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Sun, sand and asset management

This year's Sibos conference takes place in Sydney, the home of Bondi Beach and one of Australia's largest cities.

For such a small country in terms of population, Australia is the fourth largest pension fund market in the world, and the sixth largest from an asset management perspective.

In this year's Sibos conference special issue of Asset Servicing Times, Jenna Lomax analyses Australia's asset management industry, which boasts strong superannuation pension funds and record levels of assets under custody.

For the asset management industry, cybercrime has become a major area of concern as methods of carrying out cyber attacks become more sophisticated. Maddie Saghir takes a deep dive into the dark world of organised cybercrime.

Elsewhere, SWIFT's Wim Raymaekers discusses the trends and challenges of cross-border payments, and gives insight into what the company is working on.

Peter Hainz of SmartStream discusses how the banking industry is currently faring with the implementation of the Basel Committee's monitoring tools for intraday liquidity management.

Also, find an update on the initial margin rules from David White of triResolve, who discusses the lessons learned from in-scope firms, obstacles to achieving compliance and how automation can increase operational efficiency.

Finally, Rob Scott of Commerzbank suggests that although there are many challenges, the future of post-trade services is currently an exciting place to be.

As always, thank you for taking the time to read Asset Servicing Times and we look forward to hearing your feedback on this Sibos special edition.

Becky Butcher
Editor

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Waltzing technology

Home to Bondi Beach, Australia boasts strong superannuation pension funds and record levels of assets under custody, while its asset servicing framework is embracing technological change

Jenna Lomax reports

Australia is the fourth largest pension fund market in the world and the sixth largest from an asset management perspective.

In Australia, pension funds are administered by corporate structures. Super funds are largely unitised structures and they support various investment options for their members.

In 2010, the Cooper Superannuation system review noted that in 1996, the superannuation pool was equivalent to 47 percent of GDP. In 2009 this had increased to 90 percent of GDP. It predicted that by 2035, the pool would be at 130 percent of GDP.

The Australia Custodial Services Association (ACSA) produces statistics showing different categories of custody.

It found (as at June 2018), total assets under custody for Australian investors (both domestic and global assets) stood at AUD $3.62 trillion, representing growth of 4.0 percent over the prior six months.

Elsewhere, the Australian Stock Exchange (ASX), Australia's financial beating heart—has reported a strong revenue performance this year—the strongest growth seen in the last eight years.

ASX's FY18 Financial Results, released last month, stated revenue was up AUD $58.6 million to AUD $822.7 million—an increase of 7.7 percent.

This increase was seen across the firm, however, its equity trading market results reflected a somewhat pessimistic outlook, with a limited growth in the demand for trading, clearing and settlement services. So with this all in mind, what is Australia's asset servicing outlook?

Perhaps ASX's biggest news is its plan to replace Clearing House Electronic Sub-register System (CHESS) with a distributed ledger technology (DLT) solution as the post-trade infrastructure for Australia's equity market.

The new system is estimated to go-live between Q4 2020 and Q1 2021 and shows just one aspect of the country's move toward expanding and evolving its asset management offering.

Robert Brown, chief executive at ACSA, explains: "With a process underway to replace the 25-year-old CHESS system, regulatory changes ending settlement monopoly, and further reforms for corporate action efficiency, Australia is witnessing an intense period of change and innovation."

He adds: "ACSA is engaged on all aspects of the transition, with a sharp focus on functionality, improved efficiency, features of the underlying technology (distributed ledger), systemic impact on the industry operating model and, of course, end client benefits."

David Braga, head of Australia at BNP Paribas Securities Services, says: "The current proposals will remove inefficiencies in existing market practices and will remove elements of risk associated with a number of these processes."

He adds: "With the ASX's continued work on the replacement of the CHESS system with DLT, we are working directly with the ASX and our clients to understand the future landscape of the central securities depository."

Let's talk technology

With such a big responsibility relating to the size of its pension funds, funds need the best technology available to meet investment duties to clients.

Juliette Kennel, head of securities and FX Markets at SWIFT, said: "Blockchain or DLT has the potential to become one component of the future of back-middle office operations."

"The extent to which it will impact back and middle office operations will depend on the readiness and eagerness of post-trade players to evolve their current, often well-functioning platforms towards the adoption of such a technology."

As Yousaf Hafeez, head of business development at BT Radianz Services, mirrors: "There is no doubt that global firms and exchanges have been eagerly watching the Australian Stock Exchange's deployment of blockchain, the success of which is likely to catalyse an uptake of the technology in clearing and settlement transactions process."

Hafeez adds: "Technology is an enabler of change. When implemented correctly, new technologies offer the potential for cost savings, performance improvement and a source of competitive advantage. Attaining new services with speed and efficiency is increasingly important as firms and customers become more and more global."

It is clear then that Australia's asset management market framework is embracing blockchain, as well as other technologies, particularly within the areas of payments, post-trade and data—especially within the last year.

In Q2 this year, RBC I&TS carried out a poll of Australia-based asset managers, which identified data as the main focus of technology investment over the next 12 months.

Respondents anticipated that data would help them make more informed investment decisions and better anticipate client needs.

As Justin Burman, director of full service, product for Asia Pacific at RBC Investor & Treasury Services, articulates: "The results, together with RBC I&TS' regular communication with clients, will continue to feed into our 'agile' methodology."

He adds: "[We do this to ensure] that what we develop aligns with our clients' requirements for improved efficiencies, enhanced data capabilities, reduced complexity and a seamless user experience."

Clearing and settlement

Underpinned by technology, clearing is also currently going through a significant change in Australia.

Braga says: "The changing capital requirements accompanied with the need for technological change required for the CHESS replacement, represents a challenge to traditional Australian-based self-clearers."

He adds that BNP, in particular, is "continuing to expand [its] augmented custody programme to improve cut off times, and provide information quicker to clients which is increasingly important with the shortening of settlement cycles globally".

Concerning settlement, Brown explains: "ACSA is proposing key principles for efficiency, lower costs, fairness and certainty for the future competitive environment."

"The Australian market currently has extremely low settlement fail rates, and a key consideration in any new environment is to ensure that there is no degradation in this regard."

In other news

Last December, ASX also announced its commitment to the adoption of the ISO 20022 messaging standard.

Bill Doran, head of Oceania at SWIFT, comments: "SWIFT welcomes ASX's proposal to move to ISO 20022 for it embraces the general global trend of market infrastructures, which will support their objective of moving away from bespoke domestic standards."

In addition to adopting the ISO 20022 messaging standard, SWIFT also welcomed a New Payments Platform (NPP) in February, in an effort to improve how consumers, businesses and governments transact with one another, according to Doran.

He adds: "The rollout of the NPP, and the enablement of real-time payments, is the most significant development in the Australian payments industry in decades and will perhaps have the most revolutionary impact on the economy than any previous payments system innovation."

Neighbours: closer each day, home and away

Australia's wealth of asset management has inevitably led to large funds looking abroad for greater opportunities.

In particular, Australia's closest neighbour, Asia, has an abundance of emerging markets willing to do business within Australasia.

These include the Philippines, India, Indonesia and China.

Hafeez indicates: "Australia has a very large domestic capital markets community and while this means there is room for growth, many exchanges face challenges in how to successfully grow internationally, as well as domestically."

"As such, we are seeing an upward trend of exchanges trying to attract new international business."

Robert Brown, chief executive of ACSA, indicates: "Consistent with the growth in total assets under custody, the amount of overseas client investment into Australia (assets held in sub-custody) also grew by 4.4 percent during the first half of 2018 to AUD $1.54 trillion indicating continued attractiveness of Australia as an investment destination for foreign institutional asset owners."

Elsewhere in the fund's space, the Asia Region's Funds Passport is being piloted between participating countries, including Australia and Japan.

Doran discusses: "SWIFT is involved in the pilot and is working with the industry [...] to support the adoption of international best practices and standards to facilitate efficient, standardised cross-border funds and cash settlement."

SWIFT has also started testing payments using the aforementioned NPP, together with banks from Australia, China, Singapore and Thailand.

As Doran adds: "This trial is currently focused on Australia-bound cross-border payments that are processed domestically through the NPP, however, the service is designed to scale and integrate with real-time systems around the region, and other real-time systems will be added in due course."

But elsewhere, particularly where China is concerned, trade tensions with the US could have a knock-on effect when predicting future successes in that region.

However, Braga notes: "China [is] generating the most interest and demand."

"We have built a robust product offering to support clients' investment ambitions in China and can offer access to all the various stock and bond connect programmes."

As Asia enjoys a technology and financial boom, Singapore has evolved and is now seen as a strong financial hub for Southeast Asia and globally.

Singapore's advanced technological infrastructure has been a strength and the city-state remains in a prime position to increase in Asia's custody market. AST

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A marked change in form, nature or appearance

The future of post-trade services while containing many challenges is currently an exciting place to be, Rob Scott of Commerzbank explains more

Becky Butcher reports

How are post-trade businesses coping with implementing strategy towards becoming more digital? How are legacy environments adapting to change?

Most, if not all, post-trade businesses are in various states of transforming themselves into being more digitalised at their core. The commercial challenges faced by not accelerating this path to become more technology focused able to be nimble and reactive to future change, can in the mid-to-longer term be quite destructive to existing business models.

The challenge as always is not in the willingness to change or the vision of what future success looks like, but in the execution. It's important to have strong leadership and direction from the top. At Commerzbank, we have this support.

Our 4.0 strategy testament to the kind of wholesale transformation we are aiming to achieve. Having this commitment from the top and moreover, a culture of change is paramount to being successful going forward. We created, for example, a digital campus populated and represented by all key business areas from the bank. An agile environment whereby, colleagues can learn and fail fast, an environment which encourages innovation and thinking in different ways.

In general, understanding all of the business drivers of the legacy platforms at a particular organisation is fraught with difficulty. It is usual that a business case is premised on being able to collapse and retire legacy environments and strip out the associated cost and complexities. It is also true that consideration is given to the management of potential operational risk. As these platforms have aged so too have the people that support and run them. In any event, as the process to unravel these legacy platforms begins, what was first thought of as relatively straightforward to retire becomes a far more complex issue to address.

Traditional thinking has, for the most part, sought to replace system 'A' with system 'B'. Replicating all the associated process, interfaces, and reporting. More modern thinking looks to perhaps leapfrog this and almost start from scratch using the technological advancements of today. The reduced cost point of some of the new and emerging technologies is, in some instances, so great that being able to perform wholesale transformation becomes more of a reality. An alternative strategy is to perhaps run modern technology platforms alongside legacy environments and when internal comfort, scale and efficiency looks to be a reality, start to roll out and operate on the new digital platforms in place of older technology.

We've seen some recent market announcements regarding delays to blockchain-based technology implementations. Do you see this? Will blockchain solutions ever take off into the mainstream?

It is clear that distributed leger technology (DLT) has the potential to bring to bear some very far-reaching efficiency across the board and in the future may be a key catalyst for change. It can serve to eliminate, for example, all of the numerous, time consuming, repetitive and costly reconciliations which exists throughout the industry, much of which is duplicated at multiple points throughout the value chain. It is also very clear that for these solutions to ultimately succeed, it needs a widespread adoption across many of the affected industry participants. We have seen many examples of innovation from organisations. It is my belief that with DLT technology the industry should be looking to produce solutions that encompass end-to-end solutions and not just address parts of the value chain. This will also help to encourage wider adoption with core market infrastructures.

What I see now is that people are really beginning to see the potential benefits of having played in a variety of in-house 'sandbox environments', or by participating in various consortia. There seems to be a switch in focus towards trying to apply and solve some of the core market infrastructures in order that adoption and new operating models become a real and tangible alternative. Having a solution which addresses only part of the value chain may solve a specific niche problem but may create a real difficulty in standardisation across the eco-system, and may not provide a solution which can be successfully integrated with legacy environments.

Why do we still talk about finding ways of integrating and operating alongside some of the legacy environments? Expecting the level of change and adoption across multiple participants and market infrastructures as well as their clients, to happen all simultaneously is somewhat of a fanciful thought. What is important however is continuing to push the boundaries of discovery and working collaboratively to tackle solutions, which would allow the end-to-end transformation to become more of a reality, and enable the collapse of complete parts of the industry's legacy technology platforms.

Once the core market infrastructure has found these solutions which address a large number of components of the value chain in a single instance, adoption will soon follow. I believe more encompassing solutions will emerge in the coming two to five years and within seven to 10 years we'll probably see more widespread adoption and value generating business case in the post-trading landscape.

What are the key technologies emerging in post-trade and how are they being utilised?

Of course outside of DLT, there is much talk about when it comes to big data and advanced analytics. Artificial intelligence (AI) and robotic processing automation (RPA), and how it will affect the industry. These are again all very good technological advancements with potentially some significant benefits.

At Commerzbank, we are exploring ways to enhance highly manual, repetitive processes. For example, a variety of experts perform multiple repetitive keystrokes in excel or other systems, spend time getting an answer before being able to speak to a client. Further advancements in RPA could, for example, enhance not only the monotony and predictability of process but also allow the expert to engage with clients much earlier on, therefore speeding up the process. Saving time which can then be better used to understand and optimise processes in order to transform the existing client experience. Many of these types of manual tasks are not only time consuming and repetitive but all have a very prescriptive and well-defined output which lends itself to RPA.

