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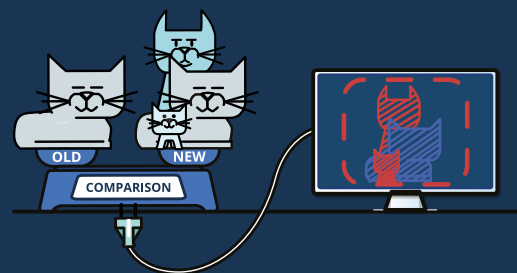
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Just the tonic

Although they are still recovering from the impact of COVID-19, banks know they must get to grips with costly, inefficient operations. Nick Smith of SmartStream asks if a new breed of high performance, outcome-focused managed services are just the tonic they need

2020 has been a year like no other. With the arrival of COVID-19, the financial industry found itself facing disruption that only months ago would have seemed like the stuff of science fiction. Six months on, financial institutions' gaze is fixed firmly on their operations, with banks looking to become more resilient against future 'black swan' events, but also seeking to boost competitiveness – and ultimately ensure survival – through improved operational performance and client service.

Yet even before the pandemic struck, banks were having to review the way they operated. Firms faced dwindling margins and were also under pressure to cut costs and improve service quality. Banks were feeling the heat from regulators, too. Financial institutions were on the hunt for ways of complying with new regulation accurately, and of demonstrating to authorities that they could control and manage risk effectively.





Banks are often still hampered by creaking legacy systems and, although plenty understand the need for digital transformation, actually achieving this goal is challenging



In response to these demands, some financial institutions had already, pre-pandemic, set out on a journey towards transforming their technology and processes. The impact of COVID-19 has, however, acted as a powerful catalyst, propelling some organisations to look at ways of stepping up the pace of change.

One avenue financial institutions are exploring is that offered by managed services. Typically, firms considering the use of managed services are seeking to re-position back-office processes or IT support functions which offer no competitive advantage.

In my experience, some firms are going even further, choosing, for example, to outsource regulatory reporting to prove to authorities the integrity of their reporting processes. What is not on the table, however, is any type of client-facing activity.

The growing interest in managed services is reflected by the rising number of engagements entered into by financial institutions with SmartStream's specialist managed services utility. 2019 was a record year for the unit, having seen the volume of incoming new clients rise by 50 percent, while deals are projected to increase an additional 50 percent to 100 percent by the end of 2020, in comparison to 2019. The year to date has seen a 25 percent growth in revenue for the managed services unit, while 2019 witnessed an increase in revenue of 20 percent.

Delivering a high-quality service and improved outcomes

Outsourcing is, of course, nothing new. During the last 15 years or so, banks have regularly turned to business process outsourcing (BPO) to cut costs. What has changed, however, is that banks have come to realise that the traditional BPO model has its limitations and that they require a different approach – one which allows technological transformation, improves competitiveness and better protects them against future change.

The traditional model involves simply shifting processes to lower cost locations, with a BPO provider's workforce operating using a bank's own legacy technology. The approach employed by SmartStream's managed services unit is very different to this model. Its aim is not to simply replicate existing processes but to deliver an improved outcome and greater efficiency. Working to measurable, agreed levels, SmartStream's Centre of Excellence delivers the highest quality service, assisting its clients to modernise and continuously improve processing, increase productivity and accuracy, drive down costs, as well as reduce IT complexity and meet regulatory requirements. SmartStream's managed services utility is used by a number of well-known organisations – these include Deutsche Bank, to which the operation provides reconciliations on-boarding, production support and operational reconciliation services.

The focus on delivering consistent excellence has paid dividends: even through the most restrictive days of early lockdown, SmartStream's managed services utility experienced no deterioration in the quality of service it delivered to customers. Throughout the pandemic, the utility has been able to offer banks continuity and an uninterruptedly high standard of service – unlike a number of other providers, which have had to approach clients over potential inability to meet service level agreements.

Accessing the most up-to-date technology

Another important point of contrast with the traditional BPO model is that SmartStream's managed services operate using SmartStream's own technology, rather than a bank's systems. Critically, SmartStream is continually updating its technology, as well as making sure that clients are always using the latest version of its solutions.

Being able to rapidly access up-to-date technology is an ever more essential consideration for financial institutions. Banks are often still hampered by creaking legacy systems and, although plenty understand the need for digital transformation, actually achieving this goal is challenging. Investing in sophisticated technology is expensive, while implementing it can be time-consuming and often demands skilled resources.

Plugging into the latest technology via a managed service is, therefore, an attractive proposition: it allows banks to carry out a rapid upgrade and to tap into specialist technology, while also providing an opportunity to achieve efficiencies and cost-savings.

Managed services can provide financial institutions with access to a broad range of solutions, encompassing a number of back-office functions

such as reconciliations, corporate actions, collateral and cash management, fees and expense management, reference data and so on.

Additionally, SmartStream has directed considerable investment towards moving its solutions to the cloud, bolstering the ease and reliability with which financial institutions can access its technology.

Advanced technologies deployed to boost processing efficiency

To introduce greater efficiency into processing, SmartStream deploys advanced technologies such as AI and machine learning. AI can be used to identify patterns and it can learn from them too by helping to spot unusual transactions and issue alerts. It can also optimise the flow of work, highlighting potential problems before they cause disruption or delay. As a result, routine tasks can be carried out by fewer people – or staff directed to more profitable activities – enabling costs to be reduced. To further developments in this area, SmartStream has set up the Innovation Lab in Vienna. The lab partners with clients to develop AI-based tools and research potential uses for advanced technologies such as AI and machine learning, with the goal of improving customer experience and driving up operational performance.

The opportunity to access the latest technology is highly attractive, but it is not just this aspect that is drawing financial institutions to engage with SmartStream's managed services utility. The calibre of staff is playing a role, too: resources are highly experienced, with extensive knowledge of SmartStream's technology – enabling all clients to benefit from best practices.

The utility's deep reservoir of domain knowledge is another important factor. As it offers managed



With back-office processes offering little competitive advantage, the industry will increasingly offload these activities to managed service providers, ultimately moving to a utility-style model



services to a growing variety and number of financial institutions, the utility acquires an insight into the most productive way of working, leveraging this know-how to refine and continuously improve the way processes are carried out.

Security

Clearly, if a bank is going to engage with a managed service provider, it must be comfortable that the provider is going to be as diligent or even more diligent than itself when it comes to handling the bank's data. Protecting client data is of the utmost importance to SmartStream and, to ensure the highest levels of information security, and to avoid the commingling of information, its managed service operates on a single tenancy basis – unlike some other providers which offer only multi-tenancy platforms.

In order to provide even greater reassurance to customers, SmartStream's reconciliations platform and OnDemand software-as-a-service services using TLM Reconciliations, TLM Aurora and SmartStream AIR, have all gained Payment Card Industry Data Security Standard (PCI-DSS) accreditation (v3.2.1, level 1). This demonstrates the highest levels of security standards, covering areas such as physical and personnel security, fraud control mechanisms, IT and data security, and data privacy.

In conclusion

With back-office processes offering little competitive advantage, the industry will increasingly offload these activities to managed service providers, ultimately moving to a utility-style model.

Managing large numbers of back-office staff is expensive, as well as a major logistical and management headache, and it is becoming clear that the financial sector must depart from this approach if it is to survive and thrive.

A specialist managed provider, operating in an area of excellence to agreed metrics, and delivering a high-quality service – even during times of significant disruption – can offer a lifeline.

For the strongest guarantee of success, the organisation chosen should offer proven technology and service execution, as well as be able to demonstrate a strong track record of continuous investment in its capabilities.

If selected carefully, managed services can have a potentially transformative effect, offering a rapid technological upgrade, as well as an opportunity to drive down costs and improve performance – which is more important today than ever.

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All change

CGI's Andy Schmidt discusses what the next-generation of central banking architecture looks like

As banking continues to move towards instant payments, mainly through account-to-account transfers, and market upheavals like the current pandemic impact banking activities, the entire payments value chain is radically evolving. Tremendous change already has happened in retail banking across many countries, with new developments announced every day. For example, Saudi Arabia recently became the latest country to announce the use of instant payments at point-of-sale by scanning QR codes from a mobile device. Instant payments also have triggered a massive migration to the latest ISO 20022 payment message formats.

Within central banking, change also is happening. Central banks systematically manage the liquidity, clearing and settlement of payments, small and large, through core payment systems such as real-time gross settlement (RTGS) systems. However, many of these systems run on platforms that are between 20 and 30 years old. Further, they use bespoke message formats and are becoming increasingly costly to support and change. As a result, many central banks are launching modernisation programmes to replace and future proof this part of their core IT infrastructure.

Central banking systems are vital to every country and region. If an RTGS system goes down, for example, or participants are unable to connect to it, the ability of entire markets to function is at risk. Further, when payments have errors or a settlement cycle fails, it can cause serious consequences for all parties involved. Therefore, when replacing these core systems, central

banks typically are very cautious. However, at the same time, they often are very ambitious.

With all this in mind, what does the next-generation central banking architecture look like?

Migrating to a common messaging standard

The single most important aspect of a next-generation architecture for central banks is the migration of all messages to a common standard, specifically ISO 20022, which is the industry standard for payment messages. This is hugely important, as it not only establishes a common payment language but also supports the transfer of enriched data within payment messages, enabling central banks to analyse the data for routing and accounting purposes, as well as security and fraud control. A common messaging standard also leads to a better understanding of traffic and data flows through systems and networks.

With the previous generation of central banking systems, processing speed and reliability were more valued than the ability to process additional data. Now that processing power is relatively inexpensive (and systems are better able to leverage data), enriched data has become significantly more important and easier to process.

Achieving interoperability

Along with the introduction of ISO 20022, it is important for next-generation platforms to be flexible enough to process multiple payment types and support multiple payment schemes, all within a single environment.

While many central banks manage multiple environments to ensure robustness and resiliency, the ability to run different schemes within the same environment provides greater reliability.

The concept is that, once all of the systems in a country or region use the same format and standards (ISO 20022 in this case), the central bank could then deploy a single flexible platform capable of clearing instant low-value payment messages in the same way as high-value critical payments are processed through the RTGS channel.

Likewise, with flexible, high-powered processing platforms, central banks can process transaction batches received from automated clearinghouses in a standard way. They can open up and “debulk” the batches, process each message individually, and then monitor the messages at the end of each batch to ensure proper processing.

Sharing liquidity across multiple schemes

Operating multiple payment schemes within the same environment could potentially mean big savings for participants in terms of liquidity. Sharing liquidity across multiple schemes enables the creation of a liquidity pool with automation possibilities. It also would provide central banks with a view of liquidity across multiple channels, helping to ensure close regulatory control.

Integrating security

The legacy architectures operated by many central banks today require additional security layers over time as new challenges and new types of fraud emerge. This “bolted on” security approach is cumbersome and time-consuming, as well as reactive, which means that vulnerabilities may still exist after the work is completed. In contrast, with modern platforms, security is “baked” into systems as they are developed. This means that protecting systems and data and ensuring service continuation is much easier. In this environment, central banks can develop new fraud controls and processes more quickly as threats emerge and deploy them in real time.

The use of artificial intelligence also strengthens real-time protection from increasingly sophisticated threats, while reducing the ongoing maintenance needs of core platforms.

Conclusion

By deploying a modern universal platform capable of supporting multiple payment schemes and many different payment types, central banks can add a completely new layer of flexibility to their payment infrastructures. This will enable them to respond to new payment concepts, schemes and opportunities much more quickly and achieve greater value.

Central banks also can integrate emerging payment schemes to the platforms as required, without the cost of deploying additional technology. In addition, platform reliability also will increase through more advanced security, while also reducing ongoing costs and improving liquidity usage.

Perhaps the most significant benefit will be the ability of central banks to process more rich and comprehensive data.

The additional data contained in ISO 20022 messages will enable them to more effectively monitor systems, spot anomalies in processing patterns, deliver enhanced fraud and security controls, streamline back-end accounting, and provide regulators with greater information for compliance purposes.

