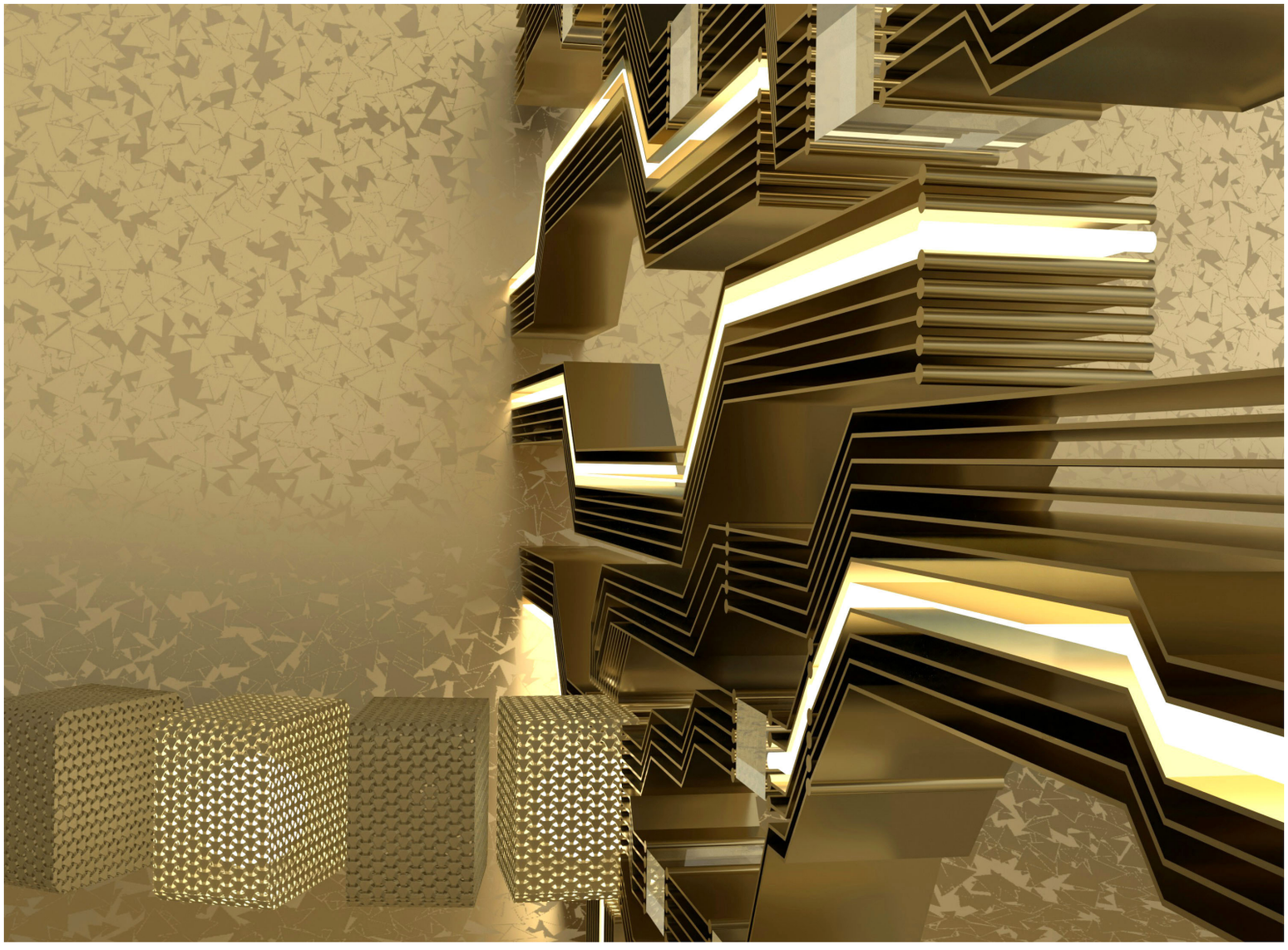
Risk publications

Risk Markets Technology Awards 2026 WINNER



Best use of cloud

ActiveViam

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As financial institutions deepen their commitment to cloud transformation, the expectations placed on risk technology leaders have increased dramatically. Higher data volumes, more complex intraday analytics, heightened regulatory scrutiny and rising infrastructure costs have amplified the urgency for banks to rethink how they architect real-time risk and profit-and-loss systems. This year's winner of the *Best use of cloud* category, ActiveViam, distinguished itself by demonstrating how cloud innovation can be applied with precision to generate significant performance gains and quantifiable commercial advantage.

