Blockchains

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# Introduction

Blockchains are a relatively new technology with its history starting in 1979. The opinions surrounding this topic varies widely. In this essay, the influence of the technology blockchain will be written about, with reference to several philosophical theories.

# Creation

The first blockchain-like protocol was proposed in 1979 by David Chaum. He described it as “*Computer Systems Established, Maintained, and Trusted by Mutually Suspicious Groups*.”. After this proposed idea, many similar ideas started popping up. Though the blockchain to actually take off would come nearly 30 years later, Bitcoin. The blockchain Bitcoin was invented in 2008 by an unknown group or individual going by the name Satoshi Nakamoto. The real identity remains unknown, but many theories are floating online. This blockchain built its architecture using the previous three decades, with the introduction of a new concept of a “chain of blocks”. This concept makes it possible to add new blocks without the requirement of being signed by a trusted third party. After the explosion of Bitcoin, other blockchains were created.

# Cryptocurrency

One of the philosophies I can resonate with is Virtue Ethics. This philosophy emphasized the moral virtue of oneself. This is the reason why I, and many others, feel conflicted about cryptocurrencies, or crypto for short.

Crypto certainly has many benefits, like fast and cheap transactions compared to some traditional bank systems (not necessarily in the Netherlands, but other countries like USA). Crypto also has great accessibility, as all you need is a computer or phone with internet. Creating a cryptocurrency wallet is also absurdly fast with no ID verification or background check. This in turn means users can maintain privacy, since they do not have to share any information. The transparency is also great, since every transaction can be seen online. And then the security. Unless someone gains access to your private wallet key, they cannot sign transactions or access the crypto.

Though it has good points, there are downsides too. Crypto are volatile, fluctuating up and down for apparently no reason (way more than normal stocks or index funds). For the inexperienced person, but also the experienced, it is easy to lose large sums of money. Besides this, laundering money is also a big problem with crypto. Since it users have full privacy, tracked money launderers is way harder to do. Finally, and one of the more important notes, crypto is surprisingly bad for the environment. Between mid-2021 and 2022, the crypto industry produced an excess of 27.4 tons of carbon dioxide. The cryptocurrency mining industry uses half the electricity of the entire global banking sector. This electricity is mainly used in mining rigs. These rigs makes hard calculations used in processing transactions.

Depending on the selected philosophy or dogma, crypto can be seen as positive, in between, or negative. If one follows the Deontology philosophy, one could argue that crypto is good. ( e.g. “Don't lie. Don't steal. Don't cheat.”). Though looking at crypto with the Consequentialism philosophy could result in a negative view, since the results of crypto have been negative to the environment.

# Recent blockchains

Many other blockchains popped up after Bitcoin rapidly gained popularity. Some of these created blockchains became successful (like Ethereum and Solana), but many others failed and went down in history.

One example of a failed blockchain project is Diem (Meta), formerly known as Libra. It made use of permissioned blockchains, which means it uses an access control layer to control who can access the network. Diem was a kind of payment system, including a private currency implemented as cryptocurrency. After the project was formally announced, it received a lot of backlash from countries, its users, the US regulators, and EU Regulators.

The Facebook project Diem has been officially cancelled, but the GitHub repository still shows activity (<https://github.com/diem/diem>).

Like Diem, other projects have failed for reasons like no interest or no real revenue generated.

## NFT

NFT’s (non-fungible tokens) may be the biggest problem people have against blockchain, with the main point being that the NFT’s have no actual value. An NFT project usually creates an amount of unique images that get minted and traded by its community. Projects create an artificial scarcity of artwork/images to increase its value, but most articles say the main point of NFT’s are to launder money.

NFT’s can only be bought with crypto, and like previously mentioned, crypto gets used to launder money. One cannot help but agree when one NFT gets sold for millions of euros.



With the Virtue Ethics philosophy, which I tend to see myself most in, I think it is unfair that the image above was sold for 6.6 million.

# Conclusion

In conclusion, blockchain has many opportunities and positive points. It is immutable, hard to hack, and is decentralized. Though it is not all great. Many sides of blockchain (mainly crypto though) gets used for illegal activities such as laundering money. It is also surprisingly bad for the environment. It is up the oneself to see if they agree with this technology or not to.

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