BITCOIN - THE CURRENCY OF A NEW ECONOMY?

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Abstract

In the knowledge society, a new economy is emerging, New Economy, which also encompasses the Internet economy in the form of e-bussines, which is why the economy is the economy of information society and knowledge. So, in a knowledge-based technology, a new digital coin was also needed in the field of electronic payments, thus creating the virtual currency BITCOIN (BTC), which in a moto translation is the bit of the bit (the unit of measure of the amount of information). It is a decentralized electronic payment system and a digital encrypted opensurce created in 2009 by Satoshi Nakamoto.

The need to create Bitcoin (BTC) was to ensure investment protection and free business finance, without resorting to financial institutions and beyond any constraints and regulations. The Bitcoin name also refers to the opensource program for using these coins, as well as the peer-to-peer (peer-to peer) network it forms.

Currently, even if he has many opponents and has gone through several difficult times, Bitcoin seems to survive and offer new technology with revolutionary use possibilities. The concept of the digital coin fits perfectly with the everchanging world, dominated by mobile and omnipresent technology. Compared to Bitcoin or another digital coin, any visit to the bank seems like a trip to another century, an era of time lost at the counter completing dozens of unnecessary papers.

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1. Introduction

Information signifies power in a knowledge society in the most general sense, whether political, economic or financial. The acquisition, mastering and superior valorisation of information is the keystone of this society. It confirms the famous maximum, issued by Francis Bacon over three and a half centuries ago, "knowledge is power". It is the culmination of the development of human society, in which knowledge is the last and the highest fundamental source of social power, succeeding other sources that have marked the development of human society - violence (force) and wealth (money).

Knowledge is high-quality power, as A. Toffler is suggestively defined, because it is very versatile, amplifies, to an appreciable extent, strength and wealth, is effective, makes strength and wealth dependent upon it.

The society of the future and, implicitly, the company's future environment will be focused on knowledge, on the best use of it. Based on this theory, we can think there is an application in which a finite number of coins is available to no one.

But anyone with an Internet connection can get into the app by installing the application on their personal computer and earning coins, which can be used for whatever they want their owner and to send them to other people through another simple application.

They can use to buy goods at stores that will decide to accept them. They can be used to pay salaries and services, thus facilitating instant payouts.

In 1998, Wei Dai on the Cyperpunk mailing list described a virtual, virtual currency, a surrogate, non-bank coin, used as a means of payment, called cryptomonas or cryptos, because it uses cryptography and is decentralized to control transactions and prevent double expense, a current problem for digital currencies, often making the mistake of assimilating the virtual currency with the electronic one, which is not an electronic currency in accordance with the law.

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Bitcoin is one of the first digital coins to use peer-to-peer technology to facilitate instant payouts. Independent individuals and computing power companies participating in the Bitcoin network, also known as "miners", are motivated by rewards (new tax levy) and transaction fees paid in taxes. These miners can be considered as the decentralized authority that requires the credibility of the bitcoin network. A new bitcoin is released at a fixed rate, but periodically low, so that the total offer of bitcoins is close to 21 million. A bitcoin is divisible at eight decimal places (100 million one bit-bit), and this smaller unit is called Satoshi.

If necessary, and if the participating miners accept the change, bitcoin may eventually become divisible to even more decimals.

Bitcoin is thus one of the first implementations of this concept called cryptomonas.

The bizarre customs of the Yap Islands population have been the basis of the bitcoin-based trading concept. For the purpose of the transactions these people make, they use a certain type of limestone stone as a means of exchange.

The entire community recognizes these "money" and the transactions are dematerialized in the sense that the exchanged stones are no longer transported from the buyer to the seller due to their massive size, but simply the transaction series are recorded through public notices so that each member of the community knows that the massive stone on Hill X belongs to the person Y. In this way, the public validation system for blockchain transactions also works, each transaction being made public through peer-to-peer advertising.

