

Nearly 80 Percent of Financial Firms Use AI to Improve Services, Reduce Fraud

NVIDIA's "State of AI in Financial Services" survey details the growth of AI adoption in capital markets, retail banking and investment firms.

Author: Kevin Levitt

From the largest firms trading on Wall Street to banks providing customers with fraud protection to fintechs recommending best-fit products to consumers, AI is driving innovation across the financial services industry.

New research from NVIDIA found that 78 percent of financial services professionals state that their company uses accelerated computing to deliver AI-enabled applications through machine learning, deep learning or high performance computing.

The survey results, detailed in NVIDIA's "State of AI in Financial Services" report, are based on responses from over 500 C-suite executives, developers, data scientists, engineers and IT teams working in financial services.

With more than 70 billion real-time payment transactions processed globally in 2020, financial institutions need robust systems to prevent fraud and reduce costs. Accordingly, fraud detection involving payments and transactions was the top AI use case across all respondents at 31 percent, followed by conversational AI at 28 percent and algorithmic trading at 27 percent.

There was a dramatic increase in the percentage of financial institutions investing in AI use cases year-over-year. AI for underwriting increased fourfold, from 3 percent penetration in 2021 to 12 percent this year. Conversational AI jumped from 8 to 28 percent year-over-year, a 3.5x rise.

Meanwhile, AI-enabled applications for fraud detection, know your customer (KYC) and anti-money laundering (AML) all experienced growth of at least 300 percent in the latest survey. Nine of 13 use cases are now utilized by over 15 percent of financial services firms, whereas none of the use cases exceeded that penetration mark in last year's report.

Future investment plans remain steady for top AI cases, with enterprise investment priorities for the next six to 12 months marked in green.

Top Current AI Use Cases in Financial Services (Ranked by Industry Sector)

Financial services professionals highlighted the main benefits of AI in yielding more accurate models, creating a competitive advantage and improving customer experience. Overall, 47 percent said that AI enables more accurate models for applications such as fraud detection, risk calculation and product recommendations.

However, there are challenges in achieving a company's AI goals. Only 16 percent of survey respondents agreed that their company is spending the right amount of money on AI, and 37 percent believed "lack of budget" is the primary challenge in achieving their AI goals. Additional obstacles included too few data scientists, lack of data, and explainability, with a third of respondents listing each option.

Financial institutions such as Munich Re, Scotiabank and Wells Fargo have developed explainable AI models to explain lending decisions and construct diversified portfolios.

Biggest Challenges in Achieving Your Company's AI Goals (by Role)

Cybersecurity, data sovereignty, data gravity and the option to deploy on-prem, in the cloud or using hybrid cloud are areas of focus for financial services companies as they consider where to host their AI infrastructure. These preferences are extrapolated from responses to where companies are running most of their AI projects, with over three-quarters of the market operating on either on-prem or hybrid instances.

Where Financial Services Companies Run Their AI Workloads

Over half of C-suite respondents agreed that AI is important to their company's future success. The top total responses to the question "How does your company plan to invest in AI technologies in the future?" were:

However, only 23 percent overall of those surveyed believed their company has the capability and knowledge to move an AI project from research to production. This indicates the need for an end-to-end platform to develop, deploy and manage AI in enterprise applications.

Read the full "State of AI in Financial Services 2022" report to learn more.

Explore NVIDIA's AI solutions and enterprise-level AI platforms driving the future of financial services.

Original URL: <https://blogs.nvidia.com/blog/2022/01/27/ai-financial-services-survey/>