Andy Schmidt
Global industry lead for banking
CGI





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5-8 October and beyond

A shift in mindset

Scorpeo CEO Matt Ruoss discusses the challenges of analysing events and optimising processes to maximise value for shareholders

Crunching the numbers on mishandled corporate actions

Over \$1 billion per year – that's how much asset managers are missing out on through suboptimal decisions tied to voluntary corporate actions, according to analysis from Scorpeo. As the likelihood of rights issues and scrip dividends grows amidst economic uncertainty, how can asset managers limit these losses?

How have corporate actions been impacted by the pandemic and its fallout?

Economic uncertainty has had a notable impact on corporate actions volumes. Back in March and April, companies were rushing to shore up any capital weaknesses. This led to a spike in rights issues. Given the volatility, managers and analysts had to make some quick, informed decisions on whether to exercise those rights. They also had to grasp the potential impact on their existing holdings, given that rights issues dilute the values of those shares.

Conversely, economic weakness and uncertainty have led to a significant drop in dividends. The

latest figures show a 22 percent drop in dividend payments in Q2, the biggest fall since 2009. Major companies like Shell, Boeing and General Motors have either suspended or cut payments. It is likely that we will see further reductions across a number of sectors. This will force a number of dividend-focused managers to make some sizable changes to their portfolio.

Our expectations are that, until the economic situation normalises, there could well be a continued demand to shore up capital, irrespective of how the underlying markets perform. We would also not be surprised to see an uptick in the volume of merger and acquisition activity, as some companies struggle to survive in the midst of continued economic uncertainty.

This economic downturn is the worst we've seen since the 2008/09 financial crisis. Did that downturn lead to a spike in corporate actions activity and, if so, what does that potentially bode for 2020?

Conditions in 2009 were similar to what we saw back in March and April. Almost every asset class plummeted and balance sheets were squeezed, forcing many companies to swiftly raise capital.

Back then, we saw a jump in voluntary corporate actions, such as scrip dividends and rights issues. This was especially true among energy companies, who were hurt by persistently low oil prices. Offering shares in lieu of the typical





It does not make good business sense for managers to lose over a billion dollars on an annual basis. So why is this happening?

Typically, it is an issue of awareness. Many managers don't realise the amount of money that is at stake.

Additionally, other managers may not think it's worth doing the analysis or dedicating the resource. For one manager, looking at one single decision, the missed value may be no more than a couple thousand pounds or dollars across their investor pool. That number is relatively

small, but again, this is happening across dozens or even hundreds of issues. In an environment where active managers are fighting hard for every basis point, leaving cash on the table seems imprudent.

Regulatory and jurisdictional restrictions can also play a part. For example, index trackers may not be mandated to take anything other than cash to avoid weighting errors.

per-share payments was beneficial to companies who were temporarily cash-strapped. The same trend happened in 2014, after a sudden oil price crash.

It took about six months after the fall of Lehman for the wave of scrip dividends to kick in. This partially explains why we did not see a similar increase in scrip dividends earlier this year. If oil prices continue to remain low and debt issuance becomes difficult, a scrip issue will be more appealing to many energy companies.

That all being said, increases in voluntary corporate actions puts a strain on analysts. Voluntary corporate actions require a decision to be made. Analysis needs to be done to determine the

best course of action for shareholders. Analysts already have busy workloads and during hectic market conditions, they are often pulled away to support the business in other respects. Without the time or resources to properly conduct this analysis, asset managers may be at risk of making inopportune decisions.

Is that another way of saying that managers stand to lose money?

Using the scrip dividend as an example. A scrip issue comes with a default choice: continue with the cash payment. Managers that let the election deadline elapse with no decision will automatically get the cash. Our analysis shows that this

is the more common route, with 75 percent of managers receiving the cash.

Yet, it is not the most favourable one. In many instances, the share election is more valuable than the cash option. One stark example is the National Grid dividend issue in May 2019 – here, the stock election was far more optimal than the cash election, representing a 48.1 pence-per-share advantage. Yet even with the value being so clear cut, 55 percent of all shareholders took the cash option. Compounded, this added to £39 million of missed value.

Multiply that across the numbers of scrip issues and the unrealised value adds up real fast. Our analysis estimates that the missed or unrealised

Operationally, how can fund managers address these challenges?

It is important to recognise what's at stake. It is also good to understand how strained corporate actions analysts are, even as the market continues its recovery. When dividends were cut, many of these notices weren't shared in a way that would be easily picked up by corporate actions processing platform. Per media reports, some companies notified shareholders via memos announcing the cancellation of annual general meetings. This would require analysts to track down and verify the information.

Analysing the value inherent in voluntary corporate actions is something that processing platforms don't do. They're primed to automatically capture and track standard corporate actions and drive the appropriate workflows, but this

doesn't extend to those where an election must be made.

That said, there are complimentary solutions which do the analysis and recommend the favourable course of action. The process of examining and electing a voluntary corporate action can be mostly automated. Internal controls are relatively simple to put in place.

Adding these capabilities to existing corporate actions processing workflows can have the dual upside of maximising the value captured through optimal elections and reducing the burden placed on analysts. This helps ensure that resources aren't redirected away from other revenue-generating activities.

value from scrip non-elections is over a billion dollars a year.

With rights offerings, analysts need to decide whether buying additional shares helps maintain or increase the value of their existing holdings. Opting to do nothing may ultimately dilute the value.

Does this raise any issues around fiduciary duty?

It may. If managers are foregoing analysis and elections of these corporate actions, it wouldn't be a stretch for investors to claim that these

decisions are not being done in their best interest. Regulators, especially in the US, have been keeping a close eye on proxy voting and governance in recent months. The second Markets in Financial Instruments Directive (MiFID II) has also pushed managers to disclose their elections on certain events, which opens the door to greater scrutiny from investors.

But that is not to say that managers should be concerned about fiduciary issues. Rather, there is a real opportunity for managers to capture significant value for their clients by making informed elections. Every basis point of out-performance above an index is valuable. Those managers that demonstrate strong governance

are going to instil confidence in their investors, giving them an edge as competition for inflows among managers continues to tighten.

What do think it will take for managers to grasp the opportunities?

It is about understanding what's being left on the table – and how simple it can actually be to maximise decision making around voluntary corporate actions. Adding 30 or 50 basis points to annual performance can be as easy as playing a more active role in analysing the value of these events. In a highly competitive marketplace, the potential basis point gains are very meaningful.





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A new way of thinking

Maddie Saghir reports

As the selection of funds continues to grow, the fund services space is continuing to evolve as client expectations change, especially given the current pandemic

Like a child in a candy shop with lots of sweets, an investor has a wide selection of funds to choose from. There is a wide range of funds in the market including hedge, private equity, real estate, venture capital, and digital assets. Once an investor has chosen an investment fund and listed its goals, risk, and fees, a fund servicer oversees the fund and decides which securities it should hold, in what quantities, and when the securities should be bought and sold. While trends in fund servicing are very much business as usual (BAU), according to experts, the future of fund servicing will be based around reimagining the way fund service providers work in light of the ongoing pandemic. This comes as the lockdown at the start of the year forced a lot of people into working from home.

In terms of clients, experts say their expectations are changing. In addition to this, the ongoing pandemic has shifted their way of thinking; with new factors stepping in influencing their decision for selecting fund and asset services providers. Indeed, resilience has become a key factor in this sense.

Rob Lowe, head of business development UK at Pictet Asset Services, says: "In terms of investments, we are seeing a continued shift towards other asset classes: clients are moving away from plain vanilla securities towards private assets, typically illiquid, which offer a longer investment time horizon and decorrelation with traditional indices."

"Low or negative interest rates on cash and fixed income also favour private asset allocation for cash-rich investors, and now private equity or real estate have become part of a standard asset allocation for institutional who are more relaxed about lock-up clauses, reduced redemption frequency and gating," Lowe says.

However, Lowe points out that small size or first-time funds are struggling to raise money. In times of uncertainty, investors feel more comfortable with well-established brand names and the safety of large assets under management (AUMs).

Christina McCarthy, regional head of fund services, Europe, Maples Group, observes that in general,

established managers are able to continue to attract new capital as investors seek proven players, and as investors have greater limitations in performing diligence on new managers as a result of the COVID-19 pandemic.

McCarthy explains that a continued influx of new or amended regulations — including the Cayman Islands Private Funds Law, the multi-jurisdictional expansion of anti-money laundering/ know-your-customer requirements, and the evolution of Alternative Investment Fund Managers Directive, UCITS and Markets in Financial Instruments Directive regulations, among others — have created a challenging environment for managers.

"Given these dynamics, it is clear that fund servicing is expanding even more beyond traditional administration as managers review their operations and seek providers with operational, compliance and technology capabilities that are on-par with or exceed the capabilities of their existing in-house solutions," McCarthy says.

An administrator with a commoditised service offering won't be successful in this type of environment, according to McCarthy.

She says: "Good administrators will provide the operational backbone that enables an investment manager to succeed, adding value as they integrate with and play a pivotal role in the manager's overall operational function. This approach, however, can often be difficult to find and managers are becoming more discerning; they are now more prepared than ever to engage with new providers who are willing to tailor their solutions to their needs."

With this backdrop in fund servicing, industry experts explain more about client trends and how the pandemic is impacting this space.

Consolidation

One prominent trend is the consolidation of fund service providers, which relates to the merger and acquisition of many smaller companies into a few much larger ones. While some experts say there is a pattern of consolidation across the market, others say this is happening less frequently.

Patric Foley-Brickley, managing director, fund services, Maitland, stipulates that consolidation will most likely happen around the edges, potentially where the larger providers want access to a particular market sector, and they can either buy it or build it.

He explains: "Often it will be much easier to buy into a smaller operation with established critical mass and associated profitability, than it is for them to build it themselves. There is likely to be some consolidation on the periphery involving mergers and takeovers of the smaller providers. Smaller providers will either grow to the point where they are substantial enough to acquire,

“ *Over the last six to eight years the industry has witnessed steady stream corporate consolidation and divestment activity and even in this environment we see pockets of activity though the volume of such activities has slowed down this year* ”

or not so successful in which case they may get acquired." It has been observed that consolidation has been driven by the influx of private capital, as record amounts of dry powder seek investments.

While an acquisition or merger may create synergies or economies of scale, one potential consequence may be a drop off in service standards, cautions Mark Weir, regional head of fund services, Americas, Maples Group.

Weir says: "In these scenarios, staff — typically at a reduced number — are tasked with trying to effectively transition all functional and operational areas of the business in addition to continuing to service clients."

Generally speaking, this is not an environment that is conducive to success and takes significant time and resources to achieve, according to Weir.

"In other cases, some providers don't even bother trying to homogenize services and systems, instead keeping them very siloed. Either way, it can result in inefficiencies for the client," he adds.

Also weighing in on this, Srikumar Te, global head of fund solutions, Apex comments: "Over the last six to eight years the industry has witnessed steady stream corporate consolidation and divestment activity and even in this environment we see pockets of activity though the volume of such activities has slowed down this year. However, we continue to see new entrants into

the market who seek to carve out a single market niche for themselves."

More for less?

Evolving client expectations is another prominent trend in this area, with some clients wanting more for less.

Clients will always expect more for less, according to Foley-Brickley because of the constant build-out of features, functions and capabilities. He explains: "Rarely are we able to monetise these developments directly."

Foley-Brickley notes that the majority of enhanced functionality and the related technology development necessary to support this enables providers to keep fees broadly the same.

He adds: "As in any industry, as products become more commoditised, providers are able to command less of a premium and prices will fall. Therefore, you must keep developing your product to continuously add value to maintain competitiveness and revenue margins."

Pictet's Lowe says clients expect providers to offer solid digital capabilities, improved data analytics (especially for fund distribution), to provide or enable regulatory assistance and to offer support on new products and services, for example, environmental, social, and corporate governance (ESG).

