

HOW SOON IS NOW?

THERE IS A BROAD CONSENSUS THAT BLOCKCHAIN TECHNOLOGY HAS THE POTENTIAL TO PLAY A MAJOR ROLE IN THE INDUSTRY'S OPERATIONS. THE ONLY QUESTION IS WHEN, DISCOVERS NICHOLAS PRATT.

AMARA'S LAW STATES that we overestimate the effect of new technology in the short run and underestimate it in the long run. The adage, coined by American researcher Roy Amara, is also the basis for the Gartner Group's hype cycle, a graphical representation of the stages of expectation that greets new technology from the peak of inflated expectations to the trough of disillusionment.

Blockchain, or distributed ledger technology (DLT), is possibly the one current technology that has been the subject of the greatest amount of hype and expectation in recent memory. It has also been met with equal levels of scepticism by those unmoved by the evangelism.

This is particularly true in the investment management market. To demonstrate the varied views, we interviewed a range of market participants to gather their opinions on two crucial questions relating to DLT – what is its most suitable application within the funds market and what is a realistic timetable for when such an application will be viable, practicable, scalable and, perhaps most importantly, likely to be widely adopted by asset managers and investors alike.

Of the current blockchain-based projects underway in Europe, three stand out. Two of these are competing projects aimed at the transfer agency (TA) and fund distribution process. The Iznes platform is a France-based

record-keeping platform that uses technology provided by SETL, a DLT-based project launched in April 2017.

The platform currently involves 25 European asset managers including Allianz Global Investors, Amundi, Aviva Investors, BNP Paribas Asset Management, Candriam Investors Group and Natixis Asset Management. It provides five services: KYC (know your client) processing, product governance

“DIGITALISATION OF THE DISTRIBUTION CHAIN WILL LEAD TO STANDARDISATION, DECENTRALISATION AND REAL-TIME PROCESSING.”

(or 'know your product') services, fund issuance and redemptions, a tax module for the investors and corporate actions management.

According to SETL chief executive Peter Randall, fund managers can connect directly to the record-keeping platform, bypassing the traditional TA and providing them with cost reduction and innovation in an area that is “a dead end of activity, expensive, slow and lacking transparency”. It is scheduled to go live for funds domiciled in France and Luxembourg at the end of September.

A similar project, FundsDLT, is designed to connect (and is backed

by) three Luxembourg outfits, the Fundsquare unity of the Luxembourg Stock Exchange, the Intech subsidiary of Post Group and KPMG Luxembourg. Tests have taken place with the involvement of the likes of BNP Paribas and the market is waiting for it to go fully live some time in 2019.

Finally, there are the blockchain plans of transaction network Calastone, which is in the process of migrating its network to a private and permissioned distributed market infrastructure based on the blockchain. The project began in 2017 and it plans to run both platforms side by side to enable its clients to migrate at their own pace.

OLIVIER PORTENSEIGNE
MANAGING DIRECTOR AND CHIEF
COMMERCIAL OFFICER, FUNDSQUARE

How long will take for DLT to become a mainstream feature of the market?

After the regulatory surges of previous years, the European fund industry is now very focused on making the most of the efficiencies and benefits of technology. Digitalisation of the distribution chain will result in standardisation, decentralisation and real-time processing and we are convinced that DLT is the foundational technology to enable change. The industry is now expecting concrete results and FundsDLT has projects at varying stages of maturity. We foresee that the first minimum viable products over blockchain will go live during 2019



and are currently working on delivering the solution for our first clients in early 2019. What is essential for success is building a functioning ecosystem and this can only be done with industry-wide cooperation, strong governance and support from a large number of actors, including important institutions.



MATTHIEU DUNCAN
CEO, OSTRUM ASSET MANAGEMENT

When do you think a blockchain project will progress beyond pilot stage and be fully operational?

