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The magazine's readership selected a list of nominees, which were judged by financial experts and editors, who honoured Commerzbank for its market position, innovation and international expertise. World Finance, 07/08 2016 issue

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Conference Report

This year's Sibos conference outlined the areas where firms are adapting to the new environment, and where there are still milestones to pass

P10



Blockchain Product

World Wide Generation's new blockchain is taking a stand on sustainability goals. Manjula Lee and Tony Samios explain how the technology can be scaled in the future

P14



Country Profile

Between the LGPS pooling project, Brexit and changes in technology, fund managers in the UK, and their service providers, have a lot to think about

P16



Custody Discussion

New regulations, new competition and new cost pressures mean custodians and sub-custodians have more balls in the air than ever before

P20



Company Update

Smartkarma has made the move into the European market, just in time for the arrival of MiFID II. Arzish Baaquie explains why

P26



Reconciliations Tech

Rocky Martinez considers how AI can improve post-trade processes, and how SmartStream's new reconciliations solution can help firms keep costs sustainable

P30



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EU Commission lays down law on MiFID II

The European Commission is pursuing legal action against 19 EU member states that are failing to comply with obligations under the fast-approaching second Markets in Financial Instruments Directive (MiFID II).

The 19 member states include Belgium, France, Greece, Luxembourg, Netherlands, Portugal, Spain, Malta, and Sweden, among others.

According to the commission, the offending countries have failed to update the regulator on the progress they have made in transposing MiFID II into domestic law.

MiFID II is set to come into effect on 3 January 2018, following a 12-month delay on the original implementation date. The European Securities and Markets Authority (ESMA) has been resolute in its stance that no further compliance extensions will be offered ahead of January. This means post-trade issues such as research payment policies need to be addressed sooner rather than later.

EU margin rules depress derivative contract terms, market survey finds

New EU margin requirements are driving less favourable non-price terms and conditions in new or re-negotiated over-the-counter (OTC) derivatives master agreements, according to an EU Commission market survey.

Respondents to the commission's quarterly survey on EU securities financing market liquidity cited the implementation of European Market Infrastructure Regulation (EMIR) margin requirements for non-cleared OTC derivative contracts as the main driver of the less favourable contract terms.

Few changes were reported regarding credit terms and conditions with respect to non-centrally cleared OTC derivatives.

The commission surveyed a panel of 28 large banks, comprising 14 euro-area banks and 14 with head offices outside the euro area.

Overall, the survey found that credit terms offered to counterparties in both securities financing and OTC derivatives transactions in the three months prior to September remained basically unchanged.

According to the commission, the relative stability in overall credit terms over the past two reference periods follows the considerable net tightening of credit terms reported throughout the previous two years.

The results mirror those from the previous survey, which also saw minimal changes to overall liquidity.

A small net percentage of respondents reported a decrease in the maximum amount and the maximum maturity of funding for many types of collateral, as well as a decrease in haircuts applied to government bonds and a decrease in financing rates when government and corporate bonds were used as collateral.

In a report on the survey, the commission stated: "On balance, respondents reported that the liquidity and functioning of markets for all types of underlying collateral covered by the survey remained basically unchanged. These results follow the deterioration reported since mid-2015 in liquidity and functioning of markets for many types of euro-denominated collateral."

The survey is conducted four times a year and covers changes in credit terms and conditions over the three-month reference periods ending in February, May, August and November.

The September 2017 survey collected qualitative information on changes between June and August 2017.

Merrill Lynch first to fall foul of EMIR

Merrill Lynch International has become the first bank to be reprimanded by the UK's Financial Conduct Authority (FCA) for failing to report exchange-traded derivative transactions under the European Markets Infrastructure Regulation (EMIR).

The bank accepted a £34.52 million penalty relating to 68.5 million unreported transactions between February 2014 and February 2016.

Merrill Lynch International accepted a settlement early on in the investigation, thereby securing a 30 percent penalty reduction from the original £49.32 million fee.

The FCA said the action "reflects the importance the FCA puts on this type of reporting".

The regulatory watchdog stated that reporting exchange-traded derivative transactions helps authorities assess and address the risk inherent in financial systems caused by a lack of transparency.

The reporting requirement was one of the key reforms introduced following the financial crisis in 2008 to improve transparency within financial markets.

In a statement on the enforcement, the FCA said: "While Merrill Lynch International was open and cooperative in assisting in the FCA's investigation and quickly took steps to remediate the breach, Merrill Lynch International was the subject of two earlier and related transaction reporting cases."

Mark Steward, FCA executive director of enforcement and market oversight, said: "Effective market oversight depends on accurate and timely reporting of transactions. The obligations under EMIR, as with the second Markets in Financial Instruments Directive, are key aspects of such oversight."

"It is vital that reporting firms ensure their transaction reporting systems are tested as fit for purpose, adequately resourced and perform properly. There needs to be a line in the sand."

He added: "We will continue to take appropriate action against any firm that fails to meet requirements."

Clearstream promises continuity of UK services in wake of Brexit negotiation

Clearstream has confirmed it will continue to offer stable custody services to its UK-based clients, no matter how the Brexit negotiations evolve.

The Deutsche Boerse subsidiary outlined its existential incentive to maintain and nurture

its existing relationships with London-based firms in its monthly transaction data report for September.

Clearstream said it is preparing for Brexit by joining forces with all other entities of Deutsche Boerse Group.

Despite the uncertainty that came after the UK's EU referendum result last year, Clearstream said its main objective throughout the Brexit process is to minimise risk in cross-border settlement.

However, it is currently unclear how Clearstream and other EU providers will be able to provide for their UK clients, if the current Brexit negotiations fail to yield a viable deal for financial services firms to operate across the channel after March 2019.

Philip Brown, co-CEO of Clearstream Banking, said: "We standardise what is fragmented. Clearstream has supported its clients in tough transitions before, among them the Argentina default and the beginning of the sovereign debt crisis with the restructuring of Greek bonds."

Banks cautiously optimistic about tech

Banks are "cautiously optimistic" that emerging technologies will have a significant impact on banking models, according to a BNY Mellon survey.

According to the research, Rethinking the Client Payment Experience, security and reliability are viewed as instrumental in creating the ideal payment experience.

The research, released at Sibos in Toronto, also revealed that just over 25 percent of respondents think blockchain technology will "substantially change the global payments experience".

On the other hand, 60 percent of respondents said it is too early to tell if application programme interfaces will have an impact on internal correspondence.

As for impediments surrounding the use of technology, 25 percent of respondents said compliance screening is the largest



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Iberclear banks on Citi to provide global custody

The Spanish Central Securities Depository (CSD) Iberclear has selected Citi to provide global custody services.

The agreement, signed at this year's Sibos conference in Toronto, will allow Spanish clearing houses to settle international securities via a local CSD.

Iberclear will provide settlement and asset servicing solutions to the TARGET2-Securities (T2S) and international markets, acting as a single point of access.

The CSD will also be tasked with the safekeeping of Citi's assets, making use of the bank's local custody network while providing on-the-ground expertise.

Jesus Benito, CEO of Iberclear, said: "We are thrilled to launch this new solution, which unlocks opportunities for our clients and the Spanish investment community more broadly. Iberclear enters a new strategic path after its successful migration to T2S with the launching of new services for its clients."

Reto Faber, head of direct custody and clearing for Europe, the Middle East and Africa at Citi, added: "This is an exciting milestone for Iberclear and its clients. We are pleased to support innovative solutions provided by key local market infrastructures and look forward to leveraging the breadth of Citi's direct custody platform to realise efficiency gains for all local market participants."

impediment to straight-through processing success, while 20 percent said they believe payment formatting errors are the greatest issue.

The white paper also found that banks need to merge their internal legacy infrastructure with components of third-party providers.

Mike Bellacosa, head of global payments product management at BNY Mellon Treasury Services, commented: "Increased regulation and competition is helping to drive innovation and change in the bank payment space that we have not seen for decades."

"But, with the coming of age of millennials and their higher levels of both technology understanding and technology expectations, we are now hearing a real rallying cry for change."

FCA offers helping hand to new AMs

The UK's Financial Conduct Authority (FCA) has opened its asset management authorisation hub for new firms entering the market.

The hub will assist market entrants when they apply for authorisation by offering pre-application meetings, case officers and access to a new website portal.

According to the FCA, the hub is an attempt to foster better engagement between the regulator and new entrants, also offering better support to asset managers moving through the startup cycle.

It is intended to provide firms with a better understanding of the regulatory authority, and to help them manage the authorisation process under its supervision regime. In a company statement, the FCA clarified that it will not lower the entry standards to the market, and that firms will have to meet the same "rigorous standards".

Megan Butler, executive director of supervision at the FCA, said: "We want to aid new entrants to the market, and the hub will help new firms understand us better as an organisation."

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SEC grants brokers relief on MiFID II

The US Securities and Exchange Commission (SEC) has delivered temporary relief to US brokers regarding research payment obligations under the second Markets in Financial Instruments Directive (MiFID II), coming into force in Europe on 3 January 2018.

The division of investment management issued three no-action letters, providing 30 months' relief under the Investment Advisors Act of 1940, allowing US broker-dealers to receive payments in hard dollars, or through MiFID II-governed research payment accounts, from MiFID II-affected clients, without being considered an investment advisor.

The relief will also allow investment advisers to continue to aggregate orders for the purchase and sale of securities, with some clients paying different amounts for research, but all receiving the same average price for security and execution costs.

Finally, it allows money managers to operate in a safe harbour when making research payments to a broker-dealer out of client assets, if they're making payment for execution through a research payment account.

Under MiFID II, investment research must be bespoke to each institution, and investment firms must pay for research with their own funds, or through a separate designated account, which is charged to the client.

Research fees must also be separated from execution and trading fees under MiFID II. The new rules are designed to improve transparency, and to stop research costs being unfairly passed on to clients.

Although the directive is an EU initiative, international firms working with European counterparties must adhere to the rules, or put a stop to those relationships.

A commission statement on the three no-action relief letters said: "Money managers may continue to aggregate orders for mutual funds and other clients; and money managers may continue to rely on an existing safe harbour when paying broker-dealers for research and brokerage."

The decision was taken in consultation with European authorities in response to uncertainty from US brokers.

Jay Clayton, chair of the SEC, said: "Today's no-action relief was designed with input from a range of market participants to reduce confusion and operational difficulties that might arise in the transition to MiFID II's research provisions."

He added: "Cooperation with European authorities, including the European Commission, has been instrumental to the SEC's efforts, and I welcome the additional guidance the EC published today."

"We look forward to continued dialogue on this and other important issues."

The news has been welcomed by an industry scrambling to make final arrangements for MiFID II research unbundling.

Chris Turnbull, co-founder of the Electronic Research Interchange, said: "Arranged through extensive cooperation with the European Commission, these clarifications ensure regulatory harmony while supporting an agenda which should ultimately improve research quality."

He added: "This change has been made with a clear focus on investors' best interests."

"While the relief is temporary, we expect solutions that enable firms to access research which benefits their clients—no matter the source—will be maintained."

However SEC Commissioner Kara Stein has concerns over the no-action letters, arguing that the decision "merely kicks the can down the road".

Stein said: "This inaction may be costly to investors and advantage some market participants over others. While a time-limited approach may allow the staff to study the impact of MiFID II, taking over 900 days is simply unreasonable."

She added: "Transparency and disclosure are vital to our capital markets. Transparency in government process is equally important."

SIX successful in migrating clearing payments under ISO 20022 standards

SIX Interbank Clearing has successfully migrated 90 percent of clearing payments through its new interbank payment system under ISO 20022 messaging standards.

The new Swiss Interbank Clearing (SIC) payment system allows cash-side settlement of securities transactions in real time.

In addition, the Swiss National Bank has the system at its disposal for implementing new monetary policy and, correspondingly, ensuring liquidity supply for the Swiss money market.

SIX said it is convinced that the migration will be completed by the November deadline.

The ISO 20022 messaging standard is designed to lower the number of technical interfaces between participants and the Swiss financial market infrastructure.

In April last year, SIX became the first clearinghouse to clear transactions solely through the standards.

Euroclear welcomes new shareholder

The Intercontinental Exchange (ICE) has acquired the entirety of the Royal Bank of Scotland's (RBS) shares in Euroclear.

Euroclear approved the acquisition of shares, equivalent to 4.7 percent of its total shareholdings. In the first half of 2017, Euroclear held €28 trillion in assets for clients.