Underpinning all the potential success of these technologies is the need for robust and accurate underlying data. Applying AI or RPA to bad or incomplete data can lead to bad machine learning or incomplete and inaccurate processing. It is paramount for organisations to address this and have a cohesive strategy which addresses the core data components within the organisation and for it to be applied consistently across their 'data lakes'. Having large numbers of systems and multiple legacy platforms often with the same but similar data representation can lead to challenges.

Big data and data analytics in financial services will play a significant part in shaping a better understanding of the client. It will help shape and focus new products and services for clients. With the advancement in data science, huge data sets can be compared, contrasted and correlated in quantities beyond manual human capability. In the same way, our high street supermarkets have been using our buying patterns and behaviour to target us with products or discounts which we are interested in. This all serves to enhance the client experience and interaction with the provider.

How do the next few years look in post-trade services?

The future of post-trade services, while containing many challenges is currently an exciting place to be. With technology seemingly advancing at a very fast pace, with clients seeking digital interaction in, for example, the same way we interact with our smartphones and tablets, instantly, intuitively and comprehensively. It all sets a backdrop of wholesale transformation. One where both organisations can adapt and prosper along with their clients.

Those organisations that have the right strategic thinking, coupled with a culture and "tone from the top" of embracing change, as well as leaders who mobilise its workforce to achieve common goals for the benefit of its clients, will ultimately be winners in the new digitalised era.

The definition of transformation stated in the title above 'a marked change in form, nature, or appearance'. There will be marked changes in both the products and services offered, there will be changes in the manner we connect and interact with one another going forward. More information will be accessible, and with increased transparency. All ingredients which can make that trusted bond stronger between a service provider and its clients. The form will be more electronic and instant with a look and feel which is far more advanced and intuitive than before. AST

Rob Scott
Head of custody, collateral and clearing
Commerzbank

The disrupted becomes the disruptor

Philippe Ruault, head of digital transformatin at BNP Paribas, explains how asset servicers are becoming the disruptors

Asset servicing clients want more and better for less and faster, putting pressure on providers who sometimes rely on historic systems and manual interfaces. The increased demands from clients also expose incumbents to disintermediation from start-ups, big-techs—the so-called FAANGs otherwise known as Facebook, Apple, Amazon, Netflix and Google—and dynamic competitors who are developing products that are more applicable and in step with (often younger) customer expectations. If asset servicers want to retain client loyalty and deflect disintermediation, they must pursue a disruptive strategy.

Asset servicers take to DLT

Embedding distributed ledger technology (DLT) into business processes will be a major enabler behind the future success of asset servicing and its product delivery. DLT introduces a number of operational and cost benefits for users, as its immutability facilitates superior transparency, greater security and reduced error counts. The technology, therefore, has the potential to refresh many core activities in securities services such as clearing, settlement, collateral management, corporate actions and fund distribution.

BNP Paribas Securities Services is beta-testing a number of DLT applications, as part of our digital transformation and commitment to continuously improve client experience.

The PlanetFunds programme is striving to generate efficiencies in fund distribution, reducing the need for human intervention and cutting cost. By using blockchain and smart contracts to streamline the flow of information between fund buyers and sellers, BNP Paribas hopes to deliver an enhanced customer experience from the on-boarding of investors to smart analytics on their buying behaviour. The technology will also improve the actual mechanics of buying and selling funds through its end-to-end execution facility, reducing reconciliation costs and delays in the distribution chain. Through implanted analytics, PlanetFunds will help investors comb through fund data prior to selection while helping managers to fine-tune their distribution channels.

In addition to distribution, providers are also using DLT to augment post-trade activities. BNP Paribas plays a leading role in an industry consortium which is supporting the launch of LiquidShare, a financial technology start-up which provides a DLT infrastructure for small-to-medium-sized enterprises (SMEs). The technology will streamline post-trade processing for SMEs, not least through enabling T+0 settlement and consolidating securities registers in what should help these companies obtain easier access to capital markets.

Blockchain is being incubated and developed at large market infrastructures too, most notably Australian Securities Exchange (ASX). ASX is leveraging digital asset holdings to replace its post-trade Clearing House Sub-Register System (CHESS) platform for cash equities with DLT.

This milestone is expected to be reached in 2020/2021. If the ambitious scheme nets tangible benefits, more infrastructures will follow Australia's lead.

However, incorporating DLT into financial markets is a huge project, and many obstacles will need to be tackled along the way, namely acquiring regulatory buy-in; averting market-wide fragmentation; ensuring interoperability; minimising the technology's carbon footprint; and identifying where DLT adds value, something which may require firms to become more selective about the type of data they store on DLT. Ultimately, the providers which have a serious DLT strategy will be the ones at a competitive advantage moving ahead.

Artificial intelligence: taking asset servicing to the next level

While widespread automation has generated efficiencies in asset servicing, the adoption of artificial intelligence (AI) and robotics will bring about unprecedented change. A report by McKinsey said that securities services could net $20 billion in savings if automation and robotics are applied at scale across the industry. BNP Paribas sees AI as a critical tool in the industry's future development, and we are implementing a number of initiatives around the technology.

Robotic process automation (RPA) can help remove manual intervention, and it is being steadily adopted by banks and fund managers globally. The natural language generation (NGL) is already automating the production of client and regulatory reports, thereby helping to optimise costs and condense the overall time spent on these activities. BNP Paribas is also using this technology in its management information system reports for clients.

In addition, we are accelerating our natural language processing (NLP) capabilities, a subset of AI which uses computers to understand and aggregate structured and unstructured data including non-digital documents such as faxes generating language off the back of it—in effect mimicking human functions. In conjunction with Fortia, BNP Paribas is using NLP tools to assist fund managers with their compliance requirements. These tools comb through documents, such as prospectuses, extract data, then flag potential breaches, in real-time—an advancement which will create significant efficiencies for users.

Client experiences and communications will be transformed too through the roll-out of cognitive, machine learning chatbots, which can field rudimentary enquiries from customers, but as the technology onboards more information, they will eventually be able to respond to more complex requests.

AI can help asset servicers support clients through predictive analytics by scrubbing data to identify patterns and trends, allowing banks to warn clients proactively about potential risks.

BNP Paribas is already trialling this technology, Smart Chaser, a trade matching tool, which not only boosts automation but can analyse historic data to identify patterns in trades that have previously required manual intervention. Smart Chaser, which has a 98 percent prediction accuracy rate, will immediately alert clients about their live trading activities so action can be taken. However, AI does have some hurdles to clear. Validating that the data being supplied to AI technology is not riddled with errors is pivotal, otherwise, the AI analytics could be distorted leading to the spread of misinformation.

The biggest priority at providers utilising AI is to corroborate that data has been obtained and used in a way that complies with the European Union's General Data Protection Regulation (GDPR). GDPR breaches come with harsh penalties so data mining must be done carefully and sensitively.

Survival of the technologists

Just as countless other industries have been forced to change, so too will banking. Asset servicing—as it is known today—will evolve dramatically over the next five to 10 years. Firms which adopt and integrate technology thoughtfully into their product offerings will be the provider's customers of the future turn to.

Custodians that fail to embrace reform are likely to be punished, and eventually forgotten about. AST

Shining bright

Lloyd Sebastian of CIBC Mellon provides an update on the asset servicing industry in Canada

Canada's banking and regulatory environment retains a strong position among institutional investors, marked by its status as a robust and mature market, with high rankings for its stability and transparency, attractive risk profile, and status as one of the few remaining countries with an AAA sovereign debt rating. Central to this confidence is the continuing focus of Canadian market participants on a culture of prudent risk management, due diligence and technological innovation. Long known as a global safe harbour in turbulent markets, Canada's market continues to uphold its fundamental 'Canadian character'.

In global estimation, Canada shines brightly as a business destination, offering a diverse, highly-skilled population. Canada continues to be a leader on a global scale in the attainment of higher education. Among 37 of the Organisation of Economic Co-operation and Development (OECD) and G20 countries, Canada is recognised for its leading education attainment rates and ability to develop a skilled workforce. According to OECD data, more than 55 percent of Canada's population between the ages of 25 to 64 hold a university or college degree.

Trade settlements

Market participants continue to take confidence from Canada's robust market infrastructure and efficient settlement mechanisms. The adoption of shorter settlement cycles in various jurisdictions plays out simultaneously for both international and local markets.

Following the implementation of T+2 in European markets, US market authorities had announced their intention to move to T+2 from T+3 by Q3 2017. Given the close alignment of Canadian and US markets, with inter-listed securities and cross-border activities, Canadian market authorities were onside to meet the same targets.

Canada's transition to a T+2 settlement cycle was implemented, in alignment with the US market, on 5 September 2017. The market-wide effort for T+2 trading was carefully coordinated among hundreds of stakeholders, market participants and financial institutions in Canada, the US and other markets. CIBC Mellon experienced a seamless transition to the T+2 settlement cycle for all clients, including clients that are domiciled globally.

Payment modernisation journey

Payments Canada, the organisation responsible for Canada's payment clearing and settlement infrastructure, is currently on a journey to modernise its payment infrastructure with the intention of broadening access to Canada's core payments system, while maintaining soundness and safety, balanced with prudent risk management. According to Payments Canada, the goal of its ambitious modernisation initiative is to encourage innovation and competition and to better meet the needs of end-users. This comes at a time when the payment ecosystem in Canada and globally is rapidly changing—businesses want richer payment data and operating environments that promote efficiencies, such as end-to-end straight-through processing.

Furthermore, Payments Canada is looking to adopt a global approach for modernisation and it notes that all of the countries that have modernised their payment systems have focused on faster payments that are near real-time and always available. Canada's Department of Finance and the Bank of Canada, who oversee Payments Canada, have expressed strong support for this initiative for both the purposes of risk reduction and the promotion of public policy objectives.

Technological innovation and data complexity

While asset servicing providers continue to connect global and domestic market participants, our industry overall is contending with technology and data advancements, thereby transforming providers into leading-edge data enablers from traditional safe keepers and securities processors. While asset servicing providers must continue to deliver on the fundamental service of dependable operational execution, providers are now additionally looked to as a source for flexible access to data and powerful technology.

For example, clients are seeking to tap into a user-friendly online portal to pull tailored data in the format that they want anytime, for reports, transactions and reference materials to assist with their evidence-based decision-making. Clients want a clear view and greater transparency around account activities in order to support governance and risk management reporting that they are now being asked to provide to their stakeholders.

To assist clients with staying well-informed, market participants are turning to their providers to distil complex settlement and account information, in order to receive the confidence they need in the protection of their holdings. Simultaneously, institutional investors also expect their asset servicing providers to leverage new technology. In this environment, providers must take the time to thoughtfully explore new solutions and how they would be securely deployed.

People and technology

Overall in the Canadian market, we are experiencing rapid technological change, and CIBC Mellon is embracing opportunities for innovation. By using automation to drive efficiencies, certain repetitive tasks can be automated, allowing employees to focus on more value-added opportunities. Institutional investors look to their custodians' service teams for local insights, a consultative service experience, and to proactively explore new solutions to help clients achieve their goals. Therefore, one of the most important investments in an organisation is into its people. Firms should build and reinforce an engaged employee culture that is collaborative and insightful and puts clients at the centre.

While up-to-date technology and products, a solid risk culture, and a great client service model are key foundations of our business, our people are central to CIBC Mellon. Our employees' ability to listen to clients, champion client initiatives and understand client priorities, in the framework of the market and industry trends, is critical.

Working with a sub-custodian, having a local presence

Institutional investors should expect their local asset servicing provider to play an active role in industry associations and working groups, in an effort to help bolster and shape industry practices within the domestic market. Additionally, a strong provider should be expected to keep well appraised of global regulatory and industry changes as they relate to the local market. At CIBC Mellon, we have the on-the-ground expertise, coupled with in-depth knowledge of the Canadian market. In addition to providing outstanding service, dependable execution and knowledgeable insights to help clients navigate the complexities of the Canadian marketplace, we pride ourselves on having subject-matter-experts at all levels of the organisation, who actively participate with local associations and industry groups to represent the Canadian asset servicing industry, and champion our clients' interests.

The Canadian market still retains the fundamental character that it is globally known for, anchored by strength, stability and a prudent regulatory environment. We very much look forward to discussing the Canadian opportunity with our valued clients and prospects at Sibos 2018. **AST**

Lloyd Sebastian
Vice president, client strategy and experience, relationship management
CIBC Mellon

Self investment

Having recently made big investments in its securities services platform, Handelsbanken is able to respond to changes and meet client demands, in an agile and efficient way with improved time to market. Jonas Modigh of Handelsbanken explains more

Becky Butcher reports

What are the trends in the Nordic markets?

I believe that we see similar trends in the Nordics as the rest of Europe, and clients are working hard to be compliant with all regulatory requirements.

Clients expect the local providers to have an equally high standard for their settlement and safekeeping services, which is seen as a commoditised service.

However, what we see is an increased focus on asset servicing and an increased demand for an adaptable solution such as asset servicing on a stand-alone basis.

We also see an increased interest for clients to go directly to the Nordics, either by leaving a global custodian set up, or by going directly all the way to the central securities depository (CSD), using different account operator models. We are not sure if this is a trend but we definitely see an increased interest in our products from clients.

