

This top U.S. bank offers consumer, business, and wealth management services. With over 20,000 employees, \$10B+ in annual revenue, and \$200B+ in assets under management, it's been recognized by Forbes "World's Best Banks" list and the Fortune 500.

CASE STUDY

How Huntington Bank Operationalized Enterprise AI at Scale with Shakudo

20K+

employees across the entire banking enterprise

120X

faster environment builds that maximize engineering throughput and time-to-value

140

models in production, supporting marketing across the entire bank

THE CHALLENGE: SCALING AI IN A SECURE & REGULATED ENVIRONMENT

In the dynamic world of financial services, staying competitive means more than just having access to the latest AI models. It means being able to operationalize them seamlessly across a secure, compliant enterprise environment. A leading U.S. bank, and one of Forbes world's best banks faced precisely this challenge.

With a team of over 100 data scientists and AI practitioners, the bank had a strong vision: adopt AI at scale to improve operational efficiency and customer experience across departments — from intelligent document processing to customer interactions with AI agents. However, they grappled with the very real limitations of fragmented MLOps stacks, siloed tools, and the difficulty of ensuring regulatory compliance across their existing cloud-hosted workflows.

Their existing platform (highly reliant on SageMaker) was functional but limited in integration, observability, and cost transparency. As AI innovation within the bank accelerated, they recognized the need for a more cohesive, scalable, and secure machine learning operations stack.

THE SOLUTION: MLOPS POWERED BY THE OS APPROACH

Shakudo worked closely with the bank's data and AI leadership to streamline and unify their entire MLOps ecosystem. This started with a strategic migration of models and workflows from SageMaker into the Shakudo platform. What distinguished Shakudo was not only its ability to match and exceed the incumbent platform's features but also to provide a long-term vision: an operating system for AI and data.

Unified AI Deployment at Scale

Migrating existing batch models into the Shakudo environment allowed the team to take advantage of deep cost visibility enabling transparency and prioritization across projects.

Through Shakudo's infrastructure-agnostic platform, they also decoupled their AI workflows from vendor lock-in. AI products could now be deployed in a secure, compliant environment that could scale across both cloud and on-prem deployment options, maintaining full data sovereignty and compliance with financial regulations.

Model Monitoring and Drift Detection

To ensure ongoing model accuracy and reliability, Shakudo enabled robust model monitoring capabilities. Changes in data distributions could now be detected early, allowing the AI team to proactively adjust models before performance degraded or compliance risks emerged — a key differentiator in highly regulated sectors.

Intelligent Document Processing with Chatbots

In a high-impact internal prototype, the team began developing an AI agent chatbot using Dify and LiteLLM to analyze and interpret SEC-filed 10-K documents. This use case demonstrated what was possible when tools could interact natively within one platform. From retrieval-augmented generation (RAG) pipelines to cost tracking and model/vendor flexibility, the proof-of-concept went from whiteboard to working pilot in weeks — not years.

THE IMPACT: FASTER ITERATION, REDUCED RISK, AND COST TRANSPARENCY

Security That Meets Financial Industry Standards

Shakudo's model of deploying directly within the customer's infrastructure — whether cloud or on-prem — ensured that none of the bank's sensitive data had to leave their secure environment. This allowed them to run high-performance AI workloads in full compliance with internal policy and federal regulations, including robust access control and audit capabilities across all AI tools on the platform.

Seamless Tool Interoperability, Without Overhead

In today's fast-evolving machine learning landscape, the one constant is change. Shakudo eliminated friction by enabling over 170+ data and AI tools to work together in the same platform — with shared data access, single sign-on, cost controls, and automated DevOps integration.

This not only empowered data scientists and developers but also gave IT leaders peace of mind. No longer did they need to choose between innovation and control — they could have both.

Governance, Observability & Full Control

With powerful observability features supporting compliance and IT governance standards, Shakudo helped the bank's AI leadership maintain control over model performance, infrastructure costs, and vendor usage — helping to future-proof their investments in a fast-moving AI market.

THE OPERATING SYSTEM FOR AI

This collaboration is an example of why the traditional “one-size-fits-all” data platform no longer works in a world where new AI tools emerge every week and the competitive landscape shifts daily.

Legacy platforms can't keep up. They assume lock-in, static toolchains, and long cycles of vendor dependency. But innovation in AI isn't static — it's accelerating.

Shakudo is an operating system for AI and data that runs within your enterprise infrastructure. It serves as the intelligent layer between your data teams and the underlying stack, automating all DevOps operations while letting AI tools genuinely interoperate across your system:

- Single Sign-On across AI and data tools
- Unified data access with permissioning
- Automated infrastructure triggered by events (no manual ops)
- Cost and performance observability from prototypes to production

If you're a technology leader facing the challenges of scaling AI across your organization, especially in regulated industries like finance, healthcare, or manufacturing, now is the time to adopt a more agile, future-ready approach.

Learn how Shakudo's operating system for AI and data can help your teams move faster, stay compliant, and stay ahead. [Book a demo](#) or [join our next AI workshop](#) to see what's possible.

GET IN TOUCH WITH US

Ethan Brooke

Senior Account Executive

ethan@shakudo.io

(437) 344-4349