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RESEARCH

# | Anatomy of a decision: InterSystems IRIS

ANALYST

Alexander Wurm

## The Bottom Line

Initial data platform adoption is often tied to use case and ease of use; however organizations encounter challenges at scale following a component data management architecture as they piece together poorly integrated solutions. To investigate the gap between first order data platform adoption and reevaluations, Nucleus interviewed multiple enterprise organizations who migrated to InterSystems IRIS after experiencing challenges with their initial data management strategy. Customers cited convergence, enterprise scale support, and component solution fatigue as key factors motivating the shift, with adoption driving up to 98 percent improvement in risk and claims filtering accuracy, and consolidation of hundreds to thousands of data management services. As data platform demands continue to rise in support of new workloads and growing data footprints, Nucleus expects InterSystems to become the destination for enterprises as they mature beyond component architectures to achieve greater efficiency and cost savings.

## Overview

Organizations are grappling with component data management service proliferation, often struggling to manage growing numbers of specialized systems while facing operational complexity, compliance obligations, and cost optimization challenges. Enterprises, particularly those constrained by limited resources or technical staffing shortages, increasingly recognize that best-of-breed strategies create unsustainable complexity, driving them toward converged platforms over time that offer streamlined management, operational simplicity, and integrated security. As a result, the market is experiencing a fundamental shift toward converged solutions that integrate document, graph, relational, and vector data models alongside data integration and data management capabilities.

Data management service proliferation is forcing enterprises to abandon component strategies. Converged platforms are becoming the new operational success-factor.

## InterSystems

The InterSystems IRIS Data Platform delivers a comprehensive data management solution designed to support demanding enterprise requirements. The platform offers multi-model database capabilities, including support for SQL, NoSQL, vector, and object models. It features high-performance transactional and analytical processing for real-time data analysis, a complete integration platform, and embedded analytics including BI, natural language processing (NLP), machine learning, and GenAI applications. While known for its prowess in the healthcare sector, organizations across industries deploy InterSystems IRIS to consolidate fragmented systems, enable real-time insights, and support data-driven decision-making. The platform particularly appeals to organizations requiring multi-model database flexibility, proven scalability for enterprise workloads, and native healthcare interoperability standards support.

InterSystems IRIS delivered 50% improved performance on compressed datasets while reducing storage costs.

## Why InterSystems?

Nucleus interviewed InterSystems customers across healthcare and retail industries to identify the primary selection factors. Customers reported high-performance database capabilities, native integrations, and proven technology stability as the key drivers for choosing InterSystems IRIS over alternative solutions.

### High performance

Organizations highlighted InterSystems IRIS's ability to handle complex, high-volume workloads while maintaining consistent

performance across use cases. The platform demonstrated superior compression capabilities, with organizations reporting 50 percent better performance than traditional compressed datasets, directly impacting storage costs and data access speeds. This performance advantage proved critical for healthcare organizations managing large volumes of patient data and retail operations coordinating thousands of database services globally.

### Converged architecture

The platform's multi-model approach, supporting SQL, NoSQL, vector, and object models simultaneously, proved valuable for organizations managing heterogeneous data types. Customers found that this flexibility eliminated the need for multiple specialized databases or data duplication, reducing complexity and total cost of ownership. As a direct result, the platform enabled organizations to implement consistent data governance, security policies, and operational procedures across deployments. Customers achieved significant operational efficiencies through centralized management of thousands of database instances from unified control points and its support for both cloud and on-premises deployments allowed organizations to standardize on a single technology while accommodating varying infrastructure requirements across regions.

### Native integrations

Organizations consistently highlighted the platform's integration capabilities as a decisive selection factor. Customers reported that these pre-built integration capabilities significantly reduced implementation timelines and technical complexity compared to alternatives requiring extensive custom connector development. The platform's native support for REST APIs and modern integration patterns allowed organizations to modernize legacy system connections while maintaining operational continuity. Healthcare customers specifically emphasized the importance of HL7 FHIR support for achieving interoperability mandates and improving care coordination.

