Blockchain - Satoshi Nakamoto ?

- **By David Scolard**

Introduction

It might seem strange to choose an unknown figure as the centre piece for a biographical paper. However, much can be said about the person/people behind blockchain technology and its now infamous currency, Bitcoin. Whoever they may be, one thing is certain, they have forever changed the world of finance, banking and technology.

The 'Blockchain' refers to a digital ledger in which transactions made in bitcoin or another cryptocurrency are recorded chronologically and publicly. Each member of the chain holds a complete record of all transactions made. The inherently decentralised system of the blockchain takes power away from the enormous financial institutions which currently govern our spending.

The jury is still out on Bitcoins effectiveness in the short term, its recent exposure and hype on the stock exchange has many questioning Bitcoin's legitimacy and real world capabilities as a currency. In the long term however I believe it's inevitable that bitcoin or possibly another cryptocurrency will succeed. The banks clearly know this as we see them clambering to invest in the technology and related currencies. With Bitcoins recent notoriety many people have had their say on the matter. We see on one side Goldman Sachs CEO Lloyd Blankfein saying Bitcoin is 'not for me', however even he admitted it may be too 'arrogant' to say it won't have a future. On the other side you have founder of software and antivirus company McAfee Associates, John McAfee, claiming Bitcoin will move above $500,000 dollars within three years. He boldly added that if it doesn't: "I will eat my own d*ck on national television".

People's opinions are somewhat irrelevant, cryptocurrencies exist now, and this will almost certainly shape the financial industry in ways we can't begin to predict.

Who is Satoshi Nakamoto ?

A true mystery of the 21st century. The creator of blockchain technology and the resulting cryptocurrency Bitcoin is hiding in the shadows, only now and then leaving traces of his possible identity. Satoshi Nakamoto is estimated to be worth an astounding 19.4 billions dollars, making him the 44th richest man alive according to Forbes magazine. Satoshi has claimed to be a 37-year-old man living in Japan, however many believe this to be a misleading alias. The illusive individual behind Bitcoin isn't one to divulge personal information so easily. So the mystery remains, and the search goes on, who is Satoshi Nakamoto?

One of the many enquiries questions how Satoshi displays an impeccable command of the English language, unusual for an everyday Japanese software engineer. To add to this most Japanese, if they were to learn English, would lean towards learning American-English. Satoshi however uses British-English spelling in his source code and avails of commonwealth idioms such as "bloody hard" when describing difficulties. Evidence also lies encoded in the very first bitcoin block, which could only be mined by Satoshi, that reads "The Times 03/Jan/2009 Chancellor on brink of second bailout for banks". This text strongly hints that he was reading London's *The Times* newspaper at the time of bitcoins inception. Still, this is all idle speculation, they may very well be a Japanese individual with an interest in the global economy. Someone dreaming up a revolutionary currency like Bitcoin would be expected to have interest in such things.

Satoshi is clearly an extremely intelligent person and therefore we cannot presume to know anything at all about him/her. The things they have done and said may be placed to mislead us every step of the way. For all we really know Satoshi Nakamoto could be an 82-year-old Guatemalan woman.

The Technology

Blockchain technology was originally put to use as part of the development of Bitcoin. Now people are finding new uses for the technology. The blockchain works by distributing information across all nodes in the network on a shared database. This database is continually updated and reconciled between the nodes using public and private key encryption. This way the blockchain database isn't stored in any one location which has some major benefits over traditional systems.

Decentralisation – The blockchain is decentralised by nature. Distributing the data throughout the network, or along the blocks in the chain if you will. This makes it extremely difficult for files to be lost or manipulated. In a centralised database, which 99% of companies, governments and individuals use today, if someone is to gain access to that master database they can cause irreparable damage. This has prompted billions upon billions of euros to be spent on security systems over the years. When using a decentralised database however such an act cannot be performed. Nodes are checked along the chain and reconciled with the information stored in all other nodes. Any irregularities are quickly corrected along the chain. The only way to affect the database would be to override the entire network. This would take an unimaginable amount of computer power making it basically a moot point.

The Impact

I believe we are only scraping the surface of what is possible.
The obvious example of blockchain's impact is the use of cryptocurrencies. These completely eliminate the need for a centralised authority such as a bank. Your money is safe in the ledgers along the blockchain. With widespread adoption of the currency and the steadying of markets we will see it becoming a much more viable option in the future. The banks of course don't like the idea of this. Some are belligerently denying the real world everyday usability of such currencies, I believe these people are naive. In 2017 we seen the first year on record where card payments surpassed cash purchases in the UK. Money is becoming more and more digital. In my estimate cash payments will be an extreme rarity in 50 years' time, probably only being used for more nefarious purchases. The clever ones within the financial industry have begun to invest in their own blockchain technologies as well as buy up some of the new cryptocurrencies on the market.
Blockchains aforementioned security benefits make it a perfect fit for today's 'Internet of Things'. The IoT may soon link your doorbell, to your central heating, to your fridge, to your driverless car. If a hacker was to gain access to the central database of these he could either steer your car into a tree or cause your milk to go sour during the night, two catastrophes the blockchain can protect us against using its distributed security robustness.
The security of the technology make it useful for many obvious candidates such as hospitals storing sensitive patient data or even governments where it could increase security, efficiency and transparency.

To Conclude..

Whatever the future holds I'm certain that blockchain is going to be a major part of it, and so whoever Satoshi Nakamoto may be doesn't matter at the end of the day, he/she/they have contributed an enormous amount to the future of technology. Nakamoto is a software engineer we can all admire.