The history of Bitcoin pdf

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BITCOIN.

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The history of Bitcoin.

A bitcoin is an electronic currency used online between individuals. Bitcoin is a cryptocurrency, a form of electronic cash. It is a decentralized digital currency without a central bank or single administrator that can be sent from user to user on the peer-to-peer bitcoin network. Bitcoin was invented by an unknown person or group of people using the name, Satoshi Nakamoto, and released as open-source software in 2009. Bitcoins are created as a reward for a process known as mining. They can be exchanged for other currencies, products, and services. Its transactions are verified by network nodes through cryptography and recorded in a public distributed ledger called a block chain.

The foundation of Bitcoin

The Bitcoin Foundation was founded in September 2012 to promote bitcoin's development and uptake.

2011-2012

After early "proof-of-concept" transactions, the first major users of bitcoin were black markets, such as Silk Road. During its 30 months of existence, beginning in February 2011, Silk Road exclusively accepted bitcoins as payment, transacting 9.9 million in bitcoins, worth about $214 million. In 2011, the price started at $0.30 per bitcoin, growing to $5.27 for the year. The price rose to $31.50 on 8 June. Within a month the price fell to $11.00. The next month it fell to $7.80, and in another month to $4.77. Lite coin, an early bitcoin spin-off or altcoin, appeared in October 2011. Many altcoins have been created since then. In 2012, bitcoin prices started at $5.27 growing to $13.30 for the year. By 9 January the price had risen to $7.38, but then crashed by 49% to $3.80 over the next 16 days. The price then rose to $16.41 on 17 August, but fell by 57% to $7.10 over the next three days.

2013–2016

In 2013, prices started at $13.30 rising to $770 by 1 January 2014. In March 2013 the block chain temporarily split into two independent chains with different rules. The two block chains operated simultaneously for six hours, each with its own version of the transaction history. Normal operation was restored when the majority of the network downgraded to version 0.7 of the bitcoin software. The Mt. Gox exchange briefly halted bitcoin deposits and the price dropped by 23% to $3.77 before recovering to previous level of approximately $48 in the following hours. The US Financial Crimes Enforcement Network (FinCEN) established regulatory guidelines for "decentralized virtual currencies" such as bitcoin, classifying American bitcoin miners who sell their generated bitcoins as Money Service Businesses (MSBs), that are subject to registration or other legal obligations. In April, exchanges Bit Instant and Mt. Gox experienced processing delays due to insufficient capacity resulting in the bitcoin price dropping from $266 to $76 before returning to $160 within six hours. The bitcoin price rose to $259 on 10 April, but then crashed by 83% to $45 over the next three days. On 15 May 2013, US authorities seized accounts associated with Mt. Gox after discovering it had not registered as a money transmitter with Fin CEN in the US. On 23 June 2013, the US Drug Enforcement Administration (DEA) listed 11.02 bitcoins as a seized asset in a United States Department of Justice seizure notice pursuant to 21 U.S.C. § 881. This marked the first time a government agency had seized bitcoin. The FBI seized about 26,000 bitcoins in October 2013 from the dark web website Silk Road during the arrest of Ross William Ulbricht. Bitcoin's price rose to $755 on 19 November and crashed by 50% to $378 the same day. On 30 November 2013 the price reached $1,163 before starting a long-term crash, declining by 87% to $152 in January 2015. On 5 December 2013, the People's Bank of China prohibited Chinese financial institutions from using bitcoins. After the announcement, the value of bitcoins dropped, and Baidu no longer accepted bitcoins for certain services. Buying real-world goods with any virtual currency had been illegal in China since at least 2009. In 2014, prices started at $770 and fell to $314 for the year. In February 2014 the Mt. Gox exchange, the largest bitcoin exchange at the time, said that 850,000 bitcoins had been stolen from its customers, amounting to almost $500 million. Bitcoin's price fell by almost half, from $867 to $439 (a 49% drop). Prices remained low until late 2016.

