

# Discover the power of HPE Private Cloud AI for Financial Services

AI solutions for top financial use cases



# Revolutionize FSI with AI

Artificial intelligence (AI) is everywhere, disrupting and creating limitless opportunities in the financial services industry (FSI). AI has the potential to make FSI more productive and profitable than ever before, by mitigating risk and security threats and enabling faster and more informed decisions. The ability to deploy and scale AI is critical to helping financial institutions adapt to new challenges, better serve customers, and keep pace with competitors. The key to success is adopting AI solutions that empower FSI operations to support these goals.

Financial institutions face significant challenges in maintaining security, efficiency, and accuracy in their operations. Moving funds effectively and staying compliant in a highly regulated industry requires adept risk management in areas such as fraud detection, lending, trading, and investment allocation. AI can help solve these challenges in a better way.

Organizations of all sizes can leverage AI to unlock more value from data, harnessing real-time insights from complex data to develop sophisticated financial products, services, and tools. But many organizations have the same question—where should they utilize AI for the greatest impact?

These use cases for AI can make financial operations faster and more impactful than ever:

- **Fraud detection and prevention:** Financial institutions can save billions of dollars annually with AI-enabled fraud detection. AI models evaluate transaction data to identify unusual patterns and anomalies that can indicate fraudulent activity in real time, enabling immediate intervention to reduce financial losses, legal fees, and reputational damage.
- **Loan application review automation:** Improve lending decisions by minimizing human biases and determining appropriate risk profiles. AI models can analyze extensive digital footprints to quickly assess an applicant's creditworthiness with increased accuracy, accelerating the loan approval process and delivering more consistent lending decisions.
- **Market research for investment strategies:** AI provides timely insights into investment opportunities, harnessing vast amounts of structured and unstructured data to offer precise and actionable investment advice. Techniques like natural language processing enable AI to interpret data from market trends, economic indicators, geopolitical events, and more to help clients make informed decisions.
- **Chatbots for customer service:** AI chatbots deliver personalized and insightful financial guidance 24/7, saving employees time and productivity and enhancing customer experiences with conversational support. By analyzing customer data and market conditions, AI models can predict individual customer preferences and deliver tailored responses.

One thing is certain, AI has the power to increase growth and revenue in numerous areas. These use cases are strategic places to begin for institutions that are looking to optimize their processes and become more competitive in the global market.

## Tap into new capabilities

Your AI strategy can include a broad range of workloads, from inference with large language models (LLMs) to fine-tuning and retrieval augmented generation (RAG). These techniques open the door to advanced capabilities like generative AI (GenAI) to hone and accelerate financial services operations. But organizations need a simple, effective way to adopt this technology. Only 57%<sup>1</sup> have a single, consolidated AI strategy. Over 35%<sup>2</sup> have opted to create separate strategies for individual functions, which creates a fragmented environment that can be costly and difficult to manage. To realize the value of AI, financial institutions need an end-to-end approach that supports their use case objectives, data security, and ethical obligations of AI.

Public cloud solutions (while feature-rich) can expose sensitive data to threats, with potentially significant consequences to IP. Financial institutions must be able to govern their data and applications to ensure AI is used for the right purposes and to avoid introducing new risks. A private-focused approach offers better AI control and security while reducing complexity. This shift has launched a return to the private cloud.

Many financial institutions are taking a hybrid cloud approach to AI with data privacy and control at the center. A turnkey private cloud eases the complexity of fragmented environments.

<sup>1,2</sup> [paths.ext.hpe.com/c/architecting-ai-advantage?x=CoKJUa&cc=us&utm\\_campaign=ai&utm\\_medium=com-fav&lang=en&utm\\_content=tech-article&utm\\_source=or&lb-mode=overlay&lb-height=100&lb-width=100&pf\\_route=a00137886-1](https://paths.ext.hpe.com/c/architecting-ai-advantage?x=CoKJUa&cc=us&utm_campaign=ai&utm_medium=com-fav&lang=en&utm_content=tech-article&utm_source=or&lb-mode=overlay&lb-height=100&lb-width=100&pf_route=a00137886-1)



This solution, known as HPE Private Cloud AI (PCAI), supports the entire AI development lifecycle and provides seamless experiences as AI infrastructure changes over time—so you can adapt and scale with new use case requirements.

