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Bitcoin: what a waste of resources

The cryptocurrency's insistence on meaningless computer tasks is outdated, profligate and holds the technology back



Is there a better way?

Thomas Trutschel/Getty

IMAGINE you discovered that in order to mint the coins and print the banknotes in your wallet, your country's central bank employed vast numbers of people to push boulders up hills and let them roll down again. Imagine that this wasted effort was equivalent to the workforce of a small South American country. What, you would rightly ask, is the point of that?

No central banker would stand for such farcical wastefulness. But the decentralised cryptocurrency bitcoin relies on it. In order to create or spend bitcoins, users must dedicate vast amounts of computing resources just to verify their transactions. This authentication process – aka the blockchain – is a key element of bitcoin's open-source philosophy. The trouble is the computation itself is make-work: solving tough but irrelevant cryptographic problems merely to deter fraudsters.

Mining – as the process of creating new bitcoins is known – used to be a fairly trivial task possible on a home computer. But it is now so computationally intensive that it requires dedicated buildings full of specialist bitcoin-mining chips running 24/7. And as the number of bitcoins in circulation grows towards the artificially imposed ceiling of 21 million, mining each new one takes yet more computation. This burgeoning industry is hugely wasteful. Energy consumption is so vast that some mines are sited near the Arctic circle to cut down on cooling costs.

Bitcoin is no stranger to controversy. But until now its profligacy has largely gone unchallenged. That needs to change. Computing power is a precious resource, as is the electricity required to run the machines. To allow this to be squandered on pointless tasks is extravagant at best. If bitcoin fulfils its ambition to compete with, or even supersede, regular currencies issued by central banks, its wastefulness would amount to a scandal.

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It is therefore welcome news that another blockchain platform, Ethereum, recently recognised the problem and proposed a solution (see “Bitcoin mining uses more energy than Ecuador – but there’s a fix”). Whether it is workable and preserves the commitment to openness remains to be seen.

But bitcoin and other cryptocurrencies must find a solution. Their reputation is already tainted by association with money laundering, fraud, drug dealing and a seemingly constant cycle of hype and disappointment. These problems, perhaps more than the mind-boggling nature of the currency, have held back what could be a revolutionary technology.

Rather than seeing its wastefulness as another PR disaster, bitcoin should grasp it as an opportunity. Abandon the make-work and dedicate the computing resources to a worthy cause; think of it as a Tobin tax on cryptocurrency transactions. The energy issue then becomes part of a wider problem.

In their bid for mainstream acceptance, Bitcoin advocates must already feel as if they are pushing boulders up hills. Why make yet more hard work for yourself when you could be doing something useful instead?

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