Marc Antoine Autheman, chair of Euroclear, commented: "The addition of ICE to our shareholder base further strengthens our position as an independent, profit-moderated infrastructure that helps assure the efficiency, stability and safety of the global financial markets."

Lieve Mostrey, CEO of Euroclear, added: "The collaborative nature of our model allows us to deliver both a diversified range of solutions that respond to the evolving needs of our clients around the world, and generate value for our shareholders."

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Fake it ‘til you make it

As technology developments shape the world around them, financial services firms are starting to adapt. This year’s Sibos conference outlined where the industry is settling in, and where there are still milestones to pass

Stephanie Palmer-Derrien reports

Technology chat is a staple at Sibos, as financial technology and payments professionals gather to assess new innovations and discuss how they can be applied to industry pain points. Last month’s Toronto event was no exception, with debates centring around the likes of blockchain and distributed ledger technology (DLT), and artificial intelligence (AI).

However, data undoubtedly stole the show, with almost every conversation circling back to the exponentially growing datasets available to institutions, and how to find value in them.

DL-Teething pains

Predictably, blockchain and DLT still dominated their fair share of discussions. However, in one panel discussion, speakers suggested that while the technology could lead to cost savings in the back office, cultural change and collaboration are required before the industry can make the best use of it.

HSBC’s John van Verre named corporate actions as an example of where blockchain could have a significant impact, as it’s a very manual process with a lot of separate steps and duplication of efforts.

Creating a solution that captures the information once and makes it available to many would have “enormous economies of scale”, he said.

However, implementing blockchain will ultimately require participants to give up their own processes and become part of the ecosystem, and so the move will be a more significant cultural change than technology change.

Conference moderator Jean-Philippe Vergne agreed that widespread implementation of blockchain will be “a cultural and organisational issue”, requiring industry cooperation.

From a central securities depository (CSD) perspective, Sergey Putyatinskiy of Russia’s National Settlement Depository, said that, while blockchain has the potential to reduce risk, CSDs need to understand the technology they’re using. All institutions also need support from their central banks and regulators in order to create anything so drastically different to their current systems, as well as support from senior management internally.

Bernie Kennedy of HKEX added that the technology has to be capable and proven for market infrastructures.

Market infrastructures’ current technology is old, but “does what it says on the tin”, she said. However, infrastructures have to reduce costs somehow, and this could include finding any areas in which blockchain could add real value.

Equally, infrastructures working together could have the power to drive change, creating a network effect, she said.

Another session addressed the lingering concern around whether DLT solutions are secure enough to be put to use in an industry as heavily regulated, and as systematically important, as financial services.

Blythe Masters, CEO of Digital Asset, stressed that her company has not had to change its approach or direction in order to address security concerns, as it has “been developing systems to specification for market infrastructure providers who, themselves, are highly regulated”.


When working with such systemically consequential platforms, security aspects should be the starting point of the design of a solution, and should ultimately meet, or preferably exceed, the existing regulatory requirements.

Thomas Zschach, chief information officer at market solutions provider CLS, added that his firm worries about, invests in and innovates around security every day.

The shift towards a distributed environment has, however, made confidentiality aspects more complicated.

DLT may have led to an uptick in systems’ resiliency, however it could potentially pose a risk to data integrity, depending on how it is implemented. If things aren’t monitored properly, for example, this could “create vulnerabilities that you didn’t expect”.

Another panelist, Alicia Pertusa of BBVA, pointed out that, while the session’s speakers came from very different backgrounds, they were all either from financial institutions or companies that serve financial institutions or infrastructures. The security requirements in these



areas are extremely high, and so service providers have to make sure they are implementing the same checks as they would with traditional solutions.

A lot of this will come down to standards as “the key to making sure all this security is achieved”, Pertusa said. Technology providers will have to be very comfortable providing solutions to these institutions and infrastructures, as “no mistakes” will be allowed.

Later in the session, Pertusa added that, no matter how cryptographically and mathematically secure a DLT solution is, it will still require a clear business use case, and backing from the regulators, in order to achieve the desired network effect, and subsequent market integration.

She said: “Integration is the key, and for that we need standards.”

Taking baby steps

AI also emerged a “transformational technology” that will improve productivity and security, and provide a competitive advantage, in a live poll at the conference.

In the plenary session on the significance of disruptive innovation and AI, 76 percent of poll respondents agreed with the above statement, while 22 percent said they think AI’s effect on financial institutions is still up for debate, and that the benefits are “unclear”.

Only 1 percent of respondents said they do not consider AI a priority at all.

Speaking on the panel, Amber Case, a fellow of the Berkman Klein Center for Internet and Society at Harvard University, noted that the AI and machine learning solutions we have today are not recognisable as those from science fiction. Rather, we are the robot stage of automation, using “narrow AI” with a small knowledge base.

Ultimately, computers will not be doing things for humans, but augmenting them, giving suggestions, information and options as and when required, thereby freeing up time. We have not yet reached that stage, Case said. However, she added: “We have co-evolved with technology since the beginning of time. We will continue to do so.”

Standard Chartered’s Alex Manson added, in response to the audience poll, that data is critical going forward, but that it is useless unless it offers insight, leading to intelligence and therefore actions. While the human brain can process information in this way on a small scale, this industry deals with huge amounts of data, and that’s where AI comes in.

He added that AI is “more than a buzzword” today, and that if people in the business are not a little paranoid about it, they are at risk of becoming complacent. However, any innovation must ultimately be relevant to customers. Manson said: “The last thing we want is a bunch of solutions looking for a problem.”

On this issue, Axel Lehmann, group COO of UBS, noted that the challenge is not necessarily in the technology—large institutions have the capacity to buy technology or develop it themselves.

The challenge lies in how to generate real use cases and develop value from them.

This will not only affect mundane activities, but will go to the core of organisations, affecting aspects like portfolio composition, monitoring and predictive pricing, he said.

The data game

The standout recurring theme of the conference was around data. In fact, in the ever-popular Future of Money plenary session, 57 percent of polled attendees said they now consider data to be more important than money.

Speaking in the session, Ather Williams III, head of business banking at Bank of America Merrill Lynch, noted that the question is “not an either-or” and explained that companies are fuelled by data, but that this data offers insight.

Data can be used to better understand counterparties and to manage the risk of cybercrime and fraud, while also offering automated “pro-active insight” into what firms should do with their capital.

Richard Koh, founder and CEO of M-DAQ Group, went further, calling data a currency in itself. He suggested that ‘fintech 1.0’ focused on

using information technology to create better, faster and cheaper processes in financial services, while 'fintech 2.0' will be about using better technology to completely "re-imagine" financial services.

He added that data and money are "two ends of the same spectrum". Data will allow firms to get better insights and create new products and services that will truly drive revenue, he said.

Elsewhere, Steven Wolff, president and CEO of CIBC Mellon highlighted a series of changes coming about in the asset servicing space, claiming that "it's all about the data".

Data can have an effect on client experience, client confidence and risk management, and aid asset managers in making sound investment decisions. However, many firms are only just beginning to consider data as a part of their growth strategies.

Samir Pandiri, executive vice president and CEO of asset servicing at BNY Mellon, added that the use of data in this way is very much "in its infancy", adding that no one firm has perfected it yet.

BNY Mellon, for example, provides macro market data, transactional data relevant to the specific asset manager, core and critical data, plus additional information that has the potential to inform trading decisions and strategies, Pandiri said.

Historically, access to such data was customised, but new platforms have allowed for building of one platform that can be expanded to several asset managers through an application programming interface, and accessed individually and on demand. This method, Pandiri said, "allows you to scale the information without driving up the costs".

Wolff also noted the increasing importance of data management as risk management. He added that this risk management must extend to third-party vendors, saying: "Your vendor is you."

He added that the regulatory and risk burden in this respect "continues to amplify".

Finally, Pandiri suggested that the financial services business models are shifting, moving from a focus on process to a focus on knowledge—knowledge that is powered by data.

Global custodians carry significant data that can be helpful to their clients "in terms of where they are relative to their peer group". Utilising this data to help clients make business decisions and to drive more effective processes is "where the value-add will really be," Pandiri concluded.

Gleaning value from data in this way will be the key for financial institutions to remain competitive, according to Dave McKay, president and CEO of the Royal Bank of Canada. McKay said the decade since the beginning of the global financial crisis has been "arguably the most disruptive and creative period ever seen in our industry".

Outside of the financial sector, technology advancements have "completely altered consumers' lives" and are responsible for a "fundamental transformation in the goods and services economy".

However, while some of these changes have come about in retail banking, progress has been slower on the institutional side, with examples of innovation available, but not with the same levels of demand. Now, this is changing, McKay said. He stressed that use of data in banking is not a new concept. Rather, the industry has seen an "exponential increase in computer power", particularly in AI and machine learning.

Industry players must find ways to increase flexibility and reduce friction in the ways they store and move data, he said.

The payments space, in particular, has seen several new entrants, leading to increased fragmentation in the market.

Here, banks must consider how they will compete—either bringing clients in through existing channels, or serving them through new channels—and may have to re-consider their core value strategies.

In this world of fresh competition, "the battleground will be data", McKay said.

Data was also found to be key in managing cyber risk in securities transactions. In a different panel discussion, Yves Poulet, CTO of Euroclear, noted that fraud occurs on the securities side of things as well as in the payments space, and suggested that, with further digitalisation, this is likely to increase.

It is important to consider data activity here, and to ensure that data remains available, he said. Confidentiality, integrity and availability are "absolutely paramount in our business".

Roy Thetford of EY added that there is an opportunity here in "data fusion". There may be established processes in a business that could help in protection against cybercrime—fraud or otherwise—and "the merging of some of these disciplines is a big opportunity".

Representing Microsoft on the panel, Rupesh Khendry stressed: "Trust is paramount when you're operating in a cloud environment."

While there has been a focus on cybersecurity in the payments space, the digitisation of securities means "a single event can lead to a huge reputational risk".

He advised attendees to start from a point of assuming a breach, working on a response to an event, rather than on a strategic approach to the threat, thereby creating the capability to intercept more sophisticated threats before they become widespread.

This is not a question of technology, he said, but of data, and of how any available data can be harnessed to the biggest benefit of an institution. **AST**



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The magazine's readership selected a list of nominees, which were judged by financial experts and editors, who honoured Commerzbank for its market position, innovation and international expertise. World Finance, 07/08 2016 issue

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World wide blockchain

World Wide Generation's new blockchain programme is taking a stand on sustainability goals. Manjula Lee and Tony Samios explain what makes G17Eco unique, and how the technology can be scaled up in the future

Theo Andrew reports

How is WWG using blockchain to facilitate investment?

On 25 September 2015, the United Nations (UN) deemed our world in crisis and sent out an urgent call to action for humanity to achieve a global resolution on extreme poverty, inequality and climate change by 2030.

The UN provided a framework with a set of 17 sustainable development goals (SDGs) as to how this can be achieved.

The World Wide Generation (WWG) G17Eco is a blockchain ecosystem designed to support all SDG stakeholders to scale and deliver their initiatives with maximum impact.

The aim of G17Eco is to provide the transparency and connectivity layer, making it easier for all stakeholders to make good decisions and to measure impact performance against the SDGs, channeling crucial capital into the \$36 trillion funding gap, to help meet the SDG goals by 2030.

What is unique to this particular blockchain programme?

G17Eco is a first-of-its-kind end-to-end solution that facilitates fast and cost effective transaction handling of SDG financing and delivery across sectors and geographies, and unites us as one ecosystem using powerful, breakthrough blockchain technology.

The platform is built on the world's first sustainable distributed ledger, benchmarked and accredited by the British government, business and institutions.

It is a private blockchain solution custom developed and based on an open source technology called ActiveLedger, developed by Agility Sciences.

ActiveLedger shares the common features of most blockchain protocols, namely transparency, anonymity, traceability and immutability, but also possesses unique features, rarely available on, or poorly implemented by ordinary blockchain or distributed ledger technology (DLT) platforms.

These are:

- Multilateral transactions—The ability to complete a simultaneous multilateral transaction
- Scalability—Multi-agent systems protocol can scale to enormous transaction and data volumes
- Territoriality—To record the geographic location of a transaction
- Interconnectivity—The ability to communicate with ordinary blockchain and distributed ledger solutions
- Immediacy—Immediate confirmation of finality on completion of a transaction

ActiveLedger has enhanced and optimised the concept originally defined by Satoshi Nakamoto for the specific purpose of simplifying enterprise development.

The goal is to reduce the cost and length of development needed by other platforms to produce solutions. Simplifying the development process also reduces the cost of development and ongoing maintenance.