In the region we also see changes in tax and relief at source rules coming up in a near future. On top of this, the exit of a Norwegian sub-custodian has affected the whole Nordic market for the local providers.

What changes in the market infrastructure will we see in the next 12 months?

We mainly see changes in the next 12 months driven by Central Securities Depositories Regulation (CSDR) and the upcoming TARGET2-Securities (T2S) implementation in Denmark for the Danish currency, which is the first non-Euro currency going live in T2S. There is of course now also an uncertainty on when Finland will join T2S, and we will have to wait and see what the new timeline for implementation will look like.

For the rest of the Nordics, we do not think that any T2S progress will be made in the next coming years, even though the Swedish central bank wrote in their yearly report that they would like to see the local market taking a position on the issue fairly soon. The delays and failures of the Finnish T2S implementation have clearly shown the complexity of such a project, and that the original target date is often difficult to meet.

The CSDR requirements for preventing settlement fail will lead to a system change for Euroclear Sweden in order to be compliant, and the change is planned to be implemented in October 2019. The preparations for the second part of CSDR, which includes penalties and buy-ins will have a huge effect on all Nordic CSDs, as well as the local market participants. However, the final implementation across the Nordics is indicated to take place somewhere between Q3 2020 to Q1 2021.

Do you see any signs of harmonisation between the Nordic CSD's?

Unfortunately, not as many as we would hope for, and we also see all four CSDs being fully occupied with their internal projects to be CSDR compliant. However, this work to be CSDR compliant will in itself have a harmonising effect for the Nordic markets. We have also seen some development in the issuance area, mainly driven by VP Securities in Denmark and Euroclear in Sweden. As a consequence of CSDR and the new competitive landscape among CSDs, we have recently also seen some price reductions for issuance in the region. We follow this progress with great interest as we service several large issuers in all the Nordic markets.

Handelsbanken Securities Services is very actively engaging in these harmonisation efforts, as well as actively participating in all committees and working groups across the Nordic region in order to achieve a higher degree of standardised solutions in the market that are beneficial to our clients.

What are the biggest challenges for Handelsbanken (or all Nordic custodians) for the coming three years?

We certainly believe that the CSDR changes for settlement discipline and buy-in will be a challenge for many market participants in the Nordic markets, requiring a lot of investments in existing IT infrastructure. A major challenge looking forward over the next three years will be the uncertainty around the local Nordics CSD's outdated IT infrastructure and how this will be handled going forward. Another challenge is the Finnish T2S project where the market once again will need to engage in the project with testing and implementation. And as we currently have no new indications of any timeline, it is very hard to plan for the project.

How well prepared is Handelsbanken for all regulatory and market infrastructural changes?

Since we have already made a huge investment in our securities services platform, we believe that we are in a better situation than most of the other Nordic market participants. Thanks to our new pan-Nordic platform, we are able to respond to changes, or client demands, in an agile and efficient way with improved time to market. This also reduces the risk for our clients who place trust in our modern and stable IT infrastructure.

Our new platform consists of two systems operating across the region, one for settlement and safekeeping and one for asset servicing, which means that harmonised changes like CSDR only requires development in one system for the whole region. This is a huge advantage, both for us and our clients, since it makes the development faster, cheaper and requires fewer resources. This also applies to Handelsbanken Group, for example, having as few platforms as possible with centralised links and connections to the market infrastructure.

What competitive advantages can your new platform bring to clients?

The new pan-Nordic settlement system is fully automated with practically no need for manual intervention at all, and it is operating on extremely high straight-through processing (STP) levels. This is a huge advantage as operational staff can solely focus on exception handling and servicing the client in the best possible way. The asset servicing system created enormous efficiencies after being able to automate the absolute majority of the corporate actions processes in a way we didn't believe was possible before the project started. We are running the whole process for all mandatory events with full automation without manual intervention and most of the processes around voluntary events have also been automated. This is an enormous advantage for our clients, clearly reducing the risk in such a complex area as corporate actions. Both the settlement system and the asset servicing system has been built to support bespoke reporting, where the client can benefit from alternative reporting methods containing tailor-made information. The standard communication is of course built around SWIFT, but our clients continue to have the need for additional or supplementary reporting in other formats and through alternative communication channels.

The entire new platform is able to support different account operating models above the traditional sub-custodian operating model, where clients are seeking to go directly to the local CSD. We experience more and more discussion with clients intending to achieve higher asset safety, higher transparency, visibility in the market and in some cases lower costs. Our platform fully supports these alternatives, including a stand-alone asset servicing product.

What will your stand-alone asset servicing product look like?

Handelsbanken Securities Services has during the year launched two different account operator models in addition to the traditional custody operating model: Handelsbanken Direct Nordic Access (DNA) and Handelsbanken Custody Account Mirroring (CAM). The DNA model is set-up where the clients have their accounts directly opened at the CSD while Handelsbanken, through power of attorney from the client, is operating the accounts. For example, the client outsource both settlement, asset servicing and cash to Handelsbanken. The common area maintenance model is taking it a step further as the client also is taking care of settlement in-house while Handelsbanken, through a power of attorney from the client, mirrors all activity at the CSD and process asset services on behalf of the client.

How close are you to go live with such a stand-alone asset servicing product?

We are actually going live with our CAM-model in November this year, and all preparations have been made and the tests have been very positive. We are really excited about this, and we believe that several other clients will follow in the coming years.

Do you believe we will see agent banks pulling out from the Nordic subcustody scene?

We have already experienced one single market provider exiting one of the Nordic markets this year. This has affected the market, both clients and other agent banks in the region, initially by experiencing the number of request for proposal's booming in the market. Naturally, changes like this open up for business opportunities for the remaining custody providers in the region. However, our primary objective is to focus on our own business and not if our competitors will pull out or not. Our commitment is to continue to generate value for our clients and securing the highest client satisfaction in the market. We are this year celebrating 20 years of pan-Nordic custody services, and we are looking forward to continuing servicing clients for many years to come.

How does Handelsbanken differ from your competitors? Can you offer something unique?

Apart from our new platform, which we believe is something unique in the market, I would definitely say our operating model. Handelsbanken works with select clients, and our aim is not to be the biggest but the best. We take pride in providing equally high service quality to our entire client base, which consists of financially stable banks and institutions.

What Handelsbanken Securities Services also offer is a true Nordic model, where everything is processed within the Nordic region. All our operational processes, IT, customer relationship management, management and supporting units are located within the Nordic region. This is the Handelsbanken model—to always be local. We believe it goes without saying that if clients want to go directly to the Nordic markets, they should go direct and not through the Baltics, Poland or any other off-shore processing site. We are confident that we are able to service our clients the best possible way by being local and thanks to the high automation of our platform, we are able to process the flows in an extremely cost-efficient way. This unique combination makes it possible for us to deliver the highest service levels and still be very competitive on pricing. AST

Jonas Modigh
Vice president, head of sales for securities services
Handelsbanken

Malta:
Hot? Yes, but I'm not talking about the weather

With Brexit fast approaching and regulation at the door, Mathieu Ganado of BOV Fund Services discusses how opportunities in Malta are presenting themselves

Choosing Malta as your fund domicile goes beyond assessing the island for its year-round sunshine and beautiful beaches. No bigger than 30 kilometres in length, size has not stopped Malta expanding itself into an established fund domicile in the Eurozone.

Economically speaking, Malta has boomed in the past decade and continues to do so, supported by high gross domestic product (GDP) growth, minimal to no unemployment, a booming tourism industry, extensive investment in infrastructure, a growing high value-added manufacturing and service industry, and blossoming new economic sectors such as iGaming and distributed ledger technologies (DLT)/ blockchain industry.

The Malta Financial Services Authority (MFSA), the island's sole regulators, operate in line and around European regulatory requirements so as to attract (amongst other financial services related activities), funds and fund managers to Malta in order to stand out as a cost competitive and innovative jurisdiction.

Let's dive deeper into what the MFSA has to offer. First off, a fund in Malta can be set-up in a number of ways.

Funds can be set up as société d'investissement à capital variable (SICAV), contractual funds, investment companies, limited partnerships and unit trust funds. Taking the most popular, SICAVs are open-ended investment companies having a variable share capital.

Once a legal form has been chosen from the aforementioned options then different fund typologies are available to fund promoters, some in line with competing for EU jurisdictions and Euro-wide requirements and some unique to the Maltese regulatory system.

The Professional Investor Fund regime is Malta's biggest selling point and the most popular fund type set-up for de-minimis fund managers looking to set-up alternative investment funds that do not necessarily have to abide by the complex, costly and thorough Alternative Investment Fund Managers Directive (AIFMD) requirements.

This regime targets 'qualifying' investors, as defined by the MFSA, where the minimum threshold per investor stands at €100,000. No leverage or investment restrictions apply and no custody requirements are needed other than safekeeping arrangements by a licensed entity.

Furthermore, fund managers do not have any portfolio diversification requirements and are allowed to invest in all alternative investment strategies.

This fund type, however, is restricted to distribution via private placement and does not benefit from the passporting rights the AIFMD provides.

Notified Alternative Investment Funds (NAIF) are another fund type somewhat unique to Malta, which can be seen as a fast track solution of getting an Alternative Investment Fund set-up and launched.

The process for setting up and launching is pretty straightforward. Notification documentation, templates of which are provided by the MFSA, are filed with the local regulators following the collation of due diligence responsibilities by the applying alternative investment fund manager (AIFM). These are then vetted by the MFSA and a fund is good to go with its launch in a maximum of 10 days after notification subject to being managed by a full scope AIFM in the EU.

Notified alternative investment funds (NAIFs) benefit from the AIFMD passport granted to the AIFM and are typically able to invest in most investment strategies including private equity and real estate.

Having said that, NAIFs are not licensed or supervised by the local regulators since these essentially are manager products, or more precisely investment products of fund managers that are heavily regulated themselves, and thus vested with the responsibility of ensuring adherence to all of the provisions of the directive by its own product.

Other fund types are available to Malta such as the well-known UCITS and AIFs (for example, alternative funds that are captured by the full provisions of the AIFMD) down to the less common loan funds and recognised incorporated cell companies. The latter two structures allow for, respectively, the setting up of funds that engage in the provision of credit to small- and medium-sized enterprises or acquisition of loan portfolios, and serve (in the latter case) as fund hosting platforms for third parties interested in setting up segregated incorporated cells within an existing structure on a rent-a-cell basis.

When structuring a fund, there is no one way to go about it. Whilst appointing an external manager is often the chosen option, for operational and cost-effective purposes, self-management is also a popular choice, especially among de-minimis fund managers. Regulated entities within the EU or European Economic Area licensed to provide investment management services to collective investment schemes typically opt for setting up third-party managed funds whereby the Malta-based funds appoint the same promoter entity as the external manager of the funds.

How to go about it

Self-managed funds are possible across the entire fund typology spectrum. It then comes down to a trade-off between cost and available resources to self-manage.

Self-management is the less costly option, but benefits funds of smaller net asset values, with less regulatory requirements to larger funds.

To self-manage a fund, taking the professional investor fund as an example, the newly set-up SICAVwould be required to set-up a board of directors, consisting of three independent members, who in turn appoint an investment committee, also consisting of three individuals with relevant experience in the investment management field.

Money laundering reporting officer and compliance duties are generally carried out by a member of the board of directors, provided they are residing in the Maltese Islands and possess the adequate knowledge of Maltese regulatory framework and have the necessary training to assume onto themselves the responsibilities that go with the roles. The investment and risk management functions are in turn carried out by the investment committee.

Delegation to third parties for certain appointments and functions are possible subject to conditions on a case by case basis.

A good portion of professional investor funds based in Malta, in fact, are self-managed with the number expected to increase further if the healthy business pipeline currently being experienced is anything to go by.

Malta has come a long way over the past decade, with no less than 600 investment funds currently based on the island. The number has gradually increased over two decades, firmly establishing Malta as a strong presence amongst the bigger fish on an EU wide basis.

Although Luxembourg and Ireland seem to be the domiciles of choice for UCITS funds and most AIF funds, Malta has and is ever continuing to attract de-minimis fund managers to set-up locally. The most recent regulatory development in Malta, which got fund promoters and locally based fund services providers mutually excited (not an exaggeration I dare add), was an amendment to the Professional Investor Fund regime to cater for virtual currency strategies. Since the regulation was announced, numerous crypto-fund managers have been enquiring to set-up on the island.

Malta's position as a crypto-currency fund domicile is further supported by the local government's agenda to position Malta as a global leader in the blockchain sector.

Numerous bills have been passed in recent months in parliament to cater for fintech and blockchain companies and start-ups to re-domicile or set-up respectively. The most well-known name to have so far set base in Malta is Binance, one of the world's leading cryptocurrency exchanges.

Opportunities for Malta don't only present themselves through direct regulatory competition. The Brexit scenario, which many anticipate will impact UK-based firms and asset managers, could lead to an influx of business to the Maltese islands, as well as to other European jurisdictions, as a result of the need for EU based funds to source a European AIFM for example, given their UK asset management firms would no longer be eligible to be appointed as managers under the AIFMD and benefit from the EU passporting rights.