In 2015. prices started at $314 and rose to $434 for the year. In 2016 prices rose to $998 on 1 January 2017.

2017–2018

Prices started at $998 in 2017 and rose to $13,412.44 on 1 January 2018, after reaching its all time high of $19,783.06 on 17 December 2017. China banned trading in bitcoin, with first steps taken in September 2017, and a complete ban that started on 1 February 2018. Bitcoin prices then fell from $9,052 to $6,914 on 5 February 2018. The percentage of bitcoin trading in the Chinese renminbi fell from over 90% in September 2017 to less than 1% in June 2018. Throughout the rest of the first half of 2018, bitcoin's price fluctuated between $11,480 and $5,848. On 1 July 2018, bitcoin's price was $6,343 The price on January 1, 2019 was $3,747, down 72% for 2018 and down 81% since the all-time high. Bitcoin prices were negatively affected by several hacks or thefts from cryptocurrency exchanges, including thefts from Coin check in January 2018, Coinrail and Bithumb in June, and Bancor in July. For the first six months of 2018, $761 million worth of cryptocurrencies was reported stolen from exchanges. Bitcoin's price was affected even though other cryptocurrencies were stolen at Coinrail and Bancor as investors worried about the security of cryptocurrency exchanges.

The advantages of bitcoin and disadvantages.

Of course, because nothing is perfect, Bitcoin have flaws.

Bitcoin Advantages:

- Freedom in Payment

- With Bitcoin it is very possible to be able to send and get money anywhere in the world at any given time.
- You don't have to worry about crossing borders, rescheduling for bank holidays, or any other limitations one might think will occur when transferring money.
- You are in control of your money with Bitcoin. There is no central authority figure in the Bitcoin network.

Control and Security

- Allowing users to be in control of their transactions help keep Bitcoin safe for the network.
- Merchants cannot charge extra fees on anything without being noticed. They must talk with the consumer before adding any charges.
- Payments in Bitcoin can be made and finalized without one's personal information being tied to the transactions.
- Due to the fact that personal information is kept hidden from prying eyes, Bitcoin protects against identity theft.
- Bitcoin can be backed up and encrypted to ensure the safety of your money.

Information is Transparent

- With the block chain, all finalized transactions are available for everyone to see, however personal information is hidden.
- Your public address is what is visible; however, your personal information is not tied to this.
- Anyone at any time can verify transactions in the Bitcoin block chain.
- Bitcoin protocol cannot be manipulated by any person, organization, or government. This is due to Bitcoin being cryptographically secure.

Very Low Fees

- Currently there are either no fees, or very low fees within Bitcoin payments.
- With transactions, users might include fees in order to process the transactions faster. The higher the fee, the more priority it gets within the network and the quicker it gets processed.
- Digital Currency exchanges help merchant process transactions by converting bitcoins into fiat currency. These services generally have lower fees than credit cards and PayPal.

Fewer Risks for Merchants

- Due to the fact that Bitcoin transactions cannot be reversed, do not carry with them personal information, and are secure, merchants are protected from potential losses that might occur from fraud.
- With Bitcoin, merchants are able to do business where crime rates and fraud rates may be high. This is because it is very hard to cheat or con anyone in Bitcoin due to the public ledger, otherwise known as the block chain.

Now that we've covered the basic advantages, we can move on to the disadvantages. There are three main ones that need to be pointed out. This is so you can get an overall idea of what to expect with Bitcoin.

Bitcoin Disadvantages:

Lack of Awareness & Understanding

- Fact is many people are still unaware of digital currencies and Bitcoin.
- People need to be educated about Bitcoin to be able to apply it to their lives.
- Networking is a must to spread the word on Bitcoin.
- Businesses are accepting bitcoins because of the advantages, but the list is relatively small compared to physical currencies.
- Companies like Tiger direct and Overstock accepting Bitcoin as payment is great. However, if they do not have a knowledgeable staff that understands digital currencies, how will they help customers understand and use Bitcoin for transactions?
- The workers need to be educated on Bitcoin so that they can help the customers. This will definitely take some time and effort. Otherwise, what is the benefit of such large companies accepting Bitcoin if its staff doesn't even know what digital currencies are?