The company's flagship in-memory analytics engine, Atoti, has long been a critical part of the technology stack for institutions demanding high-speed aggregation, scenario analysis and real-time risk intelligence. In 2025, ActiveViam expanded Atoti with a trio of cloud-focused enhancements that the judging panel felt showcased not only sophisticated engineering, but also clear, validated benefits in large-scale production environments. These developments – optimising Atoti for AWS Graviton, integrating Coordinated Restore at Checkpoint (CRaC) for Java Virtual Machine (JVM) hibernation, and launching Atoti Platform-as-a-Service (PaaS) – combine to form a compelling blueprint for how high-performance analytics platforms should operate in the cloud era.

The defining characteristic of this year's winning product was the strength of its demonstrable, real-world impact. ActiveViam has distinguished itself with examples of cloud optimisation at scale supported by detailed client evidence. For C-suite leaders increasingly focused on the economics of risk technology, the ability to translate innovation into measurable results has become a decisive differentiator.

Scaling performance while reducing cost

One of the most transformative developments introduced by ActiveViam this year was the certification and optimisation of Atoti on AWS Graviton. These ARM-based processors are engineered specifically to offer high performance at materially lower cost than traditional Intel-based instances. In an industry where banks may operate hundreds of concurrent risk systems across global cloud estates, this type of hardware optimisation can generate immediate and substantial economic benefits.

Nomura, a long-standing user of Atoti, deploys more than 100 cloud instances to support its mission-critical market and credit risk applications, and experienced a 40% reduction in hardware spend after migrating to Graviton. Crucially, the bank achieved this without compromising latency, responsiveness or the depth of analytics available to risk managers and trading teams. Conor Brennan, head of risk IT at Nomura, described the impact as delivering unparalleled granular aggregation capability at a dramatically reduced cost, positioning the bank to expand its use of Atoti while keeping infrastructure expenditure tightly controlled.

The Graviton optimisation underscores a broader industry shift. As market conditions drive institutions towards more granular and more frequent calculations, cloud costs can escalate sharply. The ability to tune a high-performance risk engine to hardware architectures that deliver the same or better performance at materially lower cost is now a strategic advantage.

Bringing elasticity to high-performance Java workloads

The second major innovation – and, arguably, the most groundbreaking – is the integration of CRaC into Atoti. This technology enables an entire JVM to be snapshot, hibernated and restarted in minutes, even when restored onto different physical cloud machines. For large banks running complex intraday workloads with vast historical datasets, this capability unlocks an elasticity model previously unavailable to JVM-based systems.

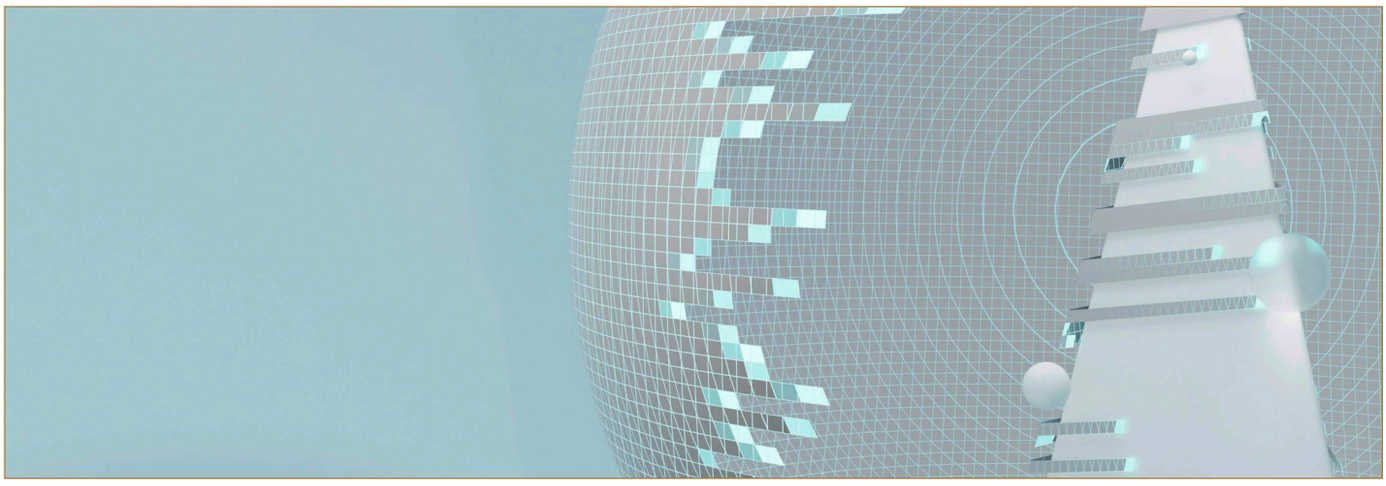
By enabling high-performance analytics engines to pause computation, release resources and restart with extremely short recovery times, banks can apply aggressive shutdown policies that significantly reduce cloud expenditure. Nomura reported a reduction in its cloud 'window of inactivity' from 24 hours to one hour, freeing up 23 hours of unused compute time per instance. In practice, this translates into millions of dollars in annual savings and has allowed the bank to broaden the range of use cases deployed on Atoti and on its cloud estate.

