

Pricing and analytics: cross-asset and structured Murex

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Murex



In a year marked by heightened volatility, shifting rate environments and growing investor appetite for tailored exposure, Murex has helped shape the structured products landscape. The company's MX.3 platform, a cross-asset risk and trading engine, has become a key reference point for institutions seeking consistent analytics and integration across asset classes.

A single front-to-back platform, MX.3 combines broad product coverage with rigorous analytics. It supports more than 350 preconfigured, structured payoffs across asset classes—from equities and rates to foreign exchange and commodities. This breadth enables institutions to structure, price, hedge and manage risk within a single environment.

That adaptability was particularly evident over the past 12 months, as institutions contended with the lingering effects of benchmark reform and renewed rate volatility. Murex helped clients navigate these shifts by updating its interest rate product set to accommodate compounded, risk-free rates and by supporting more complex note structures, such as constant-maturity swap (CMS) range accruals and callable notes linked to alternative benchmarks. The firm rolled out these enhancements across multiple client environments with minimal disruption, underscoring the resilience of MX.3's architecture.

Didier Loiseau, global head of trading and financial engineering at Murex, says the market itself is pushing towards a greater fluidity: "The boundaries between asset classes are fading. Clients now expect the same type of structured product – whether linked to equities, commodities, crypto or quantitative investment strategies (QIS) – to be available across markets."

That cross-asset demand creates pressure on issuers and, by extension, on technology providers to deliver a unified infrastructure.

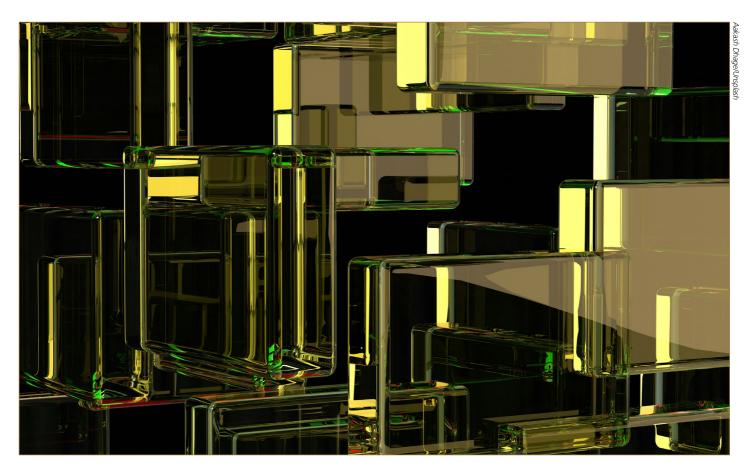


Didier Loiseau, Murex

Such convergence has also intensified operational challenges. "The validation chain remains a key obstacle for many institutions," Loiseau says. "They need confidence that a product can be priced, risk-managed, accounted for and reported consistently from day one." An integrated platform, he adds, shortens that process by ensuring the same data and representation flow through every stage, from pricing to accounting. It's a competitive advantage because it enables faster, safer product rollout.

MX.3's open architecture underpins much of that agility. The platform's application programming interfaces (APIs) allow users to integrate their own quant libraries or build lightweight custom tools that connect directly to Murex's pricing and risk engines. According to Loiseau, this openness has reshaped how clients explore new product ideas. "Enhanced APIs give structurers and traders genuine freedom to test, iterate and compare payoffs in real time," he says. "It encourages innovation rather than forcing them into a rigid workflow."





Machine learning has added another dimension. Over the past year, Murex has embedded neural network techniques into its pricing stack, dramatically accelerating valuations for some complex instruments.

"We wanted a model that makes sense for real trading, not a brute-force experiment," says Loiseau. "By using neural networks to approximate non-linear pricing functions, we can achieve Monte Carlo-level accuracy at speeds comparable to simple vanilla options." He adds that faster, smoother valuations are more than a convenience: "If you can recalculate exposures in real time, you can manage risk more dynamically and expand the range of products you trade."

Accessibility has been another theme in Murex's recent innovation. The firm's Light Exotic framework introduces a no-code approach to payoff creation, enabling non-technical users to design new products through a graphical interface. Loiseau says the next step is a "new generation" of financial-instrument scripting tools focusing on usability. "We want the ability to design a new product to become a widespread skill across structuring and sales," he says. "The easier it is for teams to

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experiment, the faster they can bring new ideas to market."

Beyond pricing, Murex continues to refine MX.3's risk and analytics suite, introducing improved calibration for callable swaps, dynamic volatility modelling for bond-linked structures and portfolio tools such as principal component analysis gamma, which condenses interest rate convexity risk into interpretable dimensions. These developments give traders clearer visibility into portfolio sensitivities and support a more consistent dialogue between trading and risk management.

The market volatility of early 2025 tested systems and workflows. As trading volumes surged, Murex clients relied on MX.3's structured product catalogue to adjust their offerings quickly, moving into CMS-based and commodity-linked payoffs or expanding

into QIS. Support for QIS structures – including those with decrement overlays – enabled firms to respond to investor demand with minimal redevelopment.

Underlying all of these advances is Murex's long-term commitment to research and development investment – more than €1 billion over the past decade – and an expanding managed services model that simplifies upgrades and accelerates adoption of new features. This approach reduces operational burden and helps clients benefit continuously from enhancements in pricing, risk and analytics.

For Loiseau, the goal is not only to respond to client demand but to stay one step ahead. "We're moving from a reactive to a proactive mode," he says. "The ambition is that, when clients need something, it's already there."