In WWG's September whitepaper, it is suggested that G17Eco can be scaled up to large transaction and data volumes, addressing an issue that has been a sticking point for blockchain generally. Could you elaborate on this?

One of the reasons Activeledger exists is to solve scaling issues. By utilising activity streaming, Activeledger can handle multiple activities simultaneously (unlike ordinary blockchain which handle transactions one-by-one).

Furthermore, Activeledger does not consume a high quantity of resources in distributing data and transactions across the network, it utilises a unique consensus model that does not restrict the volume of data or transaction performance. Nodes on the network are rewarded for the work they do (by being an authorised collaborator) and are not limited to an award offered to the first node to solve a puzzle, so

there is no delay in the transaction process. All central power units available to the network are utilised in collaboration for the common good, rather than in pursuit of individual gain.

Could this model be transferred into other areas of institutional investment?

Absolutely, it has been discussed with lawyers who are aware of the UK's Financial Conduct Authority's rules, in particular around the use of advance payment obligations. In essence, the model avoids the creation of markets but essentially allows similar processes to happen without financial (tokenised or otherwise) implications.

By not having a value or representing a value until some contractual process completes, the model could be used to manage a financial event, or timing of regulation and compliance. **AST**

Tony Samios
COO
World Wide Generation



Manjula Lee
CEO and founder
World Wide Generation





The long and widening LGPS road

Between the LGPS pooling project, Brexit and changes in technology, fund managers in the UK, and their service providers, have a lot to think about

Jenna Lomax reports

UK public sector funds are facing challenges from all angles—from the possibility of limited resources to the constant question of balancing risk and reward against asset safety. Throw that in with the 3 January 2018 deadline for compliance with the second Markets in Financial Instruments Directive (MiFID II), and working with Local Government Pension Scheme (LGPS) funds is proving to be a challenge for all involved in the industry.

Since May 2017, asset managers working with LGPS funds have been able to sign up to a transparency code between investment managers and administering authorities. As a way of boosting managers' attractiveness for mandates, the code was designed to create greater clarity on investment fees, and applies to all listed asset classes.

Just a few months prior, a State Street-sponsored report into the pension scheme's asset allocation revealed a 61 percent spike in alternatives exposure by the 89 public funds participating in the LGPS, representing £16.6 billion in assets.

A further £34.7 billion in assets were given over to fixed income, leading to a 31 percent increase in that business line.

At that time, Andy Todd, head of UK pensions and banks for asset owner solutions at State Street, said: "Mounting cost pressures and persisting lower-for-longer yields have led pension fund investment committees to seek 'higher yielding' assets to assist them in meeting their strategic investment targets. Alternatives have historically been seen to provide this solution."

However, the asset allocation of the 89 member funds could still see considerable changes to their current portfolio construction over the coming years, with unprecedented changes in technology in the pipeline, in the UK alone.

When the State Street report was released, JR Lowry, head of State Street global exchange for Europe, the Middle East and Africa, noted: "LGPS [funds] are in a period of extreme change and technology will be the next stage of their evolution. As they reshape to adapt to their new size and structure, they have a significant opportunity to overhaul outdated legacy systems and benefit from new economies of scale."

"If embraced and properly harnessed, technology has the potential to help them confront these challenges."



Sid Newby, head of business development for the UK at BNP Paribas, which has secured five custody mandates under the LGPS framework, to date, says the custody provider is indeed embracing new technology.

He says: “In the last 18 months, the technology we can deploy and leverage is more powerful and provides more opportunities for providers and clients.”

But, that’s not to say everything is plain sailing in all areas of the industry.

Todd suggests that one of the most important challenges facing pension funds is the limitation of resources.

He says: “There are few trustee boards, management and investment committees or HR and pensions departments that would claim to have surplus resources beyond that required to meet the day-to-day challenges of running a pension fund. It is commendable how staff within the LGPS member funds have adopted the initiative, taken ownership and driven the project forward despite the resource challenge.”

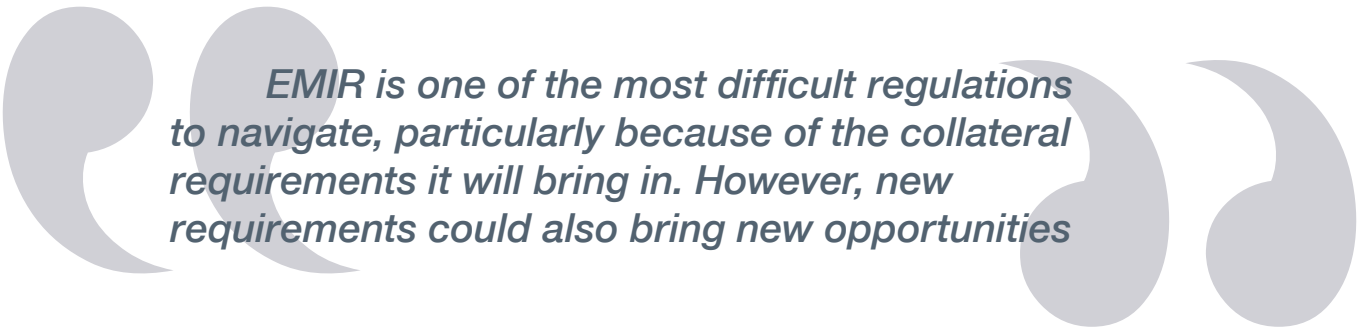
Asset managers also have to contend with the issue of balancing risk and reward strategies against asset safety, added to this is mounting cost pressures and persisting lower-for-longer yields. It is lower-for-longer yields in particular that have led pension fund investment committees to seek ‘higher yielding’ (often illiquid) assets.

This limitation of resources and juggling risk and reward against asset safety have been challenges that pension funds may have to deal with year-on-year. But, with the implementation of MiFID II, among other regulations, the industry is playing a whole different ball game, particularly between now and April 2018.

You say you want some regulations

Todd suggests that a key thing to consider is MiFID II’s re-classification of LGPS funds as retail investors, explaining that such funds are now working together with their advisors and asset managers to transition back up to professional investor status.

“Any that do not opt up are likely to part company with many of their assets managers — specifically, those managers that do not have the



EMIR is one of the most difficult regulations to navigate, particularly because of the collateral requirements it will bring in. However, new requirements could also bring new opportunities

regulatory permissions and investment operational infrastructure to support retail clients,” he says.

“The indirect consequences, which may be more far-reaching for the industry, are the provisions around transparency. We’re seeing a demand for greater transparency, for example, in dealing especially, and in costs more generally.”

Pension funds have also had to achieve a balance between some form of liability-driven investments—matching their investments with their liabilities—which they can do through a specific liability-driven investment manager or through direct fixed income investments.

Back to the EMIR

Newby also highlights the European Markets Infrastructure Regulation (EMIR) as one of the most difficult regulations to navigate, particularly because of the collateral requirements it will bring in. However, new requirements could also bring new opportunities.

He says: “While looking to derivatives for diversification or hedging, EMIR is requiring greater collateralisation. That’s a pain if funds don’t have the cash required for margin.”

“One of the consequences, alongside the reporting that clients require, is the ability to optimise their collateral and optimise their cash positions. It’s becoming a very keen topic for them to understand how they can do it efficiently, particularly with EMIR regulation.”

Let it be Brexit

Closer to home, LGPS funds are also facing extra uncertainty on the road to the UK’s exit from the EU, with negotiations due to come to a close in March 2019.

An audience poll at this year’s Sibos conference in Toronto saw 46 percent of audience members suggesting that Frankfurt will take over from London as the world’s financial centre, post-Brexit. It cannot be denied that the upheaval and uncertainty around the Brexit process brings some uncertainty to LGPS funds. But, ultimately there are still questions around how much of an impact it will really have.

In recent years, UK pension funds have diverted away from the London stock market in favour of foreign stock and bond markets,

even before last year’s referendum result. As Prime Minister Theresa May grapples with EU negotiations, organisations with pension funds are understandably concerned about the type of volatility on financial markets and the overall impact on asset managers.

Todd says: “The only element you can be sure of is that it’s coming.”

Although he warns that there is volatility in financial markets that has adversely affected asset prices, he reassures that LGPS funds will likely remain strong come March 2019.

He says: “Pension funds, including the LGPS, should not feel panicked or pressured into making sudden changes to their business models and asset allocations.”

We can work it out

Amid the smoke and mirrors surrounding Brexit and the other market pressures, asset managers and pension funds alike are looking intently to the future, whether this means the reevaluating of funds, looking to outsourcing opportunities or considering the effect financial technology will have on the industry in the coming years.

Ultimately, funds are looking for the most efficient and cost-effective methods to generate returns.

Newby says: “In general, we are seeing the large pension funds re-evaluating how they’re set up and looking more proactively to outsource certain functions, whether that is support with their private equity investments, in terms of managing the middle-office cash management of those assets, or whether it is reporting.”

He adds: “Our clients’ main question, and their business demand, is always: ‘How can I operate most efficiently?’”

On this point, Newby says, data is going to “change the game”. Particularly he points to ‘data-as-a-service’ as something likely to become a big topic in asset management over the next few years.

He says: “We’re talking to some sophisticated schemes about how, as a provider, we can help them manage their data and make use of the new tools available, in a way that they’ve never been able to do before.” **AST**

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A juggling act

New regulations, new competition and new cost pressures mean custodians and sub-custodians have more balls in the air than ever before



Custody Discussion



Richard Anton
Senior vice president and COO
CIBC Mellon

Attila Szalay-Berzeviczy
Executive director and
head of group securities services
Raiffeisen Bank International



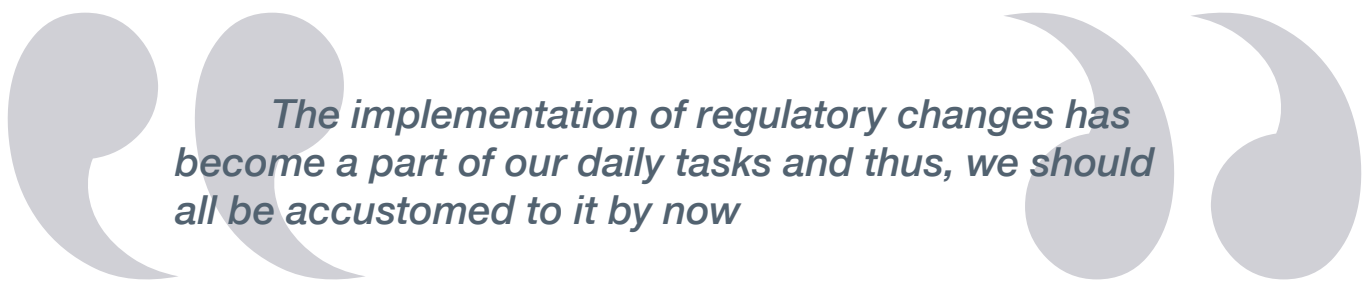
What kind of challenges are custodians facing today? How have these challenges changed over the last five years, or so?

Attila Szalay-Berzeviczy: Custodians have gone through a number of significant alterations to their offerings over recent years. Apart from establishing a strategy for Target-2Securities, in the case of those active in euro clearing, the major changes affecting the business were driven by the new regulations, such as the European Market Infrastructure Regulation, the Alternative Investment Fund Managers' Directive (AIFMD), the Central Securities Depositories Regulation, the Foreign Account Tax Compliance Act (FATCA) and the fast-approaching second Markets in Financial Instruments Directive (MiFID II).

While the so-called regulatory tsunami is far from over, a new challenge has already emerged. This is in the ability to keep up with the fast-advancing new technological initiatives which are slowly entering the custody business, too.

We are seeing a growing number of financial technology companies entering the securities and payment services business with highly competitive offerings. Accordingly, to keep up with the changes, custodian banks should work on their IT strategies and the attractiveness of their service models.

Banks should, in other words, become technological companies as well, to be ready to embrace the challenge.



The implementation of regulatory changes has become a part of our daily tasks and thus, we should all be accustomed to it by now

Attila Szalay-Berzeviczy, executive director and head of group securities services, Raiffeisen Bank International

Richard Anton: There are several key themes we are seeing in the market, particularly around regulation and governance, data and operating model choices. The march of regulation—its growth in complexity, scope and expectation—has been immense over the last decade. Even markets like Canada, which fared well through the financial downturn thanks to a strong regulatory regime, have seen enormous regulatory evolution.

