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Technology vendor of the year
Murex

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The past year has been challenging for many reasons. Financial institutions needed to adapt their trading operations to volatile market conditions and an uncertain economic environment. Firms also dealt with system implementation programmes to handle regulatory requirements, and business and technology investments.

At the same time, these firms had to adapt to respond quickly to emerging risks and new business opportunities.

Daijirou Morinaga, co-head of client services for Asia-Pacific at Murex, says risk managers, traders and sales needed their systems to adapt fast to the changing conditions, with limited available IT resources and no time to secure additional hardware, apart from using cloud computing.

This includes managing the cross-impacts across multiple streams and implementation projects. For instance, new desks and products have to be adequately represented and managed for the Fundamental Review of the Trading Book (FRTB). Also, XVA models need to capture the new risk-free rate (RFRs) without major deterioration of computational performances, says Morinaga.

Firms using Murex's MX.3 cross-asset and front-to-back platform were able to weather the challenges better. He says a majority of Murex's clients had already run re-platforming programmes to consolidate most of their capital markets operations onto MX.3.

"This helped them roll out innovations quickly and consistently across business lines," he says.

Murex also has a local support and implementation model, where its consultant team closely follows local markets' evolutions and needs. Their knowledge of Asian markets, conventions, and regulations is then injected into implementation accelerators, which incorporate country-specific configurations, test cases, documents and more.

The vendor also has the capacity to support clients' agile and DevOps methods, including test automation and continuous integration of configuration changes.

Morinaga says Murex sees the demand for higher speed and agility in deploying technology and innovations becoming a bigger theme for CIOs and CTOs of financial firms.

To continue supporting clients' technology journeys, Murex continues to invest in research and development to develop features that address new market needs. It is also facilitating the accelerated deployment of innovation through its upgrade-as-a-service programme, test automation, continuous integration tools, methodology and tech stack, and new managed services.

During the year, Murex helped its clients prepare for the Libor transition – including all the local specificities in Singapore, Thailand, and India, for example – and supported the development of new RFR-based products.

It also worked on increasing the adoption of cloud-computing and software-as-a-service projects with clients, as well as regulation implementation programmes, especially on FRTB both on the standardised and internal models approach.

Morinaga says Murex continues to put digitalisation at the heart of its product development. It introduced and extended a new catalogue of public Rest APIs and a development framework tailor-made for system integration called MXopenconnect.

Daijirou Morinaga, Murex

"Rather than a toolbox, we now offer our clients a rich catalogue of use cases, covered end-to-end from business content to non-functional requirements," he says.

Rest APIs, for example, help clients access the right data at the right time and place. From a developer's perspective, Murex has embraced the OpenAPI standard and technically decoupled API contracts to allow backward compatibility and smooth upgrades.

"The API is language-agnostic, leaving choice of language and frameworks to our clients' developers," he adds.

For example, its curve service API lets clients synchronise traders' spreadsheets and other systems with MX.3 curves in real-time.

Another example is its indicative price API, which exposes the platform pricing engine to allow external consumers or applications to send pricing requests on trade descriptions to the platform and, at the same time, receive trade pricing and risk measures calculated by the platform.

Morinaga says Murex also enhanced its cloud deployment capabilities, including a Kubernetes containerisation module. That work democratises access to cloud-based elastic compute for clients' risk computations.

He adds that the MX.3 calculation services have always been fully grid-enabled, while the risk calculation modules of the platform rely on the concept of horizontal scaling. "More recent versions have introduced the concept of elasticity natively within the platform. This was done by containerising granular calculation workloads (related to risk calculation and reporting) into containers and by leveraging the cloud native cluster management systems (i.e., managed Kubernetes) to host those workloads," he says.

The resulting performance and scalability benefits are obvious, he says, adding that during the year, several clients used the pay-as-you-go on-demand provisioning of cloud computing resources to spin off heavy simulations, like intraday VaR, XVA sensitivities, or stress tests.

This also improved the time to market for deploying new features or model changes for some clients. "In a fully cloud-enabled set-up, using 'infrastructure as code' lets you spin up new MX.3 development or test environments very easily," says Morinaga.

Over the last decade, Murex has invested over €1 billion ($1.07 billion) in research and development. It will continue evolving the technology stack by leveraging the latest technologies and standards.

"Going forward, we will continue to focus our efforts to increase the platform openness, flexibility and operability, with the objective to enable customers to fully benefit from emerging technologies and deployment models," Morinaga says. ■