

Supercharge Resilience in Financial Services with Splunk AI



Innovation drives more functionality for financial services — and more risk

There's a reason the financial services sector is considered part of the critical national infrastructure. Every day, people depend on their banks for transactions that feed them and keep them housed. Even a brief disruption to those financial services has ramifications that ripple throughout society and the economy, impacting people, businesses, government, trade, and commerce. That's why keeping systems running smoothly is critical to any financial institution.

Challenges grow exponentially each year as financial services companies continue to innovate. More functionality means more system complexity and a larger attack surface, which makes systems more difficult to monitor from end to end. The same complex tech stacks needed for innovation also have complications for compliance, security, and overall resilience.

In the financial services industry, IT infrastructure is the backbone that supports everything from transaction processing to customer service. The sheer volume of data flowing through these systems makes it difficult to manually monitor them for security and optimal performance. Traditionally, IT teams have had to rely on reactive firefighting rather than proactive solutions to infrastructure issues.

Additionally, more complexity means more difficulty managing system performance and maintaining uptime. It also means security, compliance, and observability teams are tasked with securing a larger number of potential gaps that internal and external threat actors can slip through.

Just 8% of financial services organizations were categorized as observability leaders.



Driving change with AI in financial services

The rise of AI can help financial services institutions get ahead of their observability challenge. This technology is becoming central to modern security and observability tools that help financial companies monitor the systems and processes that they support from end to end. This discipline, AI for IT Operations (AIOps), offers powerful automation capabilities that allow human teams to cope with a rising tide of system telemetry.

That's why nearly all respondents (97%) in the Splunk State of Observability 2024 report said **they are currently using AI and ML-powered systems** to enhance observability operations — a significant jump from 2023, when 66% reported adoption.

Splunk now uses generative AI, an advanced branch of artificial intelligence, to empower users in security and observability roles. Splunk Observability and Security platforms now include generative AI-powered assistants that enhance IT visibility to make threat detection more proactive. These tools sift through vast amounts of data, automatically identifying anomalies and potential threats that human teams might miss.

Thanks to the **Splunk AI Assistant for SPL**, administrators can also use generative AI to interact with data more easily. This uses generative AI to translate natural language queries into Splunk Search Processing Language (SPL), the underlying syntax for interacting with Splunk machine data.

Splunk has also built generative AI into **Splunk IT Service Intelligence (ITSI)** to make life easier for administrators. An AI-powered **Configuration Assistant** makes it easier to set up the product using natural language interactions, empowering financial services companies to work more productively.

Another tool in the ITSI product, Drift Detection for KPIs, watches key metrics for any drift outside accepted norms, giving financial services companies ample time to find and correct the underlying cause. A complementary feature, entity-level Adaptive Thresholds, prevents false positives from triggering false alerts that would distract employees..

The Taiwanese cryptocurrency exchange, **ACE Exchange**, used the Splunk platform and its machine learning models to speed up threat hunting, leading to:



70% less human intervention
required for security monitoring



10% cost savings
from idle cloud resources



24/7 availability
thanks to real-time visibility into operations



Do more with Splunk AI-powered features

Splunk generative AI capabilities offer several key benefits for financial services firms. Chat-like AI interfaces enable new team members to get up to speed more quickly in understanding Splunk's capabilities and documentation while also allowing them to explore data iteratively, leading to deeper insights. Fast SPL query generation enables analysts to create dashboards and troubleshoot issues more quickly. Translating complex code into natural language helps team members understand and modify existing queries and build on each other's work.

A small investment in an AI-powered observability platform yields big benefits in an era where technological infrastructure is both a critical asset and a potential point of failure. This powerful technology gets financial services companies ahead of the curve, preparing them for IT infrastructure and cybersecurity problems so they can eliminate threats quickly — without disrupting their all-important operations.

TransUnion tapped into the automation and machine learning capabilities of Splunk ITSI, allowing the company to:



Solve problems faster

by discovering incident root causes in minutes, not hours



Reduce the number

of false alerts



Increase revenue

by improving transaction processing



Splunk's AI solutions have your back

Let the tools do the heavy lifting and help keep your financial data safe and secure, day and night.

Splunk IT Service Intelligence

Splunk IT Service Intelligence (ITSI) is a monitoring and analytics solution powered by artificial intelligence for IT Operations (AIOps). It provides visibility into the health of critical IT and business services and their infrastructure.

You can use ITSI to solve various IT challenges, including deriving service-level insights and analysis on events, metrics, and logs to find and fix the most important issues first.