More recently, there has been greater focus among clients regarding the critical importance of data to power their investment decisions, and to affirm that the necessary governance, transparency and oversight is in place. Market participants need flexible and timely access to information, and they are looking to their asset servicing providers for solutions. We are also seeing significant attention focused on the assessment of insourced and outsourced capabilities, and across both home markets and global operations across custodians and sub-custodians. While clients want to achieve global mandates, they must also navigate through and execute locally across diverse market requirements. For custodians and sub-custodians alike, the challenge is to build flexible and scalable solutions to support diverse needs while maintaining and growing a strong and efficient core offering.

To what extent have custodians settled in to the new regulatory environment? What are the main challenges that remain?

Anton: Ironically, given that a huge part of our business is ‘settlement’, I don’t think custodians will ever be able to settle into the regulatory environment, other than into an expectation of ongoing change. The regulatory environment is not limited to any one local jurisdiction, but rather is the interplay between many different regulatory regimes and how rules and requirements can intersect or even conflict across borders. US tax requirements such as FATCA, 871(m) and 305(c), for example, or EU rules for fund managers, can also have sweeping implications for other jurisdictions.

More recently, at least in Canada, regulators have turned their attention to operational models and in particular to vendor management. The translation and framing of global and local regulatory impacts for clients is one of the areas in which sub-custodians can set themselves apart in helping global clients navigate domestic waters.

The goal is not only to support clients’ compliance efforts, but to efficiently position clients with the necessary reporting, transparency and demonstrable governance to achieve compliance without over-

consuming financial and human resources—a point that can come into tension, given the scale of some regulatory asks. It’s not just about helping clients get it right, it’s about helping to make it easier for them.

Szalay-Berzeviczy: By now, all custodians have implemented most of the requirements due to the numerous regulations that have come into effect during the recent years. Things such as strategies and models of over-the-counter derivatives clearing, reporting of transactions and collateral, segregation of assets, new depositary contracts, and so on, have all been analysed and duly incorporated. However, further new or updated regulations are already slowly entering the legislative framework.

The next significant piece of legislation that has consumed a lot of effort among capital market participants is MiFID II, coming into effect in January 2018. Some of our network banks have only just finished implementing AIFMD, and we hear that policymakers are already working on AIFMD 2. The implementation of regulatory changes has become a part of our daily tasks and thus, we should all be accustomed to it by now.

How have client demands changed? And how are custodians coping with meeting those demands?

Szalay-Berzeviczy: One of the changes that has appeared in a number of the directives over recent years is segregation. For instance, by introducing more thorough segregation rules for safekeeping of alternative investment and UCITS fund assets, the regulations led to a burdensome process of opening multiple segregated accounts in every market within a custodians’ network. It is worth mentioning that the European Securities and Markets Authority (ESMA) released an official opinion on segregation of assets in July 2017. In its paper, the regulator stated that omnibus accounts designated for clients’ assets would be the minimum sufficient level of segregation.

ESMA noted that the need for further segregation, in order to ensure asset protection, depends on the applicable insolvency and property laws and indicated that, while it is ok to provide the minimum segregation in most markets, in others further segregation should be applied.

While most custodians have already opened multiple segregated accounts by the time this paper was released, only time will tell whether clients will continue to demand higher levels of segregation, regardless of this opinion.

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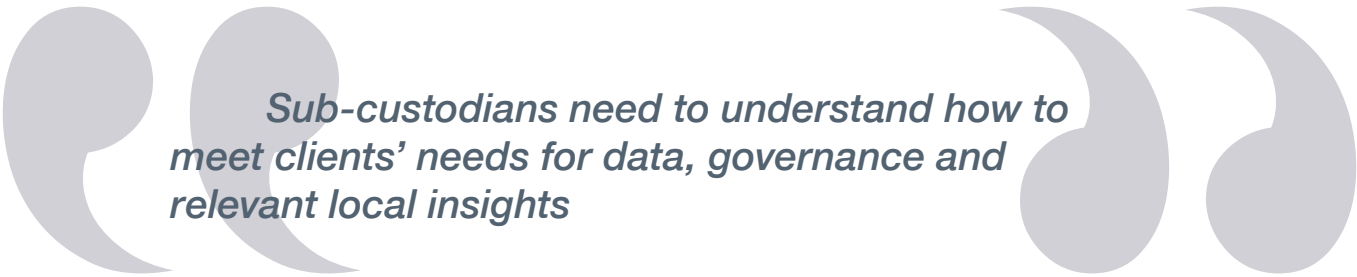
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Sub-custodians need to understand how to meet clients' needs for data, governance and relevant local insights

Richard Anton, senior vice president and COO, CIBC Mellon

Anton: We're hearing that clients continue to seek to leverage technology to optimise, digitise and grow their businesses. In particular, we believe that timely and flexible access to relevant data is central to a great client experience. This is where we're putting significant focus, positioning our people to help clients navigate the data.

At the most basic level, market participants want to know, and show, that they are doing a good job, relative to regulatory requirements, investment benchmarks, stakeholder expectations, their own goals, and so much more. At CIBC Mellon, we're focused on platforms, processes and people—making sure we have the right systems in place, affirming that our operations are structured to deliver results for clients efficiently and, perhaps most importantly, that we have great people in place to help clients navigate the challenge.

We believe people are what make the difference for the client experience, which is why the firm is so heavily focused on recruiting, retaining and motivating employees.

Equally, what are custodians demanding of their sub-custodians? What should they prioritise in terms of service?

Anton: I think custodians are facing many of the same pressures as their underlying global clients, with questions of how to execute a global mandate across more than 100 local markets, how to drive efficiency yet grow our business, and how to help clients stay abreast of local market developments.

Custodians are looking for timely information about local market regulatory change, and also for support in contextualising that change. To deliver a great client experience, I think sub-custodians need to understand how to meet clients' needs for data, governance and relevant local insights. In many ways, it really comes back to having great people in place to help clients navigate the market requirements, challenges and opportunities.

Szalay-Berzeviczy: Besides the everlasting pressures on fee reductions, the maintenance of high-quality services, lobbying efforts and continuous enhancements of IT systems, additional demands have come along with the new regulations over the recent years.

AIFMD and UCITS V, for instance, started an industry-wide trend of opening multiple segregated accounts in each market for the funds'

businesses. Other types of clients have also begun demanding further segregation, as it is seen as the key component of general asset safety. As mentioned earlier, time will show whether such account holding structures will remain in place, following ESMA's opinion released earlier this year.

The other significant change is the number and extension of due diligence questionnaires. As every custodian needs to run the due diligence processes on a regular basis we receive a large volume of requests to respond to.

How much pressure are custodians and sub-custodians under to reduce their fees? Is this sustainable?

Anton: The custody business has always been about scale and efficiency and, in turn, the industry has continued to invest tremendously into technology to keep pace with the demand from clients to drive value. Certainly there's pressure on cost, but in many ways the pressure is about sub-custodians being looked at to do more—to deliver more governance reporting, more data delivery, and more insights and actions, all while the fee pressure stays on.

The question of sustainability is actually one that market players need to answer themselves, by driving value and providing higher-quality services for clients, and by focusing on continuously improving their own operations. I think it's safe to say that client expectations will continue to rise, and it's up to companies like ours to respond to the challenge through continuous improvement of our products and services. We have a great team with a lot of exciting ideas for what's ahead as we move into a new era of data, flexibility, governance and client-focused service. The pressure will be huge, but I know we're up to the challenge.

Szalay-Berzeviczy: The new competition from the new category of entrants in the market, such as financial technology firms, together with the need to implement the regulatory requirements consuming budgets, is leading to additional demands from clients and making sub-custodians reconsider their business models. There is a clear need for automation and consolidation in our industry, possibly with the use of new technological solutions.

It is really crucial that sub-custodians come up with some unique service offerings that are also reasonably priced, in order to justify their business cases in front of their management boards. **AST**

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The next frontier

Smartkarma has made its move into the European market, just in time for the arrival of MiFID II. Arzish Baaquie explains why it has made the move now, and how it intends to transform the research sector

Theo Andrew reports

Why has Smartkarma chosen the European market as its next port of call?

Smartkarma was established in Singapore in 2014 with the idea of transforming the research industry. The industry was structurally inefficient and there were a lot of conflicts of interest in the investment research space, due to research often being viewed by its providers as simply a means to generate commission dollars.

Smartkarma is a collaborative ecosystem of independent research for institutional investors, without any of the conflict of interest that has plagued the research industry.

The platform itself has gone through a few generations of technology, and we have developed relationships with strong research providers along the way. However, until now we have been focused on the Asia-Pacific (APAC) region. Our coverage in APAC is unparalleled in terms of breadth and depth and we've grown to be Asia's number one provider of independent research.

It makes sense for us to move into Europe off the back of our success in Asia, and it is also a natural market for us to expand into. A lot of our clients are already based in Europe, and having an office on the ground in Europe helps to better serve these clients.

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How do you plan to address the fragmentation and regulatory landscape the European market?

Smartkarma was not launched as a solution to the second Markets in Financial Instruments Directive (MiFID II) it was started as a solution to an age-old industry problem.

However, MiFID II, set to go live next year, acts as a strong tailwind for us. We essentially represent the paradigm of independent research and transparency, so in that sense it works very well for us. We are working hand-in-hand with the MiFID II expectations of unbundled research.

In addition, we are making a big effort on compliance in general, and we have a very sophisticated compliance offering.

Given the circumstances surrounding Brexit, was London still the number one choice as a European hub? Are there any particular European sub-markets you are focusing on?

Other than the MiFID II factor, the asset management industry in the UK is worth about £7 trillion, so it's a big market that we want to be involved in.

Choosing London was a very strategic decision, and while the work around MiFID II was a factor, it was not the only reason we set up an office here. We view the European market as a whole. At the moment, we are concentrating on building up our content pool by strategically selecting research providers, be they boutiques or individuals.

Whether that means getting more people to write about the emerging European market or increasing coverage on the developed European market really depends on what we deem as a strategically important content area at any given time.

What effect do you think MiFID II will have on the industry, and how do you plan to capitalise on the regulation?

Fundamentally, it is a regulation that will accelerate positive change within the investment management industry, with respect to research, because in many cases fund managers will now

have to pay for research from their own profit and loss figures. We remunerate and reward our insight providers on the back of something we call 'quantitative value-add', and our ecosystem will appeal to any independent research provider looking for an open, collaborative and dynamic environment that serves a pool of sophisticated, institutional investors.

Clients and the buy-side industry have also moved very quickly onto this, and they have changed their mindset to adopt a new paradigm of MiFID II.

We are aiming to be the Spotify of the research industry; you pay a flat fee and you get access to the full range of written content.

The content flow to each client is tailored, according to their specific investment mandate, so each member will often have a different reading list and different content on his or her respective landing page.

What other regulatory changes are in the pipeline?

The UK's Financial Conduct Authority (FCA) had a market consultation in March 2017 about connected research with respect to initial public offerings (IPOs).

The FCA said that between January 2010 and May 2015, 168 out of 169 UK IPOs only had connected research published on it where it is published by banks participating in the underwriting of the respective IPO.

This obviously creates a massive conflict of interest; you would never tell investors to avoid participating in an IPO your bank is underwriting.

We anticipate that this could be equivalent to something like MiFID II. It will certainly be a big topic of discussion, because there is no independent research provider that can get access to the management team or the financial accounts of the listing company.

This practice is still only prevalent in the Australian and the UK markets; and it is about time there was a positive change in this space. **AST**

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Arzish Baaquie, head of UK business, Smartkarma



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Me, myself and AI

Rocky Martinez considers how AI can help improve post-trade processes, and how SmartStream's new reconciliations solution is moving a step in the right direction towards helping firms keep costs at sustainable levels

Financial institutions currently face a toxic cocktail of flat revenues, heavy operational overheads and a growing regulatory burden. Even a brief look at today's financial press suffices to underline how much advanced technologies such as artificial intelligence (AI) are now spurring the interest of the finance industry.

AI involves the automation of non-routine tasks that require a degree of judgment or problem-solving ability—qualities typically associated with the human mind. On the face of it, replicating such powers would seem an almost impossible task, yet significant progress has been made lately in this field. A new generation of technologies has emerged that has endowed machines with human-like capabilities, for example, the ability to recognise handwriting and images, or even process natural language.

AI is a complex beast, however, and the market for it among financial institutions is still in its infancy. Even so, banks and other financial services organisations are already harnessing its potential in areas such as anti-money laundering and compliance projects.

Feedback from SmartStream's global customer base suggests that financial institutions are increasingly keen to hear how sophisticated technologies such as AI can be utilised to improve the efficiency of their post-trade processing operations. Underpinning this interest is an intensified need to reduce operational overheads.