CRaC achieves this by serialising the memory image of the entire JVM – including aggregates, dictionaries and data structures – meaning that the restored application resumes almost instantly with full historical data intact. It offers the rare combination of speed, integrity and operational resilience, enabling institutions to reserve compute capacity during critical periods and avoid waste during lulls. For risk and trading businesses that operate with large intraday fluctuations in compute demand, this innovation changes the economics of cloud consumption.

A new operating model for risk analytics deployment

Alongside these performance and cost innovations, ActiveViam's launch of Atoti PaaS provides a new framework for how institutions deploy and administer large-scale risk analytics environments. Atoti PaaS consolidates years of cloud deployment experience into a centralised, extensible administration layer that works consistently across multi-cloud, hybrid and on-premise architectures.

The platform automates the processes required to deploy Atoti rapidly, including fetching runtime artefacts, provisioning machines, securing configurations and routing applications so they are reachable. It supports both Git-based development workflows and production deployment patterns based on container images or fat Java archives. It also integrates natively with open-industry observability standards, ensuring that logs, traces and telemetry flow seamlessly into clients' existing monitoring stacks.



Galina Nelyubova/Unsplash

"These awards reflect our commitment to solving real-world challenges with bold, practical innovation. We're proud to help financial institutions unlock the full potential of cloud technologies to drive smarter, faster and more resilient operations"

Alan Lee, Chief product officer, ActiveViam

Atoti PaaS manages the operational requirements of large distributed risk systems, including auto-shutdown scheduling, failover detection, high-availability configurations and cluster definition. Standardising these functions across infrastructures reduces operational friction and accelerates deployment cycles. OCBC, one of the first major adopters, now uses Atoti PaaS extensively within its Atoti Managed Service environment.

This capability matters because banks increasingly operate heterogeneous cloud estates. Regional regulatory requirements, sovereignty constraints and legacy infrastructure all contribute to a fragmented environment. Solutions that abstract complexity and provide consistent deployment patterns are becoming essential for ensuring control, stability and auditability across global risk teams.

Cloud innovation aligned with real business needs

This year's judging panel placed emphasis on submissions that connect modern cloud engineering with measurable outcomes that matter to risk organisations. ActiveViam succeeded by demonstrating how targeted, practical innovation can support the industry's most pressing challenges.

Risk functions today face exponential data growth driven by high-frequency market data, expanding regulatory requirements, deeper historical datasets and the convergence of risk and front-office analytics. As workloads grow more complex, the cost of cloud-based risk computation rises correspondingly. Many firms now face an uncomfortable tension between the need for richer analytics and the imperative to manage cloud spending responsibly.

ActiveViam's developments address this tension directly. Graviton delivers a straightforward cost reduction at scale. CRaC introduces true elasticity into workloads that historically lacked elasticity altogether. Atoti PaaS reduces operational overhead and enables consistent governance across fragmented cloud and on-premise estates. The combination presents a coherent strategy for modernising risk infrastructure without inflating its cost base.

For senior leaders evaluating next-generation risk platforms, this type of alignment between engineering innovation and financial impact is critical. The ability to achieve more granular, more responsive analytics at significantly lower cost is increasingly the benchmark for excellence in cloud-based risk technology.

Positioning for the future of risk technology

Beyond immediate benefits, ActiveViam's innovations establish a foundation for the evolution of cloud-native risk analytics in several important ways.

First, the ability to tune analytics engines to new hardware architectures suggests that future gains may come not only from software optimisation, but also from intelligent workload matching to processor types. Second, CRaC introduces elasticity to workloads previously constrained by JVM architectures, enabling banks to scale risk systems up and down dynamically rather than maintaining fixed capacity. Third, Atoti PaaS supports the operational model that many banks are now pursuing: a unified deployment framework capable of spanning public cloud, private cloud and on-premise environments while maintaining governance and resilience.

These developments collectively point towards a more flexible and more cost-efficient future for risk analytics – one in which cloud economics and performance requirements coexist rather than collide. ■