All in all, Malta has a good case to establish itself as a permanent fund domicile. Credit rating agencies such as Fitch and DBRS have in fact confirmed the island's credit rating at A+ and A respectively, as a result of a sound banking sector and improving bank assets.

No wonder Malta is increasingly the domicile of choice for several fund promoters from all across Europe. AST

Moving SWIFTly

Wim Raymaekers of SWIFT discusses trends and challenges of the cross-border payments industry as well as an insight into what the company is currently working on

What trends are you currently seeing in the cross-border payments industry?

Our clients and their customers rightly raise their expectations given the rapid evolution of technology, and they often notice inconsistencies in the application or effects of technology in different spaces. For example, there has been significant and growing demand for faster, more transparent and more convenient payments across borders, especially in relation to the speed of domestic payments. Corporate treasurers are also demanding more transparency, both in the visibility of where in a payment chain a transaction is at any given moment and wherein this process fees are extracted by various institutions and at what level.

What challenges do you think the cross-border payments industry is currently facing?

With the high levels of interest and appetite around alternative payment solutions, there is an increasing call for reform in cross-border payments to bring them in line with the market's expectations. Managing these expectations is key: rather than wait at least three to five years before an alternative technological solution is available on a global scale, it is better to implement new solutions that have been thoroughly tested and are ready to be brought to scale from day one.

One of the key challenges is to ensure that any significant reform can interact and be incorporated into any existing messaging standards and back-office practices: asking our more than 11,000 clients to all radically overhaul their systems overnight is not realistic.

This is why we have carefully built our global payments innovation (gpi) suite of tools to be compatible with the solutions used by our large and diverse pool of users today. For example, SWIFT gpi leverages our bank clients' existing back-office payment processing systems, compliance infrastructures and FX processes to ensure as smooth a transition as possible to our technical offering.

How is technology changing the payment industry?

It's making a higher level of detail possible in the tracking of an individual transaction, allowing more data to be extracted and acted upon. This can range from tracking a transaction's progress to the acquisition of better business intelligence—data is one of the core commodities of the digitised economy. This will transform the relationship between banks and their customers and facilitate the development of innovative financial products.

How is SWIFT working with the fintech space?

From the outset, gpi created an inclusive community, involving banks, corporates and fintechs working together. SWIFT's gpi has been developed in close collaboration with many financial institutions. Currently, over 30 percent of our cross-border traffic is now conducted with the service, via more than 600 country corridors and denominated in more than a hundred currencies. Efficiency savings have been significant—our bank clients report a 50 to 60 percent fall in payment investigations after adopting gpi. These healthy statistics speak to both the volume and quality of our collaboration with various stakeholders. In addition, we are already working with leading fintechs in the UK and Australia.

Do you think collaboration with smaller financial technology firms is the answer to innovation around technology in the industry?

Yes. Collaboration with fintechs is key to our strategy as they bring new ideas and perspectives, as well as open our teams up to new communities from which they can glean new insights. At our annual conference Sibos, there will be 40 fintechs exhibiting, providing a great platform for collaboration and innovation.

SWIFT extended its cross-border payment tracker at the beginning of this year. What does the extension provide clients? And what feedback have you received from clients?

Our cross-border payment tracker offers a similar experience as, for example, a tracker for a parcel delivery. It is a cloud-based tool that is securely hosted at SWIFT that gives end-to-end visibility on a payment's status from inception to completion in real time.

All parties in the payment chain are now connected, which means operational efficiencies and improvements in client service.

Having launched this in May this year, feedback from clients has been very positive, as the gpi tracker allows them to gain autonomy and more quickly respond to investigations and enquiries.

This increases operational efficiency and presents cost-saving opportunities. We are now extending this across our network for all payment instructions to give our gpi customers the fullest benefits possible. The gpi tracker has been deliberately designed to be iterative and dynamic, and development is ongoing.

Are you planning to release any further updates at the end of this year or the start of next? If so, how will these improve clients cross-border payments experience?

We have several new features in gpi coming online this November, and many others in the pipeline. Our strategic roadmap of enhancements and additional services has been developed in conjunction with the gpi member community.

Services scheduled before the end of 2018 include:

- gpi Stop and Recall, which allows for a quicker response to suspected fraud or errors and the ability to immediately stop or recall a sent payment.
- Extended tracking of gpi payments to enable gpi banks to track gpi payments along the full payments chain, even if the banks handling the transaction have not yet adopted gpi.

The extended tracking is particularly important. As of November, all payment messages on the SWIFT network will be required to include the gpi unique end-to-end transaction reference. This enables gpi banks to track all their gpi payment instructions at all times, regardless of whether or not other banks in the process are gpi members. By giving gpi members full visibility on all of their payments activity, these banks and their customers benefit from even greater transparency and efficiency gains.

Together with gpi member banks, representatives of their corporate clients, and fintech partners, we are exploring a number of other

opportunities to improve the international payments experience. This includes:

- A pre-validation service to help make payments error-free at the point of origin and increase straight-through processing
- A tracking service for high-value financial institution transfers
- Leveraging gpi to facilitate real-time cross-border payments by linking a fast cross-border leg via gpi into domestic instant payments systems
- Examining how ISO 20022-based gpi services would operate as part of SWIFT's wider ISO 20022 migration study
- Bringing together banks and two fintech winners of the SWIFT 2017 gpi industry challenge to develop new beneficiary services that focus on accounts receivable forecasting and requests for payment

As part of gpi, we have also organised a pilot programme with a group of 21 leading banks and corporates. The aim is to define and implement gpi standards that corporates using multiple banks can integrate into their treasury processes to increase efficiency.

What challenges are you experiencing around preparations for the implementation Second Payment Services Directive (PSD2)?

By mandating financial institutions to provide dedicated access to core banking services to third-parties, PSD2 can offer significant opportunities for banks to give customers greater speed, control and choice. While banks have long worked with third-parties to enhance their services, PSD2 has prompted institutions to open up their platforms to developers to offer additional application programming interface (API)-based tools, services and functionalities. PSD2 also further opens up the payments marketplace—enabling banks to distribute their products via third-party channels and bundle their products with third-party payment services.

Yet challenges remain for the financial industry in fully implementing PSD2. Open APIs need further standardisation to avoid third-parties having to connect with multiple banks each with a different API standard. And, given the paramount need for security, further work is required on developing a know-your-customer framework which systematically ensures that only trusted third-parties can access the highly sensitive data held by banks. To this end, SWIFT is working with the financial community to apply its expertise to ensure API standardisation and security.

What opportunities will the directive bring?

We anticipate the chief impact of the directive will be the creation of opportunities for innovation. Think back to the early internet, or the arrival of the iPhone—it was clear these technologies would be transformative, but it took time to see which experiments and features would take off.

That's how we see PSD2: it provides a springboard for banks, fintechs and other participants to innovate under a common payments structure that will ensure that services industry-wise are interoperable, and will protect consumers by ensuring that this new flexibility does not lead to new security vulnerabilities.

Meanwhile, in providing the opportunity for banks to act in practice as third parties in relationships between other companies and consumers, PSD2 creates new chances for these institutions to unlock their own creativity and develop solutions that facilitate connections between other banks and their customers: a potentially radical new way for these institutions to compete.

What are your predictions for the next 18 months in the payments sector? What developments do you think the industry will see?

Open APIs are going to be central to discussions industry-wide over the next 18 months. We're going to see an explosion in API-enabled services in both the front and back end.

Banks, corporates, vendors all looking at APIs, and SWIFT is no exception. Our gpi initiative places us at the forefront of this process.

What else is SWIFT currently working on?

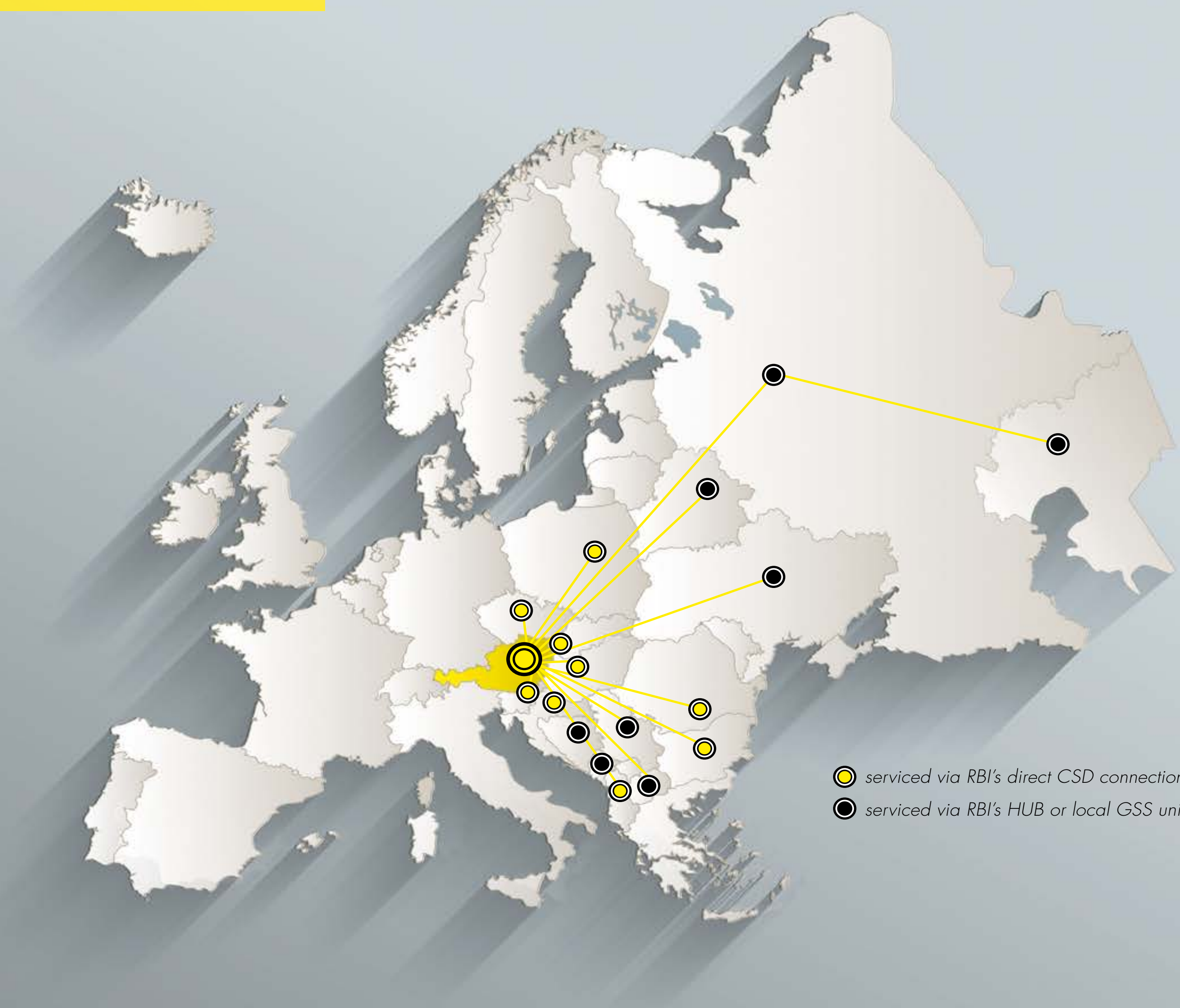
SWIFT gpi is transforming cross-border payments at the moment and a lot of our effort is focused on improving that offering further. We are also exploring exciting new opportunities through the greater use of secure APIs, predictive analysis and artificial intelligence to bring about new and improved services to our community.

SWIFT is not fixed on any set technology, we will develop and deploy whichever technology brings about the quickest and most impactful change for our customers to improve their payments experience. AST

Wim Raymaekers
Global head of banking market
SWIFT

CEE starts in Vienna

One entry to 18 markets



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Mapping out the new payments landscape

Anders la Cour of Banking Circle explains that forces driving change in the payments landscape are coming from all angles, entirely reshaping the landscape, and drawing a new map

Maddie Saghir reports

What does the banking platform of Banking Circle offer? And how has it benefited existing and potential clients?

Banking Circle is a global scale financial utility that gives financial technology businesses and banks the ability to enhance their customer proposition.

By leading the rise of a super-correspondent banking network, Banking Circle is helping financial institutions to provide their customers with faster and cheaper cross-border banking solutions, without the need to build their own infrastructure and correspondent banking partner network.

As such, Banking Circle is empowering financial institutions to focus on the customer relationship, supporting their customers' international trading ambitions without the need for multiple banking relationships, whilst reducing risk and the operational cost of transactions.

Banking Circle gives fintechs the unique ability to offer their merchants the facility to pay suppliers and partners directly from a web interface delivered by them, in their name, but without the need for investment in in-house infrastructure. This is done without any loss of time or cash, truly empowering global trade.

The ground-breaking solution ensures that financial regulation is completely adhered to without impacting on business success.

An integral component of Saxo Payments Banking Circle, Banking Circle Virtual international bank account number gives financial technology and payments businesses the ability to issue multicurrency IBANs in their customer's name and in multiple jurisdictions. Because this enables enterprises to make and accept cross-border payments in different currencies, in a way that traditional banks would simply not facilitate, it means Banking Circle Virtual IBAN is a genuine game-changer, empowering economic growth.