Two platforms in Europe dedicated to the fund industry (FundsDLT and Iznes) are expected to go live by the end of 2018 or early 2019. The state of play is now well past the proof-of-concept and pilot stages. Full commercial services using blockchain technology in funds distribution should become a reality for asset managers and distributors very soon. With that said, adoption is likely to be progressive and take some time as asset managers and distributors

become familiar with the technology, its advantages, and its possibilities.

What is the current state of play with FundsDLT?

Ostrum AM was the first asset manager in the world to transact a real client order in one of its Luxembourg-based funds using an entirely blockchain-enabled circuit via the FundsDLT platform in the summer of 2017. We have worked closely with FundsDLT since that time as they have prepared for commercial launch of their service, as described above. We expect to be among the very first asset management users of the FundsDLT platform once it launches commercially early in 2019.



RAVI BEEGUN
HEAD OF ASSET MANAGEMENT, KPMG LUXEMBOURG

Where can blockchain be best applied within the funds industry?

There are a number of compelling use cases, not least of which is the use of

blockchain for fund distribution. This use case adds value, as it leverages on the inherent benefits of blockchain technology. The digital ledger is perfect for scenarios requiring verification and top-notch security, and as such is well suited to the management of transactions and accounts. Blockchain has the potential to transform the entire fund distribution value chain, allowing asset managers to mutualise a significant number of fund processes, dramatically reduce the cost of transactions, and radically cut down the time taken for a transaction to be processed. I think it is safe to say that a host of new blockchain-based products and services will be cropping up in the next two or three years. Initiatives like FundsDLT have attracted much attention from both industry and media, placing blockchain firmly on the agenda of forward-thinking CEOs.

When do you think a blockchain project will progress beyond pilot stage and be fully operational?

We might see a first blockchain project come to fruition as early as next year. The very existence of so many blockchain initiatives has allowed the technology to develop at an astounding rate, with each project solving a piece of the security and scalability puzzle. I think we will first see a select number of frontrunners adopt the technology, and then the wider community come on board as its value is proven.



CAMPBELL BRIERLEY
CHIEF INNOVATION OFFICER,
CALASTONE

What is the most suitable application for blockchain in the funds industry?

Blockchain has potential in several areas but the ability to share key information between firms safely and reliably offers particular value in fund distribution. For example, by negating the need for individual trading firms to each maintain a separate record of orders, settlements and holdings, all immediately benefit through reduced instances of errors and automatic reconciliations which significantly reduces the overall complexity and cost. Calastone calculates that the value of these cost efficiencies will total over £1.9 billion (€2.1 billion) a year across just a few of its key markets.

The industry also benefits through sharing a single and consistent view of accurate data, enabling the development of new products and improved client service. For example, new electronic-only share classes can be enabled, providing fund manufacturers the opportunity to compete with other low-cost investment types or firms can reduce the time clients are out of the market when moving between funds. The use of blockchain in distribution, therefore, not only reduces cost but will also allow the industry to be more responsive to the needs of the investor.

What is a realistic timescale for the technology to become widely adopted?

The technology is here now and we are starting to see more instances, across sectors, where blockchain is moving from the proof-of-concept stage and into production. There are two factors that will drive the speed of adoption: the value delivered by each specific solution and the ease with which clients can migrate to these new services.

At Calastone, our focus has been to use the technology to solve real business problems and to support clients from launch with order routing, settlement and automated registry management services. The migration path to adopting these new services has been a critical consideration in our build. Our existing connectivity with our 1,600 global clients means we are able to provide them with the ability to migrate at the time and pace that suits them.

“TWO FACTORS WILL DRIVE THE SPEED OF ADOPTION: VALUE, AND THE EASE WITH WHICH CLIENTS CAN MIGRATE TO THESE NEW SERVICES.”

The sceptics

The enthusiasm and optimism of those actively involved in blockchain projects is understandable, even if there is still a lack of cast-iron certainty about when some of these projects will become fully operational. We have seen timetables pushed back in other areas of the financial services industry, most recently the Australian Securities Exchange's decision to postpone the migration to a new blockchain-based settlement

system by a further six months into 2021.