Traditionally, reconciliations processing and other post-trade activities were carried out by large numbers of back-office staff. While banks' revenues were buoyant these armies of clerks gave little cause for concern. In the aftermath of the financial crisis, however, flattened revenues became the norm, forcing financial institutions to rethink their approach to post-trade processing. Banks turned to automation, but projects often involved a variety of point systems, installed across different parts of their operations. This typically resulted in the creation of a series of disjointed processing silos, which prevented organisations from achieving much-hoped for cost efficiencies.

Forward-thinking financial institutions sought out an alternative to this piecemeal approach and instead opted to implement single solutions, such as SmartStream's TLM Reconciliations Premium. Reconciliations-agnostic and able to bridge silos, TLM Reconciliations Premium can accommodate all of an institution's reconciliations

processing requirements in one place and, in doing so, create a 'one-stop shop' serving the entire organisation.

Having systems that are up to scratch is becoming more essential than ever. One reason for this is the pressure exerted by incoming regulatory initiatives, for example, the second Markets in Financial Instruments Directive (MiFID II) and Regulation (MiFIR) in Europe. These new rulings are forcing financial institutions to perform greater numbers of reconciliations and are increasing the complexity of the reconciliations they have to carry out.

Non-regulatory, internal reconciliations are also growing in volume. Financial firms now view the carrying out of reconciliations between internal systems as part as an essential part of best practice, and an important aspect of good governance. Performing intersystem reconciliations can be a complex business and so a powerful, robust solution is a must. A tangle of creaking systems will simply not cut the mustard.

A combination of lower revenues and a mushrooming regulatory burden is putting pressure on firms as never before; they must achieve more in the back office but with fewer resources and limited budgets. In the search for answers to this dilemma, financial institutions are asking whether technologies such as AI can assist them. In particular, interest in AI is beginning to increase as firms start to become aware of its ability to reduce risk and costs.

Responding to the challenges currently faced by customers, SmartStream developers looked at how they could inject greater levels of end-user autonomy into the company's reconciliations processing solution, but without compromising any of the powerful functionality for which the system is known.

The latest version of TLM Reconciliations Premium sees the introduction of a new user interface. This allows business personnel to build reconciliations themselves, with minimal assistance from technical staff. Underlying the interface is a powerful layer of AI, which helps guide the user, promoting greater levels of independence and freeing business staff from reliance on busy IT departments.

Ease of use and design flexibility are central to the new user interface, which offers a series of attractive dashboards, giving business users

great freedom to organise how they search, view, group and chart data. Tailoring the dashboards is a straightforward process, as a sophisticated, underlying level of automation suggests rules, makes recommendations and prompts the user at every stage.

Importantly, the new user interface removes the need for a separate tool with which to build and configure screens. Non-technical business personnel are therefore able to customise the dashboards themselves, with only minimal training.

The solution provides the user with the ability to view and analyse all the data, both historic and real-time, in the system's repository. Detailed trend analysis can be carried out in order to improve operational outcomes, better hit match rates, and to identify common exception patterns down to attribute levels. As a result of these improvements, business staff not only have better access to information but greater flexibility to ask questions of it. The solution promotes independence, too, as managers and other personnel can search and analyse data, without the need for additional IT support. This makes the solution an ideal choice for self-service models and potentially helps financial institutions cut operational overheads.

In answer to clients' requirements, the SmartStream solution has been updated to enable more rapid onboarding and to promote greater levels of end-user independence. A fully-integrated service, TLM SmartRecs, has been introduced to orchestrate the onboarding of new reconciliations or the tuning of existing reconciliations. A powerful layer automatically suggests matching patterns for new

reconciliations, giving non-technical business users the ability to test and build reconciliations without IT support. Importantly, by being truly reconciliations-agnostic, the TLM solution can onboard any type of reconciliation. Combined, these aspects assist banks and other institutions to cope with the growing volume of both regulatory and non-regulatory reconciliations they must perform.

In addition to these new services, and to further assist financial institutions in their battle to keep operating costs to sustainable levels, the solution also offers a range of different persistence models. These enable organisations to make choices as to how they store information—for example, in a relational database or using an alternative, lower cost means—depending on the business need involved.

Research and development has always formed a very significant focus for SmartStream and it is an area in which the company has invested heavily. SmartStream recognises that financial institutions are under intense pressure from a combination of diminished revenues, high operational overheads and the costs of complying with regulation, and it recognises institutions' willingness to experiment with the latest technologies in order to combat these pressures. SmartStream development teams have, therefore, during the last year, been expanded in order to ensure that the TLM solution takes advantage of advances in areas such as AI.

Development work has also taken place to ensure that the SmartStream solution is aligned with other emerging technologies such as robotic process automation and distributed ledger technology.

Financial institutions are under intense pressure from a combination of diminished revenues, high operational overheads and the costs of complying with regulation



Rocky Martinez, CTO, SmartStream Technologies

Let the seller beware

New requirements around target markets mean asset managers and fund distributors must be a little more mindful, says Fundsquare's Paolo Brignardello

Do you know who is buying your funds? From next year, the second Markets in Financial Instruments Directive (MiFID II) will require asset managers and fund distributors to ensure that clients are not being sold inappropriate investment products. Exactly what this entails is still in the air, but for sure it will require even greater quantities of data to flow back and forth along the fund distribution chain. Centralised utilities could be the way to cut complexity.

Target-market analysis is becoming an important part of the retail fund business. Already part of MiFID I, suitability and appropriateness tests have been ramped up in MiFID II. At the point of sale, more effort will need to be made to assess the client's investment knowledge and experience, and what objectives they have. Then, each investment product will need to be assessed to gauge how it matches, in the words of the directive, the "needs of an identified target market of end clients". This on an ongoing basis.

What does a target market mean?

These simple words belie the complexity of this task. The European Securities and Markets Authority has published guidelines in an attempt to define some of these concepts, but many grey areas persist. Industry working groups are seeking to provide more clarity, but this ongoing dialogue will take time. Where once investment advice was often based on a somewhat subjective assessment made by a financial advisor or client, it will now need to follow a clearly-defined path, supported by relevant documentary evidence.

Manufacturers and distributors will have to work closely together. Sharing information about the client market and how portfolios are constructed. However, the asset manager might only set this out at a high level of detail, giving theoretical attributes of the suitable investor. They can also take a view on the appropriate broad target market and the distribution channel to be used. It will be the task of the client advisor to make sure there is a more granular assessment of the nature of the implicit risk-reward and liquidity in each product and how this fits client needs. There will also need to be ongoing post-sale updates of product and client profiles.

Communication along the chain

The manufacturer will need to ensure that marketing and sales are being conducted according to principles they feel comfortable with. The regulator might decide that the financial advisor, wealth manager, bank, and so on, is mainly at fault from any misselling, but they might rule that the asset manager had been negligent too. Concerns about this have led some retailers to consider reducing the number of third-party funds they provide. Only by offering in-house funds can they guarantee

a consistent approach, they argue. However, so far, the industry consensus remains that fund vendors are likely to continue as now.

Yet, this discussion underlines the need for ongoing, bi-directional monitoring along the many links of the fund production and distribution chain. Moreover, financial organisations are generally large and complex organisations. This is complicated further when dealing cross-border in different languages and different market cultures. Also, documentary evidence about who proposed what and to whom will be vital if allegations of misselling emerge. Terms will need to be defined and agreed upon. What precisely do expressions such as 'medium-term time investment horizon' or of an investor having a 'high level of knowledge and experience' mean? There will also need to be agreement about interpretations of how each country has transposed the EU directive into national law.

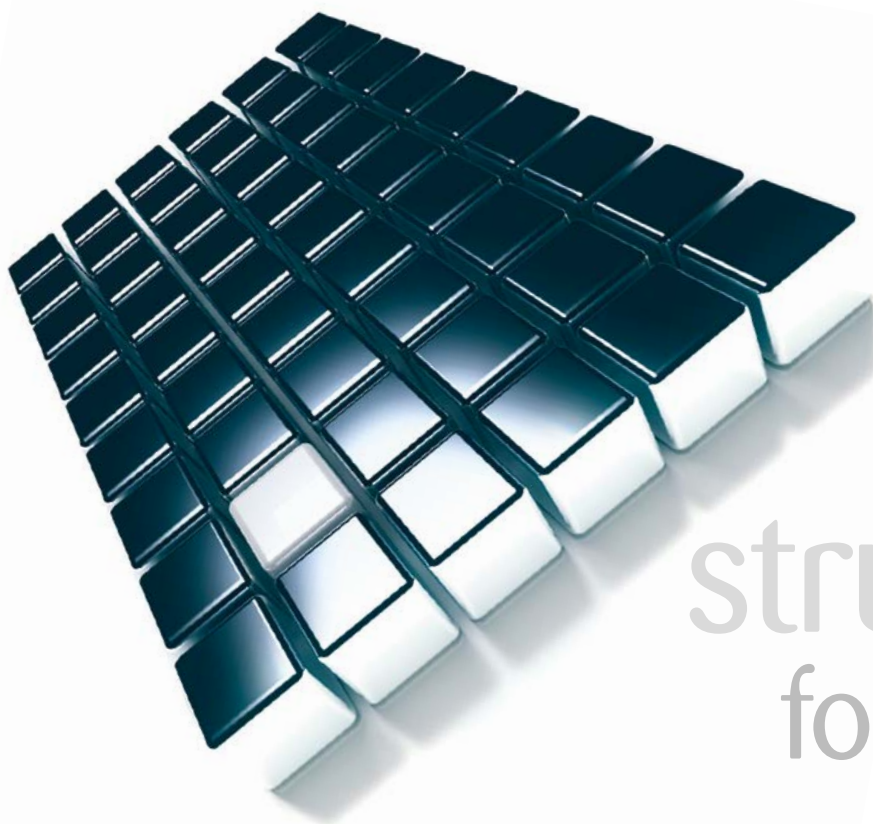
Clear, standardised communication

Utilities would do much to streamline this process, encouraging standardisation and automation. Rather than communicating point-to-point with dozens of retailers, asset managers could keep an up-to-date description of each of their funds in a central repository. Thus, all participants in the distribution chain would have a single, reliable source of information about how each fund house sees its products. There will be no way a retailer could argue that they were unable to access the data. Retailers will then have a clear basis on which to communicate information to asset managers on how their market segments are changing.

MiFID II has reversed the traditional idea of 'buyer beware', replacing it with a firm principle of 'seller beware'. The responsibility is with asset managers, distributors and retailers to make sure clients know the risks they are taking. A central data repository would streamline data flows, thus ensuring the entire distribution chain is on the same page. **AST**

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In the middle

Financial services firms are caught between innovation and legacy technology, but can artificial intelligence bridge the gap? Matt Davey of SGSS explores

Artificial intelligence (AI) has been around for a while now, but interest from the financial services industry has only recently picked up. Why is that?

There is a focus on AI now because three elements have come together and created an inflexion point: computing power, sophisticated algorithms and vast amounts of data. But, there is a danger that AI is a solution looking for a problem. Financial institutions need to focus on the business requirements of clients.

Chatbots, imaging and language processing AI developments are mostly geared towards the consumer market. Institutional financial services firms are not typically about image processing—what we are often looking at is a spaghetti of operational processes running at high volume on legacy systems. These operational processes do not always lend themselves to AI solutions, but when applied they can extend their longevity. The downside is that they can have the effect of fixing legacy systems in aspic, making further changes very difficult. At some point, you need a transformation strategy to build new systems. A key question facing large financial services firms is to what extent do you keep on extending legacy platforms, versus building new ones?

Where do you see AI being most useful in your industry?

AI sits at the top of a curve that encapsulates all of data science, including big data and machine learning. Many of the developments related to AI in financial services are focused on machine learning.

There are areas in which AI is particularly useful, such as fraud detection. For example, AI can identify patterns in vast amounts

of data and recognise potential fraudulent transactions more quickly and accurately than human staff. AI can also be applied in customer support, synthesising data across multiple systems internally and producing cross-selling opportunities or client sentiment analysis.

A new trend in machine learning is model interpretability; a model is good and very accurate, but when it makes a decision, we want it to explain itself. Many applications in banking that do not have large data sets can build graphical reports about the factors involved in decision making.

For example, consider a situation in which a customer is approved because their income was above a certain figure, and their underlying volatility was below another point. The next step on from this is combining machine learning with natural language processing to automate report generation. A compliance dashboard, for example, can spot an item and 'write' to the compliance officer, raising an alert about a potential misselling, and listing the issues raised. AI is about complex decision-making processes, where it is making the decisions for humans to review in context.