How has the payments landscape in the UK and beyond evolved over the last 12 months? Also, changes to access and transform the payment landscape's underlying infrastructure have been set in motion, what are the challenges and opportunities surrounding this?

Pressure continues to weigh heavily on the shoulders of the financial services industry, with increased regulation, the high cost of cross-border payments, and the correspondent banking system becoming even less effective as banks retrench from foreign markets. Increasing competition to win and keep customers, coupled with new regulation, has already had a huge impact. And the reality is that for the first time in generations the banking industry is on the cusp of big change.

The agility of fintechs—as well as their ability to react to customer needs with more tailored solutions—means that these new players are truly seizing the opportunity. However, fintech businesses and Tier 2 and Tier 3 banks face a common challenge—a lack of access to an international banking infrastructure, which means they are not able to offer easy and convenient handling of low price cross-border payments with low currency risk and easy and fast access to open and close bank accounts in foreign currencies. And this undermines their customer service proposition.

New entrants are changing expectations and demand. As a result, large global banks are retreating from their traditional correspondent banking partnerships, leaving many businesses without access to affordable cross-border payment options through their usual bank. Yet digital-first business is growing rapidly. And as these firms are often global from the start, it is essential to their success that they have access to fast, affordable and easy to manage cross-border payment solutions.

The new breed of fintechs, which are exceptionally good at focusing on the client relationship, are addressing this need. And they are tackling the challenge of having the right back-office infrastructure by working with traditional banks, who provide the necessary pipes and plumbing. But, for banks to avoid ending up as utilities, handling only the less profitable back-office functions, they also need to move up the value chain and focus on delivering the best solutions for their customers.

What have been the key drivers of change in the payments landscape?

Having remained relatively unchanged for many generations, the cross-border payments map is being transformed. The forces driving change are coming from all angles, entirely reshaping the landscape, and drawing a new map.

New regulations, rapidly increasing demand for faster and cheaper cross-border payments, the growth of the global trade market and the influx of new, innovative providers are able to provide more tailored, effective and efficient solutions to businesses with global trading ambitions.

This whirlwind of market changes, alongside new regulatory requirements, is creating a dramatic storm in the industry. As the market has been unchallenged since international trade first began, many traditional banks have found it difficult to adapt and compete effectively. As such they are investing in fintech solutions, whether that comes in the form of creating their own solution in-house or partnering with third parties in an ecosystem model.

Are there any particular trends that you are currently seeing in the payments industry?

Banking Circle recently commissioned research into the changing payments and banking landscape. Featuring a series of interviews with mid-tier and large banks, 'Re-drawing the Map: The changing landscape of cross-border banking and payments', reveals that incumbents of all sizes do in fact remain best-placed to seize the opportunity of the industry overhaul, as long as they are ready for the challenge.

Only those banks that are fully committed and ready for a fundamental shift in the institutional mindset will be up to the challenge. Smaller banks, many of which are already seeing rapid growth in their corporate customer base, also have new prospects in the new landscape. Fintechs have yet to make a significant dent in the dominance of the banks, but this will only remain true if banks adapt to remain competitive.

Since the financial crisis began in 2008, mainstream banks have been less willing to lend, particularly to smaller enterprises. This has forced small- and medium-sized enterprises into an unfair fight for the finance they need to compete effectively. We believe this provides an important opportunity for fintechs and banks to add value to their customer service proposition—as well as generate an additional revenue stream. We surveyed over 500 financial decision makers and directors in SMEs that have an online presence. Almost all of those we spoke to have accessed business finance within the past five years—but many have experienced difficulties in borrowing from their usual bank.

Speed is a big barrier—only three percent said it took less than a week to get the finance set up and generally, the larger the small- and medium-sized enterprises, the longer it took to arrange finance. For some businesses, finance took between five and six months to arrange—a business and its market can change significantly in that time so a delay of this magnitude could have a catastrophic impact on the company.

Looking to the future, how do you see the payments landscape further evolving within the next five years?

In these early stages of the digital economy, large institutions will continue to dominate the payments space. Fintechs, however, could threaten banks' ongoing profitability and success. Smaller, adaptable, flexible and forward-thinking banks also have a real opportunity.

For them, a partnership ecosystem, in which third-parties handle their non-core banking functions, could be crucial.

Working with a third-party financial utility, which can do the pipes and plumbing more efficiently and at lower cost, allows banks of all sizes to focus resources on the client relationship and growing their client base, bringing fresh solutions to market quickly, enabling them to compete with the bigger players.

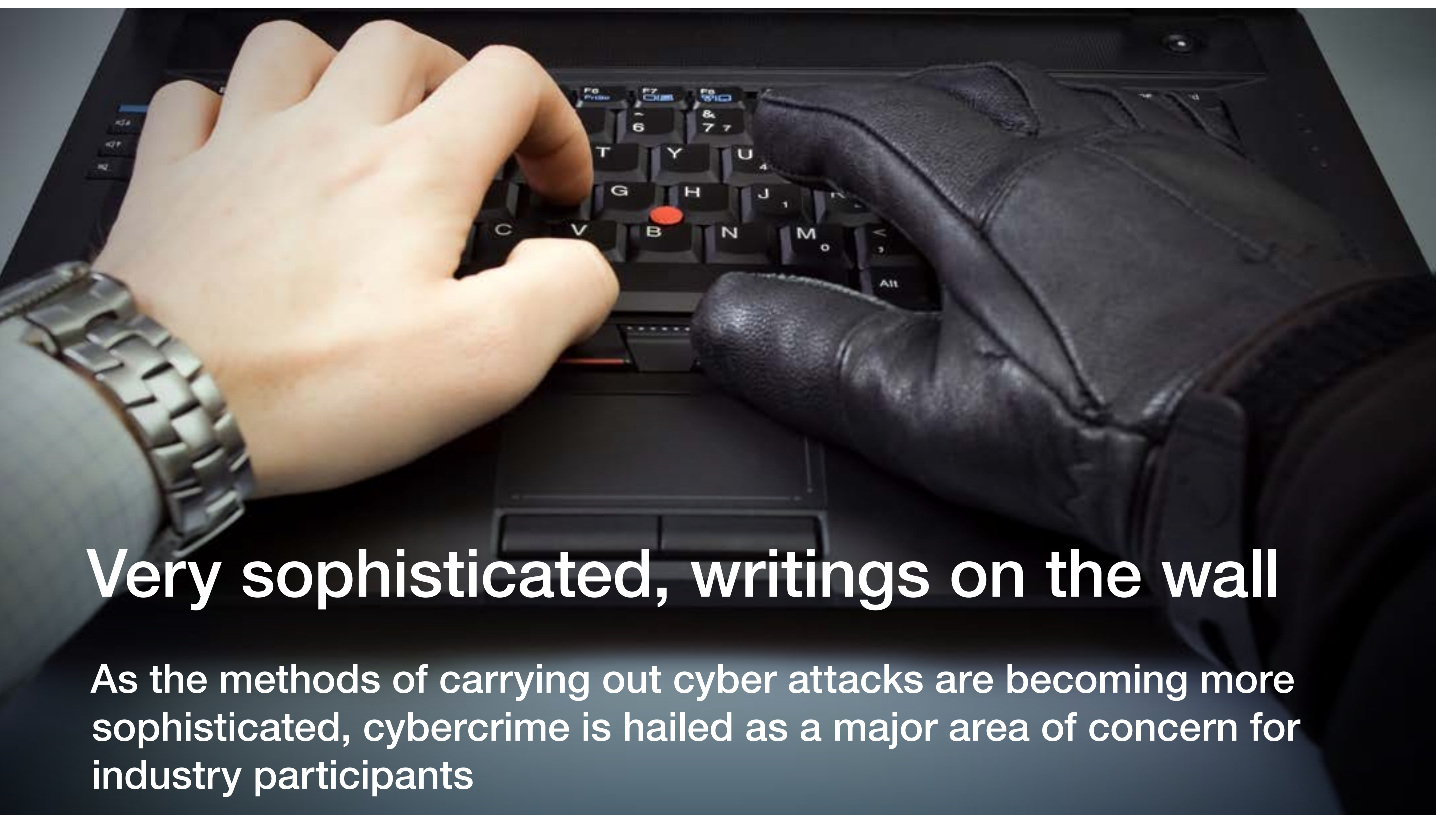
Banks and fintechs wishing to succeed in the digital era need to focus their time and resources on improving and maintaining the all-important customer relationship.

This leaves little room for investing in developing and delivering new solutions—solutions which would meet the current and future needs of SMEs. However, financial institutions must do all they can to keep up, or they risk defeat.

Financial utilities like Banking Circle are, therefore, stepping in to provide banks and fintech businesses with the capability to offer their merchant customers better solutions. Transparent, easy-to-manage, flexible, low-cost lending solutions. We are already seeing banks and fintechs accepting a move towards an ecosystem model, working in partnership with third-party allies able to deploy tailored solutions on their behalf and in their name.

This brings huge benefits to the bank and fintech customers without the usual significant investment required to build and deploy these solutions in-house.

With increasing competition and customer expectations, embracing this ecosystem model is the only way for financial institutions to prosper long-term. AST



Very sophisticated, writings on the wall

As the methods of carrying out cyber attacks are becoming more sophisticated, cybercrime is hailed as a major area of concern for industry participants

Maddie Saghir reports

Nowadays, a bit of online trickery and technology know-how can be all it takes for perpetrators to access private data and money, as opposed to the 'Bonnie and Clyde way' of physically breaking into organisations wearing balaclavas and armed with guns. Cyber attacks have been occurring for a while now and whilst clickbaity phishing emails that install malware onto victims' PCs still occur, people have become less susceptible to them and there are more defences in place against this type of behaviour.

However, the methods for carrying out cyber attacks are becoming increasingly sophisticated, which makes it an overwhelming topic of concern for industry participants. As well as this, it was recently reported that Donald Trump relaxed the US cyber attack rules thus reversing the guidelines that were set in place by Barack Obama, which has heightened concern in the industry.

Additionally, a recent paper from Finextra in association with Equinix, dated from July this year, surveyed 100 financial services professionals, and they were asked to rank seven categories in terms of the level of threat and risk that they expect to pose to their business over the next five years.

Out of the seven categories, cybercrime/fraud was rated as the top threat with 56 percent of participants rating it as a number one priority.

With this as the backdrop, these factors raise the question, how can firm's protect the organisation against cyber attacks?

Frank Carr, CMO of Financial Risk Solutions, states that firms should have established agreed and documented processes in place, for example, all staff should understand an information security threat or incident and breach management.

Carr also explains that firms should have an information security management process to identify, communicate, respond to and recover from security incidents including cybercrime (including targeted attacks using a range of vectors such as malware or social engineering against organisations or individuals) and business disruption.

For Steve Mann, CMO of Arachnys, the human element is a linchpin for effective cybersecurity and he highlighted the importance of reducing the number of false positives.

He says: "False positives can come from a number of sources. Too much network traffic that's mistaken as malicious, some network equipment that fails, true-false positives from an intrusion detection system, or a non-malicious alarm of some sort. The problem here is that with all these erroneous alarms, true alarms get lost in all this irrelevant data. The best way to limit false positive is, again have the human talent to develop the code that can weed false positives out."

Dave Parsons, chief information security officer at Abacus Group, highlights that there is not a one size fits all solution.

Parsons says: "Defense in depth is the philosophy most financial firms take to provide layered protection against malicious activity."

"A stack of security tools including firewalls, intrusion prevention, data loss prevention, consistently updated policies and procedures, and a well-educated user community that breeds InfoSec vigilance and culture is the best defence against adversity."

Meanwhile, Jerry Norton, head of strategy, financial services of CGI, notes that a top-down holistic approach is required in order to protect the organisation and it must be a board-level priority.

Norton says: "The way that a company designs and operates their applications has to be looked at differently–we [CGI] would advise what we call, security by design. Applications should be designed to be secure so even if they are hacked, data such as passwords are not compromised."

Challenging times ahead

Reflecting on the main challenges in the cybersecurity space, Mann said that one challenge is the lack of integration, as with most software stacks.

Mann explains: "If a firm can't integrate its intelligent gathering mechanisms with the solutions for threat mitigation it poses a major gap in cybersecurity defences. It doesn't matter that the firm has great technology if that technology cannot be directed against the true threat."

Parson hails the increasing sophistication of hackers as one of the challenges in the cybersecurity space. Elaborating on this, he said: "Convincing phishing websites combined with social engineering efforts create targeted 'spear phishing' campaigns. These are run by teams of professionals with the determination required to elicit the confidential corporate data required to make money on the black market. Ransomware installed as a result of successful spear phishing attacks has been particularly troubling."

Norton also attributes the sophistication of malware to one of the biggest challenges, he adds: "That malware is allowing people not only to defraud organisations but to cover their tracks after they've done so."

Here, there, and everywhere

With increasing amount of data being shared, the abundance of data is inevitable but will we be able to overcome it?

António Jesus, CTO of Know Your Customer, cited that one of the ways to correlate such diverse and time-agnostic data is to combine machine learning (ML) with semantic correlation and classification of data.

"However, this often does not work. We believe that the next big thing will be to semantically tag all extracted data so it can be directly correlated to other data in real time from the web", Jesus explains.