To understand how bitcoin works, we need to understand how the electronic infrastructure that supports this coin, the blockchain, works.

This blockchain is actually the fundamental innovation behind the bitcoin, the blockchain is a public network shared by bitcoin transactions with millions of computers (called nodes) and where communication is done through the peer-to-peer system, the same system that allows for well-known file-sharing programs.

All the bitcoins transactions that have ever existed are recorded in this blockchain and each computer (node) on the network holds each copy of these transactions.

When a new bitcoins transaction occurs, the information about it is sent to all computers in the network where they are checked by certain keys (signatures).

Then all computers receive a mathematical problem for which it requires a computing power directly proportional to the number of bithocks in circulation. The problem-solving node (computer) announces the resolution of all the others through a peer-to-peer system, the transaction is validated, and the computer that resolved the issue receives a number of bitcoins (currently 25) as a reward. After that, we analyze the next transaction.

This is actually the only way in which new bitcoins can be created, and this process is called "mining" to remind of the period when gold worked as a currency, and gold transactions led to investments in gold mines to put even more much gold in circulation.

In Romania, by Law 127/2011, art. 4, letter f, electronic money is defined as "a monetary value stored electronically, including magnetic, representing a receivable on the issuer, issued upon receipt of funds for the purpose of performing operations of payment and which is accepted by a person other than the issuer of electronic money."

Starting from the definitions of informatics, as the science of automatic data processing and management information, as that part of the computer that automatically processes the record and control data transmitted within an economic organization, we find that the essence of all IT systems is data management, which interpreted by the human factor becomes information or knowledge.

Bitcoin is not based on trust in a central issuer, but uses a distributed database over peer-topeer nodes to inventory transactions and uses cryptography to provide a security base such as ensuring that bitcoins can only be spent by their owner and only once.

Security is provided by the use of databases controlled by a database management system (DBMS) in which data storage devices are attached in a distributed way to multiple computers that

may be physically located in the same location (room, building, etc.), or be scattered into a network of interconnected computers.

2. Paper body

The construction of the Bitcoin allows anonymous ownership and transfer. Bitchers can be saved on a personal computer in the form of a wallet file or stored with a third-party wallet service, and in both cases bitchers can be sent via the internet to anyone with a Bitcoin address. Peer-to-peer topology and the lack of a central administration make it unfeasible as an authority, a government, etc. manipulate the value of Bitcoin or introduce inflation by producing them.

The Bitcoin coin also exists in physical form through "Casascius Bitcoin" created by American entrepreneur Mike Caldwell, the unique code of Bitcoin being embedded in a gold-plated coin, also subdivided.

Satoshi is the smallest subdivision of a BTC equivalent to 10 BTC (0.000000000 BTC). Other subdivisions are microbothoin (μ BTC) equivalent to 10 BTC (0.000001 BTC), milibitcoin or bitmil (mBTC) equivalent to 10 BTC (0.001 BTC) and centibicin or bitcent (cBTC).

Bitcoin makes it possible to transfer value in a very easy way and allows you to control your money, but your wallet as in real life must be kept secure.

Conclusions

Due to the fact that the economy is still young, the innovative nature and the markets that sometimes are not liquidated, the price of a bitcoin can rise or fall unpredictably over a short period of time. Consequently, it is not recommended that savings be all put into Bitcoin.

Bitcoin must be seen as a high risk, and you should not invest more money in Bitcoin than you can afford to lose. If you receive payments in Bitcoin, you can convert them quite simply into RON.

Bitcoin transactions can not be reversed, they can only be surrendered by the person who received the money. This means that trading should only be done with people or organizations that you know and trust, or that already have a recognized reputation. It is their responsibility to maintain control over the payment requests that they display to their customers. Bitcoin can detect typing errors and usually will not let you monetize money to an invalid address. Additional services may exist in the future to provide more power for decision-makers and consumers.

