



## The Age of Innovation

The financial services industry is facing a number of legacy process and technology challenges, which have to be addressed in light of rising infrastructure costs and emerging trends including the rise of retail investing. Long criticized for being monolithic, unwieldy and intrinsically conservative, custodians and market infrastructures are currently undergoing a seismic transformation as they increasingly embrace innovative practices and disruptive technologies.

Bryan Murphy, Global Head of Banks Sales, Securities Services at Citi, sits down with industry experts to discuss how firms are approaching innovation and collaboration across the industry.



**Bryan Murphy**  
Global Head of Banks Sales,  
Securities Services, Citi

### Creating a framework for innovation

Right now, the industry is facing a number of long-term headwinds. As performance continues to be elusive for active managers, many investors are rebalancing their portfolios by building up bigger allocations in more cost e-ffective passive products. This is prompting managers to seek out cost savings by pushing down fees at global custodians and brokers, which in turn is leading to these providers exerting pressure on their own sub-custodians' fees. "The industry is dealing with a number of macro issues, including rising infrastructure and regulatory costs. With margins under pressure, banks are looking for ways to deploy technology to not only obtain efficiencies but also support clients in their innovation journeys," says Murphy. But how can this be achieved?



**Justin Chapman**  
Global Head of Digital Assets  
and Financial Markets,  
Northern Trust

Most significantly, organizations need to pursue an innovation strategy which is both holistic in nature and long-termist in outlook. "We adopt a whole-office and macro approach towards innovation. In addition, we start the process by conducting a 10 year review on what scenarios could potentially arise in the market, and assess how this might impact our core business lines, whether it is asset management or custody. This strategic roadmap must also be fully aligned with our technology roadmap. A ten-year scenario might include a prediction that a distributed ledger enabled central registry emerges, which enables clients to trade directly with issuers. I would then ask if that happens, what would Northern Trust need to invest into to get to that point?" says Justin Chapman, Global Head of Digital Assets and Financial Markets at Northern Trust.



**Samuel Riley**  
Head of Investor Services &  
Financing and CEO,  
Clearstream Holding AG

Similarly, businesses need to create an organizational culture and framework which encourages staff to be innovative or think laterally. Sam Riley, Head of Investor Services & Financing and CEO at Clearstream Holding AG, shares that the company is making its data – which was traditionally held in silos within the Clearstream Data Layer – accessible to all staff. By doing so, he says Clearstream now has a wider talent base looking at firm-wide data, and potentially generating interesting ideas or products off the back of it.



Obtaining board-level support for innovation programmes is equally critical – not least because the board buy-in is a strong enabler for investments in research and development (R&D) and proofs of concepts (POCs). Chapman concedes this exercise can sometimes be a difficult undertaking. “The challenge we have with innovation programmes is that they are unlikely to make money in the short-to-medium term. I often have to explain that we may want to invest x millions of dollars yet the immediate return on their investment is unknown. It is not a normal business pitch,” he says.

#### **Finding the right partnerships**

Although banks and infrastructures have deep pools of resources to throw at innovation, many are engaging in partnerships with external fin-techs or even making strategic investments into their businesses. “In addition to our in-house capabilities, we have a number of co-investments in fin-techs which are solving problems by developing solutions which we do not want to build ourselves, or where we hope to bring a product to market quicker. Elsewhere, we are consciously investing into products and services, which we believe will one day become industry utilities,” says Riley.

Custodians are also participating in a number of exciting projects involving digital assets, with some providers looking to develop crypto-custody capabilities. This is happening in one of two ways. Some banks are building up their own crypto-custody platforms complementing their existing albeit more traditional custody offerings. Others – for a variety of reasons – are choosing to invest into third party institutional grade crypto-custodians. Both of these approaches are helping incumbents give clients access to non-traditional asset classes.

The rise in retail investing has also led to a spike in investment in the wealth technology space, a lot of which has come from custodians, brokers and asset managers who are looking to improve their technology and service offerings for underlying clients. “Citi’s Agency Securities

Lending team worked closely with Sharegain to develop an automated solution allowing wealth management firms to deliver a securities lending program to their clients –giving their customers the opportunity to earn additional revenue on their stocks, bonds, and ETFs [exchange traded funds],” says Murphy.