Risk and Volatility

- Bitcoin has volatility mainly due to the fact that there is a limited amount of coins and the demand for them increases by each passing day.
- However, it is expected that the volatility will decrease as more time goes on.
- As more businesses, medias, and trading centers begin to accept Bitcoin, its' price will eventually settle down.
- Currently, Bitcoin's price bounces everyday mainly due to current events that are related to digital currencies.

Still Developing

- Bitcoin is still at its infancy stage with incomplete features that are in development.
- To make the digital currency more secure and accessible, new features, tools, and services are currently being developed.
- Bitcoin has some growth to do before it comes to its full and final potential.
- This is because Bitcoin is just starting out, and it needs to work out its problems just like how any currency in its beginning stage would need to.

In Conclusion

With this, you now have both sides of the coin. Bitcoin, as you can see, is not perfect. It does have many advantages that physical currencies do not provide its users; however, it also has its disadvantages. This is mostly due to the fact that Bitcoin is still a relatively young and new currency. People are just beginning to become more aware of it. In order for Bitcoin to succeed, more people need to understand what it is and not let their preconceived notions distort the concept of digital currencies. There are always pros and cons to any situation in life. To be able to make a good decision, you need to weigh the good and bad thoroughly before finalizing your choice. Do the same for Bitcoin. Understand what it is, and decide what you want to do with it.

The risks of investing in bitcoins.

Virtual currency is considered the future of monetary exchange. Trading goods online with a global currency certainly sounds like a method that could expedite commerce without the complications of a national currency. Bitcoin is by far the most successful currency today, but with any new frontier, there are bound to be some obstacles. Despite bitcoin's recent popularity, there are some serious risks when it comes to investing in cryptocurrency. With so many people rushing to invest, it's important to be aware of the concerns surrounding this new market.

The Volatile And Fluctuating Market

The price of bitcoin is constantly changing. As of November 6, 2018, one bitcoin was worth $6,461.01. If you happened to purchase a bitcoin on December 17, 2017, the price topped $20,000. Days later, on the 24th, buyers could not sell their investment for more than $14,626. The bitcoin market is constantly rippling back and forth. With such an unpredictable market, there's no telling if you will get a return on your investment. To avoid a massive loss, keep a vigilant eye on the market. Make small investments; they'll be more beneficial long-term.

Cyber-theft

Cryptocurrency is technology-based, which leaves this investment open to cyberattacks. Hacking is a serious risk, since there is no way to retrieve your lost or stolen bitcoins. Many reports suggest that many buyers lose their investments on exchanges and mining losses. Exchanges are more likely to hacked -- even if you have the protection of a smart wallet. Additionally, if you do have a wallet and you forget or misplace your key, there is rarely a way to retrieve your coins. Carefully research your cryptocurrency wallets to be sure you have the most reliable option.

Fraud

In addition to hacking, there is a fair amount of fraud in the bitcoin market. Buyers and sellers are looking to trade bitcoins online, but since their rise in popularity, some of these exchanges can be fake. The Consumer Finance Protection Bureau and the Securities and Exchange Commission have warned against these transactions where unsuspecting investors are duped out of their bitcoins in fraudulent exchanges. This lack of security creates a big risk for investors. While systems have been created to deal with these problems, security remains a big issue.

Little Or No Regulation

Currently, the bitcoin market is operating without any major regulations. The government doesn't have a clear stance on cryptocurrency; the market is just too new. It is not taxed, which can make it enticing as an investment opportunity. However, a lack of taxation could lead to problems should bitcoin pose as competition for government currency. As of now, cryptocurrency is not a widely accepted currency, but the future is ever-changing. There's no telling what the state of the bitcoin market could be in a few years' time.