Robotic process automation (RPA) has been disappointing to some extent, in that it has not yet delivered all that it seemed to promise. Setting parameters for RPA systems can be very time consuming, and it is highly dependent on any changes in the ecosystem.

Ideally, RPA would be chosen for simple, high-volume use cases. It is possible that RPA on its own is not enough and it should be combined with AI and other technologies such as optical character recognition, natural language processing, and so on.

What is the biggest challenge to the integration of AI in your industry?

Many of the IT techniques within financial institutions are inherited from legacy systems, and this can be an issue when it comes to AI. A key challenge is in assessing how to plug AI into the existing legacy infrastructure. Initially, legacy systems may need to be simplified. At Societe Generale, transformation of legacy systems will be a step-by-step process based on a digital transformation strategy using web services. Outside of this, any innovative ideas from the business side will be met with machine learning technology when required, and legacy platforms will be transformed into agile ones. While we must push forward with new technologies such as AI and machine learning, we must also understand that we cannot transform everything. Agility will come from the use of web services everywhere and the transparency of the systems, whereby everything is catalogued. Replacing the legacy systems will take a long time and we will have to modify these systems to meet client needs and regulations.

What kind of AI-driven solutions are currently deployed at Societe Generale?

Within Societe Generale, we prefer to talk about machine learning rather than AI. The bank employs many data scientists to train algorithms that deal with various business cases. Our SG Markets platform is an example of machine learning techniques being used to create a recommendation engine. Based on the history of trades with Societe Generale, clients are advised of the most relevant research papers to read. We have also used machine learning to analyse thousands of contracts to detect missing clauses or recommend new clauses in legal documentation for our clients.

A ChatParser application for fixed interest and equities trading desks captures information from various chat systems as well as from email, translating them into requests for quotes. This saves precious seconds for traders and improves our response time to clients. **AST**

Financial services firms are typically running complex operations on legacy platforms. AI tools can help extend their longevity, but will only take us so far; at some point you have to make the leap and invest in a new system

Matt Davey, global head of business solutions, Societe Generale Securities Services





Let's be havin' IM

Specialist industry tools can be the best way to ensure compliance with mandatory exchange of regulatory initial margin, says triResolve's Jenny Nilsson

Mandatory exchange of regulatory initial margin (IM) is being phased in based on a notional threshold amount, which reduces over time. The largest firms started exchanging initial margin in September 2016, and the last group of firms will come into scope in September 2020.

This guide highlights how your firm can prepare for the calculation and exchange of IM, and provides recommendations on how you can fulfil your regulatory obligations with ease.

Step one: The ground work

The first task is to determine whether your firm is in scope for regulatory IM. If in scope, you must understand when you need to start exchanging initial margin. This depends on the structure of your group and the overall size of your derivatives portfolio.

To determine when you are subject to regulatory IM you must calculate your aggregate average notional amount (AANA) outstanding for all non-centrally cleared derivatives during the months of March, April and May, each year. The frequency of your AANA calculation will vary depending on your location. In the US, the calculation is done on a daily basis during the specified time period, whereas in the EU it is calculated monthly. Regardless of where you are located, all non-cleared bilateral derivatives including physically settled foreign exchange forwards and swaps—as well as non-cleared intra-group transactions—should be included in the AANA.

For corporate groups, the above calculation must be performed and aggregated across all members of the group. It's important to note that investment funds are generally considered distinct legal entities, as long as they are not collateralised by, or otherwise guaranteed by, other entities, funds or advisors for insolvency purposes.

Once you have done this calculation, refer to the chart below to determine whether you exceed the threshold for any given year. If so, you will be subject to regulatory IM as of 1 September for the year in which the threshold is exceeded.

Step two: The practicalities

Once you have determined your firm's compliance date, you must confirm which counterparties you need to interact with. You will have to exchange regulatory IM with all parties that exceed the applicable thresholds, up to and including your own phase-in date.

All counterparties need to be contacted, and you should work together to confirm the mutually effective dates, and also to determine which triparty agents you will use to manage the IM segregation. Ensure you begin this discussion well in advance, as the custodial account control agreements and the client service agreements covering IM exchange take time to negotiate.

You must also consider that custodians often set deadlines well in advance of the annual 1 September date, by which time the account

Threshold amount (USD, EUR or CHF)	Threshold amount (JPY)	Threshold amount (CAD)	Threshold amount (SGD)	IM phase-in date
3 trillion	420 trillion	5 trillion	4.8 trillion	1 Sep 2016
2.25 trillion	315 trillion	3.75 trillion	3.6 trillion	1 Sep 2017
1.5 trillion	210 trillion	2.5 trillion	2.4 trillion	1 Sep 2018
750 billion	105 trillion	1.25 trillion	1.2 trillion	1 Sep 2019
8 billion	1.1 trillion	12 billion	13 billion	1 Sep 2020


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Analyze

 statistical data related to
settlement & corporate action
transactions


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15 Exchanges

14 Depositories

 06 Leading
Core Banking
Systems

02 ICSDs

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control agreements must be in place to ensure the custodian can operationally onboard them in advance of the IM exchange effective date. This insight is often mentioned by current regulatory IM participants, so is an important lesson learned.

Step three: The number crunching

The regulation stipulates that you can calculate margin in two different ways: scheduled-based calculation or regulatory approved model-based calculation.

So far, the industry is united on using the International Swaps and Derivatives Association (ISDA) Standard Initial Margin Model (SIMM) to calculate IM. ISDA members worked together to develop this sensitivity-based approach to provide ease of calculation, transparency and effective dispute resolution. Risk factors and sensitivities form the inputs, while risk weights, correlations and aggregation formulae produce IM amounts.

As a starting point for the initial margin calculation, the model requires firms to calculate sensitivities in accordance with ISDA SIMM for all in-scope trades. This can be a significant data exercise in itself.

Trades need to be identified as being in scope and labelled correctly, and appropriate sensitivities must be calculated for each trade. With an average of 20 sensitivities applicable to each trade and 150 or more sensitivities applicable for more exotic trades, the effort required for this step should not be underestimated.

Firms must consider whether they will build internal processes to calculate the SIMM sensitivities themselves or whether they wish to have a vendor provide this service. Since the SIMM model will evolve, consideration should also be given to the ongoing internal development and testing required for model changes over time.

TriOptima's centralised web-based service, triCalculate, can calculate trade sensitivities for you. Easy to integrate to and requiring limited data, triCalculate can produce SIMM inputs in line with the latest SIMM model. Once you are able to calculate sensitivities, the SIMM model can be applied to calculate the daily IM pledgor and secured amounts.

Once the task of calculating sensitivities has been completed, you need to undertake calculation of IM. To date, the vast majority of phase-one and -two firms have leveraged AcadiaSoft's IM Exposure Manager to generate IM numbers. The AcadiaSoft service, offered in collaboration with TriOptima, calculates and returns IM exposure from both the perspective of the secured party (which must collect IM) and the pledgor party (which must pay IM). The service also solves the significant challenge of reconciliation of each party's IM inputs, trades and sensitivities, thus allowing firms to investigate and resolve any differences in their respective IM calculations.

Step four: The streamlining of the collateral process

Integrating the IM calculations with your collateral process, exchanging and agreeing the collateral amounts with your counterparty and establishing a dispute resolution workflow are the next steps you need to consider.

With margin notification times moving earlier in the business day, and a need to agree margin calls ahead of custodian cut-off times, it is crucial to establish an efficient workflow process for exchanging and agreeing margin calls with your counterparty. triResolve Margin, TriOptima's collateral management solution, automatically captures IM amounts from the AcadiaSoft IM Exposure Manager—and allows upload from other sources—where they can be processed alongside those for variation margin on a single platform. All calls can be exchanged in real time using MarginSphere, AcadiaSoft's electronic messaging service.

Perhaps the biggest challenge for the industry is having a dispute resolution method in place with counterparts for IM amounts. Due to the way that SIMM is structured, disagreements will arise when you provide different inputs. The sheer volume of sensitivity data will likely mean you have a large number of small differences. AcadiaSoft's IM Exposure Manager allows you to pinpoint meaningful differences, enabling you and your counterparty to work together to resolve them and minimise your disputes. This is increasingly important, as this is now a regulated part of the market. To achieve full compliance with ease, leveraging existing out-of-the-box industry tools to reconcile your inputs and automate the process is highly recommended. **AST**

Perhaps the biggest challenge for the industry is having a dispute resolution method in place with counterparts for IM amounts

Jenny Nilsson, head of product marketing, triResolve





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New business realities

Regulation, client demand and cost pressures have changed the landscape for service providers, says Subhasish Bhattacharyya of Intellect Design

While various recent market changes will have both near- and medium-term effects on the asset servicing industry, it's more the wave of technology disruption that could cause dramatic changes and have a lasting impact on the industry.

Let's pause a moment and examine where we are. Many of the providers are still constrained by legacy coming from acquisitions, poor integration, multiple technology platforms and a high level of manual intervention. Quite a few of the technology platforms are dated and have been in use for two decades or more. Also, since 2008, regulation has been a dominant consideration that is limiting growth in the industry. While assets under management (AUM) have been growing over the past two years, asset service providers have not always managed to keep the expenses under control.

While technology has evolved, the industry has failed to keep pace. With demand from customers driving asset servicers to achieve operational excellence, it is clear that some of these processes tied to legacy technology are the first in the firing line. Opportunities have emerged for new technologies to replace back- and middle-office processes that are repetitive, manual and cost-inefficient, with improved automation.

Advances in technology, combined with the explosive growth in data and information, have given rise to a more empowered global customer. A changing and increasingly complex regulatory environment is presenting opportunities for new services, as well as a need for major investment to support the compliance programmes of the asset servicers and their clients. Enhancing the client offering and improving control and efficiency has increased the focus on tech delivery. Rationalising and standardising applications across geographies and client segments is critical to companies. The need for investment in technology is clear. The large, full-service and boutique asset servicers succeed with the differentiation through efficiency and better pricing or more sophisticated value-added services. The ones not making the investment will become obsolete.

Asset servicers are increasingly facing demands for custom services, often with the cost absorbed by them. Asset servicers are assessing the impact of these drivers and determining how they can remain profitable, maintain market share and pursue the right growth opportunities. Leading asset servicers are following strategies to scale the business, seek efficiencies and drive toward standardisation, while determining the right client mix to achieve.

The most likely to succeed will be those that are the most disciplined in their growth strategies, diligent in addressing their data and technology challenges and responsive in meeting the rapidly-

changing needs of asset managers and asset owners. In other words, the companies that seize today's top-line growth opportunities will be those that make the right investment decisions to manage the ever-increasing demand for outsourced services.

Trends and connecting the dots

To start with, each customer segment has specific needs, and maintaining different technology platforms by an asset service provider for different customer segment is not cost-effective. Intellect's OneMARKETS solution provides the ability to service all segments of customers through the same cohesive platform, providing 'platform economy'. Let's take an example pertaining to custody business. Most custodians also have fund houses as their clientele. These fund houses would also like to have their fund accounting and transfer agency operations taken care by the custodian, so the ideal solution would be if the same technology platform that is catering to the custodial processes can take care of the other two areas.

The fund custody solution, a core offering under Intellect OneMARKETS, is targeted at custodians that also offer fund accounting and transfer agency services to fund houses, portfolio management schemes and alternative investment firms.

This can help in:

- Extending the custody function to include middle- and back-office functions of fund houses;
- Enabling central safe-keeping of assets and combined billing across functions;
- Providing a single view to end customers; and
- Reducing total cost of ownership by eliminating redundant operational processes and the need to maintain multiple back-office systems

Future digitisation needs

The other growing trend among asset service providers is extending services and offering a distribution channel to multiple funds. Service providers invest on behalf of their clients, and their biggest pain point is in interacting with multiple companies close to cut-off time. The fund distribution capability, a core part of Intellect OneMARKETS, allows clients to invest in multiple funds through one single instruction. This is integrated with the fund custody solution, so as to provide an easy access for custodial clients to invest surplus cash into short-term funds and look at overnight returns. This integration also ensures that the settlement is reflected back in custody, and that clients can have an integrated portfolio view.

