



asset servicing times

**TECHNOLOGY
ANNUAL 2022**

Post-Trade Securities Processing 2021 Industry Whitepaper

The Post-Trade Securities Processing 2021 Industry Survey
by IHS Markit and Asset Servicing Times

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Learning from the past to build the future

Welcome to the 2022 Asset Servicing Times Technology Annual.

During 2021, the financial services industry has continued to adjust to swings in volatility and market liquidity and to reconfigure workflow in response to the COVID-19 pandemic. This has been superimposed onto a change agenda that the industry has been managing for decades — how to improve straight-through processing rates, to harmonise market practice, to eliminate custody, settlement and counterparty risks, and to manage capital and liquidity as efficiently as possible.

As the year draws to a close, we hear an announcement that US securities settlement is likely to move to T+1 during the first half of 2024 — approaching a quarter century after earlier moves to deliver next-day settlement in the US, led by the Securities Industry Association, were postponed in July 2002.

Contributors to this volume reveal how the COVID-19 pandemic has reinforced the true power of cloud computing and digitalisation, not only to meet immediate operational needs such as virtual collaboration and business continuity, but as a springboard for service innovation and business growth. By moving to a Software-as-a-Service (SaaS) model and away from legacy infrastructure, contributors explain how they are able to offer a more attractive pricing structure and greater flexibility in delivering innovation and fast-to-market upgrades.

Technology is also key in providing early warning of risk and enabling financial institutions to manage that risk. This annual explores how a financial institution can ensure

the smooth, uninterrupted running of its systems and procedures. The ability to run continuous risk assessment is one important part of operational resilience, ensuring the continuity and viability of a bank's critical functions. This is precisely where strong technology systems underpin the human effort to understand and manage risk.

In the finance sector, nearly every function and process is impacted by cash payments, from the processing of derivatives transactions to the managing of asset servicing events. This volume examines how specialists are reapplying their matching capabilities, exception management functionality, and shared data networks to improve processing efficiency in the payments area.

Our contributors analyse the technology and data challenges faced by private wealth managers in making their approaches to portfolio construction accessible to investors — an important requirement in maintaining a strong client base and in demonstrating good governance to regulators.

More broadly, AST reflects on the key role played by technology in protecting our industry against cyber vulnerabilities. It also discusses the wider application of a longstanding technology tool — the application programming interface, or API — in delivering wider efficiency and flexibility to asset servicing functions.

In closing, we take the opportunity to thank all partners that have supported this technology annual.

Bob Currie
Group Editor

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Building Responsible Partnerships

IHS Markit partners with DTC

IHS Markit is connecting its corporate actions Software-as-a-Solution (SaaS) with the Depository Trust Company's (DTC) products and services to enhance corporate actions lifecycle management processes for its clients. Developed leveraging DTC's current ISO 20022 messaging platform for voluntary reorganisation instructions automation, the connection includes entitlements and allocations processing. The connection also offers DTC participant users efficient straight-through processing for corporate actions with the latest ISO 20022 standards included.

Utilising DTC's SMART technology, users will be able to automate the corporate actions workflow from announcement capture to instruction processing to final allocation using the latest ISO 20022 messaging standards, IHS Markit outlines.

Deutsche Börse releases digital post-trade platform

Deutsche Börse is launching a fully digital post-trade platform, taking advantage of the framework established by the recently enacted German digital securities law.

This digital platform, known as D7, will support distributed ledger-based technology (DLT) and links to cloud-based services, enabling market participants to digitise financial products with connectivity to established central and distributed markets and infrastructure.

The German market infrastructure group indicates that this will provide the foundation for same-day issuance and paperless, automated straight-through processing across the full transaction value chain, embracing issuance, settlement, payments, custody and asset servicing for a broad range of digital securities.

Technology developments for 2022



SmartStream enhances Latin America presence with new partnership

In September, SmartStream Technologies, the financial Transaction Lifecycle Management solutions provider, entered into a partnership with BRITech S.A, a provider of end-to-end solutions for buy-side firms in Latin America.

As partners, both firms will deploy digital solutions for back-office operations in the investment management ecosystem.

While BRITech offers a series of technology solutions for front-, middle- and back-office operations, SmartStream will fill the gaps in the areas of data reconciliations, reference data and collateral management.

The partnership will initially start with the servicing of financial institutions in Brazil, Argentina and Chile, with plans for further expansion and global initiatives in 2022. ■

Deutsche Börse is developing the D7 platform in association with its long-term technology partners Digital Asset and Microsoft, along with DLT specialists R3 and VMware. It has partnered with a number of financial services companies to deliver the project, including BNP Paribas, Citi, DekaBank, Deutsche Bank, dwpbank, DZ Bank, Goldman Sachs, Raiffeisen Bank International and Vontobel.

D7 will be implemented through a phased roll out that is likely to extend to 2024. The group anticipates that, by mid-2022, more than 80 per cent of German international securities identification numbers will be eligible to be digitised through the digital central register, enabling same-day issuance and paperless, automated straight-through processing for certificates and warrants issued at Clearstream Banking AG.

As an open platform, D7 will support decentralised and delivery-versus-payment settlement and custody systems. This will offer connectivity to a range of existing DLT platforms, including FundsDLT for fund administration and distribution and HQLAx for collateral transformation and lending of collateral baskets.

Euroclear supports use of CBDC for settlements

In October, a consortium of institutions, led by Euroclear, successfully experimented with central bank digital currency (CBDC) for settling French treasury bonds on a test blockchain. The experiment, which was commissioned by the Banque de France, included Agence France Trésor, BNP Paribas CIB, Crédit Agricole CIB, HSBC, Societe Generale.

IBM provided Euroclear with design and platform features, including privacy-preserving tokens and hybrid cloud capabilities. The objective of the experiment was to assess if a wide range of operations and functionalities can be

run on a blockchain platform and identify, from a user point of view, the added value of blockchain technology.

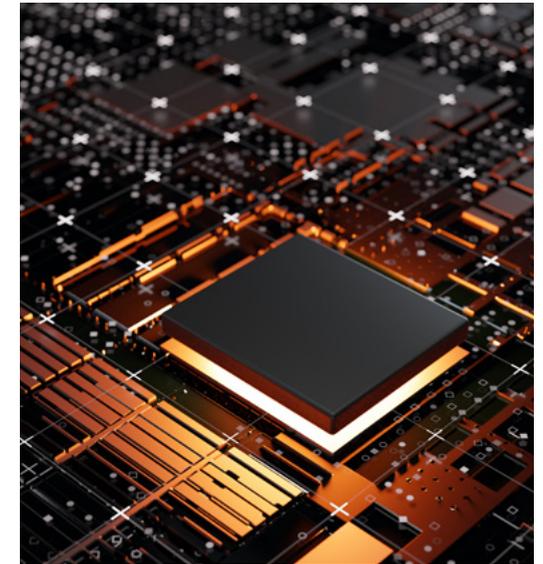
The experiment covered a range of core securities settlement operations including securities issuance, primary market and secondary market trades, liquidity optimisation mechanisms such as repo and interest payments. The experiment also demonstrated that a blockchain platform can co-exist and interoperate with existing market infrastructure, Euroclear says.