Technology Reliance

Bitcoin is an online exchange that is reliant on technology. Coins are digitally mined, exchanged via smart wallet and kept in check using various systems. Without that technology, cryptocurrency is worth nothing. Unlike other forms of currency or investment, there is no physical collateral to back it up. With gold, real estate, bonds or mutual funds, you own something that can be exchanged. With a currency that is 100% technology-based, bitcoin owners are more vulnerable to cyber threats, online fraud and a system that can be shut down.

Block Withholding

New bitcoins are created by solving mathematical equations called "blocks," which are created every time there is a bitcoin exchange online. A mining pool can use computational power to mine a block and hide it from honest miners instead of reporting the new block to the network. Essentially, this is a way for a select few to reap the benefits, while others are left with nothing.

Limited Use

Bitcoin may be a step toward a new monetary exchange; however, there are few companies that accept it as a viable form of currency. Currently, a few online stores, including Overstock, Newegg and Monoprix, allow cryptocurrency exchanges. Additionally, bitcoin owners can use their funds for travel with companies like AirBaltic, Air Lituanica and CheapAir.com. Unfortunately, many companies do not recognize bitcoin as a legitimate exchange.

Financial Loss

Bitcoin has been referred to as a Ponzi scheme, with people at the top benefiting off the ignorance of others. As more people buy into bitcoin, it creates a bubble economy. When the bubble bursts, bitcoin will essentially become useless; there will be many people holding onto cryptocurrency, intending to sell but unable to unload. There is no return on the investment, which can equal a very painful financial loss

Currency Or Investment Opportunity?

Cryptocurrency could be an effective online currency exchange; however, buyers buy up bitcoins with the intent of investing much as they would with stocks. Some even think that bitcoin is a solid investment opportunity for retirement. With a constantly shifting market, no regulation and zero physical collateral, investors can end up losing everything they invest. While bitcoin could potentially pay off, the best way to approach this investment is with caution. Small investments and small steps will cover more ground.

Young Technology

Cryptocurrency is still a very young technology. Bitcoin came about roughly 10 years ago, and it has yet to develop into something solid. With so many changes occurring in the past few years, there’s no telling how the market will evolve. Bitcoin as we know it may become useless in the future. The best way to approach this new investment opportunity is with caution and due diligence. Take the steps to secure your funds, and brace yourself for the future of the market.

Speaking about all that, the interesting fact about bitcoin is that individuals dig to get it. Yeah they dig to get bitcoins. And it is called mining. Let's talk about mining bitcoins.

Wha is Bitcoin Mining?

By mining, you can earn cryptocurrency without having to put down money for it. That said, you certainly don't have to be a miner to own crypto. You can also buy crypto using fiat currency (USD, EUR, JPY, etc); you can trade it on an exchange like Bitstamp using other crypto (example: Using Ethereum or NEO to buy Bitcoin); you even can earn it by playing video games or by publishing blogposts on platforms that pay its users in crypto. An example of the latter is Steam, which is kind of like Medium except that users can reward bloggers by paying them in a proprietary cryptocurrency called Steam. Steam can then be traded elsewhere for Bitcoin. In addition to lining the pockets of miners, mining serves a second and vital purpose: It is the only way to release new cryptocurrency into circulation. In other words, miners are basically "minting" currency. For example, in February of 2019, there were a little over 17.5 million Bitcoin in circulation. Aside from the coins minted via the genesis block (the very first block created by Bitcoin founder Satoshi Nakamoto himself), every single one of those Bitcoin came into being because of miners. In the absence of miners, Bitcoin would still exist and be usable, but there would never be any additional Bitcoin. There will come a time when Bitcoin mining ends; per the Bitcoin Protocol, the number of Bitcoin will be capped at 21 million. Aside from the short-term Bitcoin payoff, being a miner can give you "voting" power when changes are proposed in the Bitcoin protocol. In other words, a successful miner has influence on the decision-making process on such matters as forking.

