



WHAT IS A CRYPTOCURRENCY AND WHAT IS ITS PURPOSE?

During the 1990s, a number of attempts were made to create a digital currency, a currency that has no hard copy counterpart. All attempts failed, usually because these systems attempted centralised regulation of the currency and trading in it. That is, until Bitcoin emerged in late 2008.

At its most basic, a currency can be defined as data held in a specific entry system, which can only be changed under specific circumstances. This is the way your bank sees your accounts, they know you hold a certain amount of money, which can only be changed if you fulfil specific conditions (these usually relate to security systems or credit limits in place). This is also the basis of good bookkeeping. Normal currencies are held in a centralised system, where one entity keeps record of transactions, ensuring that no one can spend more money than they have.

Surprisingly, this is the same definition accorded to cryptocurrencies limited entries in a database that no one can change without fulfilling specific conditions. The difference, is that cryptocurrencies are held in a decentralised network. This means that no specific entity keeps record of the transactions but rather that several entities with a list of all transactions verify the proposed transactions before they are posted. Bitcoin was the first answer to this requirement, created by Satoshi Nakamoto. The joke, is that he wasn't trying to create a currency when he created the system that turned into Bitcoin. We will use the Bitcoin currency for example's sake in the rest of this letter, however several currencies have since emerged.

The purpose of a cryptocurrency serves is much the same as bartering goods and services, or the cash in your wallet or bank account its purpose is to allow trade in exchange for something of value.

HOW DOES A CRYPTOCURRENCY WORK?

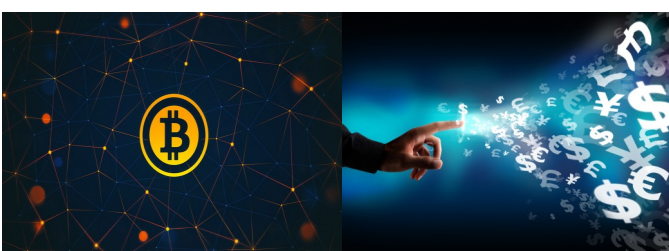
To recap, a cryptocurrency consists of a network of peers, with a full list of all transactions on every account that has been recorded to date. A new transaction is submitted, stating that X person pays Y person Z number of Bitcoins, which is signed off by X's private key. Think of a private key as you would think of your signature — it is specific, it is linked uniquely to you. The transaction is then sent out to every peer in the network for verification.

Whilst awaiting verification, the transaction can be amended. However, once a transaction has been verified, it is permanently added to the list of historical transactions held by all peers in the network.

The transaction request is verified by miners, who then mark the transaction as legitimate and forward this report to all peers too. They are called cryptocurrencies because of the consensus-keeping process, which is secured by strong cryptography.

WHO ARE THE MINERS?

As above, miners are used to verify transactions. They do this by providing computer time to solve a cryptographic puzzle. Solving the puzzle assists in verifying a proposed transaction and in return, a miner is paid in the reigning currency (such as Bitcoin). Technically, anyone can be a miner, if they have the right technical set-up and conform to the rules of the network.



In this issue:

- What is cryptocurrency and what is its purpose?
- How does a cryptocurrency work?
- Who are the miners?
- Who or what regulates cryptocurrencies?
- Pros and Cons of using emerging cryptocurrencies.



WHO OR WHAT REGULATES CRYPTOCURRENCIES?

Cryptocurrencies have been largely unregulated until now. Most regulation that has taken place to date has been a result of the peer verification system for transactions. But with any new creation, there comes a need to protect consumers and businesses from financial harm.

A number of regulation bodies globally, including the Securities and Exchange Commission, the Commodities Futures Trading Commission and the Consumer Financial Protection Bureau have focussed their attention on regulating this emerging currency in the larger financial market.

South Africa's own Reserve Bank is in the process of testing potential regulations to be applied to cryptocurrencies. As a result, no legislation exists in South Africa which specifically regulates cryptocurrencies and their use. This will likely change in the short-term future.

PROS AND CONS OF USING EMERGING CRYPTOCURRENCIES:

Pros:

- No fraud — cryptocurrencies are a very safe method of payment, without the risks of identity theft and the transactions made are irreversible.
- Early adopters benefit — cryptographic currencies seem to be the way of the future and investing in them does seem to reap some benefits. It's estimated that R1000 invested in BitCoin in 2014 is worth about R4.5m in 2017. Some companies, like Japan, have already declared BitCoin as legal tender.
- Low transaction fees — the fee required to transfer money between businesses and customers is substantially lower than other online payment methods.

Cons:

- Volatile — despite being worth more now than it was if you had invested in 2014, the currency value is volatile (like all financial instruments, to an extent) and some knowledge and training would be suggested in order to avoid the effects of this.
- Trust and misunderstanding—transacting in cryptocurrencies could be limited at the moment as many people do not understand their purpose nor trust that transacting in this currency would be legitimate and safe.

Before you get involved, we would suggest you do the research, or contact us for assistance and advice.