Northern Trust initiates AI solution in efforts to digitise alternative asset servicing

In September, Northern Trust collaborated with Microsoft Azure Applied AI Services and Neudesic to create a new artificial intelligence (AI)-powered solution as part of its initiative to digitise alternative asset servicing. The AI-powered solution will extract unstructured investment data from alternative asset documents and make it accessible and actionable for asset owner clients. Additionally, it transforms crucial information such as capital call notices, cash and stock distribution notices, and capital account statements from a variety of unstructured formats into digital, actionable insights for investment teams.

According to Northern Trust, the new AI-powered data extraction capabilities will read stored documents and fund manager reports on holdings and performance of hedge funds, private equity and other alternative assets and pull out data points including asset names, currencies and market value.

Meanwhile, the two functions – document capture and data extraction – create an end-to-end, scalable, cloud-based process capable of moving from document receipt notification to digitised, accounting-ready data in just minutes.



Pirum Systems unveils corporate actions processing solution

In March, Pirum Systems launched a solution for corporate actions processing as part of its 'Future Tech' initiative.

COACSCONnect is a "revolutionary offering that brings much needed risk reduction, connectivity, and automation to the processing of both mandatory and voluntary corporate actions", Pirum says.

Leveraging its "unique network and connectivity in securities finance", Pirum's COACSCONnect service aims to enable market participants to create, match and disseminate corporate action-related notifications. By centralising these processes, Pirum aims to allow market participants to settle claims quickly and resolve differences in a highly secure and fully audited workflow. ■

Citi observes steady increase in adoption of APIs

This August, Citi Treasury and Trade Solutions (TTS) Asia Pacific revealed it has processed close to 350 million application programming interface (API) calls for corporate clients since the launch of APIs for corporates in 2017.

APIs facilitate the execution of a range of functions that support real-time banking experience as corporate clients digitise their businesses.

Citi's APIs for corporates are offered through TTS' CitiConnect solution, and includes more than 80 APIs, covering both data-driven and transaction-driven APIs.

Data-driven APIs support self-servicing needs including producing reports, providing real-time foreign exchange information to a client, as well as account services including providing proof of payments to clients.

Transaction-driven APIs facilitate payment transactions, including instant payments and collections, request-to-pay transfers as well as WorldLink transfers.

According to Citi, momentum has continued through to this year. In the second quarter, the business' API client base grew 45 per cent year-on-year.

BIS and Bank of England open London innovation centre

In the Summer, the Bank of International Settlements (BIS) opened a London innovation hub in collaboration with the Bank of England.

This is the fourth innovation centre that the BIS has launched in the past two years, having already established innovation partnerships with the Hong Kong Monetary

Authority, the Monetary Authority of Singapore and the Swiss National Bank.

It has plans to open further innovation centres in Toronto with the Bank of Canada, with the European Central Bank and the Eurosystem in Frankfurt and Paris, and with four central banks in the Nordic region (Danmarks Nationalbank, the Central Bank of Iceland, the Central Bank of Norway and Sveriges Riksbank).

Deutsche Börse successfully tests DLT-based securities settlement

Back in March, Deutsche Börse, Deutsche Bundesbank and Germany's Finance Agency developed and successfully tested a settlement interface for electronic securities.

Securities settlement using distributed ledger technology (DLT) is performed with the aid of a "trigger solution" and a transaction coordinator in TARGET2, the Eurosystem's large-value payment system, explains Deutsche Börse.

Working with market participants, Deutsche Börse has demonstrated that it is possible to establish a technological bridge between blockchain technology and conventional payment systems to settle securities in central bank money with no need to create central bank digital currency.

Barclays, Citibank, Commerzbank, DZ Bank, Goldman Sachs and Societe Generale were all involved in conducting the experiment.

During testing, the Federal Government's Finance Agency issued a 10-year federal bond in the DLT system, with primary and secondary market transactions also being settled using DLT. The transactions carried out during testing were not legally binding. ■



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The wealth management industry is on a rapid growth trajectory, with assets under management (AUM) projected to increase by as much as 50 per cent between 2020 and 2025, according to the Business Research Company¹.

This means there is an incredible amount of opportunity in the space, but it also means that client demands and regulatory burdens are likely to ratchet up in the years ahead — in fact, this is already happening.

To thrive in this shifting landscape, asset managers need to provide snapshots of their various approaches to portfolio construction to entice new clients, satisfy existing ones, ensure internal best practices, and demonstrate transparency and good governance to regulators. As the wealth management industry matures, providing this information is a natural evolution.

Composites enable wealth managers to achieve all of this and more. The Global Investment Performance Standards (GIPS), which call for the use of composites, define them as “an aggregation of one or more portfolios into a single group that represents a particular investment objective or strategy”. This means that instead of presenting the performance of individual, paper-traded or model portfolios, firms can create composites for specific areas — for example, Europe, Middle East and Africa (EMEA) equities or Asia-Pacific (APAC) fixed income — to showcase their overall strategy and performance.

While building composites is common among institutional asset managers, private wealth managers have not adopted them to the same degree — but a shift is already underway, and this will continue to change as wealth managers face renewed scrutiny.

What are the benefits of composites, the historical barriers to adoption in wealth management, and how can firms leverage technology to implement this process?

Efficiency in the aggregate

Confluence’s chief advisor, Carl Bacon and senior technical sales specialist, Samson Musanganya explain why private wealth managers should adopt composites

Different clients, different approaches

If composites have so much utility for private wealth managers, why haven't these firms adopted them at a higher rate? There are a few reasons, all of which can be attributed to the unique complexities of this industry. It is important to remember that GIPS is merely a set of guidelines — compliance is not a requirement for any firm. Historically, institutional asset managers have touted their GIPS compliance to entice clients for whom the guidelines are important — but in the wealth management space, where clients are mostly individuals, the dynamic is very different. These investors may not know much about the financial services industry, let alone the various standards that the buy-side might adhere to, so there has been little demand for GIPS-compliant offerings.

Similarly, while many institutional clients want to maximise returns in the short-term, necessitating regular reevaluation of strategies, the wealth management clients are more likely to employ long-term, goal-based strategies. When the objective is to grow assets over a period of decades, clients generally will not pore over the intricacies of what goes into their portfolios as long as they are hitting overall benchmarks.

The third factor that has depressed adoption is not client-driven, but technological. Because private wealth managers serve so many individual clients, they handle huge volumes of portfolios, and their technology budgets are sometimes restricted, leaving them unable to support this scale. In contrast, institutional asset managers have lower portfolio counts and comparatively massive technology budgets, easing the implementation of composites.

The result is an environment in which wealth managers do not need composites to remain competitive, but thanks to a host of forces, this is changing quickly.

The case for composites

As the wealth management space has advanced, so too have the regulatory and guideline-related frameworks in which these firms operate, as well as the technology that enables them. It all adds up to an increasingly powerful case for private wealth managers to adopt composites. The year 2020 saw a revision of the GIPS Standards, including several changes to make it easier and more enticing for a wider range of firms to comply. For example, when building composites, pooled funds no longer need to be included if the relevant strategy is offered only through the pooled fund structure, making it easier to communicate the value of specific investment vehicles. Buy-side firms also have more flexibility for incorporating money-weighted returns versus time-weighted returns in building the composites.

In addition, the revised standards re-introduced carve-outs — portions of portfolios that represent distinct investment strategies in themselves — to give wealth managers more flexibility in demonstrating historic performance.

The growing scrutiny of model portfolios, a historically popular choice among many wealth managers and advisers, is another key consideration. The marketing and presentation of these portfolios are typically subject to less regulatory oversight compared to their institutional counterparts, but there have been rumblings that some regulators would like to change this.