"As processing power improves, so do the tools to process the data in near-real time. The way we see it, unstructured live data is the new database, and semantically querying that data is the new search. We're still a bit far from it, but we're way closer than yesterday."

Norton comments: "The difference between authentication and authorisation is important; when an individual has been authenticated through some sort of out-of-bound method, like an SMS message or a biometric, their access to information must still be controlled."

"There are a number of techniques that allow you to ensure that access to certain data types is restricted to the authorisation granted and who has the data."

"The abundance of data is effectively controlled by who is allowed to see what and the risk factor that is associated with it. With tokenisation, one individual does not have access to all of the data, merely a portion."

"Data must have time expiry. There are authorisation protocols, such as the Open Authorisation (OAuth) 2.0, which is typically used in open banking and other open domains which cater for all of these methods. Some security experts believe the OAuth can be compromised, it's not necessarily the only way of doing it but those types of techniques allow control of data."

He adds: "Of course end customer consent is also important when accessing data—you're creating a trust framework with certain people at different levels."

Parsons comments: "Computer files are dated and can be searched. System administrators must be required to audit data, create appropriate archives, and then destroy active data beyond legal expiration dates."

Meanwhile, Steve Marshall, managing director, and head of State Street Verus, explains that in order for us to manage data, it's important to understand that all data isn't equal, and just because something is knowable, it doesn't make it valuable.

He says: "The winners in this race will be those who effectively find a way to identify which data is most relevant and the potential impact on them. Those who fall prey to information paralysis will be those who try to gather as much information as possible for its own sake without any clear way to distinguish between the small, valuable bits and the huge amount of irrelevant data."

Collaborate

In regards to how firms can collaborate around cybercrime prevention, Mann highlighted that firms are inherently cautious about sharing information, most notably technology since it provides such competitive organisations from firm to firm.

"That being said, when there is a common vested interest, organisations can let down their veils of secrecy, to share knowledge, strategy, and implementation details", Mann adds.

Reflecting on the positives of collaboration, Norton says: "Notwithstanding the health warnings around conflicting responsibilities, sharing some facilities will, in theory, bring all organisations to the same level. The economics of cybercrime apply to the individuals orchestrating the attacks—it can be expensive for them to create attacking software, so it may be 'tested' on one organisation before targeting another."

"If the 'tested' organisation shares details of the type and service of the attack, the next potential target can be informed at the same level."

Adding an example of collaboration, Parsons says: "Threat intelligence consortiums such the Open Threat Exchange managed by Alienvault are a good example of a collaborative defence community designed to produce actionable, community-powered threat data."

Can AI help?

While artificial intelligence (AI) receives a somewhat mixed reception in the industry, the majority of industry participants seemingly agree that it can play an important role in analysing data for anomalies if leveraged correctly.

Adam Smith, CTO of Picadilly Labs, explained that AI, used with ML, is great at classifying items into groups.

"Models can be trained with vast amounts of transaction data, and derive patterns from those data. These models and patterns can then provide a 'gut-feel' recommendation, on a per-transaction basis, and incorporate a variety of data; in this case, the data could be the account holder's previous transactions, usual locations of the card, and information about the merchant such as their type, location and fraud history."

However, Smith warns that although machine learning and AI are creeping into everything, it is not a silver bullet and like any technology, it has to be used appropriately.

Agreeing on this point, Mann says that while ML and AI can help automate threat detection and response while easing the pressure on security professionals, the view that AI is the be all and end all, is pure hype.

"In the financial crime space, there is an analytics arms race underway. Financial institutions are using AI and ML to better identify and thwart bad actors trying to launder money, finance terrorism or some other nefarious purpose. At the same time, these bad actors are using the same technologies to improve the velocity, and efficiency of their attacks. The same arms race is underway in the cybersecurity arena. Attackers are also adopting ML technology to thwart cyber defences. Time will tell who will win."

Chirag Patel, head of research and advisory in Europe, the Middle East and Africa at State Street Global Exchange, says: "As the industry shifts from historically using smaller, structured datasets towards larger, unstructured 'big data' sources, the application of AI-driven ML techniques in anomaly detection and bias correction will become key because human analysis of these datasets will become intractable and require a marriage of technological expertise and practitioner insights."

The role of regulation

"The concept that security of data and systems need to be somehow regulated by an independent party or by the government is generally agreed upon. But the real question is how", Jesus considers.

"The risks involved are extremely high, and the victims of these attacks are not only big corporations anymore. The General Data Protection Regulation (GDPR) is a major step in regulating data protection in Europe, but it obviously falls short in areas where it does not intend to regulate."

"That's where the Network and Information Security Directive comes into play. Some of its measures are extremely important, but they fall short on one essential aspect: prevention. In this matter, regulation is very slow-paced. The pace of technological change is so fast that any framework that gets put in place by traditional regulatory approaches will become useless in no time."

Parsons comments: "The advantage to regulatory requirements for security practitioners is mandate. Budget is justified and resources are allocated. GDPR pushed the incident response programme at our organisation years into the future. Even if you are forced to bootstrap solutions, you and your team are pressed into service, and results will be achieved."

Norton says: "The regulators have got a lot to do in terms of encouraging hesitant organisations to disclose information about attacks, which is crucial. They can also raise the bar by setting minimum criteria and helping organisations such as banks to comply."

Norton also highlights the importance of ensuring that the banks' supply chain is strong and there are no weakest links. Concluding on a positive note, Norton states: "The duty of care towards outsourced organisations is rising throughout the whole industry." AST

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Take a fresh look

Michael Wood of Broadridge Financial Solutions discusses new opportunities for automation in the management and delivery of corporate actions

Corporate actions have traditionally been challenged with overly manual processes and have for many years lagged behind other areas of the pre- and post-trade world in terms of automation and straight-through processing (STP). Lack of standardisation across jurisdictions and markets, as well as a lack of technology investment have been traditional hurdles. There has also been only limited appetite to tackle automation in areas seen as too complex, too risky and non-differentiating.

For the processing teams of a corporate actions operations group, messaging standards changes including ISO 15022 and ISO 20022 as well as recommendations from Securities Market Practice Group (SMPG), who have helped to gradually chip away at the problem, but this has been a process of gradual improvement over many years as opposed to a real automation breakthrough. In addition, with technology investment often lacking, improvements in standards or demands from clients have simply resulted in additional manual processes which exacerbate the issues faced.

While full end-to-end automation is in many cases unachievable, or even undesirable, there are major areas of the corporate actions process where technology advancement and different ways of thinking can now play significant roles and may drive the next generation of change at a far greater pace.

Digital delivery is one such area of advancement, presenting an opportunity that can enable an enhanced client experience. The notification and elections process between investment managers and end clients are now becoming far more digitalised as 'sophisticated' investors increasingly bring technology to bear and retail investors demand a move away from traditional communication methods.

Technology plays a significant role here in allowing an organisation to deliver notifications via digital channels and capture elections in real time in return. The most advanced organisations are now able to meet client demands to differentiate in this space, using technology to their advantage to offer the most competitive election deadlines. However, without investment in automation, this is simply too manual and prone to risk. With tight margins and pressure on firms to create new revenue streams, it is increasingly important for corporate actions technology to play a greater role in enabling business opportunities.

Traditionally seen as an operational 'cost of doing business', forward-thinking organisations are now using the information in the corporate actions process to their advantage. Having a single application used globally across a firm's multiple business lines throughout the lifecycle of a corporate action event is crucial in order to maximise business benefits here. The opportunities this can present are numerous, and include:

- Real-time digital feeds of a single Golden Record, available for use across an organisation, alerting traders, investment managers and decision makers, enabling them to act on the latest information at the earliest opportunity.
- Arbitrage opportunities can be identified and presented to the front office, enabling traders maximum opportunities when managing long/short or synthetic/hedge inventory, for example.
- Through a real-time business-wide view, global inventory can be optimised between depositaries or legal entities to take advantage of trading strategies for different currency options or deadlines.
- Elections can be captured once and passed through all legs of financing transactions, with risk mitigation through a centralised cross-region view and seamless multi-leg automation.As well as the direct opportunities that exist, client service differentiation can also be achieved, for example by having an application identify elections that may be 'in or out of the money' rather than just acted upon regardless.

Of course, the traditional operation also gains huge benefit from the single global application. One single place to manage an event across regions and often multiple books and records allows an operation to centralise and standardise controls and processes, reduce risk and remove manual, duplicative processes.

All of this is possible today with currently available digital and cloud technology. But the pace of change varies significantly between firms, with the leading adopters better able to transform service provision to both internal front-office clients as well as externally through a more dynamic client service experience, while also mitigating risk through an operationally efficient framework.

In future, however, we may see an even greater pace of change, in part driven by emerging 'disruptive' technologies, enabling yet further differentiation between the leading adopters and those lagging behind. This is most likely in two places.

Firstly the industry has always struggled with the process of sourcing corporate action announcements. The lack of automation and lack of central bodies from which to source the data means that the entire industry spends substantial amounts in this area—both in sourcing the data and in building technology to interpret it.

Encouragingly we are seeing an increasing willingness from industry participants to look at collaborative ways to finally break this data impasse. In many cases the industry sees trusted service providers as being in a position to play a role in transforming this space, helping to bring organisations together through a shared service model.

Technology such as blockchain is also seen as likely to play a role here in order to drive efficiency and service quality, and while pilots so far have mostly focused on proxy vote processing, extending beyond this into other types of corporate action is a realistic goal.

Secondly, in operations, in particular, the technology focus is shifting significantly towards the use of machine learning/artificial intelligence (AI) to replace currently manual processes. Again, however, the opportunities to use AI to an organisation's advantage can often suffer from traditional issues such as a lack of data standardisation.

Here firms are again increasingly willing to look beyond their own walls and partner with financial technology innovation leaders to create solutions across a network of firms and capitalise on synergies and efficiencies that cannot be realised alone—for example in the area of claims management.

By taking a fresh look at the place of corporate actions in an organisation, opportunities exist today to generate real line-of-business value and to drive efficiency in the back office.

Firms can take their organisation forward by capitalising on the latest innovations for global, single-solution corporate actions technology, while readying for the next phase of disruptive technology and machine learning. AST

Michael Wood
Head of asset servicing product management, global technology and operations
Broadridge Financial Solutions

A clearer picture

Intraday liquidity risk has been a focus for regulators since the start of the financial crisis. Peter Hainz of SmartStream discusses how the banking industry is currently faring with the implementation of the Basel Committee's monitoring tools for intraday liquidity management

Maddie Saghir reports

The regulatory picture

Published in April this year, the 14th progress report on the adoption of the Basel regulatory framework sets out the adoption status of Basel III standards for each Basel Committee on Banking Supervision (BCBS) member jurisdiction as of the end of March this year. The report, among other matters, considers how states are progressing with the introduction of the monitoring tools for intraday liquidity management, which the BCBS has recommended supervisors to implement.

The BCBS review found that a number of countries have reached the fourth stage of implementation—stage four is reached when the final intraday rule is in force, and the domestic legal and regulatory framework has been published and is put into practice by banks.

Europe

In the EU, France, Germany, Italy, the Netherlands, Spain, the UK, as well as Belgium and Luxembourg have all achieved stage four of implementation. EU regulation (article 86 (1) of the CRD) sets out that institutions shall have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of intraday liquidity risk. Looking outside the European Union, Swiss Financial Market Supervisory Authority (FINMA) started intraday liquidity monitoring of Switzerland's five largest banks on 1 January 2015. The rule setting out the requirement to monitor intraday liquidity was published in Russia in December 2015 and has been in force there since January 2016. Implementation in Turkey commenced in January 2017.

The Middle East and Africa

BCBS 248 intraday rules are in force in Saudi Arabia, South Africa and India. In Saudi Arabia, the final rule was published in June 2016 and came into operation on 1 January 2017. In South Africa, amended requirements were incorporated into regulations and came into play on 1 July 2016. The rulings came into effect in India on 3 November 2014.

Asia and the Pacific

Australia and Singapore have introduced and implemented BCBS 248, while local licensed banks in Hong Kong began monthly reporting of intraday liquidity positions at the end of October 2015. The final rule is also in operation in Indonesia, where regulation was issued in December 2015 and came into force in January 2016. In contrast, China has not published a draft regulation. Intraday policy, however, is under development. Japan is listed, too, as not having published a draft law, regulation or other official documents. A final intraday draft rule is under development in South Korea.

The Americas

Regulation regarding liquidity management has been in force in Brazil since January 2013. Canada and Argentina have finalised and published local legal and regulatory framework but adoption by their banks is still underway. Mexico has an intraday draft under development, with publication expected later in 2018.

Interestingly, the 14th progress report on the adoption of the Basel regulatory framework notes the US as a country where the draft intraday regulation is not published. Industry participants which have undergone liquidity reviews have, however, provided feedback that the Federal Reserve System has a strong focus on intraday monitoring.

Regulatory interest in the quality of banks' technology

Answering the demands of the new regulatory regime has put banks' IT systems in the spotlight. Financial authorities are now interested in the quality of the technology financial institutions use to meet their intraday liquidity monitoring and management responsibilities. Take the case of the UK, for example. In February this year, the Prudential Regulatory Authority (PRA) published its Statement of Policy Pillar 2 Liquidity. In relation to the overall assessment of intraday liquidity risk, where an add-on is applied to mitigate intraday liquidity risk, the PRA stated it would take into account a firm's mean maximum net debits, its stress testing framework, relevant market characteristics but, importantly, also the quality of the firm's operations, process, technology and policy.