Mutual funds investment experience

Another emerging trend, in line with digitisation, is a move towards client self-service. OneMARKETS's Digital Markets Portal provides omni-channel access for end customers to:

- View real-time positions across markets, currencies and asset classes;
- Initiate orders across asset classes including mutual funds;
- Access market rates and market news;
- Access research;
- View corporate action information;
- Convey instructions for voluntary corporate actions;
- Send post trade instructions to custodians;
- View portfolio analytics; and
- Receive important notifications and alerts

Seamless customer engagement

Seamless customer engagement has the potential to transform an asset service provider's business, and value delivered to the clients, by removing inefficiencies in existing processes.

Increasingly, there is a demand by buy-side firms to employ big data analytics. Mutual fund distribution analytics are being used to access data on buying choices, investor demographics and churn rates, and using that information to focus their own development and sales strategies more effectively. One key development is the move towards a shortening settlement cycle.

Europe has already moved to T+2, and other regions are likely to follow suit. This increases emphasis on an integrated digital platform, which reduces manual interventions and enables a straight-through settlement process. The tried-and-tested Capital Market Interface Exchange, a technology framework from Intellect OneMARKETS, can handle multiple industry standard data exchange protocols like SWIFT, FIX and web application programming interfaces (APIs), and provide the backbone for a faster and assured settlement process.

Securities lending and borrowing has been garnering increased interest levels from asset service providers. The focus is shifting from saving

money to revenue generation. This will also promote greater importance of collateral management, especially collateral optimisation. Buy-side firms will be expected to have a real-time overview of the collateral inventory accepted by their counterparties, to allow for a better view of the firm's overall risk positions and exposures.

In the long term, simulation capabilities are expected to be incorporated in collateral management solutions. This will help investment management firms simulate margin requirements for each trade, indicating the optimal type of trade needed to achieve margin reductions. Intellect's OneMARKETS provides securities lending and borrowing, allowing for increased market liquidity, and also provides real-time risk mitigation through a robust collateral management module.

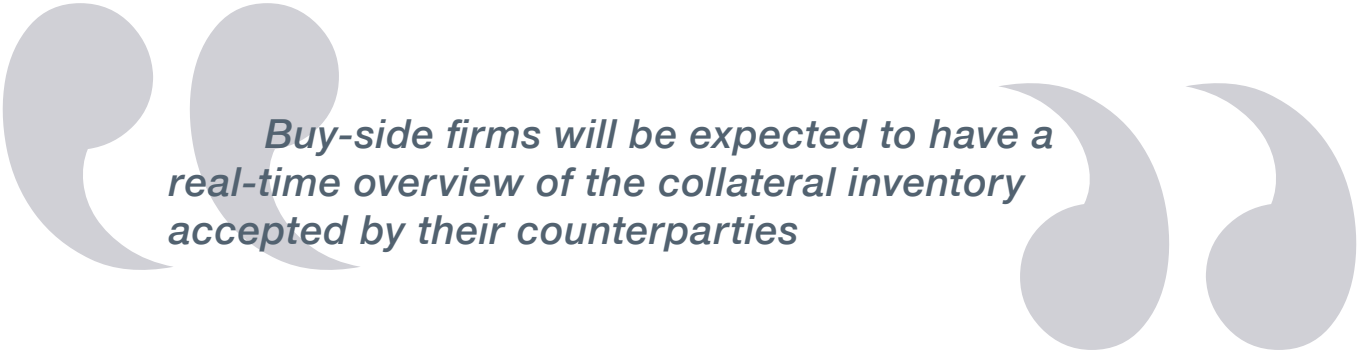
Buy-or-build dilemma

Most banks intend to choose one of the numerous market vendors for accomplishing their regulatory and growth needs. However, most of these vendors fall short, because when it comes to addressing these specific needs from banks they have tools spanning only certain activities.

Additionally, some of those do not integrate well with other systems in bank. What banks—which are on the cusp of this regulatory and growth strategy or searching for the competitive advantage—need is effective partners which can provide tools that integrate well without significant costs and are extremely loosely coupled. Such solution providers can prove effective partners in the long run.

Intellect OneMARKETS offers a robust, scalable and comprehensive 360-degree digital platform that supports straight-through processing, direct market access and high-speed execution across a variety of asset classes and market segments with seamless interfaces to local and international market infrastructure providers like exchanges, central counterparties, custodians and central securities depositories.

It is designed to seamlessly fit into your technology landscape in a non-disruptive fashion, and enables quick adaptation to new market entities. AST



Buy-side firms will be expected to have a real-time overview of the collateral inventory accepted by their counterparties

Subhasish Bhattacharyya, senior vice president and product head for OneMARKETS, Intellect Design Arena



The challenge of development

As the Nigerian economy is growing, so too is the custody industry in the country. But, such growth doesn't come without its challenges, as Toyin Ogunbamowo of Stanbic IBTC Bank explains

Nigeria is a country with one of the largest economies in Africa. At \$520 billion, it commands the recognition of global investors. As investors look into the frontier markets for yields to augment their investment returns, Nigeria pokes up for various reasons as a destination of choice in the analysis of most global portfolio managers.

Nigeria has only recently come out of two years of economic recession. The economic downturn was a result of a collapse in commodity prices, which shook the firmaments of the nation's economy and led to a massive depreciation of its official currency, the naira (NGN). There were rafts of government policies introduced to stimulate growth, and some knee-jerk reactions in the management of the foreign exchange (FX) access and utilisation. A new lease of life was breathed into the FX policies with the introduction of the Investors and Exporters FX Window by the Central Bank of Nigeria (CBN) in April 2017, and these have assisted in turning the investment stories around positively.

A key participant in the economic landscape in a country like Nigeria is the custodian. The custodian is the player that gives comfort to investors, ensuring their assets are being held by a safe pair of hands.

The custodian allows portfolio managers to go about their investment decisions professionally, knowing that the assets they are investing in are being held by professionals that would ensure adherence to all local rules and regulations, while ensuring that their corporate actions, as well as representative actions, at general meetings are being completed. They also facilitate their entries and exits from various investment instruments, as well as process access to FX, where necessary.

The custodial climate in Nigeria has been affected by some challenges in the last few years, while providers have tried to bring the above services to investors. Some of these challenges have been addressed successfully, while some are still in the process of getting proper attention and remediation. In all, these challenges reflect the nature and state of development of the Nigerian economy.

Regulation is an ongoing development, and the Nigerian custodial environment is seeing its fair share of it. A triumvirate scenario of three regulators supervise different aspects of the custodial industry in Nigeria. The National Pension Commission (PenCom) regulates the custody of assets in the pensions industry alone. These assets are currently in excess of \$15 billion. The Securities and Exchange Commission of Nigeria (SEC) is the apex regulator in the capital markets in Nigeria, and they license custodians to operate in Nigeria. To be qualified to be a custodian, the rules of SEC require you to be a bank. The Central Bank of Nigeria (CBN) also provides regulatory oversight for custodial operations in Nigeria, and it licenses custodial banks that are meant to hold non-proprietary assets of banks, money-market and fixed-income securities of investors in Nigeria.

Custodians are expected to abide by the regulations issued by these various regulators, as long as they obtained licences from them. The major challenges faced in the last few years were the plethora of circulars that were emanating from the CBN whilst the regulator was trying to rein in the various challenges that faced the FX market. There were also a series of engagements with the regulators on the introduction of risk-based supervision for the industry. This was applauded by all, as it is in line with global trends in capital markets regulations.



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Over the years Stanbic IBTC Bank has engaged with the regulators to ensure the sharing of developments in the market, and we have noted positive changes as we continue to implement market advocacy strategies with other market participants.

Another challenge facing the industry is pricing. As competition grows in any non-monopolistic industry, one expects pricing to be a key feature of differentiation. As more banks are seeking custodial licences, pricing has become a key feature of the entrance and sustainability strategies of most players.

The pensions industry is a bit sequestered, as the regulator has a pricing framework that pension fund custodians must comply with. The non-pension asset custodial industry, however, is more vociferous in its pricing strategies. Discerning investors are mindful of basing important decisions, such as selecting a custodian, on pricing alone. Quality, efficiency and robustness of custodial operations matter. And that is where custodians like Stanbic IBTC Bank still have an edge in the Nigerian custody market.

Understanding of the role of the custodians is still shallow in the local market. In the Nigerian market, many consumers believe that appointing a custodian means paying more for investment decisions. The market has been sensitising the consumers over the past years about the risk of leaving the assets with brokers, and this has helped a great deal in bringing the realisation to most consumers, and we have seen a paradigm shift in consumer behaviors over the years. Apart from corporate clients opening custodial accounts, individuals are also looking at such accounts.

Diversification of operations of custodial operators is an area of development that would support the growth of the industry. Products like fund administration, securities lending and other products aren't in the product suites of most custody providers in Nigeria. Most Custodians have mono product (custody) which has limited the income stream. Discussions are ongoing to ensure enhanced capacity in the market and hopefully diversification of the income stream of providers through additional products.

Over time, most clients have become more sophisticated in their requirements. They are requesting more openness both from the

custodians and the regulators. Demands for customised holdings reports have grown over the years with different clients requesting different formats, despite the provision of automated reports via SWIFT. Clients want to be updated on a real- or near-real time basis on happenings in the country that affect their assets. Custodians in the Nigerian market are coping by adapting to the new requests and ensuring top-notch information techniques to cater for the different requests from the client.

The infrastructure in the country is also improving to meet with these demands. The central depository is about concluding the migration of its backbone software and hardware systems to be compatible with SWIFT and what obtains in advanced economies. The CBN and Nigerian banks have just implemented the Electronic Certificate of Capital Importation (eCCI). This implementation has enhanced documentation of the flow of capital into Nigeria and also provides the CBN with the tools and data to have a comprehensive view of investors' participation in Nigeria and thereby guide its policy-making activities appropriately.

The majority of the global custodians are demanding delivery of top notch services from sub custodians. These demands include timeliness in responding to queries, quality of information, quality of reports, and instant communication of any changes in the market that would affect the global custodians. The custodians prioritise the confidentiality of clients' information, followed by the delivery of top notch services. They also want to ensure that trades are settled with few, or no, errors. Most custodians in Nigeria are living up to these demands. Because most global custodians have secondary agents, the primary agents roll up their sleeves and invest in capacity and technology to deliver in line with demands of their clients.

The development of the custodial business in Nigeria over the past 20 years has been meteoric, and growth in the Nigerian economy has also supported the growth of the custodial industry. While additional growth opportunities still remain, there is certainly room for improvement in aspects such as capacity and regulatory engagements. Constant engagement with the international custody network could play a key role in the continuous development of the industry, and ensure that it aspires to be as efficient as those of more developed economies. **AST**

The development of the custodial business in Nigeria over the past 20 years has been meteoric, and growth in the Nigerian economy has also supported the growth of the custodial industry

Toyin Ogunbamowo, head of relationship management for investor services, Stanbic IBTC Bank