By adopting composites, private wealth managers can prepare for regulatory shifts while communicating to clients that regardless of how requirements may change, their manager adheres to the highest standards in the industry.

Finally, there is the technology aspect. It is no secret that innovation has progressed at a rapid pace in recent years and firms with smaller budgets and higher

volumes of clients stand to benefit most. Automation and machine learning, for example, have advanced rapidly, helping firms carry out once-cumbersome processes in a fraction of the time. That means what was once an insurmountable volume of client portfolios can be distilled into composites far more easily. Similarly, building composites relies heavily on the accuracy and workability of upstream data, which has never been easier to access, normalise and query.

These factors have pushed a growing number of private wealth managers to adopt composites — but not in equal measure. Private wealth managers housed within larger institutions are adopting composites at a faster rate, while smaller entities have been slower to do so. These firms might consider a pivot, as it has never been easier to access all the benefits that composites have to offer.

A range of benefits

The reason for adopting composites goes far beyond GIPS compliance. Composites have positive effects in a wide variety of arenas, and while abiding by the guidelines is a big plus, the efficiencies that they unlock would be desirable to private wealth managers regardless of outside expectations.

Benefits of composites

- **Powerful tool for sales and marketing**
- **Easier assess of performance**
- **Ensures that wealth managers' operations run smoothly**
- **Provide a regulatory safe harbour**

"Building composites relies heavily on the accuracy and workability of upstream data, which has never been easier to access, normalise and query"

For one thing, composites can serve as a powerful tool for sales and marketing. Firms can present their offering to potential clients who are interested in gaining insight into strategy and real-world performance and risk. This has been a standard practice among institutional managers for years. As adoption from private wealth managers continues, it only makes sense that potential clients would be next in line to demand this of firms. Furthermore, the technology that powers the industry will continue to evolve — making differentiation more essential — likely making it only a matter of time before composites are considered a common offering by firms.

Composites also make it easier to assess performance for both the firm and prospective clients. Internally, they can fuel effective portfolio manager appraisal against goals and benchmarks; meanwhile, investors are empowered to make manager-versus-manager comparisons.

"As more rigorous regulatory standards and faster technology continue to shape the industry, the use of composites as a standard practice feels like a logical extension"

each portfolio. This leads to an abundance of benefits down the road for both the manager and the firm, including time saved and smoother internal and external performance reporting.

Finally, there is the compliance angle — both regulatory and otherwise. The GIPS Standards are undoubtedly important, but there are other regulatory considerations too. Composites provide a regulatory safe harbour to illustrate that strategies and portfolios are generating returns and serving the needs of investors. If there is ever any concrete regulatory action, this can communicate a commitment of best practices and service as a head start in the necessary disclosures. As the wealth management industry continues to face increasing regulatory requirements, it bodes well for firms to position themselves as trustworthy and compliant as possible.

Composites at Confluence

Confluence's web-based composites solution enables clients to achieve compliance with current and future GIPS Standards.

In an industry that uses ever-evolving technology, hiring large compliance teams and conducting manual processes is untenable and inefficient. Confluence's solution — which includes over 1000 global GIPS compliance verifications — is centered around automation and can efficiently meet each client's needs by addressing high volumes of portfolios and analytics.

The solution also includes the automatic rules-based association of accounts to specific composites and can easily generate reports based on those composites in a scalable manner.

Because it is a hosted solution, it is flexible and customisable with easy installation and deployment.

Perhaps most importantly, composites can be powerful sources of information when it comes to assessing suitability and dispersion. Selecting a wealth manager is a major decision, and while providers can talk about their strategies at length, it is far more illustrative to use composites to demonstrate what investing with them would actually look like. When particular clients significantly underperform or outperform others in the same composite, questions should be raised.

Composites can also help ensure that wealth managers' internal operations run as smoothly as possible. With a more streamlined process, managers gain enhanced control over (and greater insight into) the elements of

Putting it into action

A use case for the effectiveness of composite adoption is with a top 10 Global Private Bank, which transitioned from using model performance to using composites 100 per cent of the time.

The sheer volume of data the business managed posed a challenge, leading it to seek out an automated, flexible and scalable solution that eliminated the numerous manual processes and enabled more ways to meet the needs of clients.

The team began working with StatPro (now Confluence) by using its composites solution over five years ago and by using composites, the business can be fully transparent with its client base.

This enables a better client experience through marketing and sales efforts and promoting good governance.

Unlike institutional managers, where GIPS compliance is an expectation in the biggest markets, private wealth firms have historically not been penalised for not complying with GIPS Standards or reporting on composites.

However, this should not prohibit private wealth firms and their clients from putting them in place. The benefits are vast, positioning firms for success as the wealth management industry continues to mature.

As more rigorous regulatory standards and faster technology continue to shape the industry, the use of composites as a standard practice feels like a logical extension. This is especially true given the highly scalable and flexible solutions offered by firms like Confluence, which make the process as easy and efficient as possible.

By looking at the use case of this Global Private Bank, an organisation consistently setting standards in the industry,

"Selecting a wealth manager is a major decision, and while providers can talk about their strategies at length, it is far more illustrative to use composites to demonstrate what investing with them would actually look like"

we can see the shift is already underway — more are sure to follow.

At Confluence, our goal is to meet the needs of each client and help them succeed. Looking ahead, we expect to see an increased interest and adoption of composites and GIPS Standards in private wealth across many different types of firms.

Our goal is to meet the needs of each client and help them succeed. ■

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Holding the key

Digital technologies hold the key to innovation and business growth explains Vicky Dean, Goal Group's managing director, EMEA and global head of client services



The COVID-19 pandemic has served to reveal the true power of cloud computing and digitalisation, not only to meet immediate operational needs such as virtual collaboration and business continuity, but as a springboard for next-level efficiency, service innovation and business growth.

At Goal Group, we are proud of our award-winning digital transformation that has led external consultants to describe us as a “lean, mean machine” with world-class fintech credentials, a fast-expanding global client base and a highly engaged hybrid workforce.

A recent report by the US Financial Industry Regulatory Authority’s Office of Financial Innovation highlights the extent to which cloud computing is enabling organisations in the securities industry to adapt successfully to changing markets and become more competitive.

It states that “cloud computing is increasingly seen by many firms as an important architectural component to their infrastructure” and that it provides “opportunities to enhance agility, efficiency, resiliency and security within firms’ technology and business operations while potentially reducing costs”.

These wide-ranging benefits are certainly borne out by our — and our clients’ — experiences.

Migrate, modernise, digitise

Several years ago we chose to embark on our digital journey with the support of our managed IT services partner, BJSS. Together we set about facilitating our long-term digital transformation, resilience and business growth through modernising our IT operations. The ultimate goal was to regenerate our business and services to meet the evolving needs and expectations of today’s investment community — and we are successfully achieving this.

Migrating our core applications and data from our server-based infrastructure into the cloud was an integral and essential step in the evolution of our business model. When we decommissioned our servers — vastly reducing our costs and our carbon footprint — we also freed ourselves from any physical or geographical constraints to growth. Moving to the cloud created an agile, scalable platform for new product development and entry into new markets. Staff were given secure, remote access to all the documents, data and applications they needed to help them work more flexibly, and our disaster recovery time was slashed to just one day. Quite an impressive set of business improvements.

