WHY GET EXCITED ABOUT BLOCKCHAIN?

Stephen Ozanne, senior associate at Walkers, says that blockchain has exciting potential for fintech

Blockchain, the distributed ledger technology that underpins Bitcoin, is likely to be the biggest development in financial services since the invention of the microchip. However, while blockchain is mainly associated with cryptocurrencies, it is the technology's potential to radically change financial services in many other areas that is getting people excited.

In essence, distributed ledgers are databases that are shared across a network of computers in different sites and countries. Each participant in the network has their own identical copy of the database and any changes to the database are made to all copies of it. For a change to be recognised all (or at least a majority) of copies of the database must reconcile with each other. This process in itself makes distributed ledgers very secure. A hacker should not be able to make a change to the information recorded in the distributed ledger by altering just one copy of the database. Instead, they would need to access and manipulate nearly all copies of the database. This should be much more difficult, not least because blockchain is also protected by sophisticated cryptography.

Many financial institutions already see the opportunities that may be created by distributed ledgers and are investing in the technology. UBS has its Crypto 2.0 Pathfinder Program and it has created the Utility Settlement Coin (USC) as a distributed ledger based digital cash equivalent of major currencies, such as the dollar, for making payments and settling transactions quickly. The Hyper Ledger Project (hyperledger.org), a collaboration between the likes of JP Morgan, ABN Amro and BNP Paribas, and technology businesses such as IBM and Cisco, is aiming to establish a cross-industry open standard for distributed ledgers to change the way business transactions are globally conducted. Further, Esma, the European Securities and Markets Authority is currently assessing the use of distributed ledgers in securities markets.

There are many start-up businesses in the sector too. Exciting ones to watch include Abacas Global, which is creating a trading system using blockchain and asset-backed contracts or coins, and Epiphyte who provide blockchain powered instant settlement systems for FX trades.

Any type of information can be recorded in a distributed ledger. In financial services, using a distributed ledger to record ownership of financial instruments, including company shares, could quickly become the industry standard. Using a distributed ledger should be quicker, cheaper and more secure than traditional methods. Distributed ledgers could also have a sig-

nificant role in compliance. An example that might be used soon is using distributed ledgers to securely record client due diligence, such as identity documentation. The technology could reduce compliance costs while making it much easier for service providers to record, monitor and, where required, share clients' CDD.

Distributed ledger technology can also be combined with other technologies, such as smart contracts (computer programmes that verify and enforce contracts) and digital signatures, to enable fast and secure execution and operation of legally binding agreements. The Channel Islands could be jurisdictions of choice for smart contracts because in Guernsey and Jersey the formalities for executing most types of agreements can be completed digitally, whereas in England, for example, many types of agreements are written as deeds and it is questionable whether they can be electronically executed. This reason alone could make the Channel Islands important jurisdictions for distributed ledger based contracts.

Ultimately, distributed ledger technology is still in its infancy, yet it represents a huge opportunity in financial services. I would recommend keeping an eye on developments in this area – the wide-scale adoption of distributed ledgers could progress very quickly.