Business Standard

Can govt's plan to use blockchain choke Nirav Modi-style bank frauds?

The tech is useful in digitising land records, can be applied to infra, farm sector, education, finance; but there are many hurdles in implementing it

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Last Updated at March 8, 2018 00:14 IST

Finance Minister Arun Jaitley said in his Budget speech that government does not consider crypto assets as legal. But in the same breath, he also spoke about the possibility of using blockchain proactively to usher in the digital economy.

While Jaitley hadn't dwelt on the ways the technology can be used and the areas in which the government plans to introduce it, experts say blockchain, originally formed for Bitcoin, can be used to maintain land records, and has applications in several other areas. These include agriculture, financial exchanges, infrastructure and education, among others. Some quarters also believe that its usefulness in the banking sector could extend to the issue of Letters of Credit, Letters of Undertaking and other

documents of assurance. The question doing the rounds on this issue is: Could the Nirav Modi fraud could have been prevented had LoUs issued on blockchain?

Wide applicability

Andhra Pradesh and Telangana have already begun testing blockchain for land deals, and if their experiments are successful, it will be a huge step forward, as it will ensure correctness of titles, avoid benami deals and provide momentum to title insurance.

Maharashtra Chief Minister Devendra Fadnavis welcomed the technology, saying it will reduce trust deficit. A commodity exchange in India had planned to use blockchain to link all warehouses registered with it with a repository it has set up. Recently experts even mooted the idea of using the technology for the proposed gold spot exchange.

Several banks have done a proof of concept as the first step for using blockchain in various banking transactions. Experts say, had lenders such as Punjab National Bank started issuing L/Cs and LoUs using blockchain, the Nirav Modis of the world wouldn't have dared defraud them.

Over a dozen companies in the general insurance space have come together to do a proof of concept on blockchain for their businesses, with access to all member companies to check documents and records of all clients. This is useful when people go for porting or when they take two policies from different companies, when overall exposure is higher with second policy being top up in nature.

The hurdles

Despite its touted usefulness, however, the key issue is whether or not the government will generate its own crypto currency to settle transactions on blockchain.

There are other challenges in implementing blockchain technology on a national scale and applying it to a variety of sectors.

The Finance minister preferred block chain use because it is a safe mode of tracking a long chain of transactions. Every time a new deal is struck, the block that is created forms a link in a chain to every subsequent transaction.

Vaibhav Parikh, Partner, Nishith Desai Associates says, “If the government wants to discourage crypto currency but encourage blockchain, it will need to come up with alternative. And that would mean evolving their own coin.” A government-owned crypto coin may be valued at par with the Rupee, the only difference being that it would be digital.

Ashish Sharma, Partner, Deloitte India concurs. “Crypto currency is one of the longest running examples of blockchain. The technology is useful in transfer of value or transfer of data. Where the motive is transfer of value, crypto-currency or something similar in form is required to settle the transaction,” he says.

Using blockchain is not usual technological process. It requires to designing smart contracts that can help ensure dis-intermediation and speed in business transactions. When the FM referred to the technology in his Budget speech, he knew that “a number of regulatory institutions and government bodies are considering use-cases of blockchain-based smart contracts to trigger seamless execution of contracts/ citizen services," an official said.

Jesse Chenard, CEO of MonetaGo, which offers blockchain solutions for financial institutions and central banks across the globe, differs.

He says, “Crypto currency is not necessary for settling transactions that were made using blockchain. We believe current systems will suffice for most real-world settlement scenarios. The blockchain solutions we have designed specifically do not employ a token or unit of value.”

He, however, specifies why and where the government needn't have crypto currency for blockchain. Jesse says, “Blockchain for digitisation of government services does not require a crypto currency. In many cases we are seeing blockchain being used as a better business process management platform with inherent security, auditability and the ability to selectively share data with interested parties. India already has some of the most advanced settlement systems with respect to speed and technology deployed. We see no reason to move away from that in the near term.”

India is not doing something new when it talks of using blockchain. The technology has been tested globally by several central banks. A country like Venezuela has also launched its own crypto currencies and Russia is working on one. But those countries want crypto currencies to avoid economic sanctions. However globally several central banks are testing blockchain.

Jesse insists, “They are very exploratory but early indications are the technology shows strong promise. Many governments’ services worldwide are based off of antiquated processes and software that haven’t been revisited or updated in ages. Because of the inherent security, auditability and low cost of using utility blockchain platforms we believe that Block Chain is going to be a natural choice as these explorations advance.”

There are some risks and limitations for using blockchain too. Sharma says, “Regulatory uncertainties are delaying collaboration between corporates and partners of the ecosystems. Then you have cyber risks emerging from the rising number of attacks on private keys used for blockchain transactions. Hence an organisation still needs to apply all mitigation measures for an overall blockchain-based solution to be secure.”

Blockchain-based solutions would come to fore only when we ensure traceability within the business transactions. This should be possible in cases where the blockchain operations are based on govt-approved KYC measures.

Uses of blockchain

***** Experts claim blockchain has a number of other uses — agriculture, finance, infrastructure, education — besides cryptocurrency

***** Some are of the opinion that it could be used in the banking sector to issue letters of credit and undertaking.

***** To use blockchain effectively, one would need to develop smart contracts that would ensure disintermediation and speed up transactions