



BIT BY BIT:

The Rise of Cryptocurrencies

Cryptocurrency: A Decentralized Currency of the People

- Encryption techniques (“Cryptography”) are used to regulate the generation of units of currency and verify the transfer of funds
- Operates independently of a central bank or governmental authority; no bank fees
- Cannot be counterfeited or manipulated
- Peer-to-peer: (P2P) can be used for buying and selling with no bank intermediary
- Value regulated by supply and demand
- The first cryptocurrency to capture the public imagination was Bitcoin.

- “Poised to launch a revolution” *The Age of Cryptocurrency* by Paul Vigna and Michael Casey
- “At the early stage of fundamentally altering the global payments system if not the nature of money itself” - Niall Ferguson “The Ascent of Money”
- “You can't stop things like Bitcoin. It will be everywhere and the world will have to readjust. World governments will have to readjust” - John McAfee, Founder of McAfee
- “It's money 2.0, a huge huge huge deal.” - AOL Executive
- “I do think Bitcoin is the first [encrypted money] that has the potential to do something like change the world.” - Peter Thiel, Co-Founder of Paypal
- “...one of the most fundamental inventions in the history of computer science...” Marc Andreessen, cofounder of Netscape
- “...we're at one of those times in technological, economic, and social history where the sky is the limit...” Steve Wozniak, cofounder of Apple
- “....(this technology) is at the heart of the fourth industrial revolution...” Klaus Schwab, founder of the World Economic Forum

HOW DO BITCOINS WORK?



'Miners' create Bitcoins by using computers to solve mathematical functions. The same process also verifies previous transactions



Bitcoin exchanges will trade between conventional currencies and Bitcoin, offering a way into the market for non-miners, as well as a way to cash out



**WORLDWIDE, DECENTRALISED
PEER-TO-PEER NETWORK**



Users download a Bitcoin 'wallet' that works a little like an email address, providing a way to store and receive currency. Bitcoins can be transferred from one wallet to another using a web browser or a phone app

Businesses create a wallet in the same way as an individual user, typically using a website button to enable a Bitcoin payment. For in-the-flesh enterprises, QR codes can be used to let customers pay quickly and easily

