Blockchain



Definition

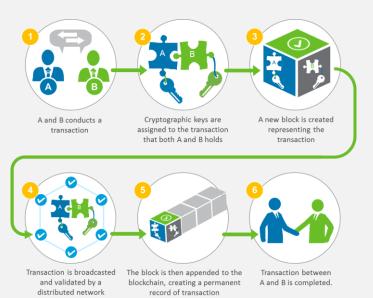
The technology behind Bitcoin and many other cryptocurrencies is a distributed ledger data base for recording transactions, more commonly known as blocks.

Blockchain technology enables users to share their ledger of transactions. The record of events gets distributed to all participants in a given network, who in turn use their computers to validate the transactions; thereby removing the need to have a third party intermediary such as a bank or central clearing centre. Blockchain records can only be updated by consensus of a majority of the participants in the system and, once entered, information can never be erased – providing a detailed audit trail of all associated events.

Blockchain is not just Bitcoin

While Bitcoin was the first cryptocurrency rolled out using Blockchain technology, the technology has much larger potential beyond virtual currencies. The technology has gained strong focus across financial institutions, technology providers and other private as well as government bodies, who are exploring the potential use cases of Blockchain in many other areas including payments, settlements, capital markets, trade finance, smart contracts, digitization, identity management, and record keeping.

How Blockchain works



Why Blockchain is getting traction Cost and efficiency

- Removal of intermediaries
- Lower risk of corruption/compromise points
- Reduced transaction costs

Real time processing

- Availability of transparent and real time data
- Near real time processing
- Processing across jurisdictions / time zones

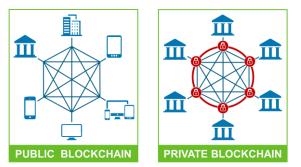
Regulation and governance

- Ability to ensure identity of participants
- Data based consensus to improve controls
- Tamper proof / immutable records
- Complete transaction history for ease of traceability

Security, privacy and controls

- Complete audit trail of all transactions maintained
- Higher data security and encryption
- Multiple ways to reconcile and avoid duplications
- Limited ability to utilise proceeds of crime

Public VS private Blockchain



With so many use cases proposed, FinTech companies will need to play a decisive role in clearly establishing the benefit of Blockchain distributed ledger technology compared to alternate technologies, as they are then more likely to see wide adoption by the industry.



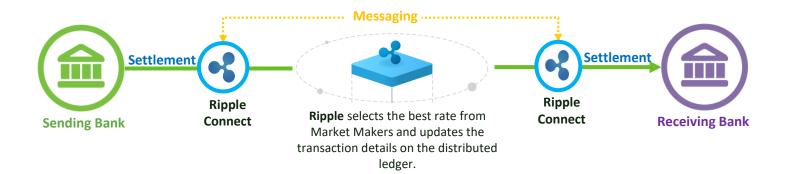
Standard Chartered Bank and Blockchain

Trade finance

Standard Chartered Bank (SCB), DBS Bank and Infocomm Development Authority of Singapore (IDA) have successfully completed a proof of concept delivering the world's first application of distributed ledger technology to enhance the overall security of trade finance invoicing. Leveraging distributed ledger technology, the initiative will reduce risk around duplicate invoice financing for banks while preserving client confidentiality.

Cross border payments

As with many banks pulling off the feat for business transactions, SCB used the enterprise Blockchain platform from the FinTech start-up, Ripple. In this endeavour, the Bank's pilot saw a transaction ping over to an unnamed "major correspondent bank" to see the transaction complete in less than 10 seconds. This settlement time included the "full transparency of fees and FX (foreign exchange)". The same payment dispatched through the existing banking system and network would have taken up to two days.



Blockchain and fighting financial crime

"Blockchain technology no doubt has a bright future; the hype surrounding it almost suggests it could be bigger than the discovery of penicillin, leading to the cure of many ills, in the financial services industry and beyond. The most likely near term successes may come in the area of post-trade settlements, especially for loans, CDS and securities, trade finance and in-time international payments. The idea, though, that these will operate without banks playing a major role is, in my opinion, unlikely. In large part, the KYC/AML programmes built by banks are not going to be replicated by start-ups. For one thing, the cost could be prohibitive for them, and more importantly, public policy makers and standard setters, as well as supervisors and regulators appear to have little appetite to allow an 'unpermissioned' space to develop, free of AML/KYC requirements. I'd bet more progress and savings are made in the next few years through industry consortia, agreeing common standards (for example in correspondent banking), on KYC utilities and big data analytics applied to transaction surveillance and information sharing initiatives."

John Cusack | Global Head, Financial Crime Compliance