# Revolution or evolution: how will blockchain technology change asset and wealth management?

From our work across the financial services sector, it is clear to us that blockchain applications have the potential to transform the industry. We recently hosted a discussion for the asset and wealth management (AWM) sector to specifically look at the application and potential of distributed ledger technology in its business.

### Steve Webb

T: +44 (0) 20 7804 1597 steve.webb@uk.pwc.com

Blockchain is not just hype – there is real interest in this topic. Views across the panel<sup>1</sup> at our event were varied, but there was also much common ground. Below is a summary of the discussion.

## Towards a blockchain breakthrough – tackling challenges

While technical challenges remain, rapid progress and investment in the technology has resulted in many problems already being solved. This progress is partly down to the open-source nature of much of the work in the blockchain arena, which enables technologists and others to build on each other's progress. Eris Industries, for example, provides an open platform through which anyone can build, test and operate blockchain-enabled applications. The R3 consortium of banks and other financial companies, working together on blockchain research and development, has grown quickly and is committed to open-source.

As a result, many of the early technical barriers to widespread adoption of blockchain are now being broken down. The issue of scalability, for example, looks to have been largely addressed. The new key technical challenge is confidentiality. Visibility of data on a blockchain presents a problem for many of the best-known commercial applications, where only parties to a specific transaction should be able to see all of the details of a trade. Selective encryption of data within the ledger is not yet fully solved although a number of technical solutions are now being trialled.

Nor are there any insurmountable regulatory barriers standing in the way of blockchain. While regulators are taking an active interest, their mandate is to achieve their desired outcomes (i.e. stable, transparent markets and compliance with regulation) rather than to dictate specific technical solutions. In fact, many regulators see blockchain as a potential opportunity to deliver greater transparency at reduced cost, which will make the financial system easier to oversee. They are also conscious of the desire of government to support innovation - blockchain represents an opportunity for nation states to secure competitive advantage.

Possibly the biggest challenge to overcome is the impact the technology has on interactions between parties. In order to gain maximum benefit, the different participants in a chain will need to work together to transform their business interactions. Working together with peers, customers and suppliers to develop solutions requires a different approach, and we see consortia forming to work together, but this complicates progress. As several panel members pointed out, the clearing and settlement use case might be delivered sooner if market infrastructure firms decide to drive the change from their central position as suppliers.

### Not if but when

The panel largely agreed that mass adoption of blockchain technologies, across a broad range of use cases, is becoming inevitable. But the question remains - when will developmental work reach a tipping point where companies are routinely deploying blockchain-enabled solutions across many of their activities – including, for example, for mass market securities settlement?

Some participants believe deployment throughout mainstream capital markets could be in place within three to five years; others think a little longer. Adoption will be gradual – perhaps beginning in niche asset classes or trading environments – but will accelerate over time.

<sup>1</sup> My sincere thanks to the panel who gave us such a lively and informed discussion. Dr Lee Braine of the Investment Bank CTO Office at Barclays Bank; Simon Taylor, Co-Founder and Blockchain Director of 11:FS; Casey Kuhlman, CEO of Eris Industries; and my colleague Ajit Tripathi, founder of PwC's blockchain practice.

The key factor driving adoption is the 'size of the prize'. The value on offer from blockchain technologies - and the immense cost pressure so many financial institutions now face - makes it inevitable that the financial services sector will pursue new applications as aggressively as possible. There are a number of estimates of potential savings. One of the most quoted is the Santander estimate that blockchain could reduce the capital markets, FX and securities industry's infrastructure and operational costs by as much as \$20 billion a year.

## Where are the asset and wealth managers?

Given the benefits, it seems surprising that the asset management sector has so far chosen not to engage in the blockchain debate in a meaningful way. Asset and wealth managers have largely preferred to sit on the side lines while the sell-side banks take the lead in exploring potential use cases.

In fact, there are a number of possible explanations for this hesitancy. One is the perception that blockchain applications will largely be in areas such as settlement, which many asset managers have outsourced to custodians and other third parties. Another is the idea among some asset managers that sell-side banks are working together to further their own interests, which may not be aligned to those of the investment community.

It's also fair to point out that asset managers are not facing the same sort of crushing pressure on costs as the banks. To a degree, this may reflect their ability to pass costs on to customers, particularly retail customers, which if true places less pressure on pursuing potential savings.

However, it would be a mistake for asset and wealth managers not to consider their blockchain strategies. Even if the strategy is to do nothing for now, there should be governance structures in place to ensure further reviews take place over time. Major technology investments that have a one to three-year timeline need to be reviewed against potential market developments.

If this is not done, then the technology delivered may not be appropriate for the environment it is delivered into. This may cause a significant 'regret spend' resulting from the need for considerable reengineering. Committing modest resources to understanding what is happening is much more affordable.

While most of the questions and conversation in our discussion focused on the potential benefits associated with cost savings, there are also threats to the AWM business model. The lower cost associated with blockchain may inspire a new generation of FinTech entrepreneurs – or indeed platforms from other industries - to make a disruptive push into the sector. There have already been moves in the US to use the technology in the private placement markets, and there is a real threat that P2P firms will use their distribution platforms to start providing a wider variety of investments.

Asset and wealth managers who do not take the time to understand the potential impact of the technology, and consider how it will impact their business strategy, may find themselves at risk.

This article was first published as a PwC FinTech blog on 28 September 2016. http://pwc.blogs.com/fintech/2016/09/ how-will-blockchain-technology-changeasset-and-wealth-management.html