Choosing Amazon Web Services (AWS) as a cloud provider gave us the scale, security, availability and cost optimisation necessary to deliver our ambitious growth and service goals. In addition to leveraging the native security of AWS, we implement additional controls on our service layer to ensure the highest possible standards in line with our ISO/IEC 27001 certification for information security. When completing requests for proposals and vendor risk assessments, we find that running our services on AWS immediately ticks many boxes, not least in terms of security and resilience.

Our brand new business continuity and remote working set-up was put to a stringent test when the pandemic hit in early 2020. Fortunately, our full cloud migration had gone live just weeks before lockdown, so with the support of BJSS we were able to transition quickly and securely to a remote working model and continue 'business as usual' for our clients across both withholding tax reclaims and securities class actions recoveries. This was a huge accomplishment for everyone involved in our digital transformation project. Our cloud-based applications provide remote access by design, using IP whitelisting, so clients could log on securely via their corporate network while working from home.

Subscription services for 2022

Aside from migrating to the cloud, we have revolutionised our core applications. Clients can choose to fully outsource their reclaims and recoveries to us, or they can take advantage of our subscription-based applications and manage the process themselves, bringing greater accuracy, efficiency and cost control to their existing processes. Both options enable clients to leverage the full benefits of cloud-based digital services regardless of the maturity of their own digital adoption programmes.

Thanks to the cost efficiencies we have gained by moving away from our legacy infrastructure, we are able to offer a far more simplified, attractive pricing structure than traditional providers. Clients who wish to 'insource' our applications pay a fixed-price subscription that covers unlimited users, unlimited processing volumes and real-time updates. This is a transformative step for the investment community, enabling institutions to scale up their processing operations efficiently, cost-effectively and sustainably; enhance their current offering to investors and meet their fiduciary obligations to a higher standard; create new revenue and service opportunities, where regulatory rules allow; and free up internal resources thanks to advanced levels of automation.

Delivering all of the benefits described, we are soon to launch the updated, cloud-based version of our flagship withholding tax reclaims processing engine, Global Tax Reclamation Solution (GTRS). Our global client service teams have worked closely with clients to channel ideas and feedback into the technical development and design process. With brand new, client-led features to optimise efficiency and automation to the highest possible degree, combined with a smart new look and feel, GTRS is set to transform the process and cost model traditionally associated with withholding tax reclaims. We are delighted with the feedback we have received so far from clients and prospects.

Another important component of our digital transformation initiative is the redevelopment of our client portal, which will soon become our primary service delivery channel for both sides of the business. It will enable clients to manage their entire claim lifecycle digitally, offering new content, functions, features and design, precisely aligned with their needs. While investing in digital service delivery, we remain committed to providing dedicated, personalised support at a local level via our client service teams across the globe.

Seizing new opportunities

Alongside the upgrade of existing applications, we are capitalising on our technical agility and smart design capabilities to enhance and extend our services, develop new ones and enter new markets. For instance, we have converted our in-house withholding tax reference database into a smart, simple-to-use online tool called Treaty Rate Manager, in response to market demand for access to our knowledge base and dedicated resources as a standalone service. We have several other services in the pipeline that will be complementary to our core offering.

One of our biggest achievements has been the development of ADRoit, a cloud-based withholding tax relief platform designed and built specifically for the US depositary banks. Since its launch ADRoit has disrupted the market for tax relief on American Depositary Receipts, capturing 25 per cent market share within 18 months and breaking a nearly three-decade-long market monopoly. The average election rate among DTC participants is around 60 per cent, but thanks to its simplicity and user-friendliness ADRoit is driving up engagement levels and achieving election rates of 70-80 per cent. We are working collaboratively on ways to nudge this even higher. We are leading the industry in leveraging agile and sustainable digital technologies to drive down costs, streamline

"Clients can choose to fully outsource their reclaims and recoveries to us, or they can take advantage of our subscription-based applications and manage the process themselves"

processes and turbocharge business growth. Working with cutting-edge managed IT service provider BJSS and wholeheartedly embracing cloud computing, we have cemented our position as a thriving, future-proofed fintech with a lean, resilient infrastructure and an exciting suite of cloud-based services. As we bring even higher levels of automation and efficiency to withholding tax reclaims and securities class actions recoveries, we endeavour to continually enhance client experience through a combination of digital service delivery and local client support. The whole team is excited to continue innovating our services and adding value to our clients' businesses as we take our digital journey to its next stage. ■

Vicky Dean
 Managing director, Europe, Middle East
 and Africa and global head of client services
 Goal Group



Cybercrime is a massive issue for the financial services industry. Financial services are prime targets for criminals, whose goal is to gain access and control over transactional systems, confidential data and user account information. However, the COVID-19 pandemic has created opportunities for companies to enhance their digital transformation.

Security is an issue that continues to exist because criminals will carry on with their work as long as something is worth breaking into or stealing. In today's cyber age, robbing banks with balaclavas and weapons is no longer necessary. Cybercrime is a major risk for many industry players as it can harm someone's security and financial health, and it can all be carried out over the internet.

It is therefore not surprising that people believe cybercrime to be one of the top three risks for the financial services industry. In a recent DTCC Systemic Risk Barometer Survey, 54 per cent of respondents cited cyber risk as a top five risk facing the financial services industry, adding that cyber risk is "always an underlying threat".

Numerous respondents also highlighted growing cyber risk due to increased remote working environments as a result of the COVID-19 pandemic.

Andy Schmidt, global industry lead for banking, CGI, suggests that it is incumbent on banks and vendors to identify the best security stance and understand what their key assets are. By understanding this, banks and vendors are then able to understand where their key entry points are, and the vulnerabilities of the infrastructure.

"If done correctly it lets everyone sleep at night and gives clients confidence that their accounts are being looked after and the infrastructure is sound. It is as much of an opportunity as it is a necessity. My hope is that security capabilities will continue to advance, and my expectation

The relentless race against cybercrime

Cybercrime has been relentless in the financial services industry, but the pandemic created an explosion of opportunities for financial services companies to rapidly accelerate digital transformation

AST reports

"During the pandemic, cybercrime increased in all sectors, with phishing, brute force and ransomware attacks increasing by 600 per cent, 400 per cent and 200 per cent respectively"

Alex Foster, BT

A catalyst for changes

Despite the relentlessness of cybercrime, the pandemic has arguably been a catalyst for changes in cybersecurity practices.

As many people are having to work remotely, and from different locations, the need for cybersecurity has come to the fore.

During the pandemic, many companies had to put in place safety measures to mitigate the risk of a cyber attack.

However, DTCC says it had already developed pandemic resilience plans and conducted table-top and other exercises which allowed it to react and respond quickly.

"We were pleased that the security procedures, practices and approaches we had in place held firm."

"The training and the systems we implemented were particularly important because 95 per cent of our colleagues were working remotely," comments Jason Harrell, executive director, operational and technology risk at DTCC.

Additionally, amid the pandemic, the role of the chief information security officer (CISO) has changed.

Whereas before CISOs were viewed primarily as an organisational control function, CISOs now play an integral part in business enablement and the strategic adoption of new technologies, as they are accountable for managing one of the most critical risks on any board's agenda.

BT's recent whitepaper, 'CISOs Under the Spotlight', shows that 58 per cent of business leaders say improving data and network security over the past year has been crucial to their organisation and continues to be a key priority this year.