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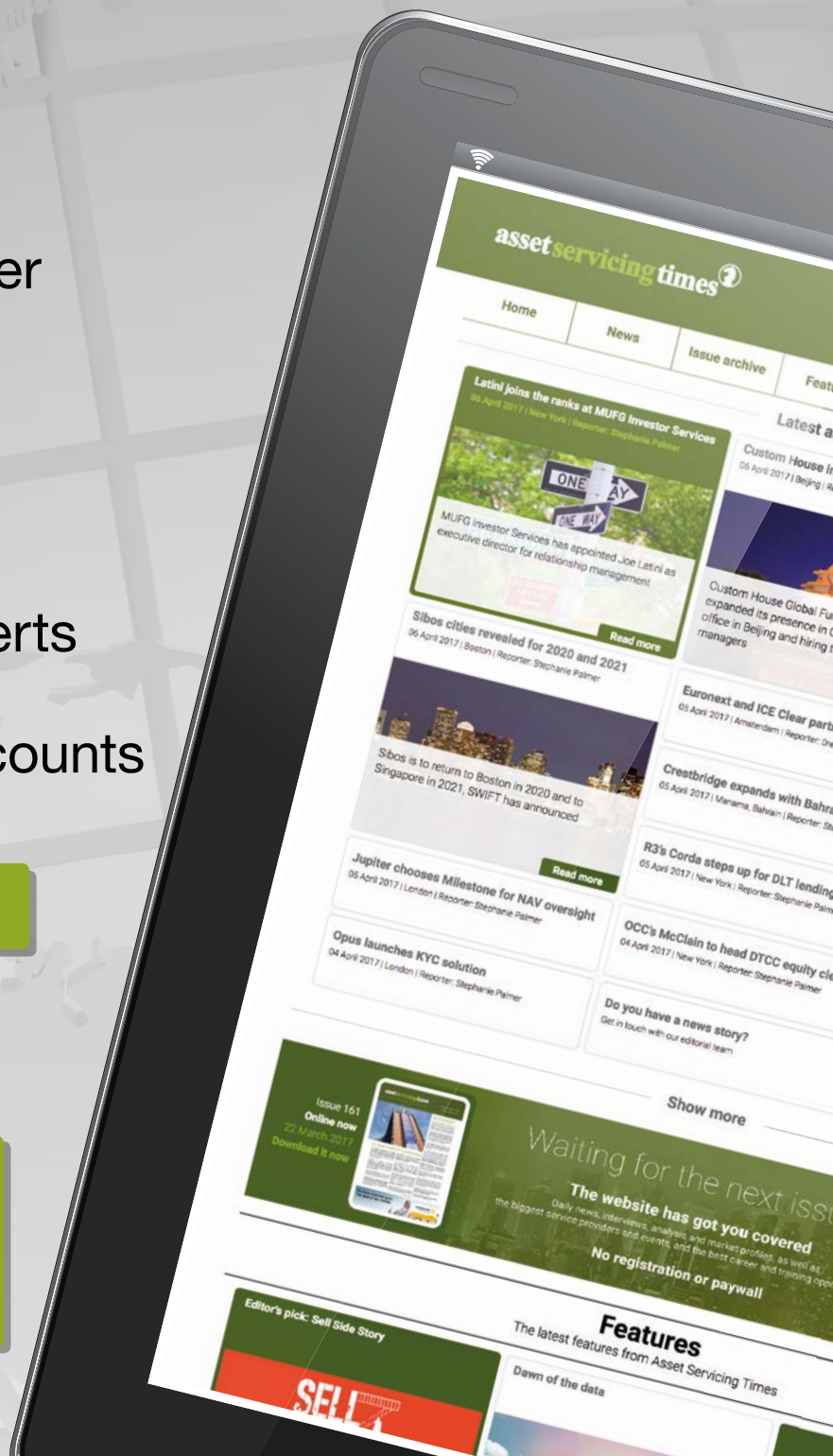
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Trials and taxations

There is value to be gleaned from reclaiming withholding tax, and it's not as tricky as some may think. Vicky Dean of Goal Group dispels some of the myths

Each time an investment is made on a cross-border basis there is a risk that any income derived from that investment will be taxed twice. Many countries have entered bilateral tax agreements with the intent of reducing, or even outright eliminating, double taxation, meaning investors can reclaim the taxes paid in those countries with which they have agreements.

Since its incorporation in 1989, Goal has developed a number of programmes and apps, which automate the process of reclaiming withholding tax, thereby removing risk and reducing processing time. We're now the leading provider of these services to custodians, depository banks, individuals and funds, to name but a few.

At Goal Group, our research shows that, in 2014, \$18.9 billion of investors' rightful returns from foreign shares and bonds were lost because withholding tax on dividends and income was not being fully reclaimed. Of this, \$3.58 billion was left unclaimed in the US.

Despite increases in claims in developed markets, the research reveals a net decrease of 15 percent in global losses due to unclaimed withholding tax between 2012 and 2014. This reflects a reduction in dividend payouts in emerging markets and the fall in bond yields since our previous study in 2012.

Globally, just under a quarter of recoverable withholding tax still languishes in foreign tax exchequers each year.

So, why isn't this money being reclaimed? Part of the reason is the durability of myths surrounding the process of reclaiming withholding tax.

Myth number one: The reclamation process is complicated and labour intensive

The business of filing tax reclaims is not rocket science. However, it has many moving pieces that require constant vigilance and

attention to detail. While some companies may consider managing the reclamation process themselves, the arguments in favour of outsourcing or buying a commercial enterprise solution from a qualified tax reclaim provider like Goal Group are compelling. We can take away a lot of the work and complication, handling the process from start to finish.

Myth number two: The reclamation process is costly and not worth it

This is simply not true. We assess each situation individually in order to provide competitive pricing and negotiable fees. Since 2015, we have experienced an increase of around 150 percent in processing reclaims for withholding tax. This number is continuing to rise as more custodians, private banks, depository banks, individuals and fund managers look to outsource this function to the experts.

Myth number three: Tracking the status of reclaims is complex

Our sophisticated programmes mean you can keep up to date with the progress of your reclaims at the click of a button. We offer a dedicated client portal where you will be able to view open and paid claims, plus metrics such as reclaim amounts, markets and the average time-frame for recovering the money owed.

Goal Group has a global footprint, expanding across the US and Asia Pacific region, with offices in San Francisco, Philadelphia, New York and Melbourne, as well as our head office in London.

The most recent addition, in New York, is the home of our American depository receipts (ADR) processing, class actions and tax reclaims operations team, which is situated perfectly to maintain contact with the Depository Trust and Clearing Corporation and the Depository Banks, ensuring a seamless and efficient service to all participants.

We have been doing this for 25 years, and have built up our innovative technology, industry knowledge and expertise over that time. We draw on all this experience, plus good relationships with the tax authorities, to achieve outstanding results for our clients worldwide.

Equally, the quality of our staff means we can cover markets that others may not. All our offices are staffed by local tax, legal and securities experts. We currently support all stock types and all client types, and if a new one is introduced to us we will research feasibility before proceeding.

Global Tax Reclamation Solution

GTRS is Goal Group's technology solution used to automate as much of the tax reclamation process as required, from producing forms and other necessary documentation to a highly sophisticated straight-through-processing solution that tracks the claim lifecycle right up to receipt of funds.

Goal TaxBack

Six of the top ten global fund managers rely on GTB for tax reclaims. GTB offers an outsourced solution to help clients fulfil their fiduciary duty to maximise returns in the most efficient and cost-effective way possible. This truly global service, delivered in-house in a service-provision environment, covering all jurisdictions and supporting all client and stock types including bonds and ADRs.

Goal Group also takes information and data protection seriously, so much so that we were one of the first companies to be awarded the ISO 27001:2013 certification. This is regarded as the international best-practice framework that allows organisations to systematically and consistently protect their information assets and clients' data. The certification demonstrates that an organisation is following international information security best practices.

As a niche service provider, we handle the whole reclamation process from start to finish, and give this area our full attention. In addition to performing the tax reclaim services, we offer an extensive suite of reports in a variety of formats, allowing clients to track and monitor the status of reclaims throughout their lifecycle. And, once the reclaim has been paid to us, we aim to transfer the balance, minus our fees, within five working days.

Our reports can be provided in a variety of formats, tailored to meet clients' specific requirements. Also, our fees are negotiable, as we assess each situation individually in order to provide competitive

pricing. Some more difficult markets may have alternate fee structures, but we always inform clients of any variations before we proceed.

Goal Group launched our flagship software, Global Tax Reclamation Solution (GTRS), in 1992 and it quickly became the technology solution of choice for leading financial institutions. In fact, we believe GTRS is used to recover around 30 percent of all withholding tax that is reclaimed on cross-border securities annually.

More recently, we've also launched Goal TaxBack GTB, offering our clients an outsourced solution, and our ADR product for Depository Trust Company participants. **AST**

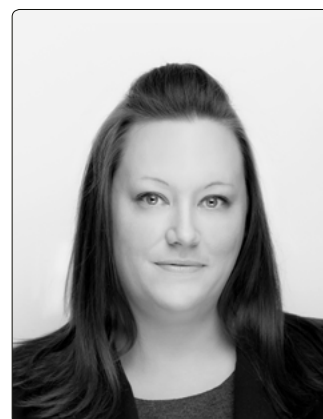
American Depository Receipts

Recently launched, the new ADR processing service offers a complete withholding tax relief solution for relief-at-source, short/quick and long-form filing methods.

Providing a customised and user-friendly management tool, the ADR Adroit allows DTC participants the ability to view and update form images per client, per residency, and per participant, while also running reports and setting up notification alerts to participants if their form is due to expire. In addition, a comprehensive electronic document library allows participants to maintain their various forms in order to obtain tax relief in the most efficient way. The full reporting suite allows electronic document submission and provides election instructions for each eligible dividend held by the beneficial owners on the first business day following record date.

While some companies may consider managing the reclamation process themselves, the arguments in favour of outsourcing or buying a commercial enterprise solution are compelling

Vicky Dean, director of withholding tax sales, Goal Group





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Comings and goings at RBC I&TS, LCH International Advisory Group and NEX

RBC Investor & Treasury Services (I&TS) has appointed Geert Pick as managing director and global head of product management for shareholder services.

In his new role, Pick will be responsible for setting the direction of I&TS's transfer agency product and aligning it with client and industry requirements.

Pick, who will be based in London, will report to Paul Stillabower, global head of product management.

Prior to RBC, Pick was associate vice president at Genpact. Before this, he worked for Gartner, a technology and advisory consulting firm, in its banking and investment services team.

Stillabower said: "Geert Pick's significant experience in business process re-design, innovation and digitisation will be key as we continue to deliver differentiated services to our clients."

Daniel Maguire has been promoted to the position of CEO of LCH's International Advisory Group, following Suneel Bakhshi's decision to step down.

Maguire, who has spent 16 years at LCH, was made COO of the firm in April this year.

During his time at the company, Maguire has been involved in LCH's SwapClear service, as well as running LCH's North American operations for four years.

In addition, Maguire spent three years at J.P. Morgan as a senior vice president for commodity exotics and hybrids.

Maguire will also become a member of the London Stock Exchange Group (LSEG) executive committee, reporting to Xavier Rolet, CEO of LSEG.

Lex Hoogduin, chair of LCH Group, said: "I am delighted to announce that Daniel Maguire has been appointed as LCH Group's new CEO."

"He brings extensive experience to the role, having been part of the senior management team leading the growth of our global OTC clearing services, delivering innovative solutions in an environment of LCH's focus on best in class risk management and operational resiliency."

Bakhshi will take on the role of chair for the LSEG International Advisory Group, helping to establish a series of regional advisory services in key growth markets.

Speaking on his departure, Bakshi said: "It has been a privilege to lead LCH Group for the past four years. LCH is a successful, exciting and growing business and I am confident that the group's strong growth momentum will continue in the future."

NEX Optimisation has promoted Ken Pigaga to CEO, following the departure of Jenny Knott.

Pigaga, who was previously global COO at the technology provider, will begin his new role this month and will remain a director on the NEX board.

Pigaga will hand over his global COO responsibilities to Sam Wren, group CFO of NEX, while the NEX Transformation programme will be overseen by both Pigaga and Wren.

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Prior to NEX, Pigaga was global COO at ICAP, and before that he was managing director at J.P. Morgan.

Commenting on the shake-up, Michael Spencer, CEO of NEX, said: "In her time with us, Jenny Knott has evolved our client strategy and implemented a simpler and more unified operating model, identifying and adopting new and emerging technologies."

"Her significant contribution will have an enduring impact on the business and we wish her every success for the future."

Regarding Pigaga's appointment, he added: "Ken Pigaga has worked closely with Jenny Knott as part of the NEX Transformation programme and is ideally placed to assume the role of CEO of NEX Optimisation."

"I'm confident that he will successfully take NEX Optimisation to the next level of its growth."

Knott commented: "I am proud of the achievements of the NEX Optimisation leadership team."

"My talented colleagues will continue to work with clients to solve industry-wide challenges and help them grow their businesses."

Pigaga's appointment comes shortly after NEX Group launched Pivot, a new tool that will enable clients to make cash movements and money market sweeps.

The Securities Industry and Financial Markets Authority (SIFMA) has elected its principal officers for 2018, naming Lisa Kidd Hunt, executive vice president of Charles Schwab & Co, as its chair.

Kidd Hunt will replace Joan Steinburg, Tim Scheve, president and CEO of Janney Montgomery Scott.

James Allen, chair and CEO at Hilliard Lyons is chair-elect, moving from his previous position as vice chair.

The newly-appointed vice-chair is William Caccamise, general counsel of global banking at Bank of America Merrill Lynch.

James Wallin, senior vice president of fixed income at AllianceBernstien, has been elected as SIFMA's new treasurer.

Also joining the board are Sylvain Cartier, head of global markets for the Americas at Societe Generale; Jim Kerr, CEO of Davidson; Thomas McDonald, CEO of McDonald Partners, and Thierry Roland, CEO of global banking and markets Americas at HSBC.

Charlotte McLaughlin, president and CEO of PNC Capital Markets, and Peter Schneider, president of Primerica have also been elected to the 2018 board.

Kenneth Bentsen remains CEO and president of SIFMA. **AST**



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