Clearly, the UK regulator is keen to know how good banks' IT systems are and how 'real-time' their monitoring and management of intraday liquidity truly is.

Overhauling technology to meet regulatory demands brings challenges but banks are realising that having the appropriate IT systems can bring advantages, beyond just an ability to satisfy regulators.

Macroeconomics

Financial institutions must now respond to speedily unfolding, sometimes unpredictable geopolitical events—often caused by Twitter messages. Emerging markets are currently subject to greater fluctuation, too. With ultra-low US interest rates, quantitative easing and a relatively weak dollar since the start of the financial crisis, borrowers have piled into dollar-denominated debt. Increasing US interest rates have led to more volatile emerging markets as countries are hit hard, finding that their dollar-denominated debt is suddenly not so cheap.

In the low-interest rate environment, banks held cash buffers. With the Federal Reserve increasing rates and facing markets shaped by often unpredictable geopolitical and macroeconomic events, banks are having to rethink the way they manage cash and liquidity. They want greater visibility into the funds they hold, giving them both more flexibility to respond to events and the ability to manage their money more profitably.

Technology challenges

Achieving clear visibility of cash and liquidity is more easily said than done, however. At many financial institutions—especially tier two and three banks—cash management remains a manual, end-of-day activity. There is no way to track actual positions without real-time automation and so poor management of funds leads to missed opportunities and increased costs. As one senior manager remarked to the author, 'I am flying blind without real-time cash and liquidity data, I need a real-time view on account and currencies'. To make matters worse, banks have inherited a slew of legacy systems—

the result of successive rounds of mergers—further obscuring the understanding they have of their cash and liquidity situation.

To get around these weaknesses, firms must consolidate existing siloed infrastructures into one automated enterprise-wide solution. Ideally, such a cash and liquidity monitoring and management platform should provide a unified, global view across all currencies and accounts.

Only with this type of single system in place can the institution, with all its subsidiaries, ensure that liquidity buffers and limits are set correctly. The technology chosen should also be able to work with different message types, from SWIFT through to Saudi Arabian Riyal Interbank Express (SARIE).

Systems must meet other requirements, too, as a brief overview reveals.

The back office

Banks' back offices are eager to move away from the use of end-of-day data. If there is, for example, a big payment in the afternoon, banks do not have visibility of what happened in the morning with yesterday's end-of-day-data. Real-time automated cash and liquidity monitoring and management solve this problem.

They want systems that allow them to gather and reconcile high quality, real-time data, which can then be channelled into functions such as cash sweeping, account forecasting, exception management and the central control of payments—activities vital for ensuring the efficient management of intraday liquidity.

Financial institutions are keen to establish increased control over and visibility into the payment process in order to resolve issues and to ensure that payments are released on time. This is also in keeping with regulatory objectives, for example, BCBS 144, which states that "a bank should have a robust capability to manage the timing of its liquidity outflows in line with its intraday objectives".

Consequences of the above are that firms looking to enhance their payment scheduling capabilities to throttle payments based on intraday liquidity usage.

The middle office

Banks and supervisors should also consider the impact of a bank's intraday liquidity requirements in stress conditions.

As guidance, four possible (but non-exhaustive) stress scenarios have been identified by BCBS 248—their own financial stress, counterparty stress, a customer bank's stress and market-wide credit or liquidity stress. Risk management and analytics required to support these tests are generally provided by the middle office.

The front office

In the past, cash and liquidity monitoring and management fell, primarily, to the back and middle office. Today, front offices (for example, FX and MM Treasury desk) increasingly ask for a real-time cash ladder view—a cash and liquidity forecast per currency, based on real-time data.

Another issue in the front office concerns the use of longs to cover shorts. All too frequently, one entity within a bank goes to the market to borrow when the necessary funds are, in fact, actually available in another part of the organisation but invisible because of the lack of enterprise-wide transparency. This shortcoming results in extra and unnecessary costs.

Finally, it is important for the front office to be able to prove to regulators that money can be moved rapidly, should that be necessary.

Regulators and technology

Interestingly, there also is an increasing demand amongst supervisors to enhance the quality of their technology. This includes, for example, using artificial intelligence in order to detect anomalies automatically in the vast quantities of reporting data, which financial authorities must gather.

Conclusion

BCBS 248 was published in 2013 but fast forward to the present and banks have gone beyond simply seeing intraday liquidity risk as a regulatory play. Financial institutions are realising that a clear and accurate view of intraday liquidity also allows a more agile response to the shifting tides of macroeconomic events and promotes banks' ability to survive in today's highly competitive, rapidly evolving commercial environment. In order to achieve the necessary visibility, banks must create an accurate, real-time, holistic view of all money movements, that can provide not only the back and middle office with a clear picture of cash and liquidity but the front office, too. AST

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Despite the challenges facing the German banking industry, there are bright spots, notably in serving the local and international needs of Mittelstand clients, and in the ability to provide more efficient and better service to retail and corporate clients through online channels. Germany's best bank, Commerzbank, is focusing on both these opportunities.

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On the horizon

Demi Derem, general manager of international investor communication solutions business at Broadridge, discusses proxy voting and its technology-enabled drive to improve corporate governance

Investment priorities are evolving

Investors are demanding greater transparency, risk-balanced financial returns and more of a say in how the companies they invest in operate. These changes are being reflected in the wider investment eco-system. Within the last 12 months the European Commission has published the amendment to the Shareholder Rights Directive (SRD II) and launched an action plan on sustainable finance, and the UN principles for responsible investment launched a programme to reimagine modern portfolio theory.

In addition, the UK's Financial Reporting Council has revised its Corporate Governance Code and many other agencies have launched similar projects. In summary, there is a lot of activity and focus on all things corporate governance.

As investment priorities have changed, good corporate governance has become central to the investment process, and this has placed shareholder voting firmly under the microscope. After all, voting is the ultimate mechanism by which investors hold to account the directors of the companies in which they have invested.

Institutional investors are now demanding that their custodians provide best-in-class voting windows and reporting services—and this demand for increasingly sophisticated reporting flows is being seen throughout the shareholder intermediary chain.

All of this activity is driving changes in the way that shareholder voting and related services are provided. The EC has just published its final implementing regulation on SRD II. As these rules are transposed, custodians and intermediaries will need to examine their voting services and make changes in order to comply, whether that is to improve accuracy, timeliness or other issues in the areas of information distribution, vote execution and transparency.

The technology evolution

Custodians and intermediaries will need to leverage existing and emerging technologies to provide their solution, and in assessing their readiness, careful consideration should be given to their service provider's track record of fintech investment, innovation and market reach to ensure that they are fully prepared for the wave of changes that will be required over the coming months and years. At the same time, asset owners have a growing appetite to oversee voting and obtain confirmation that their voice has been represented in a meeting—more than ever the need to ensure and report that a vote got to the right place at the right time is becoming a market differentiator in the custodian world.

When SRD II is transposed into a mandatory requirement across each jurisdiction, investors are hoping that they will obtain full access to vote confirmations throughout Europe. An arguably bigger change coming with SRD II is in the area of Shareholder Disclosure. The EU's plan for an automated disclosure regime is ambitious, and not without challenges as markets adopt this theme of the directive.

Failures in the onward distribution of disclosure notices could have a significant impact on the ability of intermediaries to comply, and the EC has been clear that market regulators must do what they can to ensure compliance of intermediaries.

Blockchain innovation for the voting process

The evolution of shareholder voting will not stop with the SRD II. Custodians and their service providers recognise the benefits that new technology can bring to a range of processes in the capital markets.

One key technology which has been widely experimented with is blockchain. We believe that blockchain processing offers significant benefits in managing the voting life-cycle and improving the overall voting eco-system.

Unlike older technologies, blockchain provides an open, inspectable ledger of votes cast and represents a true step forward to help address the vote confirmation which will shortly be required by all that participated in the voting chain as a result of SRD II. This, in turn, will help support the drive for increased governance standards globally as non-EU jurisdictions adopt similar practices in the drive for transparency and vote confirmation.

With this in mind, Broadridge's strategic technology investments have included a significant focus on real-world applications of blockchain technology. We have partnered with leading corporate issuers, investors and custodians to deliver and test blockchain technology in proofs-of-concept, tested alongside real voting at large general meetings. This technology is ready for the mainstream, and our plan is to help the proxy industry take a leap forward over the next few years.

Looking ahead, thoughts for the future

Where will the industry be in five years' time? Undoubtedly the eco-system will evolve driven by margin pressure, and market and regulatory change. Issuers should have improved access to timely shareholder information, and it would not be surprising to see those benefits extended to issuers throughout the Asia Pacific region. Vote confirmation will be the norm, and issuers failing to confirm votes cast may be viewed as an investment risk.

Custodians and other intermediaries will need to offer their clients access to more advanced voting services and will be increasingly reliant on technology to support this function. Investors will become more sophisticated than ever in their selection of asset managers, and corporate governance practice may well be the first question for all. AST

RPA: ruthless efficiency at any cost?

As the incessant barrage of new regulations is slowing, Arnaud Misset of CACEIS explains that the fund industry is shifting its focus to ramping up innovation and improving efficiency

The incessant barrage of new regulations is slowing. The fund industry finds itself with the ability to shift focus away from the resource-intensive burden of implementing regulations, and look to ramping up innovation and improving efficiency. Although companies have done their utmost to maintain innovation during recent years, business efficiency has often taken a back seat due to the entangled complexity of new regulatory processes taking up IT development time. In an increasingly competitive environment with ever-growing data volumes, the fund industry is keen to understand the opportunities in terms of efficiency, and a key element in the search for efficiency gains is robotic process automation (RPA).

Simply put, RPA is computer software that can use IT systems designed for humans. Clearly no automatons here, but instead, software that can operate with extensions such as optical character recognition (OCR) to read hand-written entries such as in forms, natural language processing (NLP) to extract data from unstructured text, chatbots to respond to standard queries and possibly artificial intelligence. RPA's ability to perform data entry, and use plug-ins to understand and respond to client queries makes it analogous to offshoring, and in some ways it is, but it has some key differences.

CACEIS has decided to undertake very little offshoring, as the potential loss of control (through dealing with a far-off provider with cultural differences and being just one of a number of clients) is a major factor that explains the reticence to pursue that avenue. RPA, on the other hand, enables companies to maintain control of their business, especially if they create the competence centre internally rather than rely on an external provider that may itself become a source of issues due to the lack of required industry expertise. Many companies see this RPA technology as a key component of the future financial ecosystem and therefore choose to make the necessary investments internally.

We are often said that RPA's principal objectives are nothing more than the ruthless pursuit of pure efficiency, however, the reality is different—and certainly not just marketing 'spin'. The back-office, which is always the first area to go under the RPA spotlight, is where we find a glut of tedious, repetitive processes that are the source of a high level of operational risk and have low added value. RPA's prime objectives in such an area are to reduce operational risk stemming from human error; improving client experience by increasing service quality and professionalism; and freeing-up staff for tasks where human intervention is key, such as client contact and handling more complex transactions.

Most RPA projects start in the back office, however, prioritisation of the processes is an essential task both in terms of the project's efficiency (picking the low hanging fruit first as opposed to simply branching out) and in terms of its image within the company, (targeting the tedious, repetitive processes where there is a low feeling of ownership). Here, RPA goes hand-in-hand with a 'lean management' approach, which promotes continuous efficiency and quality improvement through small incremental changes over time. One should not forget that, whenever RPA is implemented on an isolated process, the impact on upstream and downstream processes must be carefully considered. Later on, as the patchwork of isolated tasks taken over by RPA start to interface with each other, efficiency levels can then further improve. On average, RPA increases business efficiency by some 10 to 12 percent for individual tasks, but this figure can rise significantly when several processes are daisy-chained, end-to-end.

We have already established that an in-house RPA competence is preferable, but let's take a look at an ideal structure that should ensure a successful RPA project within any company. Along with the RPA specialist, three other positions are essential within the piloting group—first, a business analyst to explain the processes to the RPA specialist and ensure everything is exhaustively documented to avoid loss of skills/expertise. Second, an operational representative ensuring all members have a complete understanding of the tasks involved and acting as a project sponsor for the Operational department. Finally, an IT representative responsible for the systems with which the RPA will interface is required. All three people should make up the core team from the project's outset and ensure the project remains on track.

The final point that should never be underestimated in any RPA project is communication. There is a lot of fear surrounding the topic, and it's not limited to operational department employees.

Management, IT, compliance, risk, legal, HR and other areas may be impacted by RPA, and together with operations they need a structured communication campaign to explain the technology, the benefits and goals in order to get them on-side. Liaising with staff representatives and trades unions are also a key part to ensure smooth implementation of what is a very promising technological innovation. AST

Arnaud Misset
Chief digital officer
CACEIS

Are you ready for the initial margin rules?