The market has evolved to a point where managers see asset servicers as an extension of their business that covers trading, middle office etc.

Lowé suggests clients also expect more tailored options to fit their needs, and in some cases unbundled services.

He says: "As per the general trend between clients and providers, transparency continues to be important; for example, regulatory costs on the provider should be openly discussed with the manager as this impacts investors."

Weighing in on this, James Ferguson, head of Americas at Intertrust, notes that clients have more time to think at the moment and that while there's more communication, not necessarily more demands.

Ferguson observes that the services business is seeing requests for new products. He says: "It's as if the pandemic has allowed for more creative thinking, and Intertrust is working on new services and new ideas."

Similarly, Sri Kumar Te, global head of fund solutions, Apex, also says that he has not seen a major change in client expectations.

"While clients have been very understanding given this pandemic has impacted everyone alike – we have not seen a major change in their expectations."

However, Te explains in some instances, clients have requested an increased level of support and reporting especially around business continuity planning/disaster recovery plan, controls framework as they themselves build confidence with their investor base.

He comments: "As we have a presence in Asia, we were able to learn from their early experience

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Fund service providers learned an important lesson around procurement and deployment of technology is in its adoption rate, not deployment success

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of the pandemic and implement business continuity planning for clients in the rest of the world."

"We created support centres covering various time zones across the globe to effectively support our client service offices which have worked to our advantage."

Effects from the pandemic

The pandemic has caused clients to place more trust in their fund services providers.

Lionel Nicolas, partner PwC Luxembourg, explains that PwC engaged in a 'conversation with the industry' in April and May this year, to assess that very question, told through the eyes of those CEO's at the 'front line' of the crisis.

Nicolas notes: "The report identified that the service provider/client relationship is a partnership in a crisis, and a 'master/slave' relationship just does not work. That can become a permanent realisation, with clients more trusting and respectful of what their service providers delivered in such a difficult circumstance."

For people, it was observed that productivity levels remained at similar levels to office-based working, but perhaps more because of adrenaline and confinement allowing people to work more hours.

Regarding technology, the PwC report identifies that much of the technology supporting a rapid shift to home-based working already existed within the firms but was under-utilised. Nicolas comments: "Fund service providers learned an important lesson around procurement and deployment of technology is in its adoption rate, not deployment success."

In addition, many reflected on how they may rapidly switch to cloud-based platforms, with its computing power, capacity, and variable cost benefits compelling.

Looking at the operating model, key findings from the report indicates the old notion of a business continuity planning recovery site is now redundant and rewritten around home-based working.

Also looking at the pandemic impact, Intertrust's Ferguson identifies that stability and even extreme trading in utilities, technology and bio sectors increased.

"Funds in these sectors have done well, compared to those in the fixed income space. Resilient companies with the work from home ability, the workflow and the client service mentality have persevered well. Clients will pay for quality if they see it."

"At Intertrust we're working hard on global clients' needs given the volatility in different regions, offering bundling of services, simplified reporting and synergies where possible," he concludes.



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Market transformation

With the COVID-19 pandemic triggering an economic slowdown, Maria Krasnova of NSD explains that infrastructure will have to evolve and provide technologically advanced and affordable open solutions for the entire market while remaining cyber resilient and operationally reliable



What are the current trends in the post-trade industry?

Many companies are facing various changes in their business. The COVID-19 pandemic triggered an economic slowdown which has directly affected company profits, as well as causing an increase in online communications and new deployment of digital technology. As a result, we are seeing a dramatic increase in cyber risks and higher requirements to system capacity, availability and resilience. At the same time, compliance with stricter regulatory obligations will require significant resources and give rise to demand for transparency of financial institutions.

One of the main global trends is disintermediation, meaning that the existing service model is transitioning from a wholesale model to a flat retail model. This trend is being promoted by regulators and is also being stimulated by new digital technologies that enhance direct connections between end

investors, including retail ones, and settlement organisations in the securities market, such as central securities depositories (CSDs).

Another trend includes the transformation of business models for companies that operate in post-trade sectors, in particular CSDs which are moving from mono-line services, such as safekeeping and settlements, to multi-services based on their core competencies. This involves building open platforms that may be integrated with clients' and counterparts' systems as well as with other platforms.

Again, one of the drivers of such transformation is new digital technologies and changes in consumer behaviour, especially Y and Z generations. Their 'click-done' consumption model requires the appropriate technological solutions in the post-trade industry. That is why we actively participate in searching for and developing solutions in the business to business to consumer segment.

We have already acquired a wide base of knowledge and skills, for example, in blockchain, robotisation, and application programming interfaces (APIs).

Against the backdrop of the COVID-19 situation, digital services have become more popular. All over the world, companies are switching to online activities and reducing the number of personal meetings. In these circumstances, remote voting is a safe way to join a meeting as compared with personal attendance or ballot delivery by mail. NSD offers an e-voting service which has already shown itself to be a convenient and reliable way on the Russian market for an issuer to convene a meeting of shareholders and let shareholders vote on agenda items from anywhere in the world. Participants can also view the meeting's agenda and materials, follow the meeting online, and connect the issuer. E-voting lets shareholders continue to have an influence on their company's operations, and issuers will be able to observe shareholders' interests. We have seen a significant increase in the number of shareholders using the e-voting service, with the number of users more than doubling since 2019.

What are the biggest opportunities for the post-trade industry?

CSDs have quite a unique market position, as they are rather neutral with regard to market players' conflicts of interests, and regulators trust them. Due to this, we think that CSDs can be market-wide platform solution providers. Offering multiple services through a CSD's universal platform contributes to cost reduction across the market thanks to the use of common formats and standard communication channels, as well as the possibility for platform users to re-use the platform functionality and, thus, save on back-office costs. While it would be possible to optimise costs of CSD clients owing thanks to the outsourcing of services offered by its platforms, CSD clients could compete with each other in quality of their services — this is the area where a CSD, a traditionally operational entity with a standardised set of services that cannot be customised, generally lose out to its clients.

Are you seeing a lot of new partnerships form? And how is this benefitting the industry?

Partnerships in different variations create new opportunities for different parties, including market players, associations, countries and, of course, customers. Firstly, I would mention our cooperation with foreign institutional clients which increases the investment attractiveness of the Russian market and makes investments in Russian assets accessible and safe. As soon as the Russian legislation on the securities market allowed foreign custodians to have direct accounts with the Russian CSD and set out the universal



We have seen a significant increase in the number of shareholders using the e-voting service, with the number of users more than doubling since 2019



terms for international financial infrastructure participants to gain access to the Russian market, we witnessed a significant interest towards the new opportunities. Last year, Raiffeisen Bank International (Vienna) established the direct link with NSD and became the first foreign custodian bank to offer its clients direct access to the Russian securities market. As a result, the bank's clients got an opportunity to have fast and risk-free access to a wide range of Russian financial instruments.

NSD has been a part of the international securities settlement network since early 2000. Our cooperation with foreign securities market infrastructures provides new attractive investment opportunities for Russian investors. Nowadays foreign securities represent a substantial part of NSD's assets under custody, and investors' appetite for new international instruments keep growing; therefore, the development of our network remains one of our priorities.

Maria Krasnova
Acting chairperson of executive board
National Settlement Depository



The market needs a new, successful customer experience involving convenience, maximum effectiveness, and small costs

Cooperation within the framework of international industry associations helps to develop connections, share knowledge and convert this into business opportunities. Speaking of international partnerships, I would mention our work within the Association of Eurasian Central Securities Depositories and the World Forum of CSDs.

Another very important point here is the technological partnership, which creates new opportunities for our customers. This year NSD became a Service Bureau of the Financial Messaging System of the Bank of Russia, which offers the advantage of reducing client costs as well as the opportunity to enhance the existing financial market messaging infrastructure. Russia's small- and mid-sized banks, as well as banks of the Eurasian Economic Community, and Russian corporations will be interested in using the services that a service bureau provides. NSD suggests that companies use SPFS via its independent IT platform, enabling participants to interact quickly and safely.

Finally, I would like to add that we see a growing demand for safekeeping and settlement services for tokenised securities and pay special attention to this market. NSD maintains partnerships with securities industry associations and fintech companies as a means of gaining expertise necessary to establish a digital platform that performs functions of issuing, safekeeping, settling, and servicing tokenised assets based on the distributed ledger technology. I am convinced that our efforts will bring tangible results for the whole market in the near future.

What challenges are you experiencing/hearing from clients?

The market needs a new, successful customer experience involving convenience, maximum effectiveness, and small costs. As the mainstay of the market infrastructure, we see the growing demand for services that help reduce costs, while ensuring cybersecurity and being technologically advanced. We see the demand from the market for the expansion of serviced assets, for example, structured bonds, and the demand for reliable market information.

But the most important thing for our clients is the combination of the stability of our core business and technological innovation. Now, as never before, our independent platform plays a crucial role in allowing companies to outsource some of their services to us as a reliable partner.

Understanding the need to promptly respond to clients' requests and needs, we also continue playing the role of an experience-sharing platform and providing advice to market participants. This would shape the landscape of the future, and we are proponents of its sustainable development.

With greater use of technology and data comes greater concerns for privacy and security. Cybersecurity is now a top priority and we at NSD spend a substantial part of the IT budget on this, as well as banks and the financial industry in general.

How is NSD operating in the 'new normal'? What changes have you seen and how are firms adapting?

The current situation is, no doubt, a challenge to businesses across the globe. The wellbeing of our clients and employees is a top priority for us. In March 2020, when the COVID-19 pandemic increased, NSD invoked its business continuity plan, and more than 90 percent of our employees were sent to work from home. The requirements for information security, data protection, and uninterrupted client support have become more stringent than ever. The ability to seamlessly transit to remote work in extreme conditions is an indicator of the company's digitalisation.

This experience made us think about changing our usual approach to organising office space and working remotely. Thanks to this, we anticipate that our company will become more flexible, and more mobile. Meanwhile, the work-from-home regime has not been an obstacle to our growth.

How do you think the post-trade industry will change over the next 12 months?

I am afraid some players will have to leave the market, while many others will struggle due to the slowing economy. Infrastructure will have to evolve to be able to build and provide technologically advanced, albeit affordable, open solutions for the entire market while remaining cyber resilient and operationally reliable. Market players will seek to offer multiple products to meet demand from specific consumer categories, and the infrastructure will be adjusting accordingly.

Adapting to the new norm

Becky Bellamy reports

Although the core role of the transfer agent has remained unchanged, they have had to keep pace with how investor buying behaviour and the demands of the investment management community have transformed



In recent years, clients have come to expect more from their transfer agents. Clients want their transfer agent to provide platforms that simultaneously connect businesses with markets, engage customers with their investments and allow them to grow and transform.

However, Steve Banfield, industry director at Equiniti, says the core role of the transfer agent has remained unchanged in respect of contractual duties to service shareholders on behalf of corporate issuers.

Banfield notes: "We continue to proactively manage share registers, communicate with shareholders and employees using modern digital platforms, administer payments, and support our customers through any corporate events that they undertake."

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Asset managers rely on their transfer agent to have a robust and comprehensive client on-boarding process that satisfies both the regulation and the overall investor journey

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One of the biggest changes is the rapid technological shifts and regulation in the industry. In order to add value and remain a core part of the investor journey, transfer agents have had to keep pace with how investor buying behaviour and the demands of the investment management community have transformed.

Ed Hamilton-Russell, head of business development Europe, the Middle East and Africa at Link Fund Solutions, explains: “Transfer agents play an increasingly significant part in interacting between asset managers and investors, both of whom expect to have a dynamic and flexible investment experience and continue to expect so via increasingly sophisticated and complex models.”

Transfer agents have needed to adopt and utilise new technologies to continue to function as a key part in the value chain of investors and the companies that service them.

Rachel Turner, head of Europe, the Middle East and Africa asset managers and insurance at BNY Mellon, suggests that more asset managers are using digital interfaces to develop direct, long-term relationships with customers.