In order to implement new measures and procedures, as a result of the pandemic's impact on cybercrime, cybersecurity must be embedded in all the business and technological processes of any organisation, including the back-office.

The two key elements in the back-office are traceability and visibility. Traceability relates to requirements to trace and meet standards applicable to each firm.

This includes regulatory, contractual and business requirements. Then it is about ensuring they can be traced from conception through to continuous validation, leveraging system integration and metadata.

Meanwhile, visibility means a focus on reducing feedback loops, not just for engineering teams (providing immediate feedback on code security, secrets scanning or insecure dependencies) but also on how that connects up to backlog management by product owners and risk aggregation for senior management.

Focusing on building an information environment which is conducive to informed decision making relating to cyber risks could be one answer.

At SmartStream, Harshwardhan Choudhary, global head of risk, affirms: "The issue of security in the context of deploying and running more and more solutions and services in the cloud for back-office operations is gaining prominence with our customers."

"We understand and hear from financial institutions about their strategic objectives in achieving better outcomes for their end-customers, saving costs and lifting productivity from efficient processes, all in line with making a secure back-office. These goals are high on the agenda for back-office functions with a heightened sense of system security, reliability, availability and scalability."

"The issue of security in the context of deploying and running more and more solutions and services in the cloud for back-office operations is gaining prominence with our customers"

Harshwardhan Choudhary, SmartStream

Defence against cybercrime

The pandemic has amplified the need to ramp up security measures and there are a number of ways to do this. Many firms have implemented a cybersecurity programme that should be proportional and based on the size, type and complexity of a firm's business operations, markets and products traded, and interconnectedness within the financial markets. According to DTCC's Harrell, financial institutions should consider a number of factors when implementing a cybersecurity programme, including supervisory and regulatory obligations, the threat landscape, and their alignment with industry-accepted cybersecurity frameworks.

Meanwhile, there is a range of risk monitoring tools to help combat cybercrime such as intrusion detection tools. Even basic tools like authentication fails (which monitors how many times a person has used an incorrect code to get in) can prove to be invaluable.

"Proper authentication at the front end can solve a lot of challenges within the infrastructure," says Schmidt.

is that security will always be a top three concern for the foreseeable future," says Schmidt.

BT's Alex Foster, director, insurance, wealth management and financial services, reaffirms this. She says:

"Cybercrime is without a doubt one of the top three risks for the financial services industry."

"During the pandemic, cybercrime increased in all sectors, with phishing, brute force and ransomware attacks increasing by 600 per cent, 400 per cent and 200 per cent respectively."

"Within the financial services industry, cybercrime has been relentless. The pandemic created an explosion of opportunities for financial services companies to rapidly accelerate digital transformation onto evermore IT-centric platforms as they transitioned to remote working. This alongside the increase in electronic transactions, mobile banking and the use of cloud has led to vectors for cybercrime multiplying," explains Foster.

Schmidt cautions that blockchain is still a bright shiny object and the industry needs to figure out what problem they are looking to solve and whether or not the solution is scalable.

“You need to ask ‘how big is the need? How complex is the need? What tools already exist? Who am I looking to share it with, and what types of permissions do I need?’. It could be something as simple as sending an encrypted file through an encrypted portal and sharing information that way, which works fine. But if the information needs to be shared with a consortium, a portal might not be as fast or easy,” he says.

Building on this debate,, CaixaBank’s chief technology officer Alberto Rosa states: “There are certain cases in which new technologies have helped implement cybersecurity techniques but there is still a very important part of the work that is based on maintenance and continuous ‘fix the basis’. It is important to blend both approaches.”

Foster adds: “In theory, blockchain has the potential to bolster cybersecurity by being a decentralised and immutable ledger of transactions. However, while in theory blockchain itself remains a system that is thus far immune to hacking, the processes around cryptocurrencies utilising blockchain are vulnerable.”

An evolving future

Cybersecurity will continue to evolve in the future because crime is likely to always remain a top issue. Some experts have predicted that the cloud will be one key way of combating crime.

Schmidt says: “There is one fantastic misconception that the cloud is cheaper; often it is more expensive, at least initially. When you look at the ongoing cost of

making changes to code, updates, scalability, resilience, you can, however, get a lot for your money. This is why you are seeing so many solutions being deployed in the cloud. For example, our payments solution is cloud-native and already has a dual-cloud deployment for resiliency reasons.”

For DTCC’s Harrell, the cybersecurity pillars — identify, protect, detect, respond, and recover — will continue to be relevant as we move into the future.

“We anticipate increased global collaboration between the public and private sector to ensure a consistent baseline of protection and mitigation strategies against sophisticated threat actors,” says Harrell.

Rosa predicts: “It is foreseeable that cybersecurity will grow in importance, being a strategic aspect for all companies, not only due to the direct costs that cyberattacks can pose, but for their indirect effects.”

“Cybersecurity covers aspects that go beyond technology and involve the whole business. Cybersecurity has also become an enabler of new projects and business. Most recently, it has become evident that customers demand it in all the bank’s products and channels.”

Security practices and applications are moving to a model which is integrated into operational and development practices, which must be supported by different types of skills and approaches.

Collaboration, facilitation and enablement need to be the central themes in taking advantage of these evolving patterns.

With a range of tools and methods to select, the industry has become increasingly aware of the dangers of cyber crime and the ways in which to prevent it. Taking a preventive approach is key. ■



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The next frontier

Stephanie Park, financial product manager at AccessFintech, talks to Asset Servicing Times about the future of innovation within the payments sector

What trends are happening in payments?

Cash payments is the next frontier for innovation in the finance sector, bringing new technology and workflow to a shared function used by all business lines of capital markets. Efficiency and control are drawing attention from regulators, investors and clients and enabling a rejuvenation of this critical piece of infrastructure.

"AccessFintech looked at challenges and identified areas where we can be disruptive and use data to improve straight-through processing and efficiency"

Part of the challenge of payments is the wide breadth of functionality it covers: retail, institutions, transactional, and asset servicing.

Regardless, there are common themes of fragmented or partial data and manual processes arising from legacy processes that mean increased costs and capital risk.

As a data network-focused organisation, AccessFintech looked at challenges and identified areas where we can be disruptive and use data to improve straight-through processing (STP) and efficiency, reduce capital lock-up and enhance client and user experience. Cash payments became a natural expansion of our data-sharing workflow following the successful adoption of our solutions for settlements, margin, claims and upcoming regulation management (like the Central Securities Depositories Regulation).

Once clients became familiar with our matching capabilities, exception management functionality, and shared data network, we found them asking: "what should we do about payments? Our cash payment process is expensive — can you help?".

The core fundamentals of a shared process, extending across multiple firms (the paying and receiving parties, associated custodian or agent etc.) with a shared interest

to improve, are the key factors that drive adoption of the Synergy network AccessFintech operates.

In the finance sector, every function and process is impacted by cash payments, from the processing of derivatives transactions to the managing of asset servicing events.

Payment teams may be on the phone for most of the day, verbally affirming payment amounts, performing callbacks whilst managing manual processes via spreadsheets, email, fax, and doing floor walks looking for managers to provide wet ink signatures. Processes that are manual, antiquated and costly.

These processes often lead to payments not being affirmed and high volumes of erroneous and delayed payments. The effort involved in reconciliation alone can be enormous, as can the capital lock-up whilst investigation takes place — not to mention the cost of kickbacks, rework, overdraft claims, and missed investment opportunities due to the late application of cash to the correct accounts.

