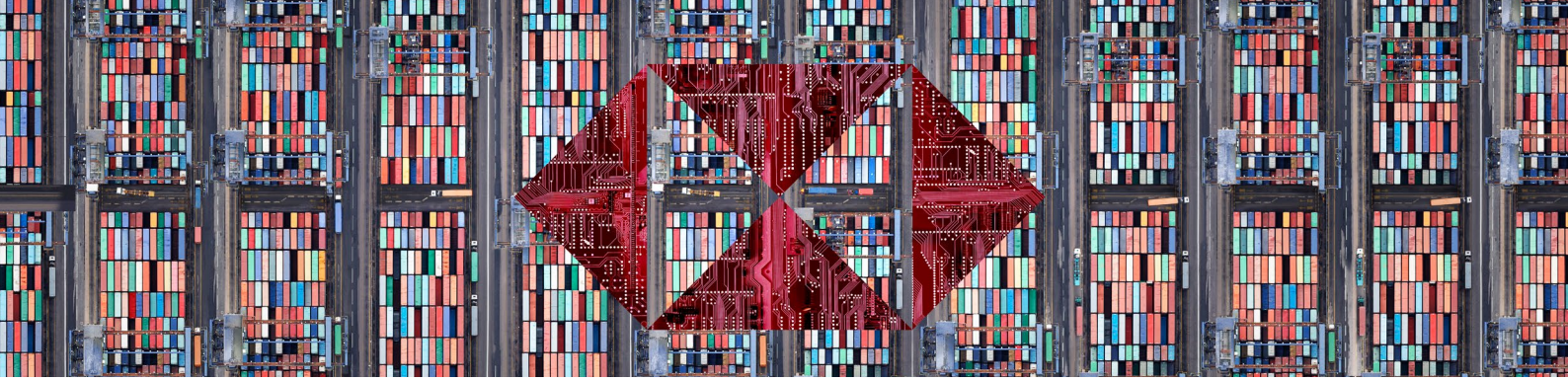

Blockchain – Transforming the future of trade finance

Behind the first live letter of credit on a scalable blockchain platform

HSBC has just completed the first live end-to-end trade finance transaction on a scalable application for the issuance of a fully digitised letter of credit, using Distributed Ledger Technology, more commonly known as blockchain. The application was built using R3's Corda blockchain.

While the flow mirrors the existing letter of credit process (involving agreeing terms of a letter of credit, the application, the issuance, the advising, the amendment request and its approval, the document presentation, the discrepancy resolution, and the bill settlement instructions), a single blockchain network was used for all participants, instead of relying on multiple systems.

Agricultural conglomerate Cargill was on both sides of the transaction as applicant and beneficiary of the letter of credit – sending a cargo of soybeans from Argentina to Malaysia – with HSBC Singapore acting as the issuing bank and ING Geneva acting as the nominated bank under the digitised letter of credit.

Why is this a significant step for you?
While there are digital solutions for documentary trade, their siloed nature leads to what the International Chamber of Commerce calls 'digital islands.' This is because such digital solutions still need to be bridged using paper.

New technology holds the promise of improved speed and processes and completely eliminating paper. However, realising these advantages requires a decentralised network, mirroring the decentralised nature of global trade.

This is where blockchain comes in.

R3's Corda uses blockchain to track, and trace information as it moves between parties. The Corda technology keeps all players in sync, reducing the need for reconciliation and speeding up your transactions, whilst providing you with end-to-end visibility. In the above transaction, this technology helped reduce the time taken for exchanging and checking documents, from the typical 5-10 days to less than 24 hours.

How is HSBC leading blockchain adoption?
We believe that blockchain has the potential to create a new market infrastructure for global trade, but replacing the current 'digital islands' and paper trails connecting buyers and sellers will need collaboration across the trade ecosystem.

