

A STUDY ON CRYPTO CURRENCY AS DIGITAL REVOLUTION - PROS AND CONS WITH SPECIAL REFERENCE ON INDIAN CONTEXT

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Abstract

Crypto currencies are a new paradigm for money, that is a by-product of digital era. Digital currency or virtual currency supported by cryptography technologies are known as crypto currency. Crypto currency is typically decentralised digital cash intended for internet use. A crypto currency is a chain of encrypted data used to represent a unit of money. A digital currency or crypto currency, is an alternative payment method developed utilising encryption methods. Bitcoin and other digital currencies are held by millions of people as part of their financial portfolios. The main objective of this study is to enlist the key characteristics of crypto currencies, along with their merits and demerits. This paper's descriptive and explanatory analysis gathers the collective knowledge from recent studies and pertinent literature.

Keywords: *Crypto currency, Digital currency, Block chain, Bitcoin, Technology*

INTRODUCTION

Technological advancements and widespread use during the past few decades have caused drastic changes in all aspects of human life. The digital era has contributed in the development and growth of many industries and sectors. New forms of trading, transactions and currency have been emerged. Crypto currency is one of the fascinating financial instruments to have developed in recent years.

Crypto currency is one of the matters of discussion both online and offline. Digital or virtual currency supported by cryptography technologies are known as crypto currencies. Without the help of outside intermediaries, they make it possible to make safe online payments. The term "crypto" refers to the numerous cryptographic methods, such as hashing, public-private key pairings, and elliptical curve encryption that protect these entries. History of crypto currency can be traced back to the timeline when an American cryptographer David Chaum published a conference, where this concept for crypto currency first came to light. Based on his original concepts, Chaum created the proto-crypto currency DigiCash in 1995. Bitcoin, often deemed a direct precursor to Bitcoin, was designed in 1998 by Nick Szabo. On January 3, 2009, Satoshi Nakamoto mined the first block of the Bitcoin network. From \$ 434 in January 2016 to \$ 998 in January 2017, Bitcoin prices increased steadily year over year. As of now the popular and most

valuable Crypto currency is Bitcoin. Bitcoin and other digital currencies are held by millions of people as part of their financial portfolios.

OBJECTIVES OF THE STUDY

1. To review and understand Crypto currency.
2. To identify the pros or advantages of Crypto currency.
3. To access the disadvantages of Crypto currency.

SCOPE OF THE STUDY

The study is focuses on "Crypto currency as digital revolution - pros and cons". This study contributes to the existing knowledge by presenting an in-depth look at the current articles and relevant literature pertaining to Crypto currency. The data collected from previous studies, articles and from websites. The study was limited to already existing informations, with special reference on Indian context.

REVIEW OF LITERATURE

CRYPTO CURRENCY

Crypto currency is typically decentralised digital cash intended for internet use. A Crypto currency is a chain of encrypted data used to represent a unit of money. A peer-to-peer network called a block chain, which also operates as a secure ledger of transactions, such as buying, selling and transferring, is in charge of organising and managing it. Crypto currencies, in contrast to physical money, are decentralized, which implies that neither governments nor other financial organisations issue them. A digital currency or Crypto currency, is an alternative payment method developed utilising encryption methods. By deploying encryption technology, Crypto currency can act as both a medium of exchange and a virtual accounting system. The owner needs a Crypto currency wallet in order to use crypto currencies. These wallets can be computer programmes that are saved on the computer or mobile device of the user, or they can be cloud-based services. The wallets are the means by which owners can save the encryption keys that serve as a means of identification and connection to their coin.

It is possible to mine Crypto currencies or buy them via exchanges. Not all online stores let customers use Bitcoins to make transactions. In reality, hardly any retail transactions are conducted using crypto currencies, even well-known ones like Bitcoin. However, the exponential growth in value of Crypto currencies has increased their acceptance as trade commodities. They are occassionally used for cross- border transfers. The first crypto currency, Bitcoin, which debuted in 2008, is still by far the most significant, popular and widely used Crypto currency. According to market capitalisation, Bitcoin, Ethereum, Bitcoin cash and Litecoin are the four most widely used Crypto currencies. The well-known Crypto currencies Tezos, EOS, and Z Cash are also available. Many of them are comparable to Bitcoin. Others have novel qualities that enable them to accomplish more than just transfer value, such as various technological foundations.

PROS OF CRYPTO CURRENCY

The first alternative to the established banking system, Crypto currencies have a number of advantages over earlier forms of payment as well as traditional asset classes. The ability to fully control one's assets is made possible by crypto currencies.

Transferrable

Crypto currency makes dealing with folks on the other side of the world as simple as paying cash at your neighborhood grocery store. Sending Bitcoin, one of the major Bitcoin is upto 48x faster than sending through an international wire transfer. Unlike stocks or bonds, holders of Crypto currencies can quickly transfer them to others or use them to make purchases of goods and services.

Ease to invest

One can purchase crypto currency with a debit card or bank account after creating a secure account, which only takes a few minutes. Crypto currency can be bought in any quantity (little or large), even in fractional amounts.

