



BITCOIN – DRIVER OF INNOVATION

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ABSTRACT

Bitcoin, the first and most popular crypto currency, paves the way as a disruptive technology in the long-term and stable payment systems that have existed for decades. In addition to its security, two key infrastructures are likely to be key to success: power distribution and Global availability. Cryptocurrencies can transform digital trading markets by creating a free flowing trading system without money. Within two years of its peaceful launch in 2009, Bin Coin grew to billions of dollars in economic value without a basic analysis of the design of the system. Since then the growing book has identified hidden but important areas of the program, identified attacks, proposed other promising alternatives, and selected more difficult future challenges. In this paper, we provide a complete description of the details that make such a cryptocurrency a popular currency and offer new things that can be dismissed.

KEYWORDS: Cryptocurrency, Bitcoin, Encryption, Currency, Exchange Rates, Transaction

1. INTRODUCTION

Bitcoin is a digital, medium-sized, anonymous currency, which cannot be supported by any government or other legal entity, and cannot be used to acquire gold or other commodities. It relies on interacting with peers to maintain its integrity.

Since its acquaintance with the world more than 10 years earlier, Bitcoin has had an unpopular and inexpensive trading history.

Such a major event took place in 2011. Bitcoin prices rose from \$ 1 in April of that year to a peak of \$ 32 in June, an increase of 3200% in three short months. That high rise was followed by a sharp decline in the crypto market and the cost of Bitcoin reached as low as possible by \$ 2 in November 2011. There was a negative improvement the following year and the cost had risen from \$ 4.80 in May to \$ 13.20 on August 15.

2013 ends up being the perfect year for the cost of Bitcoin. The top price started the year in the exchange of \$ 13.40 and went through two price increases at the same time. The main reason for this happened when the price shot up to \$ 220 in early April 2013. That sharp increase was followed by a similar rapid decline in its costs and digital currency was changing hands at \$ 70 in mid-April.

In any case, that was not the end of you. Another meeting (and a related accident) took place later that year. In early October, the cryptographic currency was exchanged at \$ 123.20. By December, it had reached \$ 1156.10. However, it fell to about \$ 760 in three days after the fact. Those rapid changes marked the beginning of several years of Bitcoin costs and reached \$ 315 lower in early 2015.

1.1 How Bitcoin Works

Bitcoin is a digital currency, a separate system that records transactions in a distributed ledger called a blockchain. successfully, these blocks are included in the blockchain record and miners are rewarded with a small amount of bitcoins. Some Bitcoin market participants can buy or sell tokens through cryptocurrency exchanges or see other people. The Bitcoin book is protected from fraud by the fraudulent system; Bitcoin trading also works to protect itself from potential theft, even if it is widely stolen.

2. LITERATURE REVIEW

Bitcoin was intended to be a seamless and unique approach between government and bank-controlled banks. The transaction agreement within the Bitcoin network is not dependent on third party mediators. Instead, it is available with the help of a blockchain - a peer-to-peer network of eger electronic systems - to verify and validate transactions.

(Nakamoto) in his paper explains that bitcoin will be introduced as a peer in the demand for an electronic currency system. Allows electronic money to be sent to another party without having to spend any money links. (Raymaekers, 2014) in his research article states that Bitcoin has become a cryptocurrency that was introduced in 2009 as the first digital currency to disperse. Bitcoin allows online payments to be made by sending money through banks, purchasing goods and services online to be made from one group to another without going to a financial institution. Many benefits of using bitcoin currency like transaction speed, transaction security, cost and convenience. The technology that supports bitcoin is blockchain technology. More than \$ 2 billion has been invested in blockchain start-ups (Shin, 2016).

