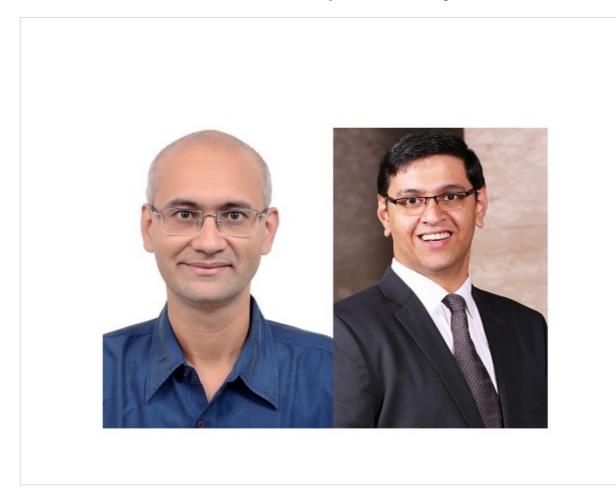
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Wannacry attack: Responsible bitcoin regulation is the need of the hour

The main disadvantage of bitcoin is that transactions can be anonymous

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Digital cryptocurrencies (the most popular being bitcoin) and blockchain has become a worldwide phenomenon in the last couple of years. To put in in simple terms, bitcoin is a de-centralised digital-only currency whose value is not anchored by any central bank or apex authority. Instead, the value of bitcoin is purely dependant on the market value of supply and demand. Created by a (still anonymous) internet personality 'Satoshi Nakomoto', bitcoin allows you to easily and anonymously transfer funds to any person around the world by means of a digital address (called a bitcoin wallet) by paying nominal or negligible fees. Bitcoin are 'mined' by computers around the world which solve cryptographic problems to generate 'blocks' of bitcoin.

The greatest advantage of this system is three-fold. The first is that the supply of bitcoin has been capped at 21 million. Since this number cannot be increased, it ensures that the value of the bitcoins is preserved over time. The second advantage is the blockchain itself. The bitcoin blockchain is a publically accessible and de-centralised peer to peer ledger where each and every transaction record is maintained. This ensures that the transactions are irreversible, tamper-proof and accessible publically. By being simultaneously maintained at multiple nodes across the world, the bitcoin network does not have a single point of failure and can even survive a nuclear strike. The third and most important advantage is the fact that transactions are almost instantaneous worldwide and have the potential to greatly reduce the fees charged for remittance and money transmission services across the world. This technology will help our country in its goal of financial inclusion and moving towards digital payments.

The main disadvantage of bitcoin is that transactions can be anonymous and sometimes it can circumvent and evade existing law enforcement mechanisms. While transactions to a wallet address are recorded in the blockchain, there is no centralized authority which verifies identities of the persons behind each wallet address. This leads to interesting situation where media outlets are able to report the amount of ransom paid to the

propagators of the recent 'WannaCry' ransomware attack, but are unable to identify the individual or the group behind the attack. Bitcoin has also been used as payment for illegal activities specifically in the dark web.

Thus there is a need for the society to encourage responsible use of bitcoin. In India, the Digital Asset and Blockchain Foundation of India (DABFI) is taking the lead in this initiative by seeking to engage and educate civil society and the government to and promote the responsible use of bitcoin. The DABFI is seeking to bring into effect a self-regulatory regime by which the cryptocurrency industry can grow in a responsible manner.

The DABFI demonstrated its commitment to this cause when recently a member co-operated with the Bank of Maharashtra and the police to nab the culprits who robbed the bank and purchased bitcoin from the illicit funds. The DABFI has created a code of conduct for all of its members and it has required its members to seek KYC information from all customers (thus mitigating complete anonymity, the biggest flaw of this technology). Being the pioneers in this space who understand the industry, it is important that the government seek to empower them in their attempt at self-regulating the space to cement India's place as a hub for bitcoin and cryptocurrency innovation.

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