Privacy

It assures privacy as there is no need to pay the seller any unnecessary personal information while dealing with Crypto currency. This guarantees that no third parties, including advertisements, banks, payment systems and credit-rating agencies will have access to your financial information. There is very minimal risk of your financial information being hacked or your identity being stolen because no sensitive information needs to be shared over the internet.

Security

Block chain technology is used to verify all crypto currency transactions. A block chain is a type of technology that secures almost all Crypto currencies, including Bitcoin, Ethereum, Tezos and Bitcoin cash. A block chain is constantly examined and validated by a significant amount of processing power.

Transparency

The network for Bitcoin, Ethereum, Tezos and Bitcoin cash all publish your every transaction without exception. This means that it is impossible to manipulate transactions, alter the availability of money or change the rules in the middle of a game.

Portability

Crypto currency holdings are independent of governments or financial institutions, making them accessible to owners no matter where they are in the globe or what happens to the main middlemen in the global financial system.

Irreversible

Payments made with Crypto currencies cannot be reversed, unlike credit card payments. This greatly lowers the possibility of fraud for retailers. Customers may benefit since it does away with one of the main defences credit card firms use to justify their high processing costs.

Safety

The Bitcoin network has never been hacked. Additionally, the fundamental concepts underlying crypto currencies contribute to their security: the systems are permissionless and the main software is open-source, allowing a large community of computer scientists and cryptographers to thoroughly analyse the networks' security. (<https://www.coinbase.com/learn/crypto-basics/what-is-cryptocurrency>)

Equality

Equality of opportunity is made possible by digital currency, regardless of where one was born or where one currently resides. You have the same access to Crypto as everyone else if you own a smartphone or other internet connected devices.

DISADVANTAGES OF CRYPTO CURRENCY

Price volatility

The price of Crypto currencies traded on open marketplaces is unstable. It suffers from high price volatility. Bitcoin's value has fluctuated sharply, reaching a high of \$17,738 in December 2017 and a low of \$7575 in the months that followed. Thus, some economists believe that Crypto currencies are a passing trend or a speculative bubble.

Fear of hacking

Although the block chains that power Crypto currencies are very secure, other Crypto storage spaces like exchanges and wallets are vulnerable to hacking. Over the years, numerous crypto currency exchanges and wallets have been hacked, sometimes leading to the theft of "coins" worth millions of dollars.

Increasing crimes

Criminals are increasingly using crypto currencies for undesirable tasks including money laundering and illegal transactions. It is already widely known about Dread Pirate Roberts, who operated a narcotics trade on the dark web. Additionally, Crypto currency has become a favourite among hackers who utilise it for ransomware operations.

Trackable transactions

Crypto currencies are basically pseudonymous, despite the fact that they portray themselves as being anonymous. They leave a digital footprint that can be analysed by organisations like the Federal Bureau of Investigation (FBI). This creates opportunities for governments or federal agencies to monitor the financial transactions of regular people.

Concentrated Ownership

The wealth of Crypto currencies is supposed to be divided among multiple parties on a blockchain, making them theoretically decentralised. Ownership is actually very concentrated. For instance, an MIT research discovered that only 11,000 investors held nearly 45% of the skyrocketing value of Bitcoin. One of the fallacies of Crypto currencies is that anyone with a computer and an Internet connection can mine them. However, mining well-known Crypto currencies uses a lot of energy, perhaps as much as entire nations do. Due to the high energy costs and unpredictable nature of mining, the industry is now dominated by huge corporations with billion-dollar annual revenues. 10% of the world's miners, or 90% of its mining capacity, according to an MIT research.

FINDINGS AND DISCUSSIONS

The ways in which crypto currency can address the flaws in the current financial system are frequently discussed by experts. Crypto currencies have the ability to address issues like high fees, identity thefts, and significant economic inequality, all of which are regrettable aspects of the present banking system. Beyond the financial sector, the technology that underpins digital currencies has a wide range of potential applications, including the modernization of supply networks and the construction of a new, decentralized internet. This study shed light on the various benefits and problems associated with crypto currencies. The major benefits or pros of Crypto currency identified are easy transferability, ease to invest, it assures privacy, the blockchain technology adopted in Crypto currency assures security, irreversibility, it guarantees transparency, it provides portability and crypto currencies provide equality of opportunities to all in holding it. The main cons or disadvantages of Crypto currencies spotted in the study are that it suffers from high price volatility, the fear of hacking, the increase of crimes like money laundering and illegal transactions, transactions of crypto currency can be trackable though they claim it's anonymous. Theoretically crypto currencies are said as having decentralised ownership but in actual it's having a concentrated ownership. So basically, even though Crypto currency has some cons, it has a lot of advantages.

CONCLUSION

Artificial intelligence and advancement in technology has influenced and transformed every sector of economy. One of the imperative contributions of technology in financial sector is the emergence of Crypto currency, the digital currency which is a major milestone of financial sector. Crypto currency offers various prominent advantages to the investors, which outstands its associated cons. However as of now it is extremely risky and speculative to invest in Crypto currencies and other initial coin offerings ("ICOs"). But still there is no problem in including Crypto currency as one of the investing avenues in the investment portfolio.

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