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BitCoin: The Pioneer of Cryptocurrency with a Limited Dream

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Bitcoin: The Pioneer of Cryptocurrency With a Limited Dream

Background

Cryptocurrency and Bitcoin have been ambitious topics the past decade. Slowly, Bitcoin has integrated into being a payment method for companies such as Paypal (Bonifacic 2021), Tesla (Shead 2021), Venmo (Hart 2021), and various others worldwide. Due to its rising popularity, many are considering what the future of Bitcoin holds, and wonder if Bitcoin can be accepted as a currency for global exchange one day.

Thesis

Despite being a successful small scale finance tool, Bitcoin is unlikely to be at the forefront of digital currency of global exchange.



Source: <https://finance.yahoo.com/news/bitcoin-drops-be-low-50-000-033822640.html>

Features/Utilities

Hearn (2012) states that Bitcoin is useful for many features, such as

- Micropayments
- Dispute mediation (the arbiter holds the disputed balance until the decision is made)
- Automated mediation (with an automated arbiter)
- Assurance contracts (people pledge towards a common goal, and the money only leaves their accounts when/if the goal is fulfilled)
- Smart property (goods that have electronic components so Bitcoin can verify this transaction)

In 2021, the use of Bitcoin expanded, meaning Bitcoin can now be used in

- Restaurants
- Shops
- Person to person payments
- Purchasing vacations, such as hotels
- Gaming platforms, such as Xbox
- Purchasing real estate

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Downsides

1. Cost of mining increases overtime, but the returns will decrease.
2. Because mining requires high computer power and skill, there is a possibility that a group of miners can dominate:they may be able to halt payments and reverse transactions. However, this situation, known as a 51% Attack, is still hypothetical.
3. Bitcoin has a constantly expanding ledger/public key, which is a huge document not downloadable on all devices.
4. Bitcoin is very volatile; it is not "a reliable vehicle in which to store value over long periods of time" (Wu 3). The graph on the left shows Bitcoin's value dropping 14% in 4 days.
5. Bitcoin is deregulated and is not backed by anything; it is just scarce.
6. Bitcoin's anonymity creates a problem in proving identity; real names are not required. Accounts that have been stolen and manipulated transactions cannot be proven fraudulent.
7. Bitcoin is not one of the top safest cryptocurrencies because it has been hacked and has bugs; a bug in 2019 "could have let attackers mine more bitcoins than the system is supposed to allow" (Orcutt 2019). Wallets and exchanges have also been hacked, but not the network entirely.

Bitcoin Specific Benefits

1. Bitcoin's supply runs on a predetermined schedule, so only a certain amount of Bitcoin can be mined, giving it scarcity. Bitcoin blocks halve around every four years.
2. If users keep their secret key a secret, only those users have access and control their account entirely, "as long as the activity adheres to those rules" (Šurda 7).
3. Bitcoin is not prone to non-technical issues; "social conventions [that] are minor or major, local or global, political or apolitical, ethical or unethical" will reasonably not affect Bitcoin and its operations (Šurda 7).
4. Transactions are currently unable to be changed; a "centralized party {cannot} make changes to core properties and force those changes upon stakeholders" (Bhutoria 11). All mining requires proof of work.
5. Bitcoin performs at lower costs; it "does not require a dedicated IT infrastructure... its cost of processing and maintenance fees are also limited" (Biczok 7). Verifying transactions is not a large cost of electricity nor hardware, as Bitcoin "does not require a third party facility or middle man, other than the network" (Šurda 16).
6. Bitcoin is most likely to withstand its competition to any alternative coin; new ideas and systems could be remade to run with Bitcoin, making it difficult for other cryptocurrencies to gain an advantage.

Benefits of Cryptocurrency

1. Cryptocurrency lowers the price of transactions, as the "cost of transferring ... via the Internet is cheaper than the conventional banking system" (Tanaka 1996). The cost does not significantly differ on a state to state or country to country basis.
2. Cryptocurrency is generally secure from fraudulent activity, especially due to the lack of a third party involved. However, Bitcoin has a longer track record as a cryptocurrency so it may be considered as more safe by some.
3. Cryptocurrency creates instant payment between any parties across the globe; the sending and receiving of money is generally instantaneous.
4. Cryptocurrencies such as Bitcoin and Ethereum combine "the features of money (commodity) with a clearing system (service)" (Šurda 10), though Bitcoin pioneered this duality.
5. The anonymity provided is hard to crack. The top three safest cryptocurrencies determined by Investopedia in January 2021 were Monero, ZCash, and DASH (Seth 2021).

Key Terms

Mining: "the process by which new bitcoins are entered into circulation" (Hong 2021).

Blocks: "files where data pertaining to the Bitcoin network are permanently recorded" (Frankenfield 2021).

Financial tool: "Personal finance software and other tools can help... handle multiple financial needs." (Knudsen 2021).

Halving: "when the reward for mining Bitcoin transactions is cut in half" (Conway 2021). When Bitcoin first launched in 2009, "each block contained 50 BTC... this amount ... to be reduced by 50% roughly every 4 years" (Conway 2021). The current block yields "6.25 BTC" (Conway 2021). In 2140, all of the 21 million Bitcoin will be mined.



Discussion

Bitcoin is currently the top cryptocurrency in engagement and payment method. According to BusinessWire, Apple is adding Bitcoin to its payment function, Apple Pay, through BitPay Prepaid Mastercard. Samsung's payment application, Samsung Pay, will soon accept Bitcoin payments as well. Bitcoin is a leader in investments; the high demand for this company created new demands that many companies are working to adapt by creating new, easier to function applications for cryptocurrency users to buy and sell coins. However, Bitcoin is ultimately unfit to be used as a globally exchanged digital currency due to its overwhelming downsides, such as volatility, potential transactional issues, and safety concerns. Some may say that nonlinear volatility is bound to occur, especially because the coin rises "from negligible awareness and adoption to a global store of value" (Bhutoria 10). However, not every person is willing to hold a currency that fluctuates so much, it could lose half of its value in an hour; a stablecoin is necessary. Society will almost certainly use a government backed cryptocurrency instead of a private one. Since Bitcoin is a fiat currency, there are two ways that it gets value: the metallist and chartalist theory (Coppola 2020). Bitcoin is valued as an asset like a stock and is not pegged like gold and other metals are. Bitcoin's public ledger may also pose problems; as more users start joining Bitcoin, the ledger will get larger and impractical to always update. As of "July 17, 2017, the Bitcoin blockchain size was 125 gigabytes" (Wu 2). If ledgers are stored in a few places only, a security breach can cause stolen Bitcoin and loss of records. Because the return on mining decreases over time but the cost of doing so increases, the miners that will be left are those with significant computing power and skills, which may create "centralized mining" (Wu 3). This may create an issue where major miners can manipulate transaction information and violate anonymity/security of other users, because "blockchain will only follow the longest and most recent chain mined" (Wu 3). Bitcoin is also hackable; blockchains started being hacked in February 2019, according to MIT. In conclusion, Bitcoin is too volatile and has many potential holes that could result in a crisis for it to be a global exchange currency, but is a smart financial tool to use for growth and investment. Cryptocurrency is the future of global exchange and money, but not Bitcoin.