With results like this, the entire market now has one more option for what to do about payments:

1. Maintain the status quo — manual affirmation of only a portion of payments
2. Invoke more resources — more people to affirm more payments in an effort to reduce errors and the resulting fallout
3. Transform — leverage existing data to ensure right first time, matching and releasing payments STP

If payments could be matched systemically just by sharing data, AccessFintech could revolutionise this process — so we did. The first organisation to go live with our Cash

Payment Matching solution reported an immediate STP rate change of 0 per cent to 97 per cent.

Options 1 and 2 will hold for a few months but are not operationally resilient.

The industry is moving fast and those that choose not to change or attempt to solve with even more headcount will soon be left behind.

Bank clients themselves have expressed concerns about how their payments are managed.

Option 3 (to transform, leverage existing data to ensure right first time) is what should be done about payments.

AccessFintech uses data to support transformation with a focus on maximum STP increases and secure, efficient and audited exception management.

With the problem statements with current cash payment matching processes defined and a consensus on the optimal solution from our industry working group reached, AccessFintech was able to utilise pre-existing matching, collaboration, and workflow functionality to create an offering that supports STP matching of payment data prior to pay date.

Most payments are STP matched, leaving teams to collaborate efficiently on unmatched or mismatched exceptions to resolve the real issues in plenty of time for pay date.

The solution has been designed to ensure it can support any payment type, and organisations are currently using it to transform processes relating to six different payment types with many more in the pipeline.

Leveraging existing data to systemically match payments and work collaboratively to resolve exceptions prior to pay

"Leveraging existing data to systemically match payments and work collaboratively to resolve exceptions prior to pay date has been proven to work"

date has been proven to work — increased right first time, and decreased errors, reconciliation, and missing cash.

The payment sector is in an exciting time where change is both expected and funded.

The benefits of reduced fails and increased self-service allow for self-funded improvements — and the uptake has been dramatic. Join the industry for the journey! ■

Stephanie Park
Financial product manager
AccessFintech



The fuel powering digitisation

APIs have been around for decades, but their significance is growing in the asset servicing industry as an enabler for digitalisation

AST reports

Application programming interfaces (APIs) foster improved data movement between applications and across ecosystems, resulting in reduced costs, improved efficiency and an overall better experience for customers. APIs enable greater process automation and real-time connection between systems. This is accelerating innovation, including opening asset servicing platforms to new applications based on disruptive technologies, such as machine learning and blockchain.

While an API is not a new construct, it has become increasingly significant in the past few years within the asset servicing industry. For example, in August this year Citi Treasury and Trade Solutions (TTS) Asia Pacific revealed it had processed close to 350 million API calls for corporate clients since the launch of APIs for corporates in 2017.

The growing popularity of APIs can be attributed to the growing digital environment where data is exchanged online in real time.

“By nature, APIs are nimble, thus requiring less effort to collaborate with the customer applications. This collaboration makes it easier for asset servicing and transaction processing organisations to work in real time, circumventing the historical challenges of sharing large files of event data, reference data, positions data and entitlements,” explains Vishal Sharma, vice president, enterprise architecture, API lead for investor communication solutions at Broadridge.

The incorporation of real-time event data using APIs enables event processors to have access to event data from source, in real time, enabling their clients' access to event information as near to market availability as possible.

According to Sharma, this is key when it comes to decision-making and trading strategies that are wrapped around corporate action event processing. API

connectivity to position management systems allows the event processors to see positions updated in real time, ensuring that the data being used to process the event is the most up-to-date data at that point. This allows for entitlements to be calculated and communicated in real time, also using APIs.

APIs play a large role in helping financial services firms evolve their infrastructure and achieve digital transformation, and the 2021 FIS Readiness Report shows this playing out across the financial services landscape.

The report found that nearly one third of capital markets firms say their competitive strategy includes making their data more accessible for clients via open APIs, while 36 per cent of finance leaders in corporations say the same. Meanwhile, Forbes found that 72 per cent of the top 50 global banks have invested in the creation of API platforms.

Growing popularity

Initially tagged as a technology instrument to connect systems, APIs have been utilised in IT infrastructure for several decades. However, APIs can now be leveraged as a monetisable asset, thus the 'API as a Product' model emerged. Sharma says digitalisation in fintech has been given further impetus by the impact of the pandemic. He elaborates: "As the pandemic confined citizens to their homes, we saw a rapid widespread adoption of digital tools for everyday tasks, from online medical consultations to shopping to internet banking. APIs are the real fuel powering this digitalisation."

Regulatory drivers have also contributed to API adoption. Robert Stark, global head of market strategy at Kyriba, suggests regulations such as the Payment Services Directive Two (PSD2) in Europe encourage banks to think about APIs, stimulating the development of products

and services that could drive new revenue channels for financial institutions.

PSD2 is a European regulation for electronic payment services that aims to increase payments security in Europe and boost innovation while helping banking services adapt to new technologies. Asset Servicing Times finds that PSD2 is evidence of the increasing importance APIs are acquiring in different financial sectors.

Commenting on the increasing popularity of APIs, Sanjeev Jain, Asia Pacific head of payments and receivables, TTS, Citi, comments: "Indeed, APIs have been around for many decades, but in the past APIs have been relegated to connecting system components to one another (for example, connecting databases to application front-ends)."

APIs are increasingly popular on the back of availability and the connectivity that they offer. According to Jain, this has allowed corporates to build innovative products and services of their own by combining 'building block' API services, including those provided by banks.

Jain explains: "For their end-consumers or target market segments, corporates can offer a customer experience that is much easier and agile, like never before."

Another key catalyst in this growth story is the explosion in instant payments adoption in the Asia-Pacific region.

"In this case, real-time payments based solutions have gelled very well with similar real-time integration technology between corporates and banks. This growth in instant payments has been driven by the increasing demand for instant fulfilment of goods and services among consumers flowing into the corporate payments world," Jain comments.

Meanwhile, Rocky Martinez, chief technical officer, SmartStream RDU, notes: "In my opinion, there are three

significant reasons for accelerated API adoption. The first reason is that many back-office and middle-office functions have become commoditised and this is not a competitive advantage."

Experts say competitive advantage has a limited life. Therefore, many of the functions which made firms differentiated have become standard across the industry.

Second, Martinez observes the cost of running enterprise software has become increasingly expensive, which is pushing the maintenance of systems to another trusted party is beneficial.

Third, asset servicing firms accept that they do not need to be owners of every process, just the processes their clients find relevant, according to Martinez.

"Having a security master does not provide added value to an end customer, but having a customer service representative available 24 hours a day facilitating asset movement will drive customers to one provider versus another," he explains.

APIs can provide significant opportunities, hence the uptake in its adoption. API integration has opened the industry to real-time information and eliminated the need for batch cycles in the middle of the night. Before asset servicing firms started to embrace APIs, customers would have to wait to see positions change after a sale or purchase, have delayed values of assets because pricing was done once at the end of the day, and wait for payments, according to Martinez.

Martinez affirms: "Real-time banking and API integration allows an asset servicing firm to call multiple payment APIs quickly to complete cash movements in seconds. Up-to-date third-party books and records, provide updated position movements and call an API for the current price when customers review their portfolios."