Turner notes as they move away from using fund distribution platforms they are increasingly relying on transfer agents to ensure responsive and user-friendly interaction.

She comments: “Asset managers look to transfer agents to offer innovative technology solutions that provide the self-service functionality and comprehensive digital interface that meet the specific needs of their clients.”

Additionally, since the 2008 financial crisis, regulators have increasingly focused on protecting the end investor and their investment.

Hamilton-Russell argues that transfer agents play a “crucial role” in ensuring that know-your-customer and anti-money laundering, and the protection of client assets is completed in a “thorough and timely manner”.

He says: “Asset managers rely on their transfer agent to have a robust and comprehensive client on-boarding process that satisfies both the regulation and the overall investor journey.”

Technological developments

With technological development impacting the way transfer agents work, Elena Casalegno, head of transfer agency operations and shareholder services at European Fund Administration (EFA), suggests that the main effect has been the introduction of complementary tools that add communication options, enhance secure counterparty identification or reporting and provide data for analytical purposes.

Casalegno explains that the application of technology in these areas has enabled transfer agents to provide clients with both reference and transaction data covering the activities of their funds, along with channels to receive or access the information with varying levels of authentication to ensure data security.

The biggest change is how firms communicate to shareholders and employees, adapting and developing solutions to modern technologies. Banfield comments: “Many investors now elect for electronic communications over paper, and we have been able to develop and deliver digital enhancements when faced with regulatory change.”

However, one of the key challenges is to navigate the rapid move to a digital world while continuing to satisfy company law and regulation that supports paper processes and wet signatures, according to Banfield.

Overall, technological developments have helped transfer agents to manage new regulations requiring the disclosure, reporting and monitoring of client and investor activity, but Casalegno explains that so far “no game-changing disruptive technologies have emerged with a material impact on services provided to mainstream asset classes”.



Adaption

With the ever-changing environment, transfer agents are challenged to adapt. Customer behaviour and expectations require a greater shift to online portals and a requirement to be able to transact/service funds directly.

Hamilton-Russell explains that this increases the importance for transfer agents to add value to the end investors and asset managers, who are increasingly looking to their transfer agents to enable flexible, easy-to-use and brand-aware access to their funds.

“It means not only that transfer agents must ensure that their digital offering, whether facing retail investors or their advisers, reflects the brand values of asset managers, but that their digital offering and communication must also be accessible. They must enable asset managers to deliver regulatory documentation and engaging supplementary fund information, cost effectively, to build and enhance positive client relationships and in turn understand the profile of their investors”, says Hamilton-Russell.

He suggests that the successful transfer agents of tomorrow will be those most adept at delivering enhanced digital service solutions, whether developed in-house or achieved through partnering with external tech providers, to support the rapidly changing fund distribution landscape.

Meanwhile, amid intense cost pressure and demand from clients for a more extensive range of services, Casalegno says that transfer agents will need to deploy smart technology on an ongoing basis in order to service clients or weigh up the risks and rewards of providing services.

Casalegno comments: “While a competitive environment that delivers value for money to clients and their investors is healthy, it’s also important to be able to define what is being provided and at what cost during new business negotiations and in-service reviews.”

“If there is a gap between the client’s service expectations and what is delivered, the disconnection will sour the best of relationships. Currently, the quality aspect of service is not prominent enough on the agenda of transfer agents and clients negotiating the cost of service”, she adds.

Turner explains that in order for transfer agents to adapt to the constantly changing, they need to have great flexibility. She notes that breadth, depth and flexibility to support all investor types and distribution channels, new fund types, asset classes and multiple fund ranges across different domiciles is important.

However, she says: "At the same time, transfer agents need to be able to deal with technological evolution, regulatory changes and investor preferences."

Concentration of transfer agents

With increasing levels of manpower and cost associated with regulatory compliance, has it become difficult for smaller transfer agents to keep up?

There is no doubt that regulation has increased across the financial industry, particularly following the global financial crisis, resulting in significant investment in technology and resources to ensure compliance. Banfield says this will "undoubtedly place significant burden" on smaller transfer agents as they invest to keep up.

He adds: "The industry has already undergone a period of consolidation leaving a relatively small number of service providers. That said, the burden is increasing and further consolidation may well occur."

However, Hamilton-Russell suggests that there have also been some larger asset servicers who take the decision that transfer agency is not a service that adds significant value to their own shareholders and so they chose to focus on their core products of custody, depositary and administration services.

At the same time, Hamilton-Russell notes that there have been new market entrants emerging from the technology arena, whose strategy is focussed solely on delivering a service centred around technology.

While technology is playing an increasingly important part of the transfer agency industry there is still a requirement for human interaction and the investment this entails.

He says: "As a result, we envisage that while there may be some changes in the individual players in the transfer agency space, those providers who view transfer agents as a core proposition and recognise its importance in the asset management sector will go the distance."

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Until technological solutions are available to enable transfer agents to manage these complex issues, size will have limited impact on market strength – regulatory risk is likely to be a deciding factor

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Casalegno explains that in order to maintain compliant up-to-date records for the same financial intermediary, whose risk profile might differ according to how it is assessed in business relationships with two different customers, poses various procedural problems, in addition to the frustration of having to explain the difference to the financial intermediary.

She states: "Until technological solutions are available to enable transfer agents to manage these complex issues, size will have limited impact on market strength – regulatory risk is likely to be a deciding factor."

Next five years

The pace of technological development is not looking to slow down, and although the core role of the transfer agent has not changed, the adoption of new ways will be required to keep up with investors.

Hamilton-Russell notes that as funds become more commoditised and asset managers find it more difficult to differentiate their value and products, along with the rise in passive funds, the investor journey is going to continue to grow in importance.

He says: "It is going to become increasingly easy for investors to 'shop around' and express their dissatisfaction by 'voting with their feet'. As a result, asset managers are going to have to have a laser-like focus on generating Alpha. Their reliance on a trusted partner to articulate and protect their brand, values and most importantly protect their clients, the end investors, is going to be ever more important."

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Having agile relevant technology, knowledgeable staff and a true partnership with asset management clients are going to be key for transfer agents over the next five years

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Having agile relevant technology, knowledgeable staff and a true partnership with asset management clients are going to be key for transfer agents over the next five years, according to Hamilton-Russell.

Elsewhere, Banfield suggests that as transfer agent services over to a digital service, the industry is shifting toward full dematerialisation through the removal of paper trades. This move will also provide more investment choice with investors benefiting from quicker electronic trade and settlement times whilst continuing to enjoy full membership rights.

He comments: “The issuance of paper will almost certainly reduce considerably as investors utilise modern technology and as corporate law moves to support companies wishing to drive good economic and social governance practices.”

Transfer agents had a much different agenda and list of priorities than they may have today, with the current COVID-19 pandemic. The coronavirus pandemic has resulted in most of the financial sector, including transfer agents, operating remotely, with most employees confined to their homes.

Casalegno believes this has highlighted the long tail of legacy communication methods, with delays in receiving original documents sent by post, instructions of various kinds that are still faxed from banking and wealth management systems, and documents sent via various telecommunication channels that lack provenance and whose authenticity would be unlikely to pass legal scrutiny.

She adds: “Over the next five years transfer agents will need to jettison their old technology and communication channels and identify new solutions that eliminate the cost and friction of outdated media that take a disproportionate amount of time to service and often result in disgruntled clients.”

“They will need to offer alternative communication solutions that are secure, intuitive to operate and demand minimum effort for adoption – remembering that clients are often asked to deal with solutions from multiple counterparties that are burdensome to install, maintain and operate. That’s hardly a recipe for success in the age of fintech.”



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Reimagining reconciliations



William Cooley of Broadridge says the pandemic has only underlined the importance of operational resiliency in reconciliations

What are the market drivers forcing firms to re-evaluate their reconciliation strategy?

Reconciliations are imperative to the risk and control functions of an organisation. Accurate and timely reconciliations ensure that companies always have a grasp on operational problems that could be affecting their bottom line.

The pandemic has only underlined the importance of operational resiliency in reconciliation processes, which have been profoundly affected by increases in the volume, variety and velocity of data, as a result of increased trading volumes during this time. Additionally, firms are under increased cost pressure given complicated economic conditions, so there is a very clear appetite for gains in efficiency.

What issues around reconciliations has the global pandemic brought to light?

Regulation and control have been hot topics over the past few years but COVID-19 has placed additional emphasis on control points because it's critical that firms are certain about their financial exposure during the pandemic. This is not necessarily in terms of new control points, but rather ensuring that your existing control points function fully in a business continuity scenario with reduced staff or at least reduced staff interactivity. Some counterparties might not have been as successful in rolling out business continuity strategies, which makes the timely resolution of problems more important than

ever because the uncertain economic conditions could lead to failures. Firms need to ensure that their bottom line is covered.

What has also become clear is that you need a system that is flexible enough to handle control points quickly and can also deal with spikes in trading volumes as seen when lockdowns began earlier in the year. At the same time, a system must still be economic, maintaining a minimal cost basis in such circumstances.

The pandemic has been a catalyst for the adoption of artificial intelligence (AI), with many firms accelerating their digital strategy. Our research has shown that 34 percent of firms now plan to increase the scope of this in light of current conditions. Those firms already progressing with technologies like AI will be much better prepared for future business disruptions.

How has reconciliation technology evolved in recent years to handle these new challenges?

Originally reconciliations were performed pen-and-paper or for more forward-looking firms that might have a complicated set of Microsoft Excel macros that would automate processes such as data acquisition or manual matching similarly to some reconciliation systems today. The first enterprise systems were built upon these workflows by industrialising the reconciliations process in a productised application; however, the tools had a very limited set of functions and processing power simply due to a lack of advanced technology. A simple task that we would routinely perform today, such as

matching 50 to 100,000 records with a relatively basic set of matching rules, might not even be able to be completed given the prior technology limitations. Creating these control points was time consuming and expensive as the reconciliations usually had to be modified to fit the tool instead of customising the tool to fit the data.

Second generation systems are where the reconciliation software industry really started to hit its stride. These systems were more of a product-based toolkit than the first-generation systems, allowing for pretty much any type of reconciliation to be addressed. These systems were much more powerful and customisable which led to some very impressive workflows being built across the industry, but the problem was still that they were essentially bespoke software builds and not easily or cost-effectively maintainable. The solutions finally had the power to process large datasets, but the underlying hardware and licensed third-party software was relatively expensive.

Market solutions often lacked portability between clients, even when using the same feeder systems, and it was difficult to build any sort of economies of scale as the installation base fragmented.

These second-generation systems power most reconciliations within financial services today but there is significant interest in where the industry goes next.

Due to advancements in big data and cloud technologies, computing costs and availability have reached a point where these innovations are more widely accessible, which has led to the third generation of reconciliation solutions based on machine learning. Machine learning is not a new concept; however, it is only now that the cost/power ratio has equalised to the point where these technologies are feasible options for the reconciliations industry.

These next-generation solutions are built on an AI/machine learning foundation and offer significant benefits over the previous generation of products when it comes to the power and features required to deal with the changing volumes, variation and velocity of data that we are seeing today.

How can AI and machine learning help in transforming the reconciliation process?

There are plenty of applications for AI in the reconciliations world – three areas receiving a lot of attention right now are accelerated onboarding of reconciliations; the improvement of already high match rates; and the automated allocation of exceptions to achieve productivity gains and reduce risk.

When onboarding a new reconciliation, a machine learning-based system can automatically analyse files and find relationships in the data to build a matching scheme. As the matching scheme is based on a statistical model, it can automatically update itself as it receives more data to boost matching rates. Previously this is a task that would have taken cycles of business analysis and testing to complete.

As the system can do this work automatically, clear efficiency gains can be realised, and managers can be comfortable in the knowledge that they are always getting the best results from their system by keeping up to date.

Cutting onboarding time and keeping matching schemes up to date are very important features that will have a real impact on a business, but I believe that the real value in adding machine learning to a solution has to do with the efficiency gains realised through the day-to-day management of exceptions.

