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DATA TRENDS 2025
FINANCIAL SERVICES

How industry leaders use AI, data interoperability and automation for success

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THE YEAR OF REALISTIC AI IN FINANCIAL SERVICES

If 2024 was the year of blue sky possibilities in artificial intelligence, 2025 is shaping up to be the year when financial services organizations transform those lofty possibilities into grounded, practical realities. The industry is moving beyond isolated AI experiments toward a more integrated approach, where artificial intelligence, machine learning and data work in concert to amplify productivity and operational efficiencies.

"It will no longer be enough to say your organization is merely using AI to win the approval of company leadership," says Rinesh Patel, Global Head of Financial Services at Snowflake. "Instead, organizations must actually be driving value from their AI implementations, and leaders will face increased pressure to quantify their AI investments and the wider business impact."

Lorraine Knerr, Global Head of Generative AI and Data Solutions, Architecture and Strategy at AWS, agrees. "Coming into this year, we're seeing a much more measured approach with customers in terms of validating their data foundations are in place. Really pushing on what is the business value, the ROI of these solutions, and are they driving improved customer journeys and generating expected revenue in the initial flurry of leveraging gen AI?"

That potential for ROI is big — especially when organizations focus on internal improvements and solid data foundations that allow them to combine their proprietary data with large language models (LLMs) and create domain-specific applications that drive their businesses in new directions. While these and other gen AI applications might lack the glamor of flashy customer-facing features, their potential impact is substantial, as evidenced by JPMorgan's projection of up to $2 billion in value from their AI use cases.

Financial institutions are methodically building robust data foundations — a nonnegotiable for scaling AI and generative AI across their operations. This investment shows no signs of slowing, with industry spending on generative AI expected to rise 29% by 2027, reaching $97 billion. Organizations are following the lead of pioneers like JPMorgan Chase, whose AI assistant LLM Suite is already being used by tens of thousands of employees, not just for basic tasks like email composition, but for sophisticated data querying and streamlined automation of unstructured data tasks.

The focus on realistic implementation represents a maturing understanding that AI's real value lies not in the speculative but the sensible: The most impactful AI applications often occur behind the scenes, improving operational efficiency and employee productivity rather than making headlines.

Financial services organizations find themselves navigating an increasingly complex compliance landscape in 2025, particularly regarding AI governance and data protection. The European Union Artificial Intelligence Act, which went into effect in August 2024, laid out what's considered to be the world's first comprehensive regulation for AI by a major regulator and sets standards for AI use by risk level that will impact the financial sector. The U.S. Securities and Exchange Commission also positioned AI governance among its FY2025 examination priorities.

Regardless of regulatory uncertainty, the financial industry's handling of sensitive personal information demands continuous strengthening of data foundations and governance frameworks. This isn't just about regulatory compliance — it's about establishing sustainable practices that can adapt to future requirements while supporting innovation.

An open, unified data platform that eliminates internal silos while enabling seamless access to structured, unstructured and third-party data has become nonnegotiable. Openness is key, too — the reality of complex data architectures means data may be stored in different clouds across different regions, and a platform's interoperability can make a difference. Overall, financial institutions must balance their pursuit of AI innovation with robust governance mechanisms, ensuring both regulatory compliance and operational excellence. This measured approach to data governance, while pebrhaps less sensational than some AI applications, remains fundamental to sustainable success in an increasingly AI-driven financial landscape.In this report, we'll take a closer look at how leaders are working with their data in the financial services industry to see how data-driven technologies and strategies are being deployed in the sector, and explore factors influencing AI adoption in financial institutions.

Understanding these trends and what they signify can provide valuable clues to inform industry leaders' business strategies, planning and technology investments over the coming year, as well as how Snowflake can help those investments come to fruition.

TRENDS THAT MATTER TO FINANCIAL SERVICES

Financial services organizations aren't just embracing data analytics and AI tools with greater frequency, they're also using data in different ways and at different volumes than we're seeing in other industries. Here, we explore three trends that show how data modernization is having a foundational impact on financial services organizations, influencing everything from business strategy to planning operations and technology investments.