Risks to consider

As Peter Parker said "with great power comes great responsibility". So, when systems are open for good citizens, they are implicitly opened for malicious users too. Consequently, experts agree the most risk industry participants see with APIs relates to security. For example, Sharma highlights that security is a fundamental foundation of Broadridge's systems' design, and API security is taken very seriously, with a stern governance pattern around the security and accessibility of APIs.

"Another key facet of risk that I foresee is that, in a rush to make systems more open, firms may potentially overlook what their customers are looking for and start making their system 'as is' available as an API," says Sharma.

Though Shamra cautions: "This is a recipe for disaster; we need to make sure an API is 'consumer-centric' through effective product management and a governance body to ensure that every public or private API goes through security and integrity checks and balances."

Stark suggests: "The entire data journey needs to be assessed for risks and vulnerabilities. This is less to do with API connectors and more to do with securing endpoints and the internal governance of the systems that are being connected."

Standards such as ISO27001, SOC2 reporting, and SIG2 questionnaires encourage software providers to deliver a high level of security or risk being left off a vendor shortlist. Additionally, there remains a significant amount of legacy technology in banking and financial services. Modernising solutions to include the necessary APIs remains high on the agenda of many chief technology officers, while newer fintechs have been able to disrupt the traditional players because they've started with modern, API-centric technology focused on a digital experience for their clients. ■

Recovery and resolution planning

MYRIAD's CEO Simon Shepherd outlines why banks must focus on operational resilience as they upgrade their recovery and resolution plans

Operational Resilience

Soon after the Global Financial Crisis (GFC), US authorities asked the leading Systemically Important Financial Institutions (SIFIs) and their global equivalents to submit updated recovery and resolution plans (RRPs) for renewed scrutiny.

In the wake of the GFC, the timing of this request could not have been surprising, but of more concern to industry observers was that, without exception, the first drafts of those RRP's were all universally rejected.

The need to go back to the drawing board to "try again" was based on a consistent flaw in each SIFI or global SIFI's plan: each had focused too much on front- and back-office challenges and had not paid enough attention to the middle-office.

Essentially, the banks had mistaken a request to overhaul and update their RRP's as a need to re-focus their attention on trading, execution and liquidity concerns, among others, in light of the fallout from the GFC. But rejection of those RRP's was based much more on "how?" and "where?", rather than "what?" and "why?". There was an insufficient focus on how to effect a workout, no matter how sophisticated the front- and back-office could become from a risk management point-of-view.

Significant aspects of operational resilience sit squarely in the middle-office and in times of crisis — both prior to distress and potentially during a workout — proper provision of the middle-office can protect interested parties before, during and after an event — with provision meaning resource in terms of both systems and people. If operational resilience underpins day-to-day activities, then the very same sound practices can be used in any recovery or resolution scenario.

The Federal Reserve and the U.S. Securities and Exchange Commission were more focused on how a distressed institution could extricate itself safely, as well

as how not to become distressed in the first place. As executives involved at Lehman Brothers in administration have since subsequently stated, a lack of transparency in the middle-office undoubtedly contributed to the duration of that workout.

Prior to those (wholly correct) conclusions, the message seemed to be that no matter how much you plan to mitigate trading and counterparty risks, there has to be an acceptance that a bank failure will happen again and, therefore, it is imperative to know how best to resolve such a failure — as well as how best to avoid one in the first place. Subsequently (and by no means linked to the RRP exercise above), the Office of the Comptroller of the Currency (OCC) released Bulletin 2013-29 entitled: "Third-Party Relationships: Risk Management Guidance" which has more recently been updated by Bulletin 2020-10.

At MYRIAD we have always regarded the original bulletin (2013-29) and its extension as something of a "Bible" for the management of all third-party vendors, not just for those involved in each large SIFI network.

Sitting as it does in the pantheon of literature within the emerging canon that is 'operational resilience', coherent management of an institution's third-party vendors is a critical aspect covered by both of the aforementioned OCC's bulletins. The conclusion to draw is that only a combination of systems and people can present a truly robust response to the need to recover or resolve such an event.

What is recovery and resolution planning?

The term refers to planning by a financial institution for the eventuality that a firm suffers life-threatening losses. Mitigation could include sales of businesses, capital raising and the cessation of dividend and coupon

payments. The underlying theme is how best to effect a workout, to avoid a systemically important (threatening) event. Whilst prevention is almost always better than cure, the SIFI focus, when asked for updated RRP, was on prevention. What was really needed in a fully comprehensive RRP was an anticipation that no matter how good the preventive planning, there will always be an event or chain of events that need resolving. To do this to best effect, there must be an understanding and an appreciation of how to bring about resolution in full. By ensuring operational resilience each financial institution, large or small, is already positioning itself to deal with any workout scenario, irrespective of the cause.

The current focus on upgrading RRP should at its heart have a heightened focus on operational resilience during a workout. Recovery and resolution plans and operational resilience are closely linked, and the latter should be a critical component in the former.

How do we define operational resilience?

How do we as an institution ensure the smooth, uninterrupted running of systems and procedures, even in abnormal trading conditions? When a bank relies on third-parties for critical functions and operations, it is important to know who those third-parties are, before it can contemplate managing them properly.

Furthermore, fully understanding the role of the third-party, its significance and the survivability of an event where that third-party might fail, feeds directly into any assessment of overall operational resilience, as well as a truly comprehensive RRP. This is even more important where the distressed entity itself might fail. Its books and records extend into account inventory, documentation, risk assessments, continued invoice processing and, fundamentally, exactly where cash and assets are and how to access them.

The EU's Bank Recovery and Resolution Directive (BRRD) in 2014 (amended in 2016) requires banks to prepare recovery plans to overcome financial distress. In doing so, the directive grants national authorities power to ensure an orderly resolution of failing banks (with minimal costs for taxpayers).

If the definition of operational resilience is ensuring continuity of a bank's critical functions, the maintenance of financial stability and the viability of all parts of the bank, then there needs to be a direct link between any recovery and resolution plan and operational resilience, not least in a workout.

'Books and Records' extends into the middle-office and the continuity of records — the 'persistence of data' — that might otherwise support that workout is absolutely critical. Indeed, such enhanced transparency beyond the front- and back-offices into the middle-office will underpin the workout. Demonstrable proof of this will be a great comfort to the authorities.

The ability to run continuous risk assessment (CRA) is but one part of operational resilience. The ability to access good, clean, consolidated data as a launchpad for CRA is a very obvious starting point. This is precisely where great systems capability underpins the human effort to understand and manage risk; and being able to fall back on an archive of the same detailed material is an extension of operational resilience in any workout situation.

Furthermore, being in a position to continue supporting providers whose own ongoing (mutual) support and cooperation will help manage cash and maintain custody arrangements will be critical in a workout. Not understanding how best to leverage that network is a major risk in itself.

The Digital Operational Resilience Act (DORA) adds weight to one aspect of all-round operational

resilience. The EU will impose tighter controls around new incident responses and reporting, and improved third-party risk requirements and monitoring for firms operating within the EU.

DORA touches aspects of many regulations that directly and indirectly impact both the buy-side and sell-side of firms active in the EU.