Blockchain technology improves the visibility and visibility of administrative, financial and security areas, as well as financial removal procedures. With its distributed data source, blockchain data is broken down into blocks, continuously adding new data to successive data blocks (Swan, 2015). Blocks linked together using cryptographic signatures that result in the transaction being stamped on time, and evidence of disruption

Bitcoin works with complex cryptography stored locally in a shared group. This experiment explores sensible articles to see how bitcoin tends to write. Investigations provide an account of bitcoin features through a written writing survey. This paper is based on important information from the available literature as well as information from optional case studies in the public domain. Contrary to various monetary standards, Bitcoin seems to have faced many challenges and many applications in everyday life, making the novelty difficult in the final customer environment.

At a time when Bitcoin is emerging, it seems that the flag is waiting for a higher future, yet the development of bitcoin is hard to anticipate. Bitcoin opens up a whole new world for both professionals and academics. In addition, this test reveals the concept of the "power" of bitcoin, including the key factors, needs, suggestions, and difficulties faced by bitcoin in arranging deals

As mentioned, in 2015, the Bit pay partnership with Ingenico led to the Point-of-Sale Bitcoin system (Redman, 2015). It opened the doors for traders around the world to begin accepting Bitcoin as a target for trading in their store. From accepting online transactions only, Bitcoin can now be physically accepted using debit cards, or mobile devices such as phones, tablets, etc. One reason for the rise of bitcoin is the anonymity of its users. In 2008, when bitcoin was first introduced, its price was less than \$ 1.

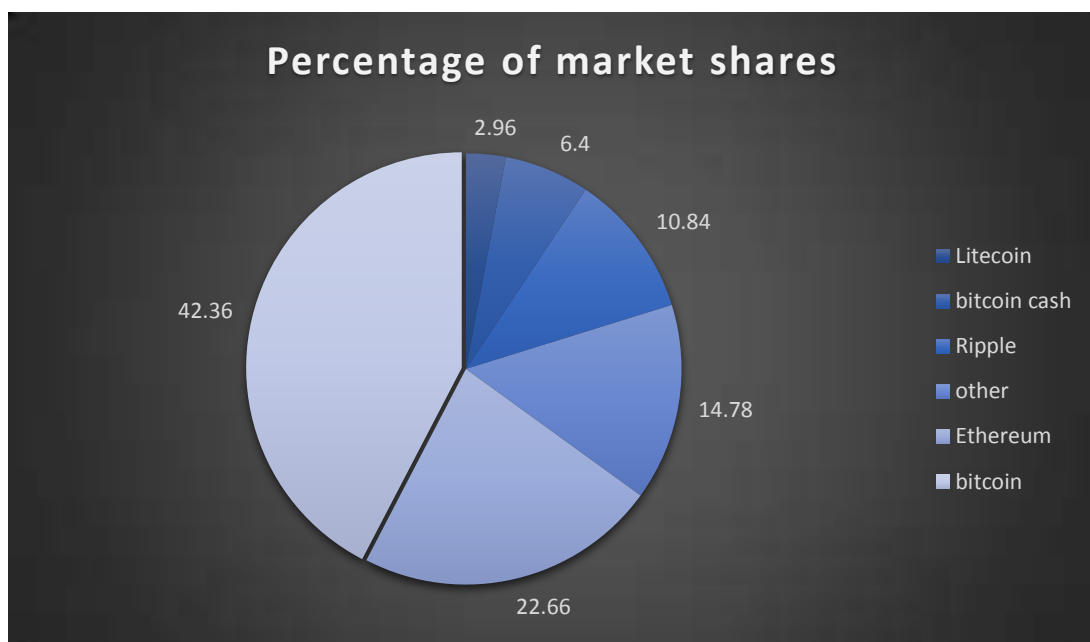


Figure 1: Market Shares of Top 5 Cryptocurrencies

Growing slowly to the general trend, its price reached \$ 1000 in February 2017 for the first time. As of August 2017, its price has quadrupled in a short period of time which has kept the attention of the whole world. Later, in just four months, by December its price had tripled and had grown at an unusual rate by 2 translations. Many of the other digital currencies on the market follow the same trend again (coindesk.com, 2018). In the form of a bubble circle, the emergence of the cryptocurrency market has sparked various claims that it is one of the most eye-catching guns.

