Impact of blockchain on the financial services sector

A blockchain is a shared digital ledger where transactions can be recorded and verified electronically over a network of computers without a central ledger. Cryptography is used to protect the data from fraud or hackers. Blockchain is being called “the new internet” and is expected to transform businesses across multiple sectors, particularly the financial services sector.

Today, entities maintain records in their own traditional ledgers for transactions between them. This sometimes leads to transfer or exchange of a considerable amount of data between entities, resulting in an increase in time and cost for them. It also makes the process of any asset transfers inefficient, costly and vulnerable.

The replicated shared ledger concept in blockchain technology can help remove these weaknesses. The use of smart contracts, an application of blockchain technology, can enhance efficiency through event-triggered mechanisms.

Blockchain is still in its relative infancy, but it is increasingly becoming a solution that will result in important benefits in the context of the transfer of assets within business networks. The Institute for Development and Research in Banking Technology (IDRBT), the Reserve Bank of India’s research arm, has successfully tested blockchain technology for trade application. The evaluation was carried out by conducting a workshop involving all the stakeholders, including academicians, bankers, regulators and technology partners. In the process, the participants came together to bring out a white paper detailing the technology, concerns, global experiences and possible areas of adoption in the financial sector in India.

The potential of blockchain technology to automate processes in the area of trade finance is huge. Additionally, it can reduce the costs and the time consumed in the processing of the trade transactions. IDRBT has also tested the use of blockchain technology in a trade application, and the results were encouraging, providing comfort and confidence in the implementation of the blockchain technology.

In addition to trade application, blockchain could transform the financial services industry in the following areas.

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**Know your customer**

Financial institutions in India are responsible for complying with and reporting on a number of requirements from the Reserve Bank of India and other regulators. Know Your Customer (KYC) is a key requirement here, but the process is time-consuming and requires an automated customer identification technology to be efficient and effective.

The use of blockchain technology would automate the account opening process and the sharing of the KYC documents with all the participants through a digital single source ID. This would not only reduce resources and costs but also maintain the privacy of the data.

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**International Payments**

The transfer of money across countries is still a very lengthy and tedious process, taking days and sometimes even weeks. Even after the money is transferred, it is sometimes difficult to trace the origination of the transactions, thus resulting in a big risk of money laundering.

Recently, there was news that a global bank had applied blockchain technology to a newly released payments app, allowing customers to make international payments 24 hours a day, clearing the next day. This is definitely the first step, but blockchain technology can eventually enable banks to provide real-time payments while reducing operational costs, human error and fraud.

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**Insurance: Claims Processing**

The insurance industry today is facing challenges in the claim-processing process primarily due to fraudulent claims, manual processes, legacy underwriting models and fragmented data sources, causing low customer satisfaction.

Policies can be created as smart contracts on blockchain as an ideal use case for insurance. This will ensure that all policies get recorded appropriately and can be linked with the claims in a more transparent manner. Blockchain technology could be used to trace the origin of the ownership of assets such as homes and cars, thereby preventing the payment of fraudulent claims. It could improve the risk modeling for the sector by comparing data across the existing silos.

Till date, blockchain technology has not been fully tested. However, aside from the immaturity of the technology, there are other hurdles for blockchain to overcome. One could be the degree to which the banks in India have an appetite right now to make the necessary investment given that they have had to spend significantly on capital adequacy as the business side has suffered due to rising NPAs.

Another hurdle could be regulatory and legal issues. There is a reasonable possibility that markets and businesses could get transformed on account of blockchain technology requiring new laws and more regulations.