Systems based on machine learning have the ability to predict the department to which a problem belongs, the reason for the problem and even the steps required to resolve the problem by examining the history of similar issues and reaching out to other systems for supplemental information. This might seem out of reach, but given the size of the datasets that are examined and the power of machine learning algorithms like XGBoost, this is easily within the realm of possibility.

The user is then free to focus on the real issues instead of just moving an issue to the next step in a manual workflow. We have seen overall efficiency gains of 30 to 40 percent by implementing this sort of technology.

William Cooley
Product manager
Broadridge



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Stability, resilience and innovation: Canada in focus

While 2020 has been a challenging year for markets, investment operations and many individuals, Lloyd Sebastian of CIBC Mellon explains that market participants and stakeholders have worked hard to deliver on the fundamental themes that distinguish Canada

As we connect with global market participants virtually at Sibos 2020, Canada continues to hold a strong position among institutional investors on the world stage, showcasing the strength of our six big banks, sophisticated pension managers, leading asset managers, growing insurance sponsors and other financial market stakeholders.

Canada's financial sector is characterised by robust and mature markets, marked by stability and transparency, proven infrastructure and efficient settlement mechanisms, and an effective regulatory environment. Also central to this confidence is a culture of participants' prudent risk management and innovation. For global

financial institutions and investors that wish to capitalise, Canada makes a strong argument.

Global investors into Canada continue to recognise the country's many advantages, including our highly-skilled, well-educated and diverse workforce, status as a hub for technological innovation and advanced infrastructure. According to The Economist Intelligence Unit, Canada retains first place in its regional rank of G7 countries for the best business environment. Indeed, Canada offers an array of incentive and support programmes to enable global investment, including an accelerated investment incentive, strategic innovation fund and an innovation superclusters initiative to name a few.

Technological advancements

Toronto, Canada is home to MaRS, North America's largest urban innovation hub. MaRS is a launchpad for startups, a platform for researchers and a home to innovators.

In alignment with this year's Sibos theme, driving the evolution of smart finance, Canada's financial industry is seeking continuous improvement while augmenting technology and data.

Payments Canada is marching ahead with its multi-year journey to modernise Canada's core payments infrastructure. Its vision is to build a modern payments system that is fast, flexible, secure and promotes innovation. As such, the platform for Canada's large value transaction system (LVTS) is targeted to be migrated over to its replacement Lynx in Q3 2021. This upcoming change should enhance the SWIFT processing of payments and benefit processing for participants as Lynx will be a true real-time gross settlement system, helping to enhance the speed and efficiency of clearing Canadian dollar payments. Lynx will be capable of processing the ISO 20022 global financial messaging standard, enabling the clearing and settlement of data-rich payments among financial institutions worldwide.

Efforts are underway by TMX-CDS for the Post Trade Modernization (PTM) Project, a new technology platform for Canadian market infrastructure. It is designed to deliver an integrated technology platform for the TMX-CDS systems, including clearing, settlement, depository, corporate actions, and improved security standards while driving greater efficiency, flexibility and responsiveness. Canadian Depository for

"Payments Canada is marching ahead with its multi-year journey to modernise Canada's core payments infrastructure. Its vision is to build a modern payments system that is fast, flexible, secure and promotes innovation"

Securities (CDS) will continue to engage participants, such as through industry committees and working groups, which CIBC Mellon actively participates in. Implementation of the PTM Project is scheduled for Q4 2021.

For many institutional investors, technology is viewed as a range of solutions and expertise rather than a single choice imposed by a vendor. In keeping with our global enterprise, CIBC Mellon is enabling an open architecture strategy designed to provide institutional investors with the flexibility to choose best-in-class systems for their investment activities and capture insights from a wide variety of data sources. The support of robust analytical tools can also be beneficial on the front lines of risk management. An open architecture model can even pave the way for a gradual transition for asset owners and asset managers alike to evolve their operational model.

On 15 September 2020, Canada's Office of the Superintendent of Financial Institutions (OSFI) launched a three-month consultation with the publication of a discussion paper, "Developing

“It is very important for foreign investors to perform a periodic review of the tax requirements with their tax advisors, custodians and other stakeholders as the existing tax rules and requirements keep changing”

financial sector resilience in a digital world” and an infographic that identifies five focus areas that can contribute to the effective management of third-party risk. OSFI’s paper highlights risks arising from rapid technological advancement and digitalisation, as these trends impact the stability of the Canadian financial sector. OSFI notes that the pace of change has only sped up since the pandemic began.

Canadian tax updates

On 20 April 2020, the Canada Revenue Agency released its revised guidance on the Foreign Account Tax Compliance Act (FATCA) and the Common Reporting Standard (CRS), respectively. The revised guidance has the potential to impact Canadian financial institutions’ and/or their clients’ operations, reporting and tax compliance programmes. For example, there are new penalties listed in the respective FATCA and CRS revised guidance if a Canadian financial institution fails to obtain a self-certification when required on or after 1 January 2021. The revised FATCA guidance contains some modifications,

including for obtaining self-certifications upon account opening, and for reporting undocumented accounts.

In response to challenges related to the COVID-19 pandemic, Canadian tax authorities developed some significant tax measures to support Canadians and businesses. For instance, for FATCA and CRS information returns, the filing deadlines for Part XVIII (FATCA) and Part XIX (CRS) returns were extended to 1 September 2020. In addition, no penalty will apply for failure to obtain a self-certification on financial accounts opened before 1 January 2021.

A key aspect of global investing is navigating the various tax rules and regulatory requirements across foreign markets. It is very important for foreign investors to perform a periodic review of the tax requirements with their tax advisors, custodians and other stakeholders as the existing tax rules and requirements keep changing. New tax regulations and requirements are released by the tax authorities in different jurisdictions periodically that may impact both existing investors and new investors. A strong asset servicing provider works to adjust processes in response to global regulatory and industry changes and their potential implications to the local market.

Canada’s regulatory environment

Canada’s regulatory structure is relatively complex, consisting of provincial regulators, federal regulators and industry self-regulatory organisations. Jurisdictions participating in the Cooperative Capital Markets Regulatory (CCMR) System continue to work together towards

“An important aspect that distinguishes Canadian investors from others in the pension space is a strong capacity for innovation and dexterity”

implementation of the CCMR, with the overall goal of modernising Canada’s capital markets, making them more competitive and better protecting investors. Participating jurisdictions of this long-term initiative are reviewing timelines for the launch of the Cooperative System to support a smooth and secure transition for market participants.

As part of global financial institutions’ phasing-out of the London Interbank Offered Rate (LIBOR), and other unsecured interest rates, various regulatory authorities have announced support in favour of rates based on actual underlying transaction rates. As of 15 June 2020, the Bank of Canada (BoC) has taken on the role of publishing the latest data for the Canadian Overnight Repo Rate Average (CORRA), Canada’s replacement rate. According to the BoC, CORRA measures the cost of overnight general collateral funding in Canadian dollars using Government of Canada treasury bills and bonds as collateral for repurchase transactions. The Bank provides Canada’s risk-free benchmark rate to users and data distributors on its website.

Canadian pension industry trends

Canada’s pension plans have a long history of leadership in alternative and private investment and with incorporating responsible investment strategies and environmental, social and governance factors — with a progressively prominent role in the global investment community — and their style is increasingly recognised globally as “the Canadian model”. An important aspect that distinguishes Canadian investors from others in the pension space is a strong capacity for innovation and dexterity.

There is growing interest from asset owners in establishing direct investment plans, or even evolving into asset managers themselves, merging in other smaller plans, managing funds on behalf of other plans as well as other institutional investors. Canadian plans have a stronger focus on direct and co-investment strategies than most other institutions. Canadian institutions are already among the world’s most admired and influential and they appear set to retain that status in the years to come.

The Canadian market amid a global pandemic

Canada’s financial markets shared in the significant disruption triggered by the global COVID-19 pandemic. The market correction that followed from the onset of COVID-19, during the peak period of March this year, saw tremendous volatility and extremely high volumes of investment operations. This came in concert with profound operational transition which saw financial institutions adapting and expanding



remote work environments and business continuity actions, while also handling an unusually high spike in volume.

Canada also shared the experience of unprecedented measures in response to the crisis. Canadian governments at the federal and provincial level stepped in with an array of relief measures to support individuals, businesses and the broader economy through the pandemic while working to “flatten the pandemic curve”.

The BoC reduced its benchmark lending rate through a series of rate cuts during March 2020 in response to the pandemic. Other stabilising measures were also launched by the BoC in order to support and uphold the stability and functioning of Canada’s financial system, for example, the it established several large-scale asset purchase programmes to help increase liquidity. With those measures, Canada’s financial system remained stable during the height of volatility and continues to properly function in the “new normal”.

From a market infrastructure perspective, our CDS central securities depository temporarily closed its window services for physical securities processing on 19 March 2020, in consideration of the states of emergency declared by several Canadian provincial jurisdictions in response to COVID-19, though the CDS business continues to remain fully operational. The window services will remain closed until further notice. CDS continues to monitor the current situation and they will provide an update to participants at the appropriate time. Amid this closure, CIBC Mellon — and some other local providers — continue to accept physical settlements and deliveries.

“Canada’s industry associations and regulators have taken the view that short-selling is part of the sophisticated market”

Canada’s industry associations and regulators have taken the view that short-selling is part of the sophisticated market. Unlike some other jurisdictions that decided to ban short-selling outright or on certain asset classes temporarily, Canadian regulators did not seek to ban short-selling during the extreme market volatility experienced in March of this year, when the pandemic was first declared.

Federal financial services regulator, OSFI continues to publish frequently asked questions for each sector that it oversees that addresses common questions on OSFI’s COVID-19 related regulatory adjustments, which are designed to support the financial and operational resilience of federally regulated financial institutions and private pension plans, contributing to the stability of the Canadian financial system.

OSFI announced on 31 August that it is unwinding some of the temporary measures put in place at the start of the global pandemic. In addition to lifting the temporary freeze on portability transfers, OSFI plans on gradually phasing out the special capital treatment of loan and

insurance premium payment deferrals that was provided to banks and insurers.

Further, OSFI notes that institutions and private pension plans have demonstrated their resilience and continue to adapt their risk management tools, operations, and processes to the current environment.

CIBC Mellon responded to the pandemic by rapidly transitioning more than 98 percent of its workforce to remote arrangements — a stance we intend to maintain through 2020 as we deliver on obligations.

Local presence matters

Global investors into Canada should expect on-the-ground expertise, dependable execution and local knowledgeable insights, with notifications on key changes and local regulations

in Canada, and clarification on documentation requirements to help navigate the complexities of the Canadian marketplace.

Global investors and market participants in Canada continue to focus on risk mitigation measures, new technology and modern architecture. The Canadian market is buoyed by its strength, stability and transparency and Canada still holds on to its fundamental character for which it is recognised globally.

While 2020 has been a challenging year for markets, investment operations and for many individuals, market participants and stakeholders have worked hard to deliver on the fundamental themes that distinguish Canada: confidence, stability and innovation.

We will continue to welcome the world (virtually) as global investors recognise the Canadian market opportunity.

The Canadian market is buoyed by its strength, stability and transparency and Canada still holds on to its fundamental character for which it is recognised globally

Lloyd Sebastian
Vice president,
global financial institutions
CIBC Mellon



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Shining a light

Maddie Saghir reports

Proxy voting has been a largely manual and outdated process for some time but COVID-19 has shone a light on new, technological ways of doing it. Could this change the system for the future?

Proxy voting is an important part of the asset servicing industry whereby a member of a decision-making body delegates their voting power to a representative to enable a vote in absence.

Companies hold annual general meetings (AGMs) with shareholders to review their performance over the last year, but if the shareholders are unable to make it then they can pass their vote through their banks and custodians who vote by proxy on their behalf. As well as reviewing performance, AGMs look into executive compensation, dividend proposals and significant investment decisions, and the ever-increasing hot topic of environmental, social and governance (ESG) and the risks related to it.