Many economists have agreed that economic bubbles, crashes, and problems are inevitable the effects of the capitalist system. Marx (1867) argued that imminent problems were common it is caused by the 'contradiction' within the capitalist system itself, and this the debate will turn out to be more complex and sharp as the so-called capitalist system it grows. He believed that these problems were a failure at the end of the capitalist system. No. scepticism, given the innovations and technological advances, the capitalist. The system will produce new bubbles like cryptocurrency football.

Although all transactions are recorded in the public ledger, only one public address is associated with the transfer transaction. Public address does not contain personal information, and as long as the public address is not associated with an identity, the transaction remains anonymous. This anonymity has made bitcoin the optional currency of the so-called "darknet" - websites that sell illegal items such as drugs and weapons. Since its closure, many new websites have emerged to replace them and use the bitcoin model as a means of communicating with buyers and sellers.

3. ANALYSIS

Bitcoin's current goal is to be a store of value as well as a payment system, there is nothing to say that Bitcoin could not be used in such a way in the future, though consensus would need to be reached to add these systems to Bitcoin. The main goal of the Ethereum project is to have a platform where these "smart contracts" can occur, therefore creating a whole realm of decentralized financial products without any middlemen or the fees and potential data breaches that come along with them.

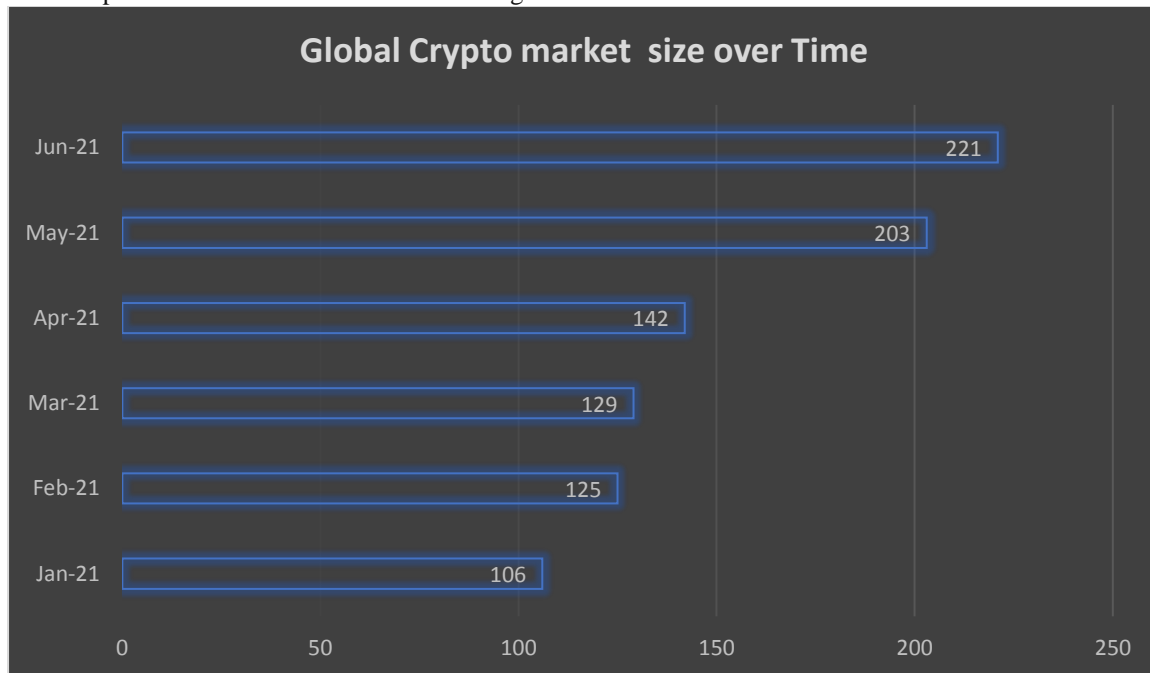


Figure 2: Global crypto market size 2021

This versatility has caught the eye of governments and private corporations; indeed, some analysts believe that blockchain technology will ultimately be the most impactful aspect of the cryptocurrency craze.

