through a permissioned ledger, guaranteed the export of almost \$100,000 worth of cheese and butter from Irish dairy cooperative Ornua (formerly the Irish Dairy Board) to the Seychelles. According to Barclays, the letter of credit transaction process, which usually takes between seven and 10 days from issuing to approval, could be reduced to less than four hours. The letter of credit itself was issued through the SWIFT (Society for Worldwide Interbank Financial Telecommunication) system and the funds were released in a traditional manner.

In August 2016, Bank of America, HSBC and the Infocomm Development Authority of Singapore (IDA) announced that they had built a blockchain application based on the Hyperledger Fabric to improve the letter of credit transaction process. The application mirrors a traditional letter of credit transaction by sharing information between exporters, importers and their respective banks on a permissioned distributed ledger (see Figure 8). A series of digital smart contracts* allows them to execute the deal automatically (HSBC, 2016). And in May 2018, HSBC completed what it claims is the "world's first commercially viable trade finance transaction" using Blockchain, arguably opening the door to the commercial use of the technology for trade finance operations (Weinland, 2018). The letter of credit transaction for US group Cargill for a shipment of soya beans from Argentina to Malaysia was conducted on the Voltron blockchain platform for letters of credit built by a group of 11 banks on the Corda platform developed by the R3 consortium.

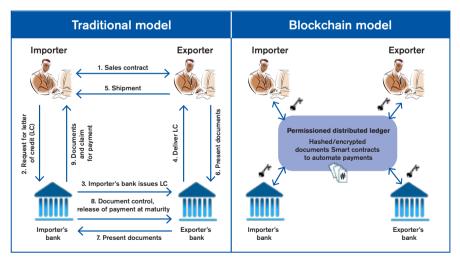


Figure 8 Example of letter of credit process^a

Source: Author

^a The specific features of blockchain platforms (e.g. types of payments) depend on the characteristics chosen by participants.