Bitcoin is a new and experimental currency in continuous development. Although it becomes less experimental as its use becomes more and more popular, it must be borne in mind that Bitcoin is a new invention that explores ideas in a way that has not been tried so far. For this reason, no one can foresee the future of this coin.

The Bitcoin price is also quite dependent on the size of its mining network, because the larger the network, the more difficult and thus the more expensive it is, the production of new bitcoins. As a result, bitcoin commodity prices need to increase, as production costs also increase. The aggregate power of the Bitcoin mining network has increased more than three times over the past twelve months.

As an essential feature of money, we can remember that the objective exchange value they derive from recurring social customs differs fundamentally from the intrinsic primary value of the currency-operated object. The objective value can be doubled by an intrinsic value more recognized for precious metals, or less for stones used as coins by indigenous peoples in Yap islands.

Whatever the object was used as money in transactions, it had a physical existence, was material, palpable, and in most cases had an intrinsic value independent of the exchange value.

The next fundamental step in the evolution of this concept was the renunciation of intrinsic value.

The dematerialisation of money represents the beginning of the modern concept, starting with the renunciation of precious metals as money and the transformation of money into a dematerial exchange environment, thus creating a modern monetary paradigm, fiat money, immaterial creation of money by the central-commercial banks system the required reserves mechanism.

The only value that this kind of money retains is the trust of the population in the institutions that emit the money and so.

Modern financial crises are based on the deterioration of confidence in the mechanisms whereby the curtains of money lie higher or lower depending on the perceived needs of the economy, the issuance of which depends on a series of monetary and economic policies that are not intuitive and ultimately depend on the decisions of some people about how much money should be in circulation. Theoretically the money that can be issued can not be limited (with the inflationary consequences of rigor and systemic risk).

Following these considerations, bitcoin could be defined as a virtual form of limited electronic crypt-coin that eliminates the problem of "trust" characteristic of normal currencies through a decentralized, encoded and depersonalized transaction system.

The emphasis here is not on the currency itself, which is just a convention, but on the global payment network that represents the bitcoin infrastructure. Just as Mastercard or Paypal networks allow the transmission of electronic money between parties, the bitcoin network also transfers electronic payments between exchange participants.

A fundamental difference from the current normal electronic payment system is that the bitcoin network is decentralized, with no central authority, institution or person to manage such transactions, such as the European Central Bank for Euro transactions.

Another difference is that e-commerce transactions in the bitcoin network are not based on a normal currency, such as Paypal where you can only pay through one of the coins accepted by the world financial system but has its own account unit called "bitcoin".

The maximum number of bitcoins that can be created at any time can not exceed 21 million. Unlike dollars, for example, which theoretically can be created in an unlimited volume, the bitcoin network can produce no more than 21 million units, currently circulating around 15.2 million euros.

The emergence of bitcoin is still shrouded in mystery, credited with this creation being the mysterious Satoshi Nakamoto, whose true identity is unknown.

Although, seen as a currency of the future, bitcoin acts as an exotic asset, common transactions are still limited, although there are sites that contain this currency, but most use it for its speculative and volatile nature. In the past three years, the bitcoin value (in US dollars) fluctuated, this being the main critic of this system.

Being decentralized, there is no assurance on the value of the investment, and if the risk factors materialize your investment in bitcoin turns into a final loss without the possibility of being saved by any central bank or guarantee fund, as happens for example with bank deposits common.

And the risk factors can be the intrinsic reliability of the system, the possibility of hacking or the emergence of competing platforms.

In addition, as the network becomes more popular, problems arise over the time that transactions are processed; if a transaction is normally processed in less than an hour, there have been cases where sellers have waited for up to 12 hours.

Given that competing platforms such as Mastercard or Visa perform millions of transactions per hour, bitcoin is limited to a few thousand, far too little for now.

On the other hand, the independent nature of this coin makes it sympathetic to the nostalgics of the gold standard and to the Austrian School of Economics because bitcoin is

basically a free currency extracted from the guardianship of any regulatory authority and whose issuance does not depend of any monetary policy.