3.1 Superior Competing Currency

Bitcoin is by far the largest crypto asset and holding it as a store of value has become the dominant narrative. A Store of value is an asset, commodity, or currency that maintains its worth and therefore can be exchanged in the future without deteriorating in value.



3.1.1 Scarcity

While there are a number of factors required in a good stock market, a shortage is the most important of all. To be a value store, the good can't be too much, easily available or easily produced in bulk otherwise it would be a small thing to increase the availability of the good. As the basic economics have taught us, when supply rises above demand, the price drops, making it a bad store of value. However, when supply is limited, any increase in demand increases the value of the good that helps maintain its value.

Gold is one of the rarest natural metals on Earth. It is difficult, expensive and very effective for digging the soil. As a result, the supply of gold does not increase easily and is not very high compared to other metals. This is the key building block for gold as a value store, because when demand rises and prices rise, it is a small effort to produce more gold which means it is difficult to fill the market with new acquisitions. This is the reason why there is a negative relationship between the value of a metal and the shortage of that metal. Compared with copper or silver, which is much easier to produce, gold had a different chance of being small and thus became a prominent type of value and money.

Therefore, Bitcoin is the only liquid liquid in the world with a fixed supply. That makes Bitcoin one of the scarce assets in the world. With constant supply, any increase in demand means that the price increases over time making it a good value chain store.

3.1.2 Durable

In order to preserve its value in the future, the asset should not be easily damaged or damaged. Food, although very important for our health, is a poor store of value because it spoils over time.

Taking into account computer standards does not change in a way that makes it difficult to use Bitcoin or reduce its performance, it will not degrade over time. It does not wear out, wear out or deteriorate due to time or use. Any bitcoin will still work in the near future as it does today.

3.1.3 Fungible

The price store needs to be exchanged in parallel. The ability to return good for another good simplifies the exchange processes, as risk means an equal amount between assets. Therefore, the disability allows for the exchange of goods in many places and markets. This is important in the value store because the asset owner knows that they can easily sell the good in the future to more buyers, the good is likely to hold its value.

One Bitcoin remains exactly the same as another Bitcoin. Because of the software, Bitcoin is not mined for any pollution. One Bitcoin will always be the same as any other Bitcoin ever made. As a result, Bitcoin is easily recognizable than gold.

3.1.4 Verifiable

The stock market is easy to identify and easy to verify. And it can be very difficult, if not impossible, to make a fake. Simple verification simplifies the exchange process thus increasing confidence in the manager that they will have no problem getting the price in the future. Knowing that the good can not be counterfeit ensures that the market will not be flooded with illegal goods and increases confidence in future transactions.

3.1.5 Storable

Because the asset store is designed to be held in the future, there should be a secure way to store the asset in order to recover it over time.

By comparison, Bitcoin is much easier to maintain and can be made for free. Bitcoin is digital so it does not need a large or secure room. Anyone can hold any amount of their own using a web-based digital, or hardware-based wallet. The wallet can also be stored on mobile phones, desktops, hard drives or kept secure by printing private keys and addresses on paper. There is a small curve to learn how to securely save bitcoin for anyone new to the space but once understood, there is no limit or cost limit to keep Bitcoin.

3.1.6 Portable

The goods store is easy to move, making it easy to get to wherever you are. This feature also helps to trade long distances.

Gold is heavy and very disruptive to deal with. In fact, this was a major setback for gold and a reason to move away from handling gold coins and using bank notes indicating a gold claim. It is expensive and slow to move which is why it is done so often. In fact, when Germany reclaimed \$ 31 billion worth of gold barracks at the last stops in New York and Paris in 2017, it took more than four years and cost \$ 9.1 million to ship all that metal to Frankfurt.

