**Crypto and Blockchain**

**What does it do?**

Cryptocurrency has been an enormous success in recent years with the first initial boom of Bitcoin. Since then, multiple different cryptocurrencies have surfaced and words like blockchain and NFTs have become popular., But what do they all mean? The origins of cryptocurrency can be traced back to the late 2000s with a paper called “Bitcoin - A Peer to Peer Electronic Cash System” but one thing that is not clear is who published the paper. It was published under the name Satoshi Nakamoto and till this day no one has ever seen them, and it is not clear whether Satoshi is one person or a group of people. (Marr B 2017)

Satoshi created Bitcoin as the first digital currency to have no middleman or authority. Unlike organizations like PayPal, Bitcoin was completely P2P, so users had complete control over where their money was going and who even saw it existed. With technology becoming a more dominate part of our lives and people wanting to become more in control of all their belongings Bitcoin seemed to be the best idea for the future economy. The first known commercial transaction of P2P payment using Bitcoin was believed to be in Florida in the United States. It is said that a person by the name of Ladzio Hancenyz spent 10,000 Bitcoin on 2 pizzas by trading them to anyone who would complete the purchase for him. At the time this only cost Ladzio $40 but in today's world that would total to $641837197 US dollars, that is a lot for 2 pizzas. (NDTV 2021) But with this transaction cryptocurrency trading was born and today multiple organizations have been created to trade and buy these currencies.

But how does Bitcoin work? Essentially Bitcoin and other cryptocurrencies are online currencies that have been created to start an online economy. It is believed that Satoshi had pumped the online economy with 1 million bitcoins in 2010 before handing the repository over to a collogue by the name of Gavin Andersen who went on to create the Bitcoin Foundation. (PC Dr 2020)

For Bitcoin to exist in the online economy, it is required to be mined. Crypto mining is the act of using computer hardware to process transactions by solving mathematical equations at a speed unknown to humans. Once a transaction is completed the computer that solved the algorithm is awarded the block of Bitcoin then the process is repeated. Bitcoin mining also increases the maintenance and development of the blockchain that it is built around. (Hong E 2021)

Blockchain is a word that is constantly seen alongside cryptocurrency. Blockchain technology was first reported as early as 1990 but its success is credited to non-existent people other than Satoshi Nakamoto. (Iredale G 2020) Blockchain in a simple explanation is a P2P ledger system that records and stores data that cannot be tampered or deleted. To edit data on a blockchain a new block of data must be added whilst remaining linked to the previous block, so no data is lost or tampered with. Satoshi used this platform to ensure no bitcoin transactions needed a middleman and could not be traced no tampered with. For a transaction to be completed though a mathematical equation is required by mining. (Hong E 2021)

**What is the most likely impact?**

Cryptocurrencies could completely replace physical currency soon if they are to continue in the right path. The world has already seen a huge decline in cash sales and with COVID-19 this has affected that dip even more. (ABA 2021) If cryptocurrency is to succeed in the world, we must first find a use for them. At the current time only 2 of the main currencies have a real-world use (Bitcoin and Ethereum) with multiple organizations accepting them as payment. Smaller coins have started to find their place in online gaming, replacing cash rewards with copious amounts of coins in hopes that in the future they will be worth more than the initial cash prize. In recent years cryptocurrencies cards have been becoming more popular to the point where even Visa is allowing cryptocurrencies as a form of payment, ingoing and outgoing. One of the biggest impacts though comes down to a political standpoint, What Governments and higher bodies think of it.

Because cryptocurrencies are protected by a blockchain system, and most wallets are heavily encrypted there is no way for an outside source to trace how much crypto you have or where you are spending it. From a consumer standpoint this is a positive, you will always be in control of your money, where it goes and where it is stored. But with the growth of crypto comes the growth of governing control. The main issue is Bitcoin was created to completely give the user 100% control which has created a cause for concern for a lot of governments. The first of those issues is Tax, without the government having no access to your wallet or access to any information about that wallet it is up to the user to claim the tax on their yearly report. Cryptocurrency now is often seen as white-collar gambling though so many users choose not to pay tax on it as with similar activities like gambling winnings are not required to pay tax.

The second biggest issue is how this will affect national economies if cryptocurrency is to replace our traditional ways of payments. With a complete online economy controlled by the sole users the government will most probably suffer massive losses if their currency because a least satisfactory option and with the growth of crypto cards it is a possibility that traditional cash will become a thing of the past. If governing bodies cannot see how much income is coming in and where it is going it will become increasingly hard to write and study reports of yearly economical spendings.

**How will this affect you?**

Cryptocurrencies could replace all forms of currency as we know if they are exposed to the correct conditions. Already an increased number of companies are taking on Cryptocurrencies as a form of payment with consumers already being able to purchase Tesla's with Crypto. This will affect me most probably in my lifetime with increased cryptocurrency and cryptocurrencies planforms being developed which is making it easier for the everyday person to invest and buy these currencies. Visa and larger platforms also adopting cryptocurrency will be more appealing to most people as they will have more control over their money than ever before.

Blockchain technology could also affect my future career in IT (Information and Technology) with these advancements in Crypto. Blockchain technology could also be used in a lot of IT companies to store data in a secure and recorded fashion with no way to alter or destroy previous renditions. We can already see programs like GitHub using similar functionality properties of Blockchain, so it is safe to say this formatting will be much more present in any future job I hold.

As we become a more technologically based race our mobile phones and computers will eventually become more of an artificial limb than an accessory. Cryptocurrencies may replace our traditional currencies and that will perfectly integrate with our constant connection with technology. Humans are always striving to become more independent and in control of what they do with their belongings and when the word circulates that crypto is your money and your money alone, I think we will see a larger boom than ever before.

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