

Banking on AI: Deutsche Bank, NVIDIA to Accelerate Adoption of AI for Financial Services

Deutsche Bank will further accelerate its center of excellence for AI and machine learning.

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Deutsche Bank Wednesday announced a partnership with NVIDIA to accelerate the use of AI and machine learning in the financial services sector.

The announcement follows months of testing to explore use cases that could support the bank's strategic ambitions to 2025 and beyond.

"Accelerated computing and AI are at a tipping point, and we're bringing them to the world's enterprises through the cloud," said NVIDIA founder and CEO Jensen Huang. "Every aspect of future business will be supercharged with insight and intelligence operating at the speed of light.

"Together with Deutsche Bank, we are modernizing and reimagining the way financial services are operated and delivered," he added.

The potential is enormous. McKinsey estimates that AI technologies could deliver up to \$1 trillion of additional value yearly for global banking.

Frankfurt-based Deutsche Bank is a leading global investment bank with more than 80,000 employees in 58 countries worldwide.

Deutsche Bank's initiatives promise to speed efforts to serve customers worldwide, develop new data-driven products and services, increase efficiency and recruit tech talent.

Together, Deutsche Bank and NVIDIA have initially focused on three potential implementations with a multi-year ambition to expand this to over a hundred, which the companies are exploring.

With NVIDIA AI Enterprise software, Deutsche Bank's AI developers, data scientists and IT professionals will be able to build and run AI workflows anywhere, including in its hosted on-premises data centers and on Google Cloud, the bank's public cloud provider. (In related news, NVIDIA today announced NVIDIA AI Enterprise 3.0 .)

Price discovery, risk valuation and model backtesting require computationally intensive calculations on massive traditional CPU-driven server grid farms. Accelerated compute delivers more accurate results in real time, helping provide more value to customers while lowering total costs by as much as 80%.

Many bank functions that typically process overnight, like risk valuation, can now be run in real time on accelerated compute.

This represents a leap forward in how traders can manage risk by running more scenarios faster on a more energy-efficient grid farm.

Deutsche Bank is exploring how to engage employees, potential recruits and customers more interactively, improving experiences using 3D virtual avatars in real time, 24 hours a day, seven days a week.

An early potential implementation enabled Deutsche Bank to create a 3D virtual avatar to help employees navigate internal systems and respond to HR-related questions.

Future use cases will explore immersive virtual experiences with banking clients.

Extracting critical information from unstructured data has long been challenging. But existing large language models don't perform well on financial texts.

Transformers, a type of neural network that learns context and, thus, meaning from data, introduced in 2017, could change this.

A single pretrained model can perform amazing feats — including text generation, translation and even software programming — and is the basis of the new generation of AI.

Deutsche Bank and NVIDIA are testing a collection of large language models called Financial Transformers, or Finformers.

These systems will have the potential to provide early warning signs of counterparty risk, retrieve data faster and identify data quality issues.

Explore how NVIDIA's AI solutions and enterprise-level AI platforms drive innovation in financial services.

Original URL: <https://blogs.nvidia.com/blog/2022/12/07/deutsche-bank/>