The above transaction is part of our collaboration with R3, a consortium of over 100 financial institutions. Twelve banks were directly involved in supporting this letter of credit application, which HSBC developed further to enable live transactions. HSBC is also involved in developing innovations in other areas of trade. We are actively involved in regulator-led and consortium based blockchain projects such as we.trade and are actively exploring other applications for open account trade.

What next?
Developing a network to support the deployment of blockchain-based applications will be one of the critical next steps. We will continue to work with R3 to expand the number of partner financial institutions and increase adoption by others in the trade ecosystem.

We will continue to develop and refine the application with each new transaction and facilitate the inter-operability between partners.

We anticipate HSBC and other banks will conduct more live transactions this year, while the system is readied for a full commercial launch within a year and it could take another 3-5 years of collaborative work to gain critical mass. In the interim, clients are embracing existing digital offerings like electronic Bills of Lading, Mobile & Desktop Trade Applications, SWIFT for Corporate for Trade, etc., that would prepare them to embrace blockchain in due course.

We remain focused on working with other global and local financial institutions and governments, to ensure that we empower businesses like yours, by revolutionising trade finance.

HSBC

Questions Fréquentes

What is a blockchain or distributed ledger technology (DLT)?

- Distributed ledger technology (also known as blockchain technology) involves a distributed database maintained over a network of computers connected on a peer-to-peer basis, such that network participants can share and retain identical, cryptographically secured records in a decentralised manner.
- Blockchain in the final context is a continuously growing list of records that documents every financial transaction as a 'block'. For every new transaction, another block is added, creating a permanent information chain.
- Unlike a bank's ledger, which is centralised and private, blockchain can be either public or private. It is distributed directly to users who can then verify transactions without relying on a central authorising entity.

What is a private blockchain?

- Private blockchain is also known as permissioned blockchain. In contrast with the public blockchain, only participants, who are given access, are able to join the network and their identity will be validated by the network prior to onboarding. This mirrors real business scenarios in trade finance as all participants in the transaction are known to each other.
- Private blockchain solves two major drawbacks of public blockchain. Given the trust level in a private blockchain is much higher than in a public one, substantial amounts of computational power to achieve consensus among participants is no longer required. In addition, private blockchain also allows transaction information to be shared with relevant parties only, instead of the entire network, enhancing the privacy standard as required in business scenario.
- Corda developed by R3, is one of the private blockchain technologies.

What is Corda?

- Corda is a built-for-purpose blockchain platform created by R3 for their members.
- The core design principles are to build something that will integrate with bank systems and that ensures speed, scalability and privacy.
- Essentially Corda is designed to enable secure global communications and exchange of digital assets across a global shared ledger for banks and their customers.
- This transaction was built on Corda v3.1, which was released in April 2018.

Is this transaction an industry first? Is this just another Proof of Concept / Pilot?

- There have been other proof-of-concept transactions, dummy transactions and proprietary transactions completed over the last 18 months but this is the first live transaction to be completed using Corda's scalable technology.
- We believe the success of this transaction provides an excellent foundation for a scalable production of fully digitised letters of credit.

What are the benefits of participants in this transaction?

- The use of blockchain can help complete the document exchange and transacting process involved in letter of credit transactions within 24 hours, whereas conventional paper-based usually takes 5-10 days.
- In addition, efficiencies through eliminating paper and streamlining processes will help make the letter of credit more accessible to counterparties that do not enjoy mutual trust, and that were formerly driven away from using the conventional letter of credit due to its complexity and higher costs.
- This could promote international trade and unlock liquidity for businesses.

How does blockchain help facilitate a Letter of Credit (LC) transaction?

- The primary reason for long lead times in conventional LC transactions is the need for physical documentation exchanges, including transfer of title of goods and separate communications among counterparties, shipping companies, banks, etc. These can be entirely transformed using blockchain technology.
- Blockchain technology shortens the transaction time of LC transactions by allowing electronic transfer of title documents and connecting all parties in a single blockchain network, allowing instantaneous updates and removing the long lead time for back-and-forth communication among the counterparties in an LC transaction.