





Did You Know that FIS Provides Risk as a Service (RaaS)?

Tough new challenges for risk management require a whole new approach to how financial institutions consume technology - and FIS is ready to respond. In this Q&A, Andrew Woods, our head of risk services, explains how the RaaS operating model can help you get risk right.

The Changing World of Risk



What's new for financial institutions and their risk functions?



Andrew Woods: Financial institutions continue to face major challenges, but those challenges are changing.

For the first time since the global financial crisis, regulatory requirements are starting to stabilize. As the flow of new mandates slows down, the next priority is to implement known regulations as cost-effectively as possible.

In the initial drive to achieve compliance, many organizations hired large teams of pre- and post-trade compliance officers. Now, in light of growing capital and operational costs, competitive disruption and declining profits, the pressure is back on to find greater efficiencies and improve margins.

Whether meeting initial margin and credit valuation adjustment (CVA) requirements or optimizing pricing more broadly with valuation adjustments (XVAs), the risk function plays a critical role in both meeting regulatory requirements and boosting profitability. But it must do an increasingly complex job without breaking the budget.





How is risk management evolving to tackle modern challenges?



AW: Risk management's profile within financial institutions is rising and evolving to become an integral part of the business. No longer simply a siloed middle-office function, risk is moving into the front office and becoming key to trading decisions, minimizing capital requirements and optimizing portfolios.

As trading and risk merge closer together, there's a greater need for more streamlined, integrated risk management processes that work in harmony throughout the organization, draw on a single source of data and deliver a complete view of risk across asset classes.

At the same time, the risk function is exploring new ways to do more with less, especially when it comes to supporting complex risk metrics. Over the past decade, for regulatory compliance and competitive advantage, many tier two banks have increased the sophistication of their calculations in line with tier one banks. And now, even tier three banks – and non-financial institutions that run a trading book – are looking to do the same.

Calculating risk with greater accuracy can help improve your bottom line. But the work involved can also stretch your resources and potentially push up your costs.

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So, how can technology help reduce the costs of risk management?



AW: In the drive to streamline and connect risk management operations, well-integrated, multi-asset-class technology for trading and risk management can help simplify complex technology landscapes and reduce cost of ownership for banks, while increasing insight. That's why FIS has brought together its own market-leading solutions to form a single group for cross-asset trading and risk (CATR).

By seamlessly integrating our solutions in this way, we minimize both implementation time and duplicated development effort – and can increase our clients' scale and capabilities while continuing to reduce their costs.

But integration is only the start of the story. Through better use of powerful technology, FIS can help financial institutions drive further operational efficiencies, whether by managing their end-of-day runs more effectively, delivering real-time analytics, aggregating results in an in-memory cube or using artificial intelligence to automate calculation processes.

And critically, along with the technology itself, we can offer a full range of RaaS outsourcing options that deliver risk management processes more affordably on clients' behalf.



The FIS RaaS Solution



Technology can already automate risk calculations. Why do financial institutions need RaaS, too?



AW: Automation alone can't handle complex risk metrics, no matter how sophisticated your risk engine. Quantitative calculations take a lot of hard work from highly skilled professionals; only an experienced quantitative engineer will have all the expertise required to build, calibrate, validate, document and run complex models - and understand, as well as document, the results.

But quant specialists can cost banks dearly and are simply unaffordable for many smaller organizations. Augmenting their work or outsourcing completely to a RaaS team allows you to access specialist quantitative resources and reduce the cost of risk analytics.

Through the RaaS model, a risk technology provider like FIS can industrialize quantitative calculations on a new level. By running nondifferentiating, newly commoditized calculation processes for many organizations, from SIMM and CVA to SA-CCR to even KVA, we can achieve unprecedented economies of scale and perform complex calculations with optimal efficiency.

That makes quantitative expertise affordable for a much broader market. Additionally, RaaS brings a high degree of certainty to the delivery of complex calculations, as they are being used and trusted by many other financial institutions.







What about all the market data? Can RaaS handle that, too?



AW: Absolutely. Our RaaS team will gather, cleanse and validate all the required market data for our clients' calculations, on equities, interest rates, FX, cash bonds, credit derivatives, commodities and so on.

When there's no traded credit data available for a counterparty, we will create a proxy credit curve and rigorously document the process.



Which risk types and calculations does FIS' RaaS solution support?



AW: We cover all major risk types for buy- and sell-side firms, including market risk, credit risk and liquidity risk, and can calculate XVA based on the results. We also support compliance with a wide range of regulatory and reporting requirements.

Our services will integrate to cover both the trading book and banking book and provide a single, enterprisewide view of risk, with real-time calculations and limit checks.





The Right Risk Architecture



In-house IT teams are already stretched. Who looks after the technology that supports RaaS?



AW: As your RaaS provider, FIS will host, run, maintain and upgrade any applications and take care of the underlying infrastructure in the cloud, too.

If integration is so important for risk management, are best-of-breed solutions a thing of the past?



AW: No, as today it is possible to have the best of both worlds. The financial services industry is moving toward a technology architecture that knits together separate, specialist solutions on top of a single, comprehensive data layer. In response to this demand, FIS provides individually best-ofbreed components that not only work independently but also talk to each other to provide a complete, integrated solution.

By, for example, providing components for aggregation, scenario generation, pricing and job management, we can deliver flexible solutions that fit neatly into a heterogeneous solution landscape.







But don't best-of-breed solutions always take a long time to install and integrate?



AW: Not any more. Through open APIs, technology providers can develop and test solutions more quickly and intuitively, considerably reducing implementation timelines. This allows them to deliver innovative best-of-breed capabilities fast in the form of "microservices" – small service-based components that deliver specific functionality for managing particular tasks.

Microservices both integrate easily with a wider componentized architecture and operate effectively as independent services, enabling you to upgrade, test and swap in individual components without disrupting the wider architecture. Basically, you can buy whatever risk solution you need and link it together with other services sitting on top of a bank-owned data layer or data warehouse.

Also, when hosted in the cloud, microservices offer the elastic scalability that banks need to manage continual fluctuations in workload, without buying – or wasting – new infrastructure.

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Can microservices handle complex risk calculations in high volumes?



AW: They certainly can. For example, FIS has recently re-platformed its Adaptiv Analytics solution as a microservice to support more flexible and powerful calculations and analytics.

While in-memory aggregation provides both a desktop aggregation experience and an enterprise-grade analysis tool for a wide range of risk calculations, distribution allows organizations to analyze even the largest and most complex data sets.

Are you ready to get risk right with RaaS?

To find out more, visit https://empower1.fisglobal.com/Get-risk-right-with-FIS-RaaS.html

About FIS

FIS is a global leader in technology, solutions and services for merchants, banks and capital markets that helps businesses and communities thrive by advancing commerce and the financial world. For over 50 years, FIS has continued to drive growth for clients around the world by creating tomorrow's technology, solutions and services to modernize today's businesses and customer experiences. By connecting merchants, banks and capital markets, we use our scale, apply our deep expertise and data-driven insights, innovate with purpose to solve for our clients' future, and deliver experiences that are more simple, seamless and secure to advance the way the world pays, banks and invests. Headquartered in Jacksonville, Florida, FIS employs about 55,000 people worldwide dedicated to helping our clients solve for the future. FIS is a Fortune 500® company and is a member of Standard & Poor's 500® Index.

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