

In October 2017, Mastercard launched its own blockchain network to address challenges of speed, transparency and costs in cross-border payments in the business-to-business (B2B) space. Mastercard's blockchain is a permissioned ledger that can be accessed via an API, making it possible for users to connect to the blockchain without having to create their own distributed ledger server nodes\* (Mastercard, 2017).

In November 2017, Visa rolled out the first pilot phase of its blockchain-based B2B payment service, B2B Connect, first announced last year (De, 2017). The platform aims to ease cross-border payments by facilitating direct payments between institutions, cutting out traditional intermediaries. The United States-based Commerce Bank, the Republic of Korea's Shinhan Bank, UnionBank of the Philippines and the United Overseas Bank, based in Singapore, are collaborating with Visa on the project.

That same month, J.P. Morgan launched the blockchain-based Interbank Information Network (IIN), in collaboration with the Royal Bank of Canada and Australia and New Zealand Banking Group Limited. IIN leverages blockchain technology to “minimize friction in the global payments process” by allowing faster payments in fewer steps and more securely (J.P. Morgan, 2017).

With its promise of greater efficiency, faster settlements at lower costs, lower risk of fraud, auditable traceability and rising pressure from digital innovators, Blockchain is seen by many financial institutions as a “must investigate” technology. Savings generated by the use of the technology could be potentially significant. According to Santander *et al.*, (2015), Blockchain could reduce banks' infrastructure costs attributable to cross-border payments, securities trading and regulatory compliance by US\$15-20 billion per annum by 2022.

Will Blockchain become the future of cross-border payments? Time will tell. The technology is still maturing and people are still investigating its full potential. Regulatory uncertainties and lack of interoperability of current platforms remain a challenge (see Section 4.2). Adoption is, therefore, likely to be gradual. Well-established financial institutions are more likely to focus first on internal operations to improve efficiency and reduce organizational complexity and back-office costs – not least because, today, some top-tier banks make significant profits on cross-border transactions and may not be keen to embrace a technology that could cut out one of their key revenue streams.

But one thing is certain: Blockchain is disrupting the sector and pushing well-established financial institutions to adjust. If the newly developed applications are