So what do those working in the funds technology and operations field believe is a realistic view of blockchain technology in terms of application and timetables? We asked two people for their views – a software architect who believes that the technology may still be a solution looking for a problem and a fund administrator who was formerly global head of fund services at Schroders and describes himself as a Luddite, but a Luddite with a technology degree.

NOEL FESSEY
CHIEF EXECUTIVE, EUROPEAN FUND
ADMINISTRATION

Where can blockchain can be best applied within the funds industry?

I have seen several use cases proposed. The most common is probably transaction processing for investor subscriptions and redemptions. I have also seen it proposed in KYC and in price publication as a means to eliminate the market data middle-man by writing your NAVs into a blockchain.

When will a blockchain project will progress beyond pilot stage and be fully operational, secure and scalable?

Most of the use-cases or pilots I have seen – certainly in transaction processing – seem to be largely, perhaps wilfully, ignorant of the nature of fund distribution networks which operate at scale. These are highly heterogeneous, with many levels of indirection and intermediation at each level. There are potentially many hundreds of actors in each fund's distribution network. In this context, a true distributed ledger won't scale, and would in any case introduce privacy issues. In order to overcome scaling issues, proponents offer off-chain scaling via a central database and to overcome the privacy issues,

they offer multiple private ledgers. This might be fine in some parts of the financial industry – perhaps in securities transactions between two brokers but in fund distribution it amounts to saying that blockchain would be great if only the world were different.

But the fund world is what it is – it's a world that took an age to move from SWIFT FIN to ISO 20022 format messages and which still likes to use fax and email for order presentation. It's a world in which some participants have

“THE FUND WORLD IS NOT LIKELY TO ADOPT BLOCKCHAIN QUICKLY – NOT AT SCALE. TOO MUCH MONEY IS SUNK INTO CURRENT TECHNOLOGY.”

state-of-the-art technology in which every cent of expense counts, and others that muddle along with Excel. I might be wrong, but I think it's not a world which is likely to adopt blockchain quickly, at least not at scale. There's too much money sunk into current technology and too much business process to change, and probably not enough financial reward for the cost of change. The use cases I have seen also focus on the simplest types of transactions, and don't cover the full scope of the typical fund operating model.

Does that mean that I think blockchain/DLT is a dud idea? No. I expect it will find its uses, and ideas like smart contracts are indeed very interesting, albeit poorly understood by most people, no doubt me included. But it's just technology, like a classical distributed database is technology, like public key infrastructure-based encryption is a technology, which



once was esoteric and hard to do and now is ubiquitous. So one day I expect blockchain will be commonplace, but probably not in the way people think. Who knows, perhaps one day it will replace cheques.



PIOTR LASKAWIEC
SOFTWARE ARCHITECT, METROSOFT

What is the most suitable application for blockchain in the funds industry?

That's an interesting subject in general, even outside the funds industry. Instead of starting from a valid business issue and then searching for the best technical solution, the industry is trying hard to find an ultimate problem that would be a perfect match for blockchain/ DLT. We have a hammer but we are still searching for nails. Generally speaking, distributed ledger shines in use-cases where there are multiple parties that

do not fully trust each other but want to participate in the common business processes. KYC or verification of sales agreements in asset management are good starting points for further research on potential DLT applicability. I'm sure that there are other suitable use-cases. However, I have an impression that the pure marketing is something where DLT is mainly used for. Excessive hype around DLT only distracts from the real benefits the technology provides and ultimately slows down the adaptation in the real business.

What is a realistic timescale for the technology to be widely adopted?

It's very hard to predict when a relatively fresh technology will be mature enough to be widely adopted in production systems. Moreover, every single technology is only a tool. For instance, from a purely technical standpoint, DLT has a potential but the IT landscape is crowded with promising technologies that have not found their place in the mainstream. Technology needs a valid use-case, acceptance from the business, access to experienced engineers and a bit of luck. I'm sure that the technology in general will be a mainstream feature of the market. It's already happening. I'm just not sure which specific technologies will move the market to the next level. **fe**