## Highlighted Use Cases

Nucleus interviewed InterSystems customers across multiple industries to assess the benefits of deployment and the primary drivers of the selection of the platform.

Regulated industries face mounting pressure for data integrity and compliance spurring increased traction among converged platforms that offer unified security and governance frameworks.

"Point Click Core integrations eliminated months of custom connector development we faced with alternatives"  
- European Retailer

## Academic healthcare organization

This healthcare organization operates with a focused team of 18 professionals serving an academic institution's faculty, staff, students, retirees, and families. The organization faced significant challenges with its previous systems, struggling with fragmented data, limited integration capabilities, and inability to meet evolving healthcare interoperability requirements. The disparate systems created operational inefficiencies and hindered the organization's ability to deliver coordinated care and maintain accurate patient records.

The organization initiated a comprehensive migration to InterSystems IRIS in 2018, completing the transition in 2024. The selection process prioritized platforms offering high-performance databases, PCC integrations, and proven healthcare-specific capabilities. InterSystems IRIS emerged as the clear choice due to its superior connectivity features and ability to make FHIR filing more efficient. The implementation followed a phased approach, maintaining service continuity throughout the six-year migration period.

Following deployment, the academic healthcare organization achieved improvements across multiple operational metrics. The organization reported up to 98 percent improvement in risk and claims filtering accuracy, transforming its ability to identify and manage patient risk profiles. The capture and reduction of due and overdue rates improved by 85 percent, enhancing revenue cycle management and reducing administrative burden. Patient satisfaction scores reached 97 percent, reflecting improved care coordination and service delivery. The platform enabled integration with hospital discharge systems for follow-up care coordination, streamlined vaccine records management, and enhanced claims filing processes. Billing managers reported substantial satisfaction improvements due to cleanly managed collections and reduced manual interventions. The organization successfully leveraged REST API integrations to connect with external health systems, achieving the interoperability necessary for comprehensive patient care.

## Retail conglomerate

This European retail conglomerate operates across 95 countries with a sizable technology infrastructure supporting global operations. The organization managed 2400 database services running on its previous platform, facing challenges with standardization, centralization, and consistent performance across diverse geographic markets. The distributed nature of operations created complexity in maintaining

Organizations are standardizing on single technologies platforms while accommodating varying infrastructure requirements across regions. Hybrid and phased deployment flexibility drives platform selection in these instances.

Organizations achieve up to 98% improvement in risk filtering accuracy with IRIS deployments.

data consistency, implementing updates, and ensuring uniform service levels across all regions. The organization undertook a major harmonization and centralization project from 2019 to 2020, upgrading from its prior database service to IRIS. The migration strategy focused on achieving standardization across Europe while maintaining local operational flexibility. The selection of InterSystems IRIS over alternatives was driven by the need for a performant data platform capable of supporting massive scale while enabling automation and asynchronous communication across 48 distinct applications.

Upon completing the IRIS migration, the retail conglomerate realized operational improvements. The organization successfully centralized shop servers into unified data centers while maintaining responsive local operations. The platform enabled early order processing automation, improving supply chain efficiency and reducing manual intervention requirements. Asynchronous communication capabilities streamlined data flow across 48 applications, eliminating previous bottlenecks and synchronization issues. The backend and enterprise service bus (ESB) capabilities of InterSystems IRIS integrated seamlessly with complementary technologies. In all, the organization leveraged InterSystems for backend operations while maintaining flexibility for user-facing applications, achieving an optimal balance between standardization and customization.

## Looking Ahead

The convergence of multi-model database requirements, real-time analytics demands, and stringent security needs creates a compelling case for InterSystems IRIS adoption. The platform's proven scalability to thousands of database instances while maintaining centralized management appeals to enterprises undergoing digital transformation or consolidation initiatives, particularly those operating in complex regulatory environments. This value message is particularly appealing to regulated entities such as those in financial services, healthcare, utilities industries with global operations as pressure mounts to ensure data integrity, auditability, and compliance with evolving standards, often under strict deadlines.

"InterSystems proved superior for system connectivity, enabling us to achieve true healthcare interoperability"  
- Healthcare provider