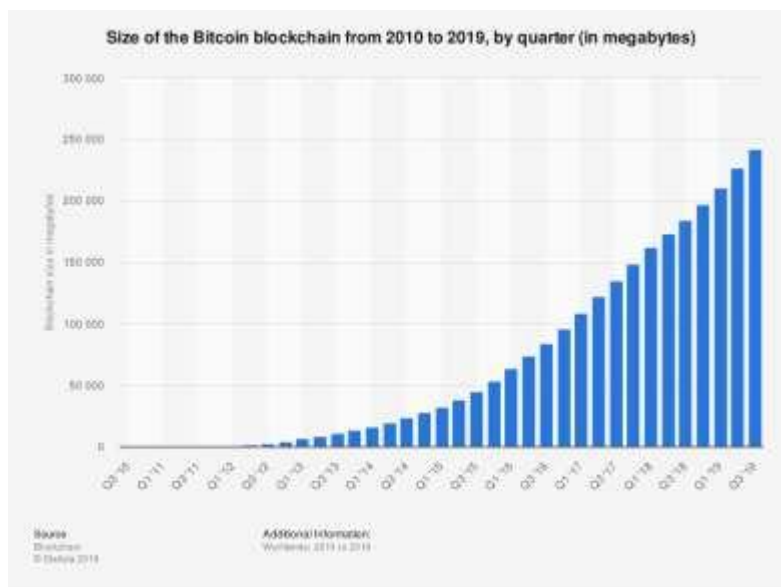
NEO is a distributed ledger based on blockchain that is similar to Ethereum. NEO also makes the implementation, management, and execution of decentralized apps (dApps) possible.

NEO is a software project founded by a Chinese company, wherefore many consider it to be China's answer to Ethereum. The Chinese company wants to disrupt the smart contract market and be a point of contact for large ICOs. So far, three ICOs have been conducted through NEO, which is little compared to nearly 100 that were run through Ethereum. China's recent ban of ICOs and shut-down of several crypto exchange markets speak against **5.2.10NEM**

New Economy Movement (NEM) is a blockchain-based peer-to-peer network that launched in March 2015. It combines the characteristics of a payment system and a smart contract system... A consensus mechanism called "Proof of Importance (POI)" calculates an "importance value" for each account. It takes into consideration the account balance, the account activity, and the importance value of the accounts it interacted with. The greater the importance value of the account, the greater the likelihood to pay transaction costs. Therefore, having a high account balance does not automatically translate into advantages.

#### **6 GROWTH OF CRYPTOCURRENCY – MILESTONES**

There have been inconceivable highs and corresponding lows in the ten plus years since Bitcoin's genesis block, as development of block chain technology and awareness of its potential marches ever forward. As this decade draws to a close, it's an opportune moment to view ten years of blockchain development in retrospective. The technology has grown from a digital currency worth only pennies to an emerging pillar of global economic systems—and it's still just getting started. Growth of crypto currency in global market is remarkable



Source: <https://www.statista.com/statistics/647523/worldwide-bitcoin-blockchain-size/>

In 2009 blockchain development was limited. In fact, the first transactions ever to take place on the Bitcoin network were undertaken in December of 2009. The blockchain ecosystem was limited to a handful of technologists and developers with only an inkling of the phenomenon that they had already set in motion the overall cryptocurrency market size is projected to reach USD 1.40 billion by 2024, at a CAGR of 6.18% during the forecast period.

## 7 FUTURE PROSPECTUS OF CRYPTOCURRENCIES

There appears to be increasing anxiety in cryptocurrency markets after the prices of Bitcoin (BTC) failed to maintain above the psychological \$10,000 level in February 2019. The disappointment came less than three months ahead of the highly anticipated Bitcoin halving. Although Bitcoin had performed relatively well compared to other major asset classes before massive corrections happened in March, recent macro events have long been looming in both the traditional and crypto markets. That extra layer of uncertainty seems to remain intact, at least into the near future. However, looking back in time, investors may find the current market conditions in 2020 to look somewhat like those of 2012. Both are Bitcoin halving years, both have a global crisis, and both have turbulent equities markets



Source: Annual Reports, Press Releases, Investor Presentations, Expert Interviews, National Retail Federation, White Papers, Retail Journals and Magazines, IEEE Journals, and MarketsandMarkets Analysis

The cryptocurrency market is expected to reach USD 1.40 billion by 2024, at a CAGR of 6.18% during 2019–2024. Bitcoin held the largest share of 38.76% of the cryptocurrency market in 2017. This market is likely to reach USD 558.2 million by 2024, growing at a CAGR of 4.23% during 2019–2024. This is attributed to Bitcoin's advantage of being the pioneer in the field and its worldwide acceptability. Ethereum witnessed significant growth in 2017 and was valued at USD 297.6 million.

As per the my analysis, Bitcoin and other crypto currencies may not be the best instruments to hedge against a worldwide recession, as Bitcoin holders can liquidate their holdings to compensate for their losses in other assets or repay their debts. However, when crises come, policymakers tend to resort to easing, and Bitcoin could be an ideal hedge against currency devaluations..

### **CONCLUSION**

Cryptocurrency especially Bitcoin offers a new, effective and attractive model of payment methods that can boost companies and operators revenues. It also provide alternative method of payment, apart from real money, that enable users to make financial activities such as buying, selling, transferring and exchanging easily in global market . Cryptocurrency can bring more positive changes to e-Business and e-Payment sector. However cryptocurrency doesn't get that much of trust yet. Many concerns, challenges and issues are existing in many cryptocurrency platforms. Until cryptocurrency is being well regulated and controlled, users need to take extra precautions of using such virtual money. So the lack of legislations is considered as the main concern in cryptocurrencysystems. In India the silence of the RBI on the regulatory status of Bitcoins may prove to be damaging. An industry has grown around Bitcoins in India- traders, exchanges and merchants who accept payments in Bitcoins. Bitcoins have already gained wide acceptance around the world- hence banning them would not be an option in India. Instead, this industry would need to be regulated. The sooner this is done, the better

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