In this sense, bitcoin is seen as an antithesis to the modern financial institution, which may suffer fatal systemic crises like the one in 2008, on which the very nature of the inflationary currency of the official electronic currency is based.

Bitcoin is not the only currency on the market, but some of the advantages of this digital coin make it more distinctive than other coins, but as nothing is perfect, it also has flaws.

Among the benefits of Bitcoin, we can list payment freedom. With Bitcoin, we have the ability to send and receive money anywhere in the world at any time. We do not have to worry about crossing borders, rescheduling for linked holidays, or other limitations that might occur during the money transfer. With Bitcoin, we have total control over your money, and there is no form of central authority in the Bitcoin network.

Another advantage is security and control. Allowing users to control their transactions, helps keep Bitcoin safe for the network. Traders can not charge additional charges without being notified. They need to talk to the consumer before adding any kind of toll. Bitcoin payments can be made and completed without personal information being linked to the transaction. Due to the fact that personal information is hidden from indiscreet eyes, Bitcoin protects against identity theft, the bitcoin wallet can be encrypted and backed up to ensure money safety.

Another very important advantage is that the information is transparent. With the blockchain, all completed transactions are visible to everyone, but personal information is hidden. The public address is visible, but personal information is not related to it, anyone can check transactions at any time in the Bitcoin block chain.

The Bitcoin protocol can not be manipulated by anyone, organization or government, because Bitcoin is cryptographically safe.

Very low fees are another advantage, at present, within the Bitocoin payments, no commissions are charged or very small. Users may include fees to process transactions faster. The higher the charge, the more priority it gets in the network and it will process faster.

Digital currency exchanges help the trader to process operations by converting bitcoins into fictitious coins. These services generally have lower fees than credit cards and PayPal.

Due to the fact that Bitcoin transactions can not be reversed, they do not contain personal information, and they are safe, traders are protected from potential losses due to fraud, it involves far fewer risks for traders.

With Bitcoin, traders can do business where crime and fraud rates are high. That's because it's very hard to mislead someone in Bitocin thanks to the public register, also known as blockchain.

Now that we have reviewed the basic advantages, we can move on to the disadvantages. There are three main drawbacks that need to be highlighted, so we can give you an overview of what we can expect from Bitcoin.

Thus, among the disadvantages of Bitcoin we can list lack of notification and understanding. Many people still do not have the existence of digital coins and Bitcoin. People need to be informed about what Bitcoin means in order to apply it to their lives. Networking is the best way to promote Bitcoin.

Companies accept bitcoins because of the benefits, but the list is relatively short compared to physical coins.

Companies like TigerDirect, Dell, NewEgg and Overstock accept Bitcoin as a form of payment, which is great. Employees should be trained on Bitcoin to help their customers. This will certainly require some time and effort.

Risk and volatility are two elements that pose a big disadvantage to Bitcoin. This is volatile, especially because there is a limited amount of coins and the demand for them that increases with every passing day.

However, volatility is expected to decrease as time passes. Given that many companies, media and shopping centers have begun to accept Bitcoin, its price will eventually stabilize.

Currently, the Bitcoin price jumps from day to day, especially due to the events associated with digital coins.

Bitcoin is still in its infancy, with incomplete but emerging functions. To make the digital currency safer and more accessible, new features, tools and services are currently under development.

Bitcoin has yet to grow until it reaches its full potential. This is because Bitcoin is just starting out and has to manage its problems just like any other coin in the beginning.

Knowing both sides of Bitcoin, we conclude that this is not perfect. It has many advantages that physical money does not provide to its users, however, it also has disadvantages. That's because Bitcoin is still a relatively young coin. People are beginning to perceive their existence more and more. For Bitcoin to be successful, more people should understand what this is and not leave the preconceived notions to distort the concept of digital coin.

There are always pros and cons, as in any situation. In order to make the right decision, we must weigh good and bad before the final election.

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