

SOLUTION BRIEF

# NetApp AI solutions for financial services

Spark product innovation and revenues with AI



## Challenge

Rules-based expert systems currently used to catch fraud have become too easy to beat, resulting in billions of dollars in losses each year.<sup>1</sup> In addition to trying to combat fraud, financial services institutions are also challenged to make the right credit decisions, improve risk management, enable fast, insightful trading, and develop personalized services—all while improving the customer's experience.

## NetApp AI solutions for financial services

To address these challenges, the financial services industry increasingly relies on artificial intelligence (AI) and machine learning (ML) technologies. AI is giving the financial services industry a major makeover, driving transformation in just about every aspect of the business. From launching innovative new products to reducing risks and improving the customer's experience, AI is reinventing the way that financial services organizations operate in these ways:

- **Fraud detection.** With AI on your side, you can prevent credit card fraud by instantly detecting unusual behavior in an account. You can also use AI to help identify and prevent insurance fraud for loss claims.
- **Creditworthiness assessment.** AI is used to generate credit scores based on data like geolocation, social media activity, browsing behavior, peer networks, and more.
- **Product innovation.** AI is the driving force behind mobile payment systems that allow customers to pay for their morning coffee without currency or cards. AI quickly and accurately analyzes earnings call transcripts and performs a sentiment analysis to help determine how investors will react.

With NetApp® AI solutions, banks and other financial institutions can use the deep insights gained from AI and ML operations to improve their defenses and better serve their customers. NetApp is the trusted industry-leading advisor to more than 9,000 financial services organizations worldwide, solving their performance and security challenges and helping them gain a competitive advantage in this fast-evolving marketplace.

## Key benefits

### Power real-time risk mitigation and performance

- Detect illegal or suspicious financial activity almost instantly when you feed, train, and operate your AI applications with the industry's fastest and most flexible all-flash storage.
- Enable successful trade execution and increase revenue.

### Extract the most value from your data

- Gain deeper insights into your business with a simplified AI solution that enables you to harness and analyze data from multiple disparate sources.
- Accelerate the creation of models that help financial experts assess trends, identify risks, and ensure better information for prospective planning.

### Grow without limits

- Start small and grow seamlessly—from hundreds of terabytes to tens of petabytes—without disrupting ongoing operations.
- Run an exhaustive array of simulations to test the robustness of your models.

NetApp helps ensure that your finance data is always available in the right place at the right time to fuel transformation. We remove data silos to provide real-time, market-ready analytics and to help you combat fraud with proven AI solutions. And as the data authority on hybrid cloud, NetApp delivers AI solutions that remove bottlenecks at the edge, core, and cloud to enable more efficient data collection, accelerated AI workloads, and smoother cloud integration.

### Power real-time risk mitigation

AI can be a powerful tool for reducing risk, eliminating fraud, and protecting customer endpoints. To be successful, you need a data management solution that can keep up. NetApp [ONTAP® AI](#) gives you the performance you need to feed, train, and operate your applications so they can quickly and accurately detect illegal or suspicious financial activity across all areas of your organization.

NetApp AFF systems keep data flowing to deep learning (DL) processes with the industry's fastest and most flexible all-flash storage. You can expect to get more than 2GBps of sustained throughput (5GBps peak) with well under 1ms of latency, while the GPUs operate at over 95% utilization. A single NetApp AFF A800 system supports throughput of 25GBps for sequential reads and 1 million IOPS for small random reads at latencies of less than 500 microseconds for NAS workloads.

By adding more network switches and storage controller pairs to the ONTAP cluster, the architecture can scale to multiple racks to deliver extremely high throughput, accelerating training and inferencing. With this flexible approach, the ratio of compute to storage can be altered independently based on the size of the data lake, the models that are used, and the required performance metrics.

### **Extract the most value from your data**

All data is valuable, especially for financial services companies. With data coming in from multiple disparate sources such as smartphones, call centers, transaction histories, and more, financial institutions must find a way to harness and extract the most value from it as quickly as possible. That requires powerful AI capabilities that reach from the edge to the core to the cloud—without adding to the complexities that are inherent in an AI environment.

Only NetApp offers data fabric technologies to satisfy the needs of complex, high-performance data pipelines with solutions that span your entire multicloud environment. NetApp AI solutions help you simplify management of datasets, enabling you to reduce errors and operational cost with a platform that's built for the enterprise. You can automate protection and theft prevention systems by using data, without incurring massive operational overhead. You can even address regulatory compliance requirements by leveraging your unstructured data.

### **Grow without limits**

Data is the most important component of AI operations. The more data you have, the better the

results. Not only do AI applications require lots of source data, they also generate a lot of data through DL and ML processes.

The NetApp rack-scale architecture allows organizations to start with an AFF A250 and grow as needed to scale from hundreds of terabytes to tens of petabytes with all-flash storage. And with NetApp ONTAP FlexGroup, up to 20 petabytes of single namespace can handle more than 400 billion files.

### **Breakthrough AI solutions for financial services**

NetApp is the trusted industry-leading advisor to more than 9,000 financial services organizations worldwide. Our solutions solve performance and security challenges and help you gain a competitive advantage in this fast-evolving marketplace. With NetApp, your finance data is always available in the right place at the right time to fuel transformation. Our proven AI solutions remove data silos to provide real-time market-ready analytics and to help you combat fraud.

Learn more about [NetApp AI solutions for financial services](#).

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### **About NetApp**

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. [www.netapp.com](http://www.netapp.com)

<sup>1</sup> The Ascent, Lyle Daly, [Identity Theft and Credit Card Fraud Statistics for 2021](#), August 2021.