TREND 1:
ENTERPRISES ARE TAPPING MORE INTO UNSTRUCTURED DATA

Unstructured and semi-structured data make up an estimated 80 to 90% of all enterprise data, and the volume continues to grow. The financial services industry houses a high volume of unstructured data, encompassing PDFs of loan agreements and insurance policy applications, emails with clients or business partners, call center recordings and more.

The financial services industry inherently also produces more unstructured data than other industries, because of record-keeping requirements particular to the industry. As such, financial services firms are eager to unlock the value in such data to identify new customer segments, drive better services and streamline call center operations.

And they're already doing it, including by using generative AI. In its December 2024 report on artificial intelligence in financial services, the U.S. Department of the Treasury confirmed that respondents are using gen AI more for processing the myriad types of unstructured data in areas ranging from customer communications to robo-advisors offering personalized services to expedited insurance claims analysis and beyond.

Tapping into the power of such unstructured data will not only accelerate advances in 360-degree customer views, marketing analytics, fraud detection and investment research use cases, but will also enable generative AI applications, including the creation of gen AI copilots.

TS IMAGINE™

UNSTRUCTURED DATA IN ACTION

TS Imagine, a SaaS platform for integrated electronic front-office trading, portfolio management and risk management, receives an estimated 100,000 emails a year, which include critical notifications from data providers about upcoming changes to their data products. Receiving that information allows TS Imagine to test and prepare its products. "If we're not ready for these changes, there's going to be a production outage," says Thomas Bodenski, COO and Chief Data and Analytics Officer. Instead of producing insights, members of the data management team had to read those emails manually. TS Imagine automated email intake using Snowflake Cortex AI. Instead of spending 4,000 hours on an error-prone sorting process, the AI deletes duplicate or nonrelevant emails, and creates, assigns, and prioritizes JIRA tickets for them. The team hasn't missed a notification since implementing the process in December 2023.

Read the whole story.

TREND 2:

DATA SHARING AND INTEROPERABILITY ARE BECOMING INCREASINGLY IMPORTANT

Financial institutions sit on a mountain of first-party data. But what sets financial services firms apart when they all collect the same types of data and offer largely similar services? The ability to customize, refine and uplevel those services with differentiated data. That starts with being able to access, find and use available first-party data and then enrich it with context gleaned from relevant external data.

Analysts and portfolio managers are able to better connect additional, alternative data with internal performance data, for example, to find data-driven connections the competition isn't seeing. Playing nice with others isn't just for the playground. As tech landscapes continue evolving to be more open, financial services institutions benefit more from tools that allow seamless collaboration or integration with partner solutions. That plays out both in terms of productivity — being able to connect to the tools employees already use and know — and in terms of connecting data with other industry-leading solutions. Connectors that equip teams to easily use data from ServiceNow or State Street can make data-driven decision making even easier.

TREND 3:

THE HIDDEN IMPACT OF DATA AND AI ON FINANCIAL SERVICES OPERATIONS

It's not just the flashy customer-facing features like roboadvisors or AI-fueled forecasting that are making an impact on how financial service institutions are using AI. Some of the most transformative applications of data and artificial intelligence in financial services are happening behind the scenes.

"As organizations focus more on AI ROI, we will see a wave of enterprise AI implementations where efficiency and productivity gains are the primary focus," says Rinesh Patel, Global Head of Financial Services at Snowflake. He predicts the most compelling use cases will be internal, focused more on removing the complexities and challenges around data management as teams rely more on AI to streamline their end-to-end data lifecycle — from data ingestion to data mining and analysis. "Leveraging AI to build a strong data foundation will — over the long run — enable organizations to figure out their commercial strategy and use cases," Patel says.

One particularly powerful application is in semantic modeling, where AI helps create meaningful relationships between different data sets. Think of it as creating a sophisticated library classification system for your data. Just as the book cataloging systems help librarians organize books by subject matter, AI-powered semantic modeling helps financial institutions understand the context and relationships within their enormous data repositories. This way teams can find specific data points as well as understand how they relate to other information across the organization, improving search capabilities and data utilization.