ITSI Configuration Assistant

Use the Configuration Assistant to monitor and optimize the health of your ITSI environment at scale. The dashboard helps you identify configuration issues for your services, KPIs, and entities at a glance, resolve these issues, and apply changes to your objects in bulk.

Splunk AI Assistant for SPL

Splunk AI Assistant for SPL offers bi-directional translation between natural language (NL) and Splunk Search Processing Language (SPL) to compose what you want to search in plain English. The Splunk AI Assistant for SPL then translates the request into Splunk Search Processing Language. You can execute or build on that SPL search, all within a familiar Splunk interface.

Information from saved searches can provide more context for transactions. Your team can use this data to better assess risk.

KPI Drift Detection

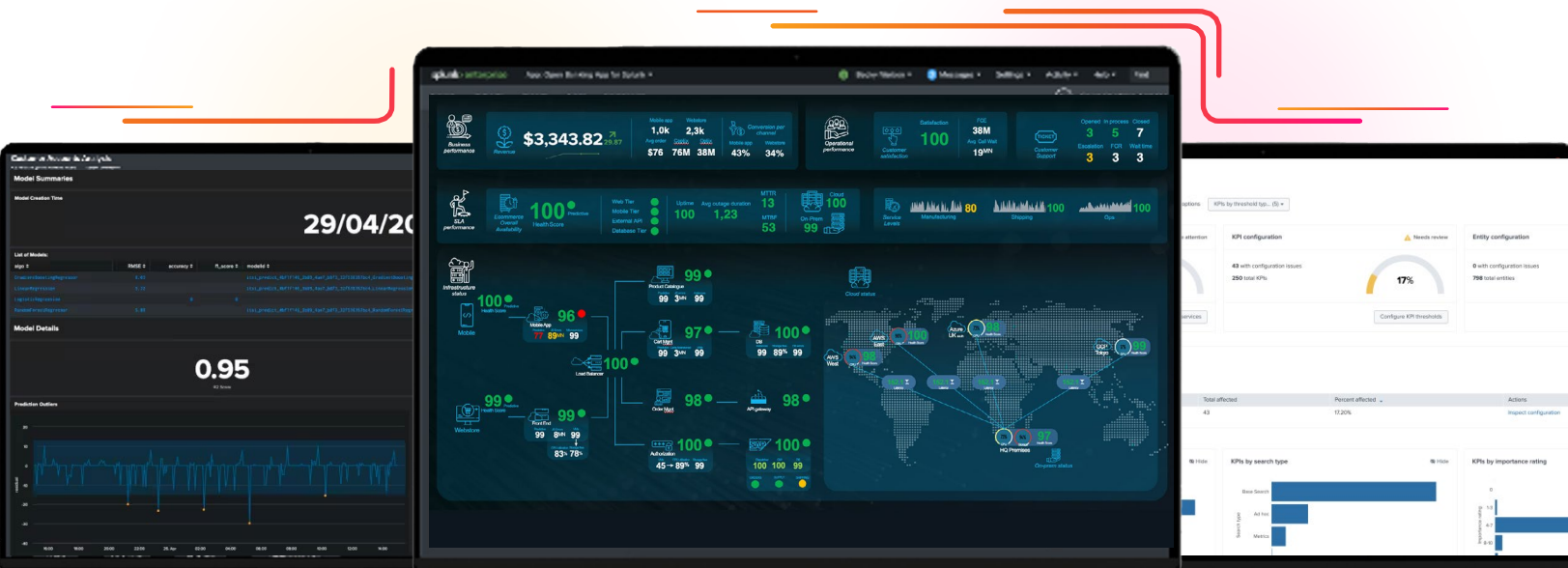
Catch sudden changes in KPIs before they are impacted and proactively determine slow, long-trending changes (like slowly increasing latency over months) that potentially indicate an issue so they can be remediated before problems arise.

Adaptive Thresholds

Regularly revisiting adaptive thresholds allows Splunk ITSI users to retrain the system based on the latest insights and observations. This retraining process ensures that the adaptive thresholds remain relevant and aligned with the dynamic nature of the IT landscape.



of financial services respondents are exploring generative AI in observability





Even small interruptions to financial services can have a major impact for customers

More institutions are introducing AI to observability and security roles to build resilience and keep operations running smoothly, making it easier for teams to identify threats, gain deeper insights, and improve productivity with an end-to-end view of processes. As the attack surface grows, financial institutions should also be prepared to grow their strategies.

Learn more about Splunk's solutions for [financial services](#) and [how they minimize downtime with AI](#).