However, portability is not a problem with Bitcoin. It can be stored on a thumb drive or accessible anywhere in the world with internet meaning you can "take it with you" wherever you go. This is especially



important for refugees who have historically been forced to flee and who can only manage. Now they have a way to save and take whatever wealth they have.

3.2 Payment connection

The software maintains a continuous update recorder that records all Bitcoin transactions. The code sets out the Bitcoin shortage, and the mines introduce new Bitcoins from time to time. This Bitcoins payment form consists of solving the mathematical problems needed to verify a transaction. Successful solutions to those problems using mathematical calculations create a lot of money.

3.3 Market value

Today, there are billions of dollars in digital assets in the world. In 2017, consolidated digital funds had a total market value of approximately \$ 100 billion. Depending on the market price, the price of digital currencies can be ten times higher than the most important companies

4. INNOVATION

Digital currencies have the power to transform fiat currencies into a popular new payment method. In this scenario, a country with a highly efficient cryptocurrency system could benefit greatly from 'arms' competition and financial leadership.

The integrity of the data flow in the network of cryptocurrency systems has the potential to reduce, to some extent, the problems of corruption and underground industries that exist in all countries.

Physical income grows at a faster rate than cash. This is due to the simplicity of modern payment methods and the current state of technological advancement, which allows seamless transactions in the port and online sales.

Cryptocurrencies have the potential to serve as a tool to build new financial systems in countries with a high percentage of unregistered people and political instability due to their key benefits such as no external disruption, user anonymity, low transactions and cross-border transaction.

People will be able to participate in global commercial markets, which has led to economic growth. When citizens in a country face political, social, and / or financial turmoil, they can use cryptocurrencies in large quantities.

Blockchain technology that supports cryptocurrensets allows for a variety of technological advances, including faster and more secure payments, the best-selling transactions in the financial markets, and the validation of sensitive data.

Blockchain will disrupt all businesses, and digital money will enhance the company's new model, speed up and maximize business outcomes at unprecedented levels. This change could be the explosion or the beginning of financial restructuring. Therefore, investors are investing more in blockchain success, which is a crypto-currency collapse technology.

4.1 Fraud management

An unprecedented level of security is possible with Bitcoin. The network offers users protection from the most common types of fraud such as payments or unwanted expenses, and bitcoins are less likely to cheat. Consumers can support or crucify their wallets. Hardware bags make it very difficult to steal or lose money. Bitcoin is designed to allow its users to have complete control over their money.

4.2 Global availability

With Bitcoin, all payments in the world are usually fully integrated. Bitcoin allows any bank, business or individual to securely send and receive payments anywhere at any time, with or without a test account. Bitcoin is available in many countries that remain unavailable in most payment systems due to their limitations. Bitcoin increases global access to trade and can help international trade to flourish.

One of the most important benefits of crypto sets is their global availability. With limited government restrictions and laws, except in China where digital currency trading takes place despite restrictions, cryptocurrencies can be accessed and traded by people from all over the world using integrated investment platforms that require nothing but an online connection and a cryptocurrency fund to get started. .

In addition, customers are able to purchase products from overseas eCommerce sites at a lower cost per crypt sets, as cross-border payments benefit at lower costs with this digital asset.

This means that eCommerce sites can open their doors to represent the most targeted audience if they are to adopt crypto sets. Transactions on cryptocurrency networks are also much faster than traditional fiat currencies, and remain more secure, further helping to make products more accessible worldwide.



4.3 Cost effective

With the use of encryption, secure payment is possible without any problem and is expensive. Bitcoin transactions can be more expensive than alternatives and be completed in a short period of time. This means that Bitcoin has some potential to become a standard way to transfer any money in the future. Bitcoin can also play a role in reducing poverty in many countries by cutting transaction costs higher on workers' wages.