CUSTOMER SPOTLIGHT

STATE STREET

State Street Alpha generates 25x productivity with the help of AI:

Typically, manual, threshold-based filters are created to detect anomalies, resulting in a large number of false alerts that require manual investigation. State Street applied AI models, which learned to become more efficient at removing false positive alerts. They detected 100% of true exceptions and eliminated 87% of false positives — resulting in a 25x productivity gain for data operations teams who previously had to investigate each exception as a potential error.

Read the whole story.

USE CASE SPOTLIGHT:

SUBINDUSTRIES IN FINANCIAL SERVICES

Here are three ways financial services organizations can benefit from being able to transform unstructured and structured data with a powerful AI-enhanced platform.

INSURANCE

Handling a claim:
The insurance claims process is complex, technical, nuanced and also extremely important to customers. From the moment a claim arrives, it needs to be evaluated, routed to the correct location, analyzed and ultimately processed over a long period of time. To accomplish this, insurance claims managers often have to review notes, contracts, call center logs, and sometimes video or audio to assess the validity of a claims report.

But with a data strategy that supports AI-powered tools that can efficiently and effectively extract fields from multiple documents, claims managers can more easily use modeling to improve operational efficiency, lower the costs of investigating and settling claims, and improve customer experience with faster claim responses.

ASSET MANAGEMENT

Conducting quant research and investment analytics:
Tuning into tructured data like pricing, estimates and ESG data is only the beginning of valuable quant research and investment analytics. For savvy asset managers, unlocking unstructured data with LLMs is the next frontier for generating alpha. Sifting through items like corporate financial documents, earnings transcripts and SEC filings can be cumbersome, as can reading relevant news or understanding social media trends, which all can be helpful in understanding industry landscapes or shifting attitudes that impact markets.

Without gen AI, using those unstructured data resources for market research requires advanced natural language processing skills and large time commitments. But with the right AI-powered tools, asset managers and quants can expedite summarization and equip asset managers to conduct more thorough — and unique — analysis, ultimately generating alpha (or, at least, faster insights that do).

BANKING AND PAYMENTS

Helping first-time home buyers:
Buying a home is one of the most exciting milestones for many, but it can also be a headache. The process requires a lot of documentation. Loan applications, income statements, tax returns and property appraisals all contain necessary information but can be difficult to process at scale. With AI-powered text processing capabilities, agents and underwriters can more quickly and effectively parse documents, identify gaps or mistakes, and expedite the home buying experience for customers.

THE STATE OF THE AI DATA CLOUD FOR FINANCIAL SERVICES

Financial services firms account for a significant portion of Snowflake's AI Data Cloud, which is uniquely suited to the industry's needs.

Indeed, for years many of the world's leading financial institutions have turned to Snowflake for help with creating 360-degree views of their customers, streamlining risk management processes, improving their threat detection, reducing reputational and financial risk from fraud, and adhering to regulatory guidelines.

The need for a unified, secure, cloud-based platform that can handle vast amounts of data continually increases, as developers put more AI applications into production and bring more AI/ML work into Snowflake. Fortunately, Snowflake was built to address this need. It allows firms to scale multiple workloads across their entire data stack using a single copy of their data, enabling a single source of truth without requiring the organizations to extract, transfer and load information from an existing data warehouse or data lake. Its robust AI and data engineering capabilities allow organizations to implement and scale generative AI, develop AI models, build conversational assistants and more — and deriving value from unstructured, multimodal data is only going to get easier. Additionally, Snowflake Marketplace connects you to over 720+ providers, offering more than 3,000 live, ready-to-use data, services and Snowflake Native Apps[1] (as of January 31, 2025).

Meanwhile, regulatory demands and business resilience needs are requiring financial firms to spread their data across multiple clouds. Since Snowflake works seamlessly across multiple providers, organizations can easily use separate clouds to collaborate for different purposes. This gives companies faster access to the global financial services ecosystem of payment processors, data providers, application providers and other intermediaries. A multicloud approach is also advantageous when it comes to building business resiliency and better disaster recovery. And because financial services companies can share data entirely within Snowflake, they can exchange data more quickly and cost effectively.

