Bitcoin

History

There is little doubt that the twenty-first century is the century of Information Technology, and the Internet is the primary catalyst. It is funny to think that the Internet was once thought of as something slightly better than a fax machine. Not many people had the foresight then to predict the utility of this technology, and the same goes for Blockchain Technologies.

Electronic Commerce requires Electronic Finance and there has been no stopping the rise of Online Banking. However, in the wake of ever growing fees and the 2008 financial crisis, the world has seen an overall loss of confidence in the traditional banking system.

Interesting fact: When you give money to a bank, that money legally becomes their money. It becomes an asset on the bank's balance sheets. They then have a separate legal contractual obligation to pay you back, they owe you money. They are allowed to use the money which you have loaned to them for any purpose that they wish for.

What happened in the 2008 Financial Crisis was that the miscalculations (taking risk for profits), that banks where making for decades, finally caught up with them and they were about to go bankrupt which would mean a default on all their creditors, the depositors. Luckily the US government stepped in and 'bailed out' these banks at the expense of the US taxpayers but since there have been no sufficient changes in regulations and since bank are speculating with your money still, it is unclear whether the US Government has the funds or the appetite to do so again.

This has greatly influenced people's view of the US dollar as the world's reserve currency, not only at the consumer level but among governments and market traders alike. It has become a common believe that the US dollar and other national currencies pegged to it would start to fall in value or perhaps even fail completely.

As if on queue the world's first cryptocurrency Bitcoin, started life in 2008 as a free, open-source computer program written by a "Satoshi Nakamoto". No one knows if Satoshi Nakamoto refers to one person or several, and the identity of that person or persons remains a mystery to this day.

Nakamoto's genius was in the way he solved the fundamental problems of decentralized digital money and what he created was a decentralized database of addresses that holds tokens (Bitcoins/money) that can only be sent to other addresses if one has the password (private key) to do so, and it works!

Transactions are verified by system-supported cryptography that crowdsources from a global network of computers. This makes Bitcoin secure and fast enough to operate on a scale consistent with world currencies. It is easy to use, requires no third party trust (banks) and operates with extremely low transfer fees.

The consequences have been far reaching and because the technology is unstoppable and proven, it is only a matter of time before more and more people begin using it freely. It is uncertain exactly how the world will react to such a massive change in the way we transact going forward, but the disruption is already evident.

Many believe that when this new currency system stabilizes, we will see the decline of the US dollar standard. Money should encapsulate the fair worth of anything that a free market deems so, including goods, services and labor- Bitcoin does all of this.

As the Internet is prevalent and neutral, there really is no way of stopping or controlling the emergence of this fantastic new and fair way of dealing with money and of global trade. It simply is up to the free markets to decide if it sees Bitcoin as beneficial or not, and so far, the trend is that free markets love Bitcoin.

From the early days of buying a pizza with Bitcoin, to the current market cap of over 10 Billion USD, each Bitcoin's value can only appreciate with value in time because the supply of Bitcoin will never increase past 21 million Bitcoins. As the popularity and utility of Bitcoin increases this will mean that the same amount of Bitcoins will come to represent an ever larger amount of trade and goods, which are not limited, an inverse inflation.

Current State of Bitcoin

Today, the currency is already accepted by many merchants for buying goods, making donations, and the list is growing fast. High profile names are pumping millions of USD into it, and now even public bodies want in on the act now.

There is little doubt now that Bitcoin technology will form the basis of money in the future, one way or another, and the industry is still wide open for new entrants. Make no mistake about it, those who embrace and learn to survive and thrive in this new world of digital currencies will become the movers and shakers of the future. So, those businesses and individuals who wish to stay ahead of the pack should endeavor to learn as much about it as possible.

Believe it or not but the most important thing about Bitcoin is not that it can be used as a currency, but it is the fact that we are now starting to really discover that we can use the underlying technology for so much more. The Blockchain that makes up the core of Bitcoin technology can be used for many decentralized uses such as voting mechanisms, ID verification, legal contracts, and this is where the new revolution in smart contracts will really be the most beneficial and disruptive.

What is Bitcoin

A Bitcoin is simply a digital record in an active and growing public ledger (Blockchain), that keeps track of who owns what within the Bitcoin system. It is important to understand that there is no physical bit ‘coins’, only records of ownership of units of value.

When a Bitcoin is sent from one person to another it does not actually move anywhere, there is only an alteration in the ledger’s ownership record for that ‘coin’.

The ledger records ownership without revealing any true identities through the use of digital addresses (public keys), which function like pseudonyms. Ownership is ultimately determined by a secret digital key (private key) that affords the holder exclusive rights to transfer Bitcoins. When a transaction is made, this secret key is compared with its corresponding public key and if they match then the transaction is allowed (validated). If they do not match, then the transaction is refused (invalidated). This process is known as ‘digitally signing’ a transaction.

The owner is then able to spend Bitcoins on products and services from any business that chooses to accept them.

Reducing the trust required for transactions to occur was one of the primary drivers for the creation of Bitcoin in the first place. As Satoshi’s original paper states in his last paragraph: "We have proposed a system for electronic transactions without relying on trust."

Bitcoin as an Investment

There is another reason to own Bitcoin besides the participation of an online economy – investment. There are two primary reasons that people invest in Bitcoins.

If central banks across the globe continue to devalue their currencies, then holding Bitcoin could shield against inflation. Despite the valid concern over inflation, caution is needed when using Bitcoin as a hedge against inflation. The currency continues to be young and still needs to prove itself.

If Bitcoin becomes widely adapted, including having easy exchange to and from national currencies, then it'll become unimaginably valuable. Since the specified limit on the number of Bitcoins in existence will never increase, its unit worth will essentially increase when its supply stops increasing and as it starts to eat up more of the global economy's trade. Some predict prices within the thousands, even tens of thousands, per Bitcoin. The potential upside is massive and as long as you are able to afford to lose your investment, it should be an essential part of any speculative portfolio.

Why do people give Bitcoins value?

Utility

Bitcoins can be used to purchase goods and services wherever other currencies aren't accepted or convenient, most notably in dark markets, or developing nations.

Exchange Value

Bitcoins can be exchanged for many different currencies on global exchanges. The term for this is ‘fungible’.

Speculation

Bitcoin’s value is volatile and has surged in both directions. Speculators procure Bitcoins with the hopes of creating fast profits by playing the market. So Bitcoin has value as a speculative asset with a high volume of activity in the marketplace. The term for this is ‘liquidity’.

Scarcity

The total number of Bitcoins is algorithmically restricted to twenty-one million Bitcoins, and they have not all been released (mined) yet. This maximum number of Bitcoins is hardcoded into the protocol and cannot be changed. When something is scarce and difficult to obtain it becomes valuable, and so has Bitcoin.

Cost of Production

There is an additional reason that Bitcoin can be ascribed value and that is the dollar cost per kilowatt of electricity needed to create (mine) new coins and secure the network. While this cost is significantly less than the face value of a Bitcoin, it is still a factor that must be taken into account.

Fair

It’s an open ledger (book) consisting all the records of transactions of limited supply units. All the rules of the system are out in the open and all participants can only play by the rules. This means that all parties can in fact ‘trust’ the ‘Bitcoin system’ as the ‘system’ is theoretically un-hackable.

Straightforward

Bitcoin is quick and secure!