How much can a miner earn from mining Bitcoin?

Bitcoin are mined in units called "blocks." As of the time of writing, the reward for completing a block is 12.5 Bitcoin. In February of 2019, the price of Bitcoin was about $3,500 per Bitcoin, this means you'd earn (12.5 x 3,500)=$42,000.When Bitcoin was first mined in 2009, mining one block would earn you 50 BTC. In 2012, this was halved to 25 BTC. in 2016, this was halved to the current level of 12.5 BTC. In 2020 or so, the reward size will be halved again to 6.25 BTC.

If you want to keep track of precisely when these halvings will occur, you can consult the Bitcoin Clock, which updates this information in real time.

What are miners doing that's so important that they get free Bitcoin?

Miners are getting paid for their work as auditors. They are doing the work of verifying previous Bitcoin transactions. This convention is meant to keep Bitcoin users honest, and was conceived by Bitcoin's founder, Satoshi Nakamoto. By verifying transactions, miners are helping to prevent the "double-spending problem." Double spending means, as the name suggests, that a Bitcoin user is illicitly spending the same money twice. With physical currency, this isn't an issue: Once you hand someone a greenback $20 bill to buy a bottle of vodka, you no longer have it, so there's no danger you could use that same $20 to buy lotto tickets next door. With digital currency, however, as the Investopedia dictionary explains, "there is a risk that the holder could make a copy of the digital token and send it to a merchant or another party while retaining the original."Let's say you had one legit $20 and one really good photocopy of that same $20. If someone were to try to spend both the real bill and the fake one, someone who took the trouble of looking at both of the bills' serial numbers would see that they were the same number, and thus one of them had to be false. What a Bitcoin miner does is analogous to that--they check transactions to make sure that users have not illegitimately tried to spend the same Bitcoin twice. This isn't a perfect analogy--we'll explain in more detail below. Once a miner has verified 1 MB (megabyte) worth of Bitcoin transactions, they are eligible to win the 12.5 BTC. The 1 MB limit was set by Satoshi Nakamoto, and is a matter of controversy, as some miners believe the block size should be increased to accommodate more data.

People must be wondering about what equipments a person should have to do the process of mining bitcoins?

What equipment do people need to mine?

Either a GPU (graphics processing unit) miner or an application-specific integrated circuit (ASIC) miner. These can run from $500 to the tens of thousands. Some miners-particularly Ethereum miners-buy individual graphics cards (GPUs) as a low-cost way to cobble together mining operations. The photo below is a makeshift, home-made mining machine. The graphics cards are those rectangular blocks with whirring circles. Note the sandwich twist-ties holding the graphics cards to the metal pole. This is probably not the most efficient way to mine, and as you can guess, many miners are in it as much for the fun and challenge as for the money.

How entrepreneurship is affected by bitcoin?

Digital gold and millennials have been dubbed, and anybody else with a sense of good investment. Virtual currencies are revolutionizing how individuals make transactions and interact with the financial system. These unconventional and futuristic currencies are changing our financial world in ways we are just now beginning to grasp. Entrepreneurs thrive on the unconventional and have long seen the potential of bitcoin and how people do business with it. Some people do succeed and some don't. Moreover, to succeed entrepreneurs should have training or what's called entrepreneurship training. Several studies have discussed orientation of entrepreneurship, measurement, and importance. These studies discussed the ability of this training to encourage individuals to start their own business. Small businesses are more likely to face many economic, sociocultural physical and emotional issues that might affect their potentiality to become an effective entrepreneurial business. All these points are to be noted before even considering to penetrate the market with bitcoins. The advantages of bitcoin are enough to make small businesses to open and be effective also to have a good mark in the industry. What small businesses are afraid of is the cost however, bitcoins have no costs which makes it essential for small businesses to start be entrepreneurs.

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