Charu Jain, product specialist for IHS Markit's IMProxy solution, explains that institutional investors own shares in hundreds of global companies that hold AGMs as per applicable company laws. Jain says: "AGMs for an investor are concentrated in a short time span and are located at distant global venues, therefore making it impossible for investors to personally attend all these AGMs to

vote. However, investors can appoint someone else as their proxy and authorise them to cast their vote, in line with their directions."

Jain adds: "Once AGM notice and materials have been delivered to the shareholders, proxy votes can be cast online, by mail or by phone, prior to the meeting. The votes can also be casted in person by the appointed proxy at the meeting itself"

Karen Weaver, custody product manager at BNY Mellon asset servicing, notes that if an issuer announces a general meeting, custodian banks will receive the notification, calculate the eligible position of their clients and pass the notification on.

She highlights that this process is usually manual and is repeated in every organisation. "By the time the shareholder gets the information it may have passed through four intermediaries to get to them and, if it's a popular security, most of the large custodian banks will have been involved."

Unfortunately, Weaver notes that while investment strategy and the ability to hold securities globally has evolved, a lot of processing for meetings remains manual which can make the events difficult to manage.

She adds: "Due to the inefficient process, shareholders then have a limited time to send their votes back to the issuer ahead of the meeting deadline as there is currently no option than to go back via the same route from which the meeting announcements came."

Indeed, the current model around proxy voting is somewhat outdated and in need of a technological update, but COVID-19 has exemplified this need even further.

Adapting to a new way

The global pandemic threw a spanner in the works for AGMs this year. February to June is the prime season for proxy voting, which is when countries around the world started going into lockdown.

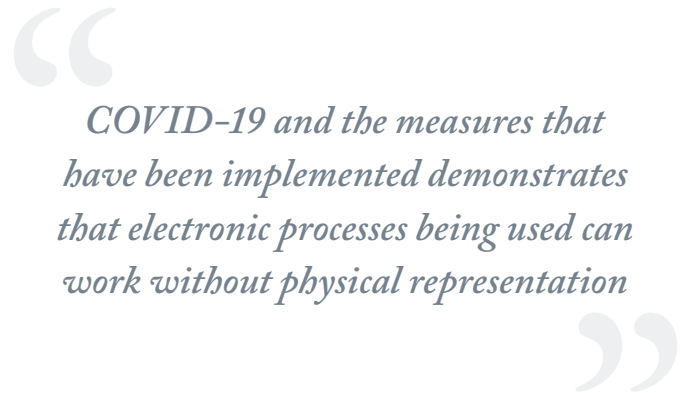
As well as this, travel to and from many countries was banned, as were public mass gatherings. This meant that companies were forced to put in contingency measures to minimise the disruption to their AGMs.

In terms of adapting to this, ISSA's Jyi-Chen Chueh, chair of the ISSA Operating Committee, explains that the ISSA Corporate Action & Proxy Voting Working Group (CA WG) has seen a series of measures taken by various regulators and market infrastructures during COVID-19 to address the challenges that have arisen as a result of the implementation of confinement and social distancing rules across the globe.

This has included providing guidance on conducting safe physical meetings; allowing for the postponement of annual general meetings; relaxing requirements in terms of physical documents/ wet signatures; allowing for alternative modes of meetings such as video, teleconferencing and/or any other electronic means.

IHS Markit's Jain agrees that COVID-19 had an extraordinary bearing on the AGMs this year.

He explains that companies that could not leverage technology either due to the legislation or their own constitutional rules or their choice, resorted to postponement, adjournment or seeking waivers from the regulators.



COVID-19 and the measures that have been implemented demonstrates that electronic processes being used can work without physical representation

Shining a light

While the pandemic has caused some disruption to AGMs, it has shone a light on new ways in which proxy voting can be carried out. In terms of whether the changes around proxy voting because of the current situation will alter for the long term, BNY Mellon's Weaver says: "COVID-19 and the measures that have been implemented demonstrates that electronic processes being used can work without physical representation. It would be such a waste to simply return back to the way things were."

"The technology and the processes already exist to manage the interaction between company and shareholder and this is shining a light on the manual and paper-based processes that have continued to stay in place instead of evolving with the times. The temporary measures will hopefully open the door to more substantial changes. That said, it could require legislative changes, so it is unlikely to happen overnight," she says.

Similarly, at ISSA, the belief is that the securities industry has an opportunity to help shape the post-COVID-19 "new norm".

Chueh comments: "We are accelerating that thought leadership among our members through new topical themes and by putting a new lens on existing topics like proxy voting. In that space, some of the temporary measures that have been adopted have the potential to be deployed on a more permanent basis, especially on topics related to electronic proxy voting and digital/hybrid meetings. This would require further assessment of the appropriate controls and governance, leveraging data and lessons learned during COVID-19 and engaging regulators."

On this issuers side, Jain says that the usage of technology brings considerable savings due to lesser printed AGM documentation and reduction in costs associated with a physical meeting for venue, travels and logistics.

Innovation and new technologies will have an important role to play in terms of lowering costs and deploying scalable and more efficient solutions

He adds: "Additionally, such online AGMs have a reduced carbon footprint due to lesser travels by the company's management and the board as well as the shareholders or their proxies. Although online meetings have their own set of challenges in terms of Q&A governance during the AGM and risks of technology failure; overall, the reduced costs and more end-shareholder participation will prop more and more companies to adopt technology solutions, where legally allowed. Once moved, the companies will tend to retain these technologies and might not revert to physical meetings even if the situation changes."

Technological intervention

A number of challenges associated with proxy voting can be addressed with technological intervention. Hosting virtual meetings and online votes via technology can help improve efficiency and save on travel costs as well as reducing the carbon footprint.

Some of the main challenges around proxy voting include communication timelines, especially voting results communication, where dissemination still needs further harmonisation globally.

Jain says that many a time, issuers are unable to identify the shareholders through the complex chain of financial intermediaries and it takes significant time and effort to send AGM notice and materials to them.

"Additionally, the communication is non-standardised and non-machine readable, thereby slowing the communication down the chain because each participant needs to validate the information being passed on. A number of shareholders might be receiving the AGM information so late in the process that they do not get sufficient time to delve on the resolutions and decide their vote," Jain explains.

Leveraging technology can help reduce complexity and improve traceability in the voting chain and provide for easy identification of shareholders and reconciliation of the valid votes, according to Jain.

However, Jain highlights that currently, only a few technology providers facilitate the processes for proxy voting. More investments will bring in new providers, technology innovations and process efficiency proposals to help improve upon the current technology infrastructure and the related processes.

Meanwhile, BNY Mellon's Weaver affirms that the current model was due for a change even before COVID-19.

As such, BNY Mellon recently joined a consortium consisting of Citi, Clearstream, Computershare, Deutsche Bank, HSBC, J.P. Morgan, and State Street to back a platform that simplifies how information and votes are shared from/to the issuer and its shareholders. This tool is called Proxymity and was initially developed by Citi before spinning off into its own entity.

Weaver comments: "Instead of looking to incrementally improve small parts of the current process, Proxymity looked at the problem as a whole; how to help the issuer speak directly to their shareholders and limiting the actions of those involved to be what's important. And so Proxymity was born and instead of processing the general meeting notifications, all the intermediaries need to do is confirm the eligible positions of our clients to the Proxymity platform."

"The platform marries the issuer information with the position information from the intermediaries for the client to see and cast their votes with Proxymity, which is directly connected to the issuers in several markets already."

Over at ISSA, looking at how technology can improve the proxy voting process, Chueh concludes: "Innovation and new technologies will have an important role to play in terms of lowering costs and deploying scalable and more efficient solutions. For instance, there has been a series of distributed ledger technology proofs-of-concepts that demonstrated the potential benefits of blockchain for proxy voting. However, broader adoption will also require regulatory support to promote e-voting, digitised authentication and documentation."

"Global standards harmonisation will also be key to avoid a multiplicity of proprietary formats, in order to reduce costs and enable interoperability."



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Firm foundations

Operational resilience, robust infrastructure and technology in the back office of securities post trade has enabled the front end to cope with unprecedented trading volumes and prepare for an uncertain future, according to Michaela Ludbrook of Deutsche Bank

For Michaela Ludbrook, Deutsche Bank's global head of securities services lockdown and overnight relocation to home "offices" was a poignant reminder of the importance of getting the nuts and bolts right to enable clients in the front office to continue to trade with minimal business interruption. "It highlighted the need for data and technology to protect, scale and streamline, people to invigorate processes, and partnerships to pioneer the next set of solutions," she says.

Transforming partnerships

"With the crisis precipitating both home and split office working across various locations around the world, we have invoked digital tools such as

electronic signatures, transparency around flows, data reporting and lifecycle transparency," she says.

As digitalisation accelerates right across the corporate banking landscape, operating and business models will change as the way people execute tasks or the technology they use evolves. "Artificial intelligence (AI), data and distributed ledger technology (DLT) will be crucial for future transparency around data and people being able to self-service," reflects Ludbrook.

Deutsche Bank Securities Services is assessing all digital tools and deciding which ones to integrate to reduce data latency, improve transparency and improve overall client experience. Ludbrook believes the industry needs to be flexible about which ones to test drive and then integrate.

"It could be eliminating tasks like email queries with self-service models, for instance application programming interfaces (APIs) enable us to link, and plug and play very quickly and DLT enables some parallel processes to eliminate handoffs."

To this end, Ludbrook shares that the bank's securities services team is "driving a partnership and co-creation approach with clients to build differentiated solutions that deliver end clients' benefits and solve common problem statements".

The business is advancing its exploration of DLT, API, AI, data analytics and machine learning to deliver client-centric securities services with several use cases in play:

- Using DLT to automate the over-the-counter bond lifecycle with digital "money" through allocation, primary issuance to secondary market trading and post-trade activities
- A pilot using DLT to enable beneficial ownership transparency in Europe, thereby simplifying compliance with regulatory requirements by providing investor beneficiary holding information while ensuring data privacy
- Using APIs to provide real-time trade settlement status updates to minimise the manual inputting of settlement instructions; the launch of Chatbot Debbie being an example of this

- Collaboration with an asset management company to enhance its liquidity management with real-time cash notification APIs
- Collaborations with a global custodian bank to develop an API-based foreign exchange (FX) custody solution that automates time-sensitive FX-related processes
- Using data analytics and machine learning, delivering a data analytics model that displaying clients' cash liquidity usage and how this corresponds to Deutsche Bank's funding provision in the market. Another tool, a settlement efficiency dashboard, uses big data to provide clients and operations with performance, volume and operating metrics

