# AsiaRisk
# Awards
# 2022

# XVA solution of the year
## Murex

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For the third consecutive year, Murex won the Asia Risk Awards' XVA solution of the year. Murex's MX.3 management platform once again delivered one of the industry's most accurate and cost-effective XVA computations – something the market desperately needs.

As credit and funding spreads have widened due to the onset of Covid-19 and the war in Ukraine, credit valuation adjustment and funding valuation adjustment costs have increased. Meanwhile, market volatility swings have been affecting exposures at default, escalating the cost of capital of counterparty credit risk. XVA describes a family of derivatives valuation adjustments after considering funding, credit risk and regulatory capital costs. Dealers typically incorporate the costs associated with XVAs into the price of a new trade.

As a result, traders increasingly need to rebalance hedges more frequently as markets move and client requests for novation, restructuring existing positions and pricing new deal types increase. This is where Murex's solution supports its clients to keep operating costs in check, as banks must compute XVAs in real time and at scale using complex analytics.

When asked what differentiates its XVA solution from other vendors, the French software company takes pride in its consistency from pricing to risk management to finance. Its solution is natively embedded with all the MX.3 cross-asset platform services, and accesses all the trade, market and counterparty data already in the system.

Corrections and reruns can be managed seamlessly in the platform, and no data interpretation and mapping are required, thus offering consistent modelling, representation and management of positions, XVAs and hedges along the entire calculation chain.

That is in stark contrast to some vendors' standalone XVA systems, which require heavy and expensive integration with the banks' trading platforms or double-booking of trades. The resulting data and model discrepancies between the front office and XVA calculations often lead to mispricing and inaccurate hedges.

Alexandre Bon, head of marketing, presales and go-to-market, Asia-Pacific (Apac) at Murex, says that no other XVA solution on the market provides a fully integrated solution that gives sales and traders a single tool to price, book and risk-manage their over-the-counter derivatives with consistently calculated XVA price adjustments.

MX.3 embeds XVA pricing and fee transfer into the daily tools of sales and traders, giving them the autonomy to price and negotiate trades with their clients instantly without waiting for the XVA desk to price the deals.

Murex's customers appreciate the service. One head of XVA quants at an Australian bank said his bank chooses Murex's platform because it allows the XVA desk to focus on more complex transactions and manage the book's risk. "The provision of a 24/7 pricing capability gives control back

Alexandre Bon, head of marketing, presales and go-to-market, Apac, Murex

to the sales staff and eliminates the need for vanilla XVA pricing to have to funnel through the XVA desk," he said.

The XVA Pricer tool enables proactive intraday monitoring and dynamic hedging, meaning traders run complex pre-deal what-if analyses and compute real-time XVA costs and sensitivities.

The XVA Pricer rolled out its latest extension to facilitate XVA hedging in pre-trade by integrating XVA sensitivities. Bon says this capability is now available to clients in Apac, where there is robust interest given current market conditions.

Murex's XVA solution's other differentiators include its extensive, extendable product coverage. It supports clients' proprietary products and models, providing an XVA user payoff language in Python to script the payoff definitions so they can be evaluated within the XVA framework.

The native integration between the front-office and risk engines also significantly improves time to market for new products and analytics. For example, Murex was able to seamlessly deploy system adaptations for new risk-free rate payoffs across the entire value chain as more and more market participants transitioned into a new suite of benchmark rates from Libor.

Despite already being a market leader in the space, Murex has continued to make valuable investments in advanced technology for an evolving ecosystem.

It understands that XVA management requires a massive computational capacity to produce accurate results in real time and in batch modes, so it developed a patented programming framework specifically for XVA, and delivered optimal and vertical scalability on CPU and GPU grids. (GPU, or graphics processing unit, is a specialised processing unit with enhanced mathematical computation capability, ideal for computer graphics and machine learning tasks.)

On that note, Murex is exploring machine learning models for XVA as its team tested the use of neural networks in pricing and calibration, including replicating the differential machine learning approach on exotics. It is now analysing whether the approaches can be applied to a wider range of portfolios.

In addition, MX.3 has successfully deployed its computation engines onto the cloud, granting clients access on a pay-as-you-go basis.

The new cloud-based managed services, BPaaS, has hugely lowered barriers to entry for smaller banks. It requires minimal configuration and no additional infrastructure, levelling the playing field in trade pricing and XVA cost management. ∎