USING DATA SHARING AND COLLABORATION TO ADDRESS CRITICAL FINANCIAL SERVICES BUSINESS CHALLENGES

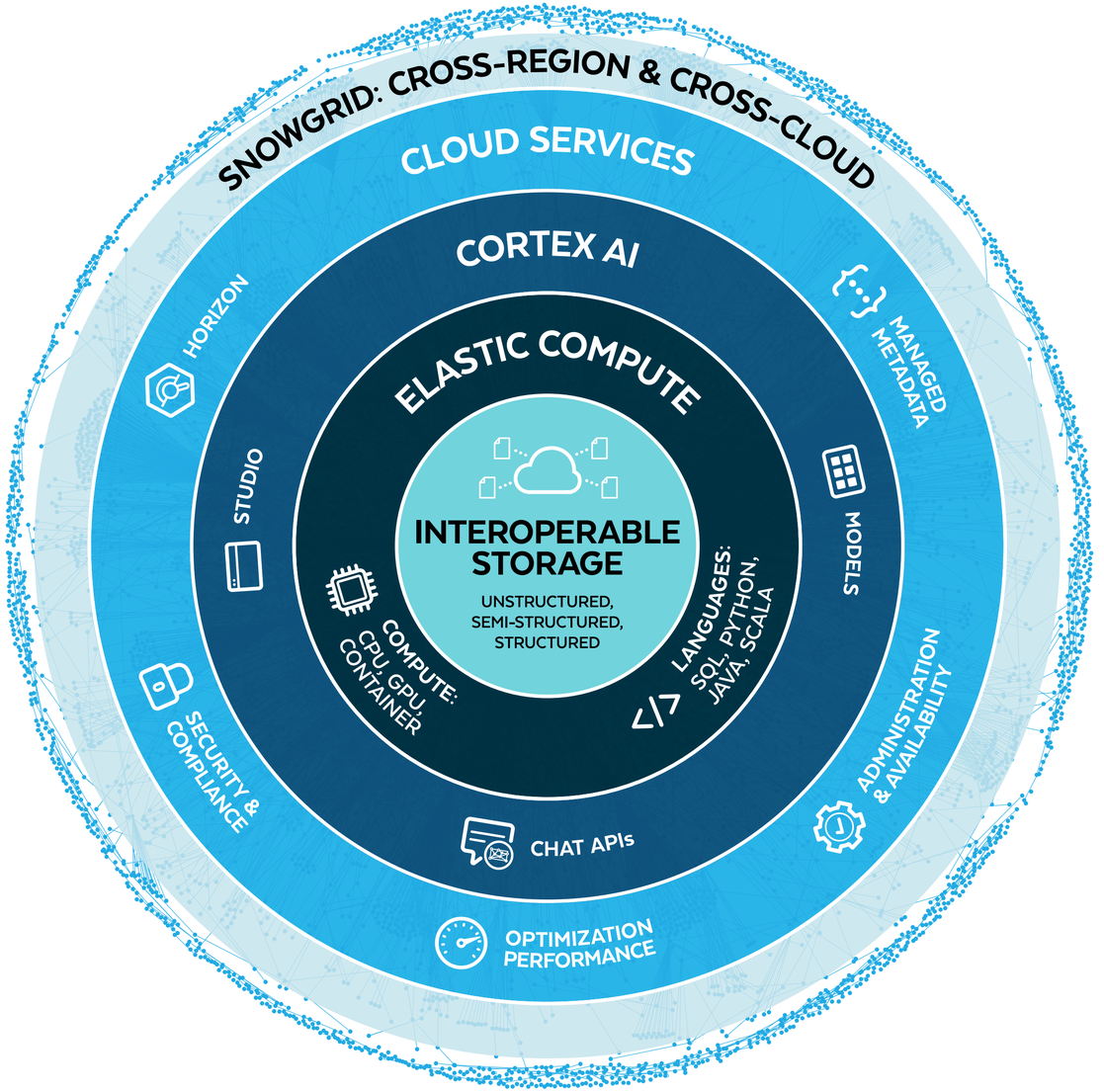
The Snowflake AI Data Cloud modernizes how organizations access and leverage data via secure data sharing and data collaboration, supported by a strong partner network. For example, AWS and Snowflake enable a unified data and AI strategy, helping organizations ingest, transform and share data at scale and powering critical workloads across analytics, data engineering, AI and app development. With fully managed infrastructure, businesses gain simplicity, scalability and governance while leveraging integrated AI services, and real