

The background of the entire page is filled with a festive pattern of confetti and streamers. There are several long, flowing streamers in black, red, and silver. Scattered throughout are numerous small, diamond-shaped confetti pieces in black, red, and silver. The overall effect is celebratory and dynamic.

AsiaRisk

AWARDS 2014

**Technology Vendor
of the Year**



Numerix

Technology Vendor of the Year

One of the most notable effects of the current regulatory reform is the way in which it is breaching boundaries between different functions in banks. The front office can no longer accurately price over-the-counter derivatives trades without considering capital, clearing and collateral. At the same time, the middle office is being called on to produce risk metrics in real time to meet trading timescales, rather than on a traditional overnight batch schedule.

In addition, margin and collateral management has become too critical to be left isolated in the back office. This interdependency, and the greater complexity and performance demands it generates, places huge demands on a bank's technology infrastructure. For New York-based Numerix, the new order represents opportunity.

Numerix made its mark in Asia and elsewhere as a supplier of cross-asset pricing analytics, typically delivered as add-ins to spreadsheets, or in-house or third-party front-office systems. Meeting the requirements of the most demanding trading desks has stood the company in good stead as the market has evolved.

"We are a front-office company, first and foremost, and understand what trading desks need," says Steven O'Hanlon, chief executive and president of Numerix. "In response to regulatory developments, we have built our risk management systems from the ground up, and we address the most important concern in the marketplace, which is the need for real-time risk capabilities."

Numerix has integrated its models and methods into the flexible CrossAsset platform, supported by CrossAsset Server – a grid computing-based environment for scalable high performance. This has enabled the company to offer analytics packages that can either be tailored to address specific business issues, or bolted onto an organisation's technology infrastructure as a centralised analytics engine.

Asian clients have played a critical role in working with Numerix to define user requirements and guide the development of its technology towards this transformation. Singapore-based DBS Bank, for example, wanted to improve the ability of its equity derivatives structuring and trading desk to respond to requests for quotes (RFQs) and increase trading volumes. Numerix tailored the CrossAsset platform into a pricing engine that can automatically respond to emailed enquiries about equity-linked notes and other structures.



Steven O'Hanlon,
Numerix

The result has been an increase in the desk's ability to handle RFQs. The accuracy, speed and scalability of Numerix's pricing analytics, as well as the "customisability and configurability" of CrossAsset, has been key to the success of the project, says Calvin Yeap, head of equity derivatives trading at the bank. DBS Bank is now working with Numerix to extend the business-specific solution to an enterprise-wide facility with enhanced risk management capabilities.

Industrial Bank of Taiwan is using CrossAsset to evaluate exotic foreign exchange options for risk management purposes. After assessing a number of potential systems, the bank chose the Numerix platform for its ability to evaluate complex derivatives with results close to the mark-to-market valuation produced by the bank's own systems.

**The customisability
and configurability of
CrossAsset has been key to
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Calvin Yeap, DBS Bank

Another Taiwanese bank has been using CrossAsset to run valuations on exotic forex options and vanillas, in addition to calculating pre-trade limits and potential future exposure (PFE). The bank is now implementing CrossAsset as a central analytical engine to support all of the bank's derivatives activities. In addition to product structuring and front-office pricing, the analytical engine will be used to calculate credit valuation adjustments (CVAs) on pricing, PFE, value-at-risk (VaR), and asset and liability management.

A key factor in the rapid implementation of CrossAsset in this central role is its built-in connectivity to standard market data sources.

"CrossAsset can consume data from multiple source systems and any third-party systems without imposing constraints on the data – a critical requirement for large-scale derivative valuations and risk-related calculations such as PFE, CVA and VaR," says Satyam Kancharla, chief strategy officer and senior vice president, client solutions group, at Numerix.

Clive Davidson