RISHABH SOFTWARE

Case Study

Application Migration & Modernization for a FinTech Platform

Successfully transformed a legacy monolithic transaction platform into a scalable and cloud-native microservices ecosystem.

PROJECT OVERVIEW

A U.S.-based financial services organization partnered with Rishabh Software to modernize its legacy monolithic transaction platform. Growing transaction volumes and regulatory demands had impacted scalability, release velocity, and real-time processing. The engagement focused on migrating to a cloud-native microservices architecture to improve resilience, enable faster releases, and support continuous delivery.

Capability	Industry	Country
Application Modernization	FinTech	United States

KEY FEATURES

With a clear vision for sustainability and faster go-to-market cycles, the FinTech organization set out to transform its legacy financial platform into a modern, microservices-driven technology infrastructure. We re-architected the entire application into modular financial operations with the following key features:

Modular Financial Processing Services

It reduces release risk, enables faster feature delivery, and allows teams to enhance individual financial functions without disrupting the entire platform by implementing decoupled workflows.
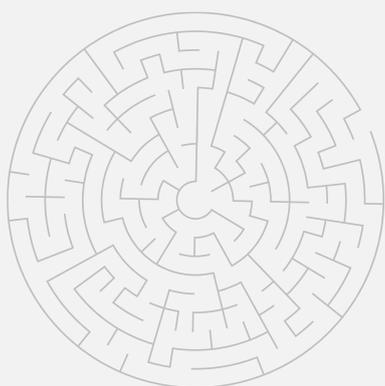
Intelligent Payment Scheduling

Automates payment execution using configurable business rules and schedules to ensure accurate processing, reduce manual effort, and maintain predictable cash flow across client operations.

Asynchronous Reporting Engine

Enables uninterrupted transaction processing while large financial reports run in the background, helping operations teams meet compliance deadlines without slowing down payment workflows during peak periods.

Real-Time Operational Visibility

Provides live system updates across user interfaces and downstream services, allowing teams to proactively monitor processing status, quickly identify exceptions, and reduce resolution times.

CHALLENGES

- Tightly coupled financial workflows made even small changes risky. Payment scheduling, trust processing, reporting, and account staging were all interconnected, so updates in one area often slowed down business delivery.
- During peak payment periods, the platform struggled to keep up with the transaction volumes. With no way to scale services independently, performance dipped, and support teams had to manage the resulting operational stress.
- Reporting and reconciliation workloads were competing with real-time transactions, leading to slowdowns in payment processing and delays in compliance reporting during peak transaction periods.
- Deployments were handled manually with very little automation, which slowed down releases and increased mistakes. This made it harder to roll out updates or meet new regulatory requirements quickly.

Rishabh Software's modernization effort, focused on migrating from monolith to microservices, helped build a more reliable and scalable foundation for the client's core financial operations across multiple areas. This modernized solution shifted deployments from risky and expensive changes to a simpler, more controlled release process.

Incremental Monolith Decomposition

Our team progressively broke down the legacy application into domain-aligned services so payment processing, trust workflows, account staging, and reporting could run independently. This helped reduce release risk, made changes easier to roll out, and allowed enhancements to be delivered without interrupting active financial transactions.

Cloud-Native Platform Engineering

Our development team moved transaction-heavy services to a cloud-native setup to support scaling during peak payment cycles. This ensured consistent performance while improving availability across both client-facing and back-office systems, giving operations teams a more reliable platform to work with.
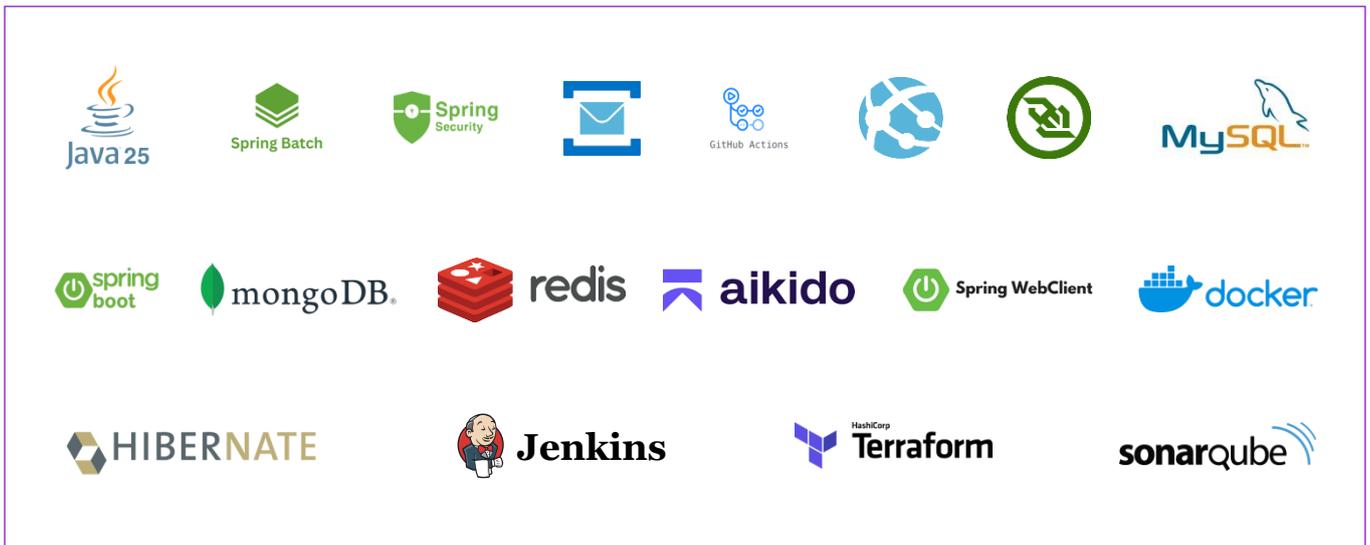
API-Led Architecture Implementation

We introduced a centralized integration layer to standardize application access to financial services. This simplified connectivity across systems and created a strong foundation for onboarding new clients, extending platform capabilities, and supporting regulatory changes.

Event-Driven System Design

To prevent reporting and background jobs from slowing down real-time payments, our experts implemented Azure Service Bus for asynchronous processing. This separated long-running tasks from transactional workflows, improving overall system responsiveness.

TECHNOLOGIES & TOOLS

Java 25, Spring Batch, Spring Security, GitHub Actions, MySQL, Spring Boot, mongoDB, redis, aikido, Spring WebClient, docker, HIBERNATE, Jenkins, HashiCorp Terraform, sonarqube

Outcomes

38%
Faster release cycles

44%
Lower deployment effort

33%
Faster reporting turnaround

ABOUT RISHABH SOFTWARE

As a Digital Engineering and Enterprise Transformation leader, we empower businesses to scale, innovate, and thrive in today's digital-first world through technology rooted in trust and transparency. We leverage emerging capabilities such as Cloud, Data Engineering & Analytics, AI, Automation and Application Engineering to drive digital transformation and unlock new opportunities. We have successfully served across 25+ countries, and we work towards customer delight as "WE CARE."

sales@rishabhsoft.com

+1-877-747-4224

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