While engaging with fin-techs can usher in excellent results, regulated financial institutions do need to exert caution. “One of the challenges we have when working with fin-techs is that they struggle to understand that banks – such as ourselves – are subject to strict regulatory oversight,” says Chapman. This inherent conflict between the two types of organizations can at times impede development. Chapman highlights there are other challenges too – citing mounting concerns about the inflated valuations being assigned to certain fin-techs – an issue which may discourage future investment by incumbents moving forward.

Aside from engaging and partnering with fin-techs, Murphy highlights that industry-wide collaboration and the establishment of consortia could facilitate innovation. This sentiment is echoed by Riley. “Collaboration is not just about investing into new businesses but by connecting the marketplace. Our business models are changing and we will not succeed if we stand alone,” he notes.

Citi, together with a number of other leading financial institutions has worked closely with Clearstream to develop HQLAx, a distributed ledger technology (DLT)-supported platform which lets market participants transfer ownership of securities across multiple collateral pools at precise moments in time<sup>1</sup>. “The issue of collateral optimization is key. The current interest rate and regulatory environment reinforces the importance of sound collateral management. New products such as HQLAx allow for optimization by letting users move collateral around multiple times per day, and then reuse it, thereby facilitating maximum potential from a liquidity perspective,” comments Riley.

<sup>1</sup> Clearstream – January 11, 2021 – HQLAx secures EUR 14.4 million series b funding





### Looking to the future

Ultimately, custodians and market infrastructures need to future proof themselves and ensure their business models stay relevant as client behaviour evolves – not least because of the rapid growth of decentralised finance (De-Fi), namely peer-to-peer financial services facilitated through Blockchain. “End-to-end transparency is vital. Retail investors are driving up transaction volumes, and we are seeing new trading venues emerge in the fin-tech space – supporting both crypto and existing asset classes. The ability to connect investors with issuers, and deliver data in a way that is as real-time as possible is becoming more of a focus for us,” says Riley.

The way in which custodians engage with clients could also be transformed over the next few years. Today, a standard client-custodian relationship will involve the former procuring an extensive range of services from that sole provider. However, this set-up could change substantially moving forward, according to Citi’s Murphy. “Historically, the industry has had a fairly monolithic securities services product offering. It feels increasingly likely that sales, product and innovation teams will start stitching together different products – which may not necessarily be offered by that one organization – but could be available through partners such as trusted third parties or fin-tech partners,” says Murphy.

This approach is pervasive throughout the retail De-Fi and wealth space, although it is still some way off in the institutional world. Nonetheless, Chapman anticipates algorithms could potentially help institutional clients one day select the products and solutions best suited for their bespoke requirements, in a way not too dissimilar from the retail market. “If data is held in public and private clouds, interoperability between the two could potentially result in switching costs for clients falling substantially,” adds Murphy.

Providing clients with seamless access to new asset classes will also be critical for custodians and infrastructures. While trading of digital assets such as crypto-currencies has been buoyant, industry experts are optimistic about the future prospects for asset tokenization – namely the creation of easily tradeable digital tokens denoting value in an underlying asset. As these digital units can be tokenized, they are cheaper for retail investors to gain exposure to. “Tokenization could be an enabler for creating liquidity in assets which are not liquid such as property,” says Chapman.

As embryonic digital assets and disruptive technologies come to the fore, many believe that traditional incumbents will provide a bridge connecting the old world with the new. Most notably, a number of experts argue traditional financial institutions are in an excellent position to support both existing and digital assets, especially as the two markets will likely overlap for a prolonged period. Similarly, Chapman highlights the regulated nature of banks – together with their trusted status and robust governance frameworks – will be vital in strengthening markets such as De-Fi, which are presently unsupervised.

### Preparing for a new digital world

With the challenging macro conditions, clients are seeking out new revenue sources, operational savings and real-time reporting. It is imperative that custodians and infrastructures innovate and develop new products so as to meet these evolving client needs.

“Client requirements are rapidly changing, both in terms of what they are investing in and their overall expectations from service providers. By adopting a balanced approach to internal innovation, industry collaboration and external investment, service providers will be well-placed to deliver more innovative client solutions and have a chance to shape the industry’s future for the better,” concludes Murphy.

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