4.4 Reimbursement in bulk

Bitcoin can be used to run refund campaigns like Kickstarter, where people promise money for a project taken from them only if there are enough promises to achieve the goal. Such verification contracts are processed by the Bitcoin protocol, which prevents transactions from happening until all conditions are met.

4.5 Dispute Resolution

Bitcoin can be used to develop new dispute resolution services using multiple signatures. Such services may allow third parties to approve or reject the transaction in the event of a dispute between the parties without the control of their finances. As these services will be compatible with any user and merchant using Bitcoin, this can lead to free competition and high quality standards.

4.6 Accounts sign in bulk

Most signatures allow transactions to be accepted by the network only if a certain number of designated groups agree to the signing process. This may be used by the board of directors to prevent any member from using parts of his or her treasury without the consent of other members. This can also be used by banks to prevent theft by preventing overtime payment if the user does not provide additional information.

4.7 Trust and integrity

Bitcoin offers solutions to many of the trust problems that plague banks. With a clear choice of accounting, digital contracts, and consistent transactions, Bitcoin can be used as a ground for restoring trust and consistency. Fraudulent banks cannot cheat the system to make a profit by polluting other banks or the public. A future where major banks will support Bitcoin can help restore credibility and trust in financial institutions.

4.8 Strengthening and decentralization of communities

In the form of land redistribution, Bitcoin has created a unique type of payment network with a growing level of robustness and retrieval. Bitcoin can hold millions of dollars in trading without the need for military protection. Without a common point of failure as a data center, network attacks are difficult. Bitcoin can represent an exciting initiative to protect domestic and foreign financial systems.

4.9 Flexible transparency

All Bitcoin transactions are public and transparent and the identity of the people after the transaction is automatically confidential. This allows individuals and organizations to work with flexible rules to reflect this. For example, an entity may choose to disclose certain transactions and balances to certain employees as a non-profit organization is free to let the public see how much you earn through daily and monthly contributions.

5. FUTURE SCOPE

The next decade could prove its significance in the evolution of Bitcoin. Changes within the external financial system, there are a few areas in the Bitcoin's ecosystem where investors should take care.

Currently, cryptocurrency stands between being a value store and a daily trading platform. Institutional investors are eager to get into action and benefit from fluctuations in prices as even governments around the world, such as Japan, have announced that it is a fair way to pay for goods.

The introduction of Bitcoin (or, in that case, increases in its appeal as an asset class) as a payment method would not be possible without technological advances in its natural environment. To be considered a viable investment asset or payment method, Bitcoin's blockchain must be able to manage millions of transactions in a short period of time. Several technologies, such as the Lightning Network, promise scale on its performance. New cryptocurrencies have been developed as a result of the complex forks of the bitcoin blockchain, including Bitcoin Cash and Bitcoin Gold, which aim to adjust ecosystem parameters so that they can manage more transactions at a faster pace.

CONCLUSION

Bitcoin is a payment system based on a redesigned architecture that provides a file for how to get more anonymous credentials, bitcoin addresses, can used to make and receive payments. The long-held view of



bitcoin is that it is the subject of much debate. Making Bitcoin requires ingenuity, patience, and most importantly, minimizing power. After all, the basic rules enshrined in the Bitcoin constitution ultimately take the technology. That's why Silicon Valley has had a hard time understanding the value proposition of Bitcoin, not just technology, financial instrument, or consumer request; an entire technology-backed financial system. Changing the constitution of Bitcoin requires a political process that can break its financial structures, therefore, new technologies are being used as modules. Bitcoin is a digital novel that has the potential to be a key player in micropayment markets and global markets. It is also a good alternative to gold bugs who prefer to hold funds that are fully funded by assets. In addition, because they are anonymous and in their hands, it is therefore difficult to shut them down, it can allow organizations that are hated by the government, whether they are praiseworthy or disgusting organizations - to be funded without the risk of money laundering or sanctions against donors.

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