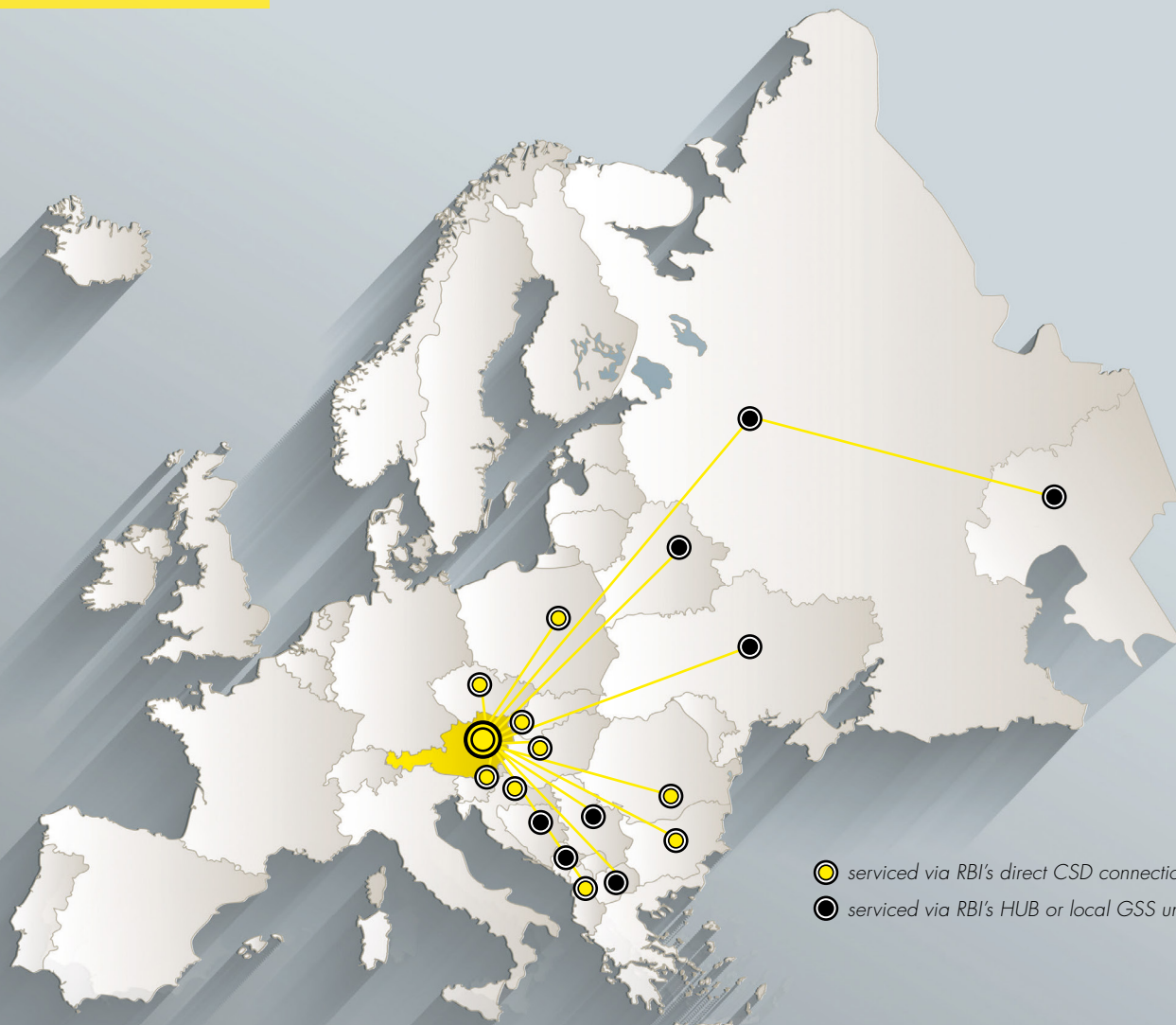
This article first appeared in Deutsche Bank's Guide to Sibos at www.db.com/sibos

AI, data and DLT will be crucial for future transparency around data and people being able to self-service

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A gold mine of data

With the asset servicing industry consisting of an abundance of information, reference data is becoming increasingly important and is being made available to other beneficial users

Maddie Saghir reports

Data has a wide variety of use cases; it allows organisations to more effectively determine the cause of problems and it has the ability to allow organisations to visualise relationships between what is happening in different locations, departments, and systems.

Reference data is an important part of the asset servicing industry, however, challenges can occur when processes are manual. Technological intervention and automated processes are paving the way to create more efficiencies in this space.

Riccardo Lamanna, head of State Street Global Exchange, Europe, Middle East and Africa, explains that reference data is usually referred to as static information related to securities, counterparts, issuers, or a combination of those. Asset servicing industry participants are users of reference data in their usual processes, from fund administration to risk management to performance services. However, Lamanna suggests that the industry is “progressively becoming a very important vehicle through which reference data is being made available to other beneficial users, such as its clients, as well as becoming a provider of reference data itself”.

Whenever a trader is executing a trade, counterparty and security identifiers are required. Neill Vanlint, managing director of global sales and client operations at GoldenSource, adds that this counterparty and security information is what the industry means by reference data.

Vanlint says that for asset services, consistent data utilised across systems is “of paramount importance”. He also highlights that custody services would be “impossible to manage” without reference data.

Affirming its importance, Yann Bloch, vice president of product management at NeoXam, stresses that reference data is the foundation which the rest of the data management processes rely on.

Reference data encompasses generic data domains, such as currencies, exchanges, countries and business day calendars. In the context of asset servicing, it extends to securities terms and conditions, entities (or parties), portfolios, accounts, clients, products, etc.

Bloch notes that even though data does not change often, “it is growing in scope, volume, complexity and importance”.

The scope of data will continue to grow as financial institutions tend to diversify their assets. For example, moving into alternative assets comes with its share of new types of reference data to manage.

Bloch says: “With consolidation in the banking and asset management sectors, the volume of data has mechanically grown, in terms of the number of clients and products for example.

Regulation, such as the Securities Financing Transactions Regulation (SFTR), the second Markets in Financial Instruments Directive (MiFID II) or the Fundamental Review of the Trading Book (FRTB), also mandates more complex data. Hence, dependable reference data is becoming more and more critical for regulatory compliance and business decision-making.”

A ripple effect

As industry experts have suggested, correct reference data is crucially important to businesses and it is critical to making sure data is as accurate as possible, but this is difficult to do without automated processes. Working in any large financial institution, there are multiple lines of business, such as consumer banking, corporate banking, asset management, asset servicing, and asset lending. Across these business units, you have to report on your balance sheet your assets, liabilities, counterparties, deposits, liquidity and capital positions.

Harry Chopra, chief client officer at Axiom SL, says: “You must have clean sets of data that reconcile across the multiple schedules. For instance, counterparty and securities exposures should line up on the balance sheet and individual reporting schedules. Also, all of these organisations are trying to price risk based on insight from this data – and if the data is wrong, there are huge consequences.”

Some of the main challenges arise when reference data is passed along through a manual process, either from the custodian to an investment manager or from an investment manager to a broker dealer, according to DTCC’s executive director, institutional trade processing product management, Bill Meenaghan.

Each step carries manual processing risk which can be eliminated by using an automated process, according to Meenaghan. He says: “Manual processes also don’t usually have any standards which may lead to a counterparty interpreting the data incorrectly, thus increasing the risk of trade failure.”

However, reference data management needs to be seen as an organisation-wide effort. Bloch highlights: “It cannot be the initiative of just one department, since reference data involves multiple IT, compliance and risk teams, as it is being sourced, transformed, cleansed, stored and consumed.”

“A successful approach of reference data management works when people, processes and technology are aligned in delivering a well-identified objective.”

Protocols in place

When it comes to the type of protocols in place to enable secure data transfer between counterparties, AxiomSL’s Chopra says: “We took it upon ourselves to create a cloud-based service for our product, which took us a couple of years to figure out. We were granted ISO 20001 certification, which is difficult to get for providing a service, as well as ISO 27017. We found that you must have key management in the process.”

According to Chopra, this process works with a set of encrypted keys that allow you to make sure that when data is moving from one organisation to another, and accessing secured cloud facilities, it is encrypted and arrives at the correct end points. He notes: “That worked well, and we now have multiple financial institutions of asset managers and banks that use the service.”

The industry has been relying a lot on established protocols such as SWIFT or FIX; essentially, any types of files exchanged over Secure FTP servers are commonplace. But in the last few years, Bloch says NeoXam has observed an increased adoption of blockchain-based protocols, although he notes “it would be a stretch to say that we’ve reached the mainstream stage yet”.

Simplifying the process

While it is very difficult to find and agree on industry-wide solutions that would make reference data easier to manage for industry participants, Lamanna argues that data management solutions are an important factor.

Industry participants can outsource a significant part of their data management, and when linked to reference data, service providers can deliver solid security master file management, saving significant resources and effort in areas such as reconciliations, manual interventions to overwrite wrong information and classification, according to Lamanna.

“Clients can then focus on their core business processes: asset allocation, investment activity and distribution of products,” he adds.

In terms of how to simplify the process to make the data easier to manage, Lamanna notes that data management outsourcing is certainly a way to help at the level of each market participant.

However, Lamanna explains that this must be based on a solid platform that can easily operate with multiple providers which inject data, and use applications that consume and in turn enrich that data.

Weighing in on this, Meenaghan says: “Where possible, reference data should be electronically managed by the source in a centralised database. That database should enrich transaction systems directly.”

“Transaction systems should also agree with what place of settlement (PSET) should be used to ensure the correct standing settlement instructions is selected.”

Meanwhile, Vanlint comments: “The biggest favour that financial institutions can do themselves, to navigate the current compliance minefield, is to ensure that all their reference data is managed in one centralised repository.”

The average firm has multiple different sources of data and this kind of disparity is impossible to sustain as “markets become increasingly complex and as merger and acquisition results in the need to fold one firm’s data architecture into another’s”, according to Vanlint.

Vanlint adds: “Firms that do not want to get caught out have to be confident that they can answer any challenges from the regulator or events in the market, so scrambling to compile piecemeal data is simply not an option.”

“You need to know where all the necessary information is, which is why a central source is so important.”

Standardising data

Creating standardisation when it comes to reference data is something that the industry is moving towards, as it will help simplify the process. Chopra exclaims: “This idea of entities, industries, and sectors marks that we are making huge progress. Granted, there are three or four different standards but at least it’s not 50.”

However, there is still a little way to go on issuer relationships on the fixed income side of things, but Chopra notes that this is “not a massive problem”.

He says: “Trading is a little difficult because there are so many trading systems and so many exchanges, but it is a manageable problem.”

Also agreeing that a standardised approach could make life easier for market participants, State Street’s Lamanna cites: “Any effort aiming to standardise reference data structures will make it easier for market participants and data management providers to deliver consistent and significant data which eliminates duplication, inconsistencies and reconciliation activities.”

However, Lamanna cautions that data users will always face challenges from their internal applications and processes when integrating reference data until they decouple data from those processes in favour of a solid data management infrastructure.

Chopra concludes: “The asset servicing industry sits upon a wealth of data, including the legal entity structure, investor managers, and trading positions. There is a unique opportunity to help these organisations with their global shareholding disclosure ownership.”

“That would be a very good way to think about where the asset servicing industry could go next by helping their clients to manage this particular regulatory reporting exposure.



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Time is critical

The financial services industry had several inherent challenges coming into 2020, however, IHS Markit's Michael McPolin says the pandemic has not significantly changed the challenges for financial institutions, but it has amplified the need and time criticality to take action



Will the events of 2020 be the catalyst to market change?

The financial services industry had several inherent challenges coming into 2020. These included growing trade volumes, greater regulatory pressure and increasing complexity of corporate events in a period of diminishing tolerance of financial institutions errors. These trends, combined with a sustained period of industry price compression and reducing profit margins, suggested that 2020 was heralded to be a challenging year even before the World Health Organization declaration of COVID-19 as a global pandemic.

The first half of 2020 has significantly increased the human and economic challenges, as many countries are beginning the transition out of lockdown and despite rapid and unprecedented central bank intervention, unemployment numbers are at record highs. This has placed a significant impact on key sectors such as the airlines, motor industry, construction, real estate, retail,

travel and leisure. The economic impact has affected investor confidence and resulted in significant market volatility with large drops in major market indices. We have also seen spikes in settlement activity as investors initially sought to move their investments to perceived safe havens of cash and other-risk-averse assets.

In respect of asset servicing as a direct consequence of the economic crisis, the number of bankruptcies and complex debt restructures in the market significantly increased while a record number of companies cancelled, suspended or extended their dividends. Income and distribution events were hit hardest as companies sought to retain liquidity in line with direction from governments and regulators.

The lack of clarity from some companies regarding dividend payment cancellations is compounded by conflicting market information. Some stock exchange

closures created investor panic, significantly adding to the operational challenge of servicing clients and obtaining timely and accurate information.

The industry had the additional challenge of responding to this market volatility while operating under a business contingency plan with most offices closed and staff working from home as a result of the global lockdown.

Some would argue that the pandemic has not actually significantly changed the challenges for financial institutions, but it has amplified the need and time criticality to take action.

How can financial institutions adapt to this challenge?