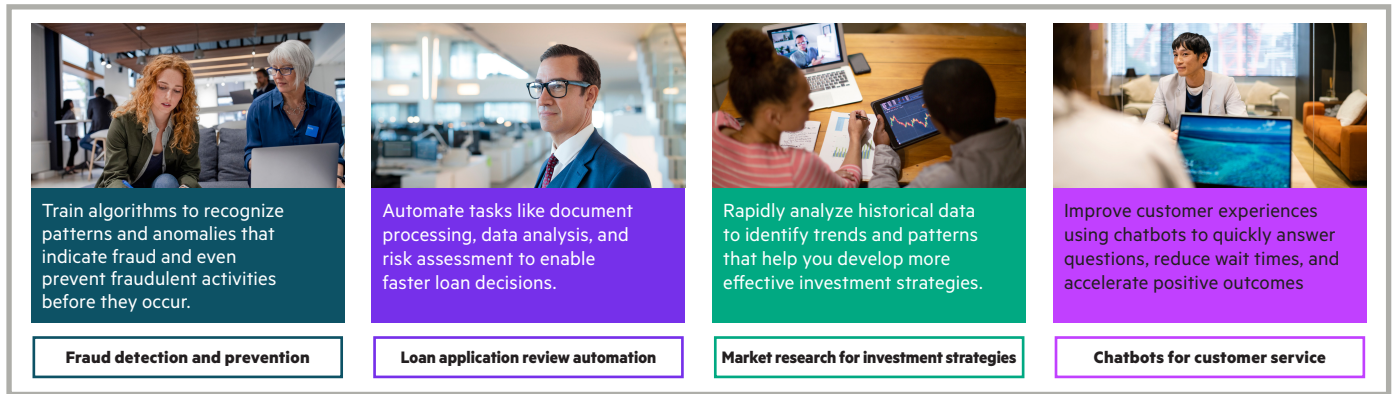


Figure 1. Prevalent FSI use cases for AI

## Why HPE Private Cloud AI?

The solution that makes all this possible is HPE PCAI. HPE PCAI is designed to accelerate bringing AI into production. It is the first co-engineered solution to come from NVIDIA® AI Computing by HPE, a new joint initiative helping organizations unlock their AI ambitions. NVIDIA AI Computing (or HPE PCAI with NVIDIA) includes AI-optimized infrastructure, networking, software, and foundation models that accelerate the entire AI workflow, so projects reach production faster with higher accuracy, efficiency, and infrastructure performance at a lower overall cost. The solution is tailored to AI models and designed to scale easily with the demands of FSI use cases.

Here's what you can accomplish with HPE PCAI:

- **Accelerate productivity:** Innovate faster with unmatched flexibility and performance to bring more pilots to production
- **Gain control:** Establish control, governance, and manageability over the environments that support your use cases
- **Experiment and scale:** Take advantage of the cloud experience that gives you cloud agility, economics, and flexibility
- **Enhance security:** Safeguard financial data wherever it lives without slowing down insights

Unlike solutions from our competitors, HPE and NVIDIA empower financial services teams with a rich ecosystem of proprietary and open-source tools to rapidly deploy AI workloads, simplify infrastructure configuration and management, and take on AI use cases while keeping financial data private and secure.

This is the value of HPE GreenLake. HPE PCAI offers a self-service cloud experience through HPE GreenLake, a single platform-based control plane with a portfolio of cloud services for hybrid environments. Unlike full-stack AI solutions based on reference architectures that can take months to plan, build, and deploy, HPE PCAI is ready to use out of the box. Start as small as a single use case and evolve quickly for multiple use cases. Plus, you can manage workloads on-prem, colocation, or in the cloud.

## What to expect from the NVIDIA AI Computing by HPE portfolio

HPE PCAI delivers the end-to-end approach you need for AI. This comprehensive solution combines purpose-built infrastructure, pre-configured models, and services—through a common user interface. You gain NVIDIA AI computing, networking, and software with robust HPE ProLiant Gen12 inferencing servers, HPE AI storage, and HPE GreenLake cloud to make it faster than ever to deploy AI use cases.

AI-optimized hardware is available as a single rack in small or medium configurations. Small configurations are ideal for basic inferencing use cases (e.g., market research and investment strategies, chatbots for customer service) while medium configurations can support RAG for LLMs (e.g., loan application review automation). Large multi-rack configurations are available for fine-tuning the most complex models (e.g., fraud detection and prevention).



On the software layer, NVIDIA AI Enterprise offers a specialized set of AI tools to address your long-term AI needs. In a simple configuration, HPE AI Essentials Software provides a curated set of tools from HPE and NVIDIA to expedite data pipelines and use cases. Integration with NVIDIA NIM inference microservices helps you create data pipelines, develop and fine-tune models, and deploy AI use cases quickly.

## Make AI adoption turnkey

Financial institutions across banking, trading, and insurance sectors are modernizing their operations with AI, capturing real-time insights to achieve better outcomes, higher profits, and a competitive edge. AI will continue to transform FSI by automating essential tasks, like reviewing diverse financial documents, while keeping our money safe with robust anti-fraud capabilities. HPE and NVIDIA are the partners you can trust to make the promise of AI a reality.

To jumpstart your journey, we offer a portfolio of services that take the guesswork out of AI innovation. HPE AI Services help financial institutions produce AI-driven business outcomes. HPE experts work with you to create a road map to implement your ideal solution. You learn to quickly identify opportunities to scale your critical use cases and maximize your return on data. We make the entire process turnkey, so you can worry less and focus more on gaining value.

AI will be a fast-growing part of the IT estate for decades to come. HPE PCAI can be your answer for getting productive with AI. Discover how a private cloud approach can shape the future of FSI.



## Learn more at

[NVIDIA AI Computing by HPE](#)

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