SUCCESS STORY

A Global Asset Management Firm + InterSystems

CUSTOMER
A Global Asset Management Firm

CHALLENGE
The firm's global portfolio modeling system was not fast or scalable enough to keep up with growth.

SOLUTION
InterSystems Data Platform

OUTCOME
Modernizing a proprietary portfolio modeling system with InterSystems enabled the firm to reach its goals for performance, reliability, application availability, scalability, and risk reduction.

Sub-Second Risk Analysis Enables Faster Investment Decisions

Modernizing on InterSystems Data Platform Accommodates Growth

Risk is inherent in investing and minimizing that risk is a common goal for money managers. For a global asset management firm with more than $500 billion in assets under management for clients worldwide, any trading error can have major cost and reputational consequences.

The firm created a proprietary portfolio modeling application to help mitigate investment, operational, and technological risk. Investment and operations teams use the application to rapidly generate models based on proprietary algorithms, assess risk, run compliance, and generate program trades for globally managed portfolios. But the original version of the application was not fast or scalable enough to keep pace with the organization's growth, the increasing speed of trading, and the mounting complexity of portfolios and regulations. So, the firm decided to develop a new version.

The Vice President of Investment Systems Software Development at the firm, observes that, "one of the principal objectives when deciding to revise the portfolio modeling system was to integrate a modern data platform that would allow for consistent levels of high performance coupled with a large degree of scalability." The firm chose InterSystems.

InterSystems
Creative data technology

The speed of the new application and its core risk algorithms gives portfolio specialists immediate feedback on risk and other significant metrics during the investment decision-making process. The system manages more than 500,000 concentration rules, and executes these rules pre-trade in under .07 seconds, meeting the firm's strict SLAs. "We have seen a significant improvement in our time-to-market, from model instruction through compliance clearance to execution, since the change to InterSystems," says the Vice President of Investment Systems Software Development. "More importantly, we have seen a significant reduction of investment and operational risk."

"We have seen a significant improvement in our time-to market, from model instruction through compliance clearance to execution, since the change to InterSystems."

The Vice President of Investment Systems Software Development, Global Asset Management Firm

In-Memory Database Speed, With Persistence

The initial project focused on enhancing the compliance engine inside the application with in-memory speed and the reliability of automatic data persistence, which are core capabilities of the InterSystems data platform. "The compliance engine is central to the investment process, and was running within our relational database," explains the firm's Vice President. Running any given model can result in thousands of complex rules being checked simultaneously and, even with tuning, performance on the relational database was lackluster and problematic. This initial project with InterSystems exceeded expectations for performance.

The Benefits of a High-Performance Data Platform in Financial Applications

The switch has enabled the asset management firm to reach its goals for performance, reliability, application availability, scalability, and risk reduction. The portfolio modeling system has had a perfect record of operational reliability since deployment. It has been remarkably stable with minimal support and more efficient use of development resources. "I really enjoy the fact that now I never hear a word from users about performance problems in [the application]," says the VP of Investment Systems Software Development.

Increased Flexibility and Reliability

All InterSystems data platform products are designed to help financial services firms unlock the full value of their data by converging data management, integration, and analytics into a single, high-performance platform. InterSystems enables firms to connect and harmonize data across front-, middle-, and back-office silos, support transactional and analytical workloads in real time, and embed advanced analytics, machine learning, and generative AI directly into core workflows. This unified approach allows asset managers to accelerate time to insight, improve risk visibility, and deliver more responsive, data-driven decisions. Developers benefit from broad language support within a flexible environment that simplifies integration and accelerates the delivery of modern financial applications.

Reduced Technological and Operational Risk

Downtime in financial services may mean a significant loss of revenue. So, this asset management firm uses the high availability features of InterSystems technology to ensure that if there is a problem, work can continue uninterrupted. "Relational databases have their deficiencies in supporting data-rich, highly computational, transactional applications, which can lead to outages or significant delays," explains the firm's VP of Investment Systems Software Development. "The data model offered by InterSystems is well suited for this type of environment. Using the InterSystems data platform we have had a perfect record of availability with [our portfolio modeling system]."

"Using the InterSystems data platform we have had a perfect record of availability with our application."

Vice President of Investment Systems Software Development, Global Asset Management Firm

InterSystems Delivers the New Generation of Data Management

Switching from a "traditional" database has given one of the firm's key applications the speed, reliability, and scalability needed to carry the organization forward for many years. InterSystems data platform has proven to be a better solution for:

- Minimizing investment, operational, and technological risk
- Providing superior time-to-market response for managing portfolio cash flows
- Guaranteeing that a modeling exercise will not alter the risk profile of a portfolio
- Providing a flexible and scalable platform to enable business growth

"The portfolio modeling system is vital for our firm. Looking at the order volume generated by the application since its inception, the system has proven to be a remarkable success," says the VP of Investment Systems Software Development. "Our proprietary portfolio modeling system and InterSystems technology have helped us clearly mitigate the risk of trading errors on the investment and operational sides of the business."

To learn how InterSystems can help your firm improve efficiencies and create competitive advantages, visit **InterSystems.com/AssetManagement**.

InterSystems®
Creative data technology