The industry headwinds of price compression and reducing profit margins remain as the primary driver for change in the financial services industry as financial institutions look to achieve efficiency, risk reduction and enhance their client service experience.

Changing workplace

Based on market analysis, remote working has proven to be successful with several major organisations considering revising their operating models to incorporate working from home on a permanent or rotational basis. It is felt that the adoption of this operating model will provide significant savings on real estate and provides staff with a better work life balance. It is envisaged that there will be an increased focus upon new technologies that enhance the robustness and efficiency of remote working along with tools that allow employers to better manage and measure performance.

A key facilitator of the success of remote working has been the adoption of communication technology platforms which have seen monumental increases in volume usage. This virtual world works for some businesses better than others, its ongoing adoption could provide great cost savings on travel and expenses, but the loss of human contact may impact future working and client relationships which have been an important attribute for the industry.

In a crisis situation and specifically with teams working remotely, one of the biggest operational challenges is the need to prioritise workload. This has traditionally been done based on the monetary value, but operations managers also need to consider reputational and regulatory impacts. Therefore, the need to have access to accurate market data and real-time workflow and risk dashboards is essential in order to mitigate risk and maintain service delivery.

Opportunities from technology

In response to these industry and market challenges, financial institutions have invested in rules-based workflow automation technology and digitalisation tools, either building or buying market-leading post-trade solutions. These solutions facilitate increased efficiency and risk reduction by automating the end-to-end workflow with the aim to increase straight-through processing rates. This creates time and resource to refocus the operating model to the identification and resolution of exceptions.

Firms are increasingly leveraging cloud technology to lower total cost of ownership (TCO) and simplify the implementation and maintenance of solutions compared to the traditional model of on-premise deployment and upfront licensing costs. The compelling economics of cloud is especially valuable to custodians who struggle to replace their legacy technology platforms, impacting their digital transformation and adoption of modern technology solutions.

Given the reliance on manual touchpoints and processes, developments in new technologies such as robotic process automation, can help increase operational efficiencies by automating the basic repetitive tasks without impacting the technology infrastructure. Using robotics, web scraping and artificial intelligence (AI) techniques to source corporate action data directly from newswires, the web, vendors and other providers to analyse the unstructured data in disparate formats using AI and machine learning, can help firms to reduce manual validation efforts and timeliness issue for corporate actions.

Intelligent automation can also be used to analyse reconciliation breaks and patterns at different steps in the investment lifecycle to help operations in faster resolution of breaks. Modern tools like natural language processing based chatbots can assist in client servicing for basic information queries and assist in the decision-making process with additional information.

Client onboarding and product distribution can also be significantly improved using digital onboarding solutions and workflows with multiple products in the market.

Messaging and interfaces

The increasing demand from buy-side clients on self-servicing, real-time information access and modern digital tools, provide opportunities for the industry to leverage technologies such as application programming interfaces (APIs) and open platforms. API adoption is increasing at a rapid pace and can improve the efficiency not only around client communication but also providing real-time data to the front office. This in turn optimises their returns on

investments and interactions with the street including counterparties, market infrastructures and solution providers. A number of new entrants are now offering data normalisation and networking sharing solutions.

Operating models and outsourcing

As highlighted earlier, before the pandemic there had been significant pressure on costs with financial institutions looking at transformation programmes that involve re-defining and enhancing operating models. Options under consideration included and continue to include combinations of replacing legacy platforms with best-of-breed technology and data solutions. Alternatively, firms can outsource non-core activities to specialist managed service providers who benefit from having developed centres of excellence, process expertise and economies of scale and in most cases delivered on new technology.

The general view in the industry is that there will be more outsourcing with several custodians now offering front to back solutions targeted at the buy-side. More broadly financial institutions are increasingly looking to outsource complete processes under business process as a service where not only technology but also business processes are being externalised to expert providers.

From our own experience, we know that there is a growing appetite for the managed services model where a whole process can be outsourced and mutualised while retaining options for customisation and user-specific integration needs.

For those of us who have been in the industry for some time, discussions around outsourcing and industry utilities have always been topical, but as we look at how the current health and economic crisis will shape the industry, the business case for adoption of these options for certain functions such as event sourcing and validation has become a reality. It is suggested that the next phase of the outsourcing evolution is mutualisation whereby multiple financial institutions outsource technology and operations to an external provider, especially in non-core functions.

Evolving regulatory change

The market volatility seen in the first half of 2020 is likely to continue due to uncertain demand and concerns over prolonged economic instability. The challenges around corporate actions complexity will continue to evolve. Capital markets will find new and innovative ways to raise investments and governments will respond to the economic crisis by most likely introducing new austerity measures such as tax legislation.

In addition to the above challenges, history has told us that after any crisis governments and regulators have tried to introduce additional regulations to protect investors and maintain confidence in market integrity. In respect of the COVID-19 pandemic, the cause and impact are not a result of failure to control or regulate the market but an opportunity for financial institutions to work with the regulators to address inefficiencies and risk in the market by using regulation to drive the harmonisation and standardisation agenda.

At IHS Markit, we have seen evidence of this approach used within the second Shareholder Rights Directive in Europe which stipulated performance parameters and the use of machine-readable, straight-through processing capable messages. This direction resulted in the adoption of ISO20022 for proxy voting by the Securities Market Practice Group and the development of a number of market offerings including our IMProxy solution.

In summary financial institutions need to embrace an agile and innovative approach to the global challenges as they evolve. Firms can remain competitive by transforming their operating models and adopting technologies to deliver against the primary challenges of enhanced efficiency and cost reduction. Financial institutions who have invested in new best-of-breed technologies have an advantage over firms operating on legacy platforms and it is essential that these firms progress with their business transformation programmes as the cost of delay in the current environment could be critical.

For more information, visit [ihsmarkit.com/informationmosaic](https://www.ihsmarkit.com/informationmosaic)

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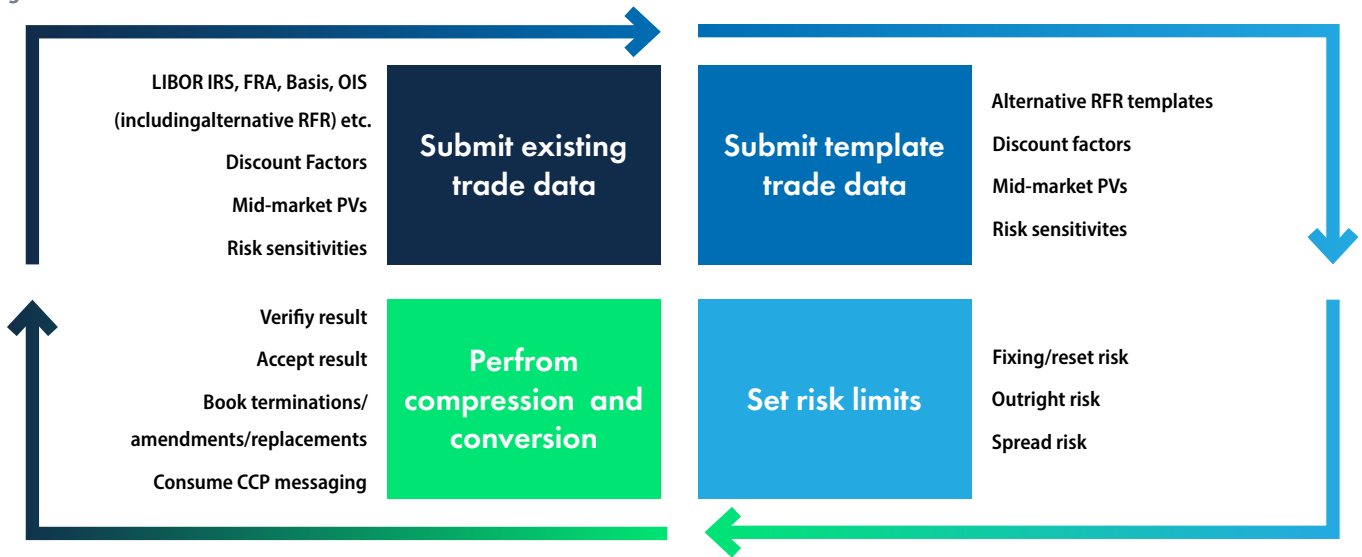
Delivering certainty in uncertain times

TriOptima explains how it combines the reduction of gross notional exposure and the conversion of net risk exposure to deliver outsized results, partnering its portfolio compression network with core net ICE LIBOR over-the-counter swap portfolios



triReduce's benchmark conversion service offers users an interactive approach to mitigating uncertainty about the future of Intercontinental Exchange (ICE) London Interbank Offered Rate (LIBOR) swaps. Swap market participants can proactively reduce both their gross and net exposure to the ICE LIBOR benchmark at the same time as increasing their adoption of the alternative reference rate for each respective currency. This service will be provided for trades cleared in all major central counterparties (CCPs) as well as for ICE LIBOR-referencing trades held in non-cleared portfolios. A single process, in which participants retain control of the transition within their portfolios, is key to managing the change in your own mid-market valuations. By insuring all compression and conversion takes place iteratively and at each firm's own valuations, the service brings clarity to discussions about how to adopt alternative risk-free rates (RFRs) in swap portfolios.

Figure 1



Reviewing the data requirements

To better understand what is required, **Figure 1** illustrates triReduce’s benchmark conversion service. As they do today, participants will submit their existing swap portfolios, where it is likely they will have existing ICE LIBOR and non-ICE LIBOR referencing trades, including alternative RFRs. This enables

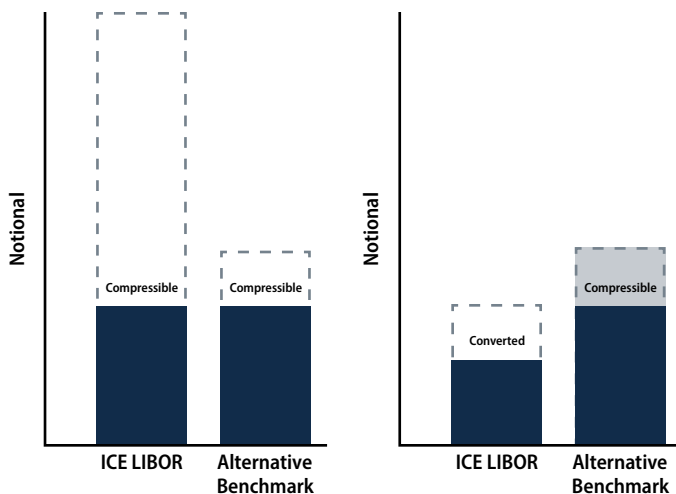
the service to compress where possible and convert into the alternative RFR where compression is not possible.

Participants will provide discount factors and their own mid-market valuations, as well as any measures of risk they would like to control through the process for their existing trades and for additional template trades.

Figure 2

Maximise reduction of gross notional across ICE LIBOR swaps and the alternative benchmark

Convert remainder of ICE LIBOR swap exposure to the alternative benchmark



These template trades are a standard representation of alternative RFR trades that will be used to establish additional liquidity at specific maturities to facilitate the conversion. With this information and the corresponding risk-based limits that participants define, triReduce’s benchmark conversion service will return a proposal of fully terminated, amended and replacement trades that reduce exposure to ICE LIBOR transition in a controlled manner. Once accepted by each participant within a finite window of time, the proposal is passed on to the CCP for processing in the case of cleared trades.

Reduced ICE LIBOR over-the-counter swap exposure

The result is a reduction in ICE LIBOR swap exposure achieved through a simultaneous reduction of gross notional exposure and conversion of net risk exposure.

TriOptima combines these two objectives and delivers outsized results by bringing together its world-leading portfolio compression network and new participants with core net ICE LIBOR over-the-counter swap portfolios, as seen in **Figure 2**.

Ensure your readiness to take control of the ICE LIBOR transition for your over-the-counter swap portfolio by contacting your local TriOptima office or emailing benchmarkconversion@trioptima.com to discuss benchmark conversion.

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