Requirements for the mandatory exchange of initial margin are expected to be time-consuming and laborious to implement. David White of triResolve discusses the lessons learned from in-scope firms, obstacles to achieving compliance and how automation can increase operational efficiency

Becky Butcher reports

The mandatory exchange of initial margin (IM) is being phased in based on a notional threshold amount that will reduce over time. The largest firms began exchanging IM in September 2016, and the final group of firms will come into scope in September 2020.

Preparation for meeting these requirements will take significant time and involve intensive efforts to ensure systems, processes and documentation are in place, according to the International Swaps and Derivatives Association (ISDA).

Regardless of when a firm comes into scope, the time to begin preparing is now.

TriOptima has helped many phase one and two derivatives dealers meet their IM requirements. With vast experience in valuation and collateral management, it understands the complexities of the regulation and is ideally placed to help firms overcome the challenges.

To aid the market's compliance efforts, David White, head of sales at triResolve, highlights the lessons learned from in-scope firms, the key challenges to achieving compliance and how firms can increase operational efficiency by automating the process.

What trends has TriOptima observed so far among firms in phases one and two?

There are many, but the overriding trend is the market's adoption of International Swaps and Derivatives Association's (ISDA) standard initial margin model (SIMM).

If you review the IM rules, they dictate that firms can calculate IM in one of two ways: either through a regulatory-approved model or via a schedule-based percentage-of-notional approach.

The latter doesn't really allow for netting and is quite expensive, so the ISDA SIMM has provided exactly what it says on the tin: a standard way for the market to calculate IM via an approved model.

What are the key challenges firms face in complying with the IM requirements?

I think there are three big challenges: calculating inputs, managing margin calls, and resolving disputes.

The calculation is arguably quite easy, as firms can access this off the shelf from ISDA. The challenge arises in calculating the inputs to the ISDA model on a daily basis. This requires the calculation of trade-level sensitivities, which has proved onerous.

The next hurdle arises once those inputs have been calculated and fed into the model: how are you then going to efficiently agree and exchange those margin calls with a counterparty?

Finally, there is the challenge of dispute resolution. Despite using the same method to calculate IM amounts, differences will inevitably arise when input data differs to your counterparty data. You need to be able to reconcile sensitivities to pinpoint dispute-driving differences and establish a coherent dispute-resolution process.

How can automation help, and where is it most effective?

Firms should be looking to automate both their IM and variation margin (VM) processes.

Through automation, resources can be freed up to focus on exceptions. In doing so, firms will have more time to resolve disputes. By prioritising dispute resolution, there is less risk to the firm and the market as a whole.

For TriOptima, this is key—firms should unquestionably be automating the margin call exchange and agreement. In terms of dispute resolution, there must be an efficient way to identify and reconcile sensitivity differences, and a method to highlight the differences between what are driving disputes on any one day.

What factors should firms consider when developing an automation strategy?

To automate this process, a bifurcated collateral management model cannot be used. Instead, which vendor can provide a solution for all parts of the process—IM and VM—must be considered.

Can the solution your firm is adopting calculate inputs to the VM process? Can the vendor your firm is looking at produce inputs to the IM calculation sensitivities? Can your firm have an automated process around the exchange and agreement of margin calls, and does it have an automated and efficient way to resolve disputes with counterparties?

A vendor that can answer all of these questions and has a seamless data flow between all constituent parts will maximise the chance of implementing an operationally efficient solution.

TriOptima's seamless initial margin solution

TriOptima makes compliance with initial margin requirements easy. With one simple trade file, your firm can benefit from an end-to-end solution to calculate inputs, manage margin calls and resolve disputes—with no complicated integration or installation required.

Calculate your inputs margin calculations must be performed using an approved model or predefined schedule. ISDA's Standard Initial Margin Model (SIMM) has been universally adopted by the industry and requires portfolio risk sensitivities as inputs. Our triCalculate service can calculate these trade sensitivities for you. With one simple trade file, you benefit from out-of-the-box calculation of SIMM inputs on a platform that keeps pace as the model evolves.

Manage your margin calls. An efficient workflow for exchanging and agreeing margin calls with your counterparty is essential for success. triResolve Margin, the market's leading collateral management solution, automatically captures IM amounts enabling automated, exception-based margin call exchange with your counterparties.

Resolve your disputes. Despite using the same method to calculate your IM amounts, differences will inevitably arise when your input data is different to that of your counterparty. AcadiaSoft's IM Exposure Manager (which is powered by TriOptima) enables you to identify the differences that are driving your disputes and helps you work with your counterparty to reach a resolution and minimise future disputes.

To simplify your journey to compliance, TriOptima have created a dedicated website: www.trioptima.com/triresolve/collateral-management/initial-margin

Be sure to visit it today, or contact us on info@trioptima.com to learn more. AST

David White
Head of sales
triResolve

The platform of stock exchanges has taken off

Attila Szalay-Berzeviczy, head of group securities services at Raiffeisen Bank International, discusses the deployment of the bank's operations centre with the CEOs of the three founding stock exchanges of SEE Link

Another major step to integrate the stock markets of South East Europe has been accomplished. SEE Link, a platform that connects the local stock exchanges, supported by the European Bank for Reconstruction and Development, has now been further completed by a viable settlement infrastructure built by Raiffeisen Bank International (RBI).

Attila Szalay-Berzeviczy, RBI: With great satisfaction, we have been watching SEE link successfully expand over the past few years. With RBI's settlement engine in place, there should be potential for additional growth.

Ivana Gažić, Zagreb Stock Exchange: In fact, having seven markets in six countries on board is already a positive surprise, and we continue to see interest from other exchanges. We are frequently invited to conferences in our region, where other markets equally look for solutions to open questions such as liquidity issues between the countries.

Solving the post-trade issue was crucial, as well as necessary to enhance trading between these seven markets. With this topic solved, we will definitely be ready to accept additional members.

Ivan Steriev, Macedonia Stock Exchange: The obvious next candidates will be Romania and Greece. And we hope to have the remaining markets on our platform in the foreseeable future.

Ivan Takev, Bulgarian Stock Exchange: We have put a lot of energy in expanding SEE Link to its current size. I agree that the next steps should be finalising the connection with Greece and signing a contract with Romania. In addition to that, we will be concentrating on creating even more favourable conditions for cross-border trading via our platform that includes concluding the settlement issue.

Takev: Brokers usually distribute their cost-intensive research reports among their clients. In order to incentivise them to share their findings with third parties, we are thinking of models to remunerate them—this will certainly require additional funds.

Szalay-Berzeviczy: The RBI Operations Center has been created to simplify market access in fragmented geographies. One centralised entry point opens an unprecedented array of markets. This way, our approach resembles SEE Link to a great extent.

Gažić: We are very happy that Raiffeisen Bank International has pursued this idea. We are often asked why we do not have one common exchange for all our markets. Admittedly, it is extremely complex to be active in our region. Rules, currencies, trading hours—everything is different, not even all of us are EU member states.

With RBI as our new partner, we have got an intermediary who will make trading between the participating countries more efficient and cheaper.

Steriev: We are glad that we have reached the moment to sign this memorandum. We believe that in the near future the cross-border settlement facility for SEE Link will become functional, given the missing post-trade solution has been a show-stopper so far, preventing a more intensive use of our infrastructure.

However, this came as no surprise, from the very beginning we knew that the settlement side, which is a much more complex matter, would have to be tackled at some point. In a way, we deliberately started with completing the order routing platform in the first place. Once we had accomplished the trading facilities, we looked for a post-trade solution. RBI, with its know-how and its established regional system, is an apt partner, who has the answers to our needs.

Szalay-Berzeviczy: Which features of the RBI Operations Center were decisive when selecting your back-office provider?

Takev: It was not just the settlement application that convinced us. The RBI solution comes with supplementary services related to taxation, corporate action and trade reconciliation.

Steriev: That is also very important for the further development of SEE Link.

Takev: Indeed, our markets diverge a lot in terms of settlement routines, documentation duties and other requirements. The RBI solution covers all of that. As a result, many burdens will be lifted off the shoulders of domestic players, making their lives much easier. AST

The signing ceremony at the RBI headquarters in Vienna:

From left to right: Bettina Janoschek, head of GSS sales and relationship management at RBI

Ivan Steriev, CEO of the Macedonia Stock Exchange

Harald Kreuzmair, division head institutional Clients, RBI

Ivan Takev, CEO of the Bulgarian Stock Exchange

Hannes Takacs, head of ECM and CMI Development at EBRD

Ivana Gažić, CEO of the Zagreb Stock Exchange

Attila Szalay-Berzeviczy, head of GSS at RBI

Laying down the foundations

NSD's Artem Duvanov explains how the role of technology in market infrastructure is changing and how these technologies will affect the individual roles in market infrastructure

Becky Butcher reports

What technologies or innovations are market infrastructure institutions currently adopting? How will these technologies affect the value chain in market infrastructure?

Fintech will inevitably change the business model of many companies, be it retail, banking or infrastructure businesses, including the CSD. The most obvious trends are the regulators' initiatives in the field of collection and analysis of market big data, the use of artificial intelligence and blockchain, and service providers' efforts to bring together the internet, banking services, social media, and fintech solutions to create a single data stream for market analysis and launch of new products for clients.

Robotisation is in the focus of the financial sector, while active digitalisation entails irreversible qualitative changes in the corporate culture of businesses.

Industry players have a keen interest in digital assets giving rise to the demand for custody services for such assets.

We at NSD are actively involved in so-called digital transformation—we analyse new technology emerging in the market, assess its potential impact on us in terms of both opportunities and threats, and decide on our further steps.

The financial sector today is a cyberspace, with processes transitioning online, and there is no doubt that the trend will continue. Some companies would be able to adapt and add value to clients, while others will have to leave.

What has NSD done to leverage these innovations? What benefits do these technologies bring to buy-side investors and other market players?

NSD is specific in that due to the narrow nature of our business—securities post-trading—not all of the many innovative technologies out there could be applicable to us. For instance, banks can use artificial intelligence, big data, and so on, while we at NSD simply do not have any tasks where those technologies could be efficiently leveraged. However, as far as blockchain is concerned, we have the greatest opportunities ahead. There are two different opinions on blockchain technology. The first one is that blockchain is a disruptive technology for centralised systems, and NSD is based on a centralised system. According to the other opinion, blockchain offers new opportunities for centralised systems and those have to be tapped into the maximum extent possible. To have our own opinion, we need to try and test the technology ourselves. There are currently two business cases for NSD and blockchain—shareholder voting and commercial papers.

In 2017, NSD presented a settlement platform for the issuance of commercial papers by a major mobile network operator. As part of the project, the challenges of ensuring confidentiality of data regarding securities balances and ensuring compliance with specific requirements of Russian laws were successfully solved. A bit earlier, an e-voting system prototype for bondholders was rolled out.

The existing e-proxy voting technology involves data interchange through the chain of nominee holders between the issuer and the owner of securities, back and forth. Within that chain, NSD maintains the voting ledger and ensures the delivery of voting instructions and vote counting. NSD was the first in the world to implement that model.

We are moving step by step, building expertise and demonstrating to the market the long-term benefits of the new technology.

Our goal is to scale up the technology for various financial transactions and processes.

One of the priorities is to reduce the cost of transactions for all players through greater volumes of transactions and involvement of a wide range of issuers and investors.

How does risk brought by innovations play in this arena? What challenges are you foreseeing in the near future and how do you plan to address them?

Our plans are to actively develop the technology, but this would only be possible if the required laws and regulations are in place.

We believe it is crucial to lay down a common regulatory framework for distributed ledger technology (DLT) across all sectors. We are actively cooperating with the regulator in various working groups.

NSD has established the central securities depositories working group on DLT to work on requirements and standards and shape best practices in order to make reliable the process of assets movements within DLT-based networks.

In 2018, NSD and Sberbank CIB, a corporate investment banking arm of Sberbank, announced their intention to jointly test the initial coin offering (ICO) blockchain-based technology through the Bank of Russia's regulatory sandbox. Testing the pilot project through the regulatory sandbox will allow us to assess the specifics of such transactions, minimise related risks, and receive feedback from the Bank of Russia as to how to improve the mechanisms of those transactions.

How do you see the role of technology in market infrastructure in three to five years?

It is no doubt that technology is transforming the role of market infrastructure. For us at NSD, the ultimate goal is to lay down a foundation for the development of the digital economy in Russia and to ensure the emergence of a new asset class for investors, as well as ecosystems for ICOs and digital assets trading in the secondary market.

Together with the market leaders, we are working on the project to build settlement infrastructure for digital assets, which is an essential prerequisite for institutional investors to enter the market and for ensuring its dynamic development and capitalisation growth. AST

Artem Duvanov
Head of innovation, director
National Settlement Depository

Notes

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COFFEE SHOP

BEST AT SIBOS

People are important to us

Since 2000, our business has been steadily growing. Our approach to technology has succeeded because we understand the financial industry. We always listen to it. Listening is part of our DNA.

Technology is the life force of our business. But we also know that while AI and robots are pretty exciting – well, we find them pretty exciting – human beings are even more important. When it comes to understanding the challenges financial institutions face, and to deciding how technology can best serve those organisations, we realise that people are paramount.

We want to know where you need to get to and how we can help you get there. That is why talking to you face-to-face is important to us, and why getting to know you at Sibos is our top priority.

Come along and join us on Stand I31,
it will be the best coffee you taste at Sibos.
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