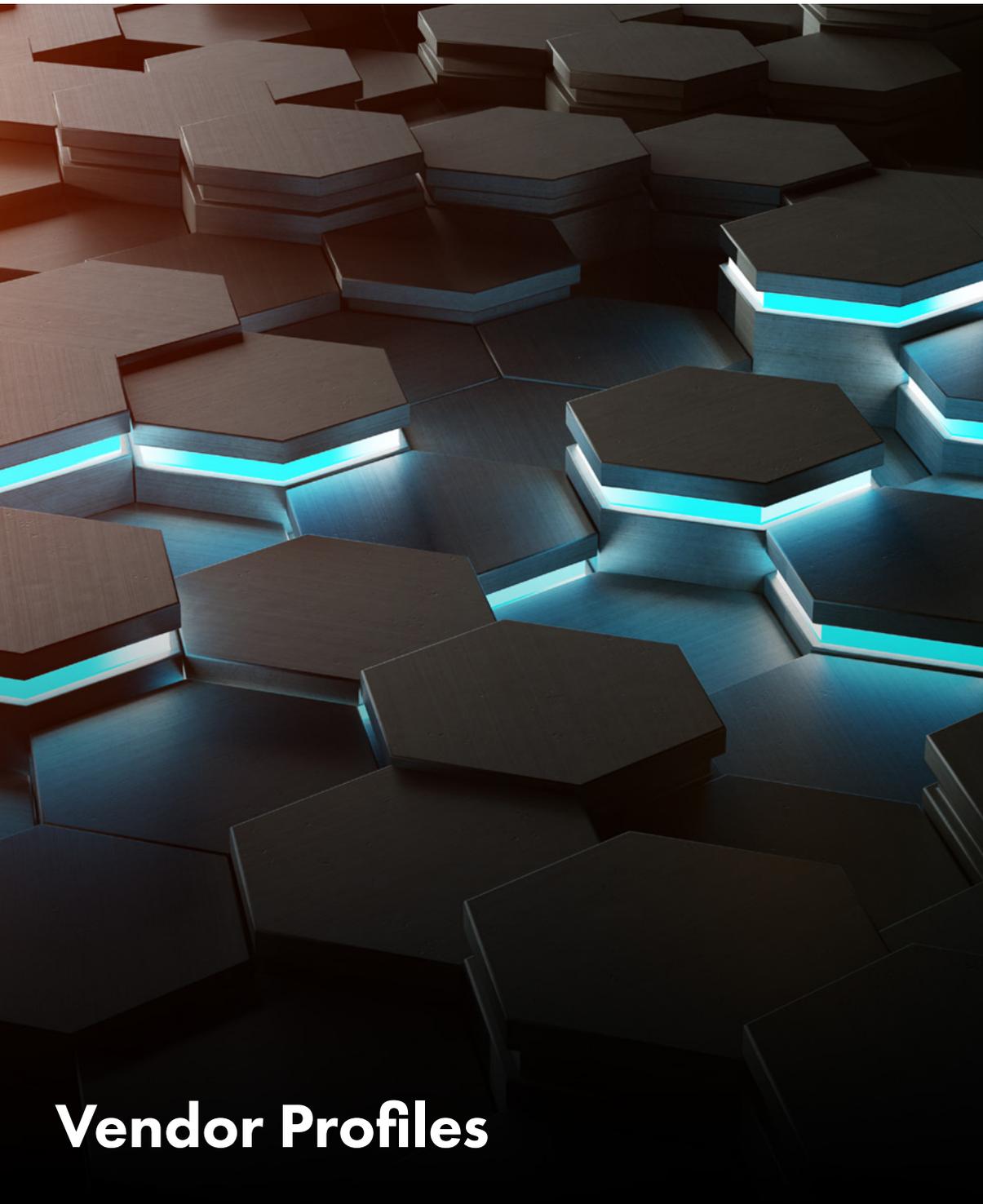
Without the right systems or platforms in place, this represents a serious challenge from a regulatory standpoint, let alone an operational one.

Addressing the latter in a coherent way will undoubtedly help address the former. The risks afforded by all of the aforementioned, not least reputational risk, will all need to be covered in an RRP.

Data persistence, security, sustainability of safe access, the preservation of transparency and the maintenance of audit trail can only happen in the most robust, proven and fit-for-purpose platforms. These facets are all key aspects of operational resilience and how this can positively contribute to recovery and resolution planning. ■

Simon Shepherd
CEO
MYRIAD Group Technologies Limited





Vendor Profiles

AccessFintech



AccessFintech' Synergy Network enables optimisation of cross organisation processes. Achieved through collaboration, the use of data, workflow and shared technology access. By enabling users to collaborate in our industry DataLake, it drives the uses of technology to transform operations to simplify and speed workflows, reduce liquidity risk, and provide valuable benchmarking insights across the financial ecosystem.

At its core is the AccessFintech Synergy Network, a modern and secure collaboration network that facilitates three key capabilities across the financial ecosystem: data collaboration at scale with more visibility into transaction data and access to benchmarking insights. Workflow optimisation to speed and simplify transactions through digital automation, resolution and decision-making in one place. And technology distribution providing connectivity to new technologies and reducing the cost of ownership for all.

The company has a self-service ethos, where risk is mutualised, and there is better, more enlightened decision making across organisations and functions.

AccessFintech's Synergy Network is built with leading financial institutions with a critical mass of data, participants and solutions where more than a billion transactions are now being processed every month on the network.

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For all of its services, Goal performs calculations and completion of forms and documentation, to provide their clients with the complete claim package.

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The company monitors in excess of \$8 trillion in client assets worldwide. Clients include five of the top ten global custodians and six of the top ten global fund managers.

For more information, visit: www.goalgroup.com

IHS Markit



Global Regulatory Solutions by IHS Markit offers a cloud-based, cross-regulation SaaS platform that allows banks, brokers, hedge funds, asset managers, insurance companies and corporates to comply with global regulatory requirements. We offer customers a user-friendly web-based analytics dashboard to monitor multi-jurisdiction reporting for MIFID, EMIR, SFTR, ASIC, MAS, CFTC and other global reporting regimes. IHS Markit, in partnership with Pirum Systems, offers an end-to-end reporting solution for SFTR. The collaboration sets an industry-wide standard to aggregate, exchange, enrich, reconcile and report trading activity across all in-scope SFTs. Building upon advanced connectivity with CCPs, triparty agents, venues and trade repositories; the turn-key service leverages a proven track record of delivering industry-wide reporting solutions combined with more than 16 years of partnership with the securities finance community.

Our platform is the most technologically advanced in the market, with the power to manage, process and analyse large quantities of data for reporting purposes and make it simple for compliance managers to have the transparency they need to achieve CAT (Complete, Accurate and Timely) reporting.

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As leaders in the industry, we are changing how financial market participants meet their compliance obligations. We believe in deriving insights from trading data to help customers both comply and improve decision-making. Our dashboard is the gold standard in the industry for data visualisation for regulatory reporting and analysis and has won multiple industry awards for our solution, technology and service.

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MYRIAD

MYRIAD Group Technologies provides market-leading software that spans the full spectrum of custodian and client engagement, addressing the complete lifecycle management of counterparty relationships of any nature. The MYRIAD platform implements powerful Vendor and Network Management solutions through multiple modules to deliver performance and cost management, automated process control, rolling due diligence and sophisticated reporting for actionable intelligence. Underpinning the governance, risk and compliance disciplines, our products enable institutions to support operational excellence with collaborative technology that unites departments and drives efficiency. Rationalising fragmented ways of working and generating economy of effort are central to the value that we deliver to our clients.

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Pictet



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