

Case Study

Tier 1 Bank

 FINTECH



TIER 1
BANK

MADE ON SINGLESTORE

America-based Tier 1 Bank Repositions Itself as a Financial Services Innovator with SingleStore, Saving \$40M/Year

About

A top-3 American multinational investment bank and financial services offering innovative business solutions, research and analysis globally.

Industry

Fintech

Use case

ULTRA-FAST QUERIES

TCO

MODERNIZE

Solutions

SingleStore Helios®

Overview

If there's one industry undergoing constant tech innovation, it's financial services. Whether moving from pure-play transactional systems to omnichannel systems of engagement and AI-ready customer solutions, success in financial services requires not just faster systems, but a fundamentally different data architecture natively engineered to handle real-time operations.

To effectively meet its customers at every touchpoint, this Tier 1, top 3 U.S. bank needed to modernize its banking platform and infrastructure from mainframes to modern scalable data engines — improving customer experiences improve customer experience and roll out products and services faster.

Challenges and goals

The bank's existing infrastructure, including Oracle RAC for OLAP and a leading mainframe for OLTP, could not support its massive customer base. The company continued to add more and more compute power and instances to meet its concurrency and latency requirements.

“SingleStore delivers blazing fast queries that deliver single-digit millisecond latencies with immediate consistency and high concurrency to handle millions of real-time queries across tens of thousands of users.”

One of these providers charges by MIPS (millions of instructions per second), and with the bank’s mainframes running at or near capacity, operating costs continued to increase month over month — resulting in an annual IT budget in the billions of dollars with no money left for innovation. This put market share at risk; while the bank was carrying this heavy financial and operational burden, competitors were developing new products and services it could not compete with through innovation.

The bank’s data braintrust knew legacy modernization of its data estate would overcome its biggest challenges, including:

- Potential market share and revenue losses across its customer base
- Devoting nearly all of its budget maintaining current operations, sapping funds that could be driving innovation
- Inability to keep pace with competitive omnichannel apps spanning a full range of financial services

Technology requirements

While its largest competitors made big investments in technology transformation, this bank was still relying significantly on legacy mainframes and ongoing maintenance projects, impeding its ability to become iterative and agile. And, it could not move to an industry-standard ‘systems of engagement’ model. The bank needed to offload 30% of its mainframe usage to a customer data hub. The ideal solution needed to be cost-efficient, highly scalable and agile — and position the financial institution as a competitive innovator.

Why SingleStore

This bank selected [SingleStore Helios®](#), a real-time data platform built for speed, scale and simplicity to deliver a modern architecture for robust omnichannel systems of engagement. It offers parallel, high-scale streaming data ingestion of up to millions of events per second that can be processed for immediate availability.

“SingleStore delivers blazing fast queries that deliver single-digit millisecond latencies with immediate consistency and high concurrency to handle millions of real-time queries across tens of thousands of users,” said our customer champion/advocate.

Solution

Our customer had the vision to execute a strategic mainframe offloading initiative, moving data storage and processing from the mainframe to a more cost-effective and efficient solution: SingleStore. The company easily migrated stored procedures from the mainframe to SingleStore, whose drop-in compatibility with industry-standard SQL wire protocol support made it simple to get started. SQL experts are readily available, removing many development roadblocks that impact time to market.

All of these capabilities added up to a platform poised to keep up with the changing requirements of today's financial services customers.

"Using SingleStore as our system of engagement now enables us to offer consistent and personalized omnichannel recommendations to customers regardless of when, where, and how they choose to interact with us," said our Customer Champion/Advocate. The bank's systems can now manage complex caching in RDB format, achieve high concurrency with millisecond response times on 125 million queries per day and use native CDC into SingleStore to stream events directly into the database — where they are immediately available to support queries.

Outcomes

By banking on SingleStore's speed, scale and simplicity, this financial services leader has modernized and optimized experiences for its customers with an omnichannel system of access.

Saving \$40 million annually, freeing up more IT budget for innovation

Shifting 30% of its mainframe traffic to SingleStore has resulted in \$40 million annual cost savings for our customer. The move helped both financially and strategically: instead of these funds going to maintain and cope with an aging data infrastructure, this financial innovator can now redeploy these funds to build differentiating, value-adding services and to create and deliver innovative customer experiences — all of which enhances revenue retention and positions the company for the future.

Rapidly developing new customer-facing applications

SingleStore helps this bank's development sprint teams reduce time-to-market for new customer applications by using familiar SQL to accelerate the cadence of releases. The bank can now better meet customer expectations through modern omnichannel banking solutions to compete effectively with other large, established banking organizations as well as fintech innovators and emerging digital-first challenger banks.

Increasing competitiveness = increased revenue

Our customer leveraged SingleStore's speed and scale to accelerate its creation of modern solutions that enable it to effectively respond to ever-changing customer needs. By delivering on customer expectations through enhanced omnichannel experiences, it has also realized incremental revenue growth.

SingleStore customers include six of the top 10 U.S. banks, and seven of the top 15; as well as two of the world's top five banks and three of the top 10; as ranked at time of publication by [MarketWatch Guides](#), [Bankrate](#) and [Investopedia](#)

Watch how SingleStore accelerates fintech applications at scale in [this webinar](#) featuring our customers dailyVest, Digital Asset Research (DAR) and spacetime.io

SingleStore is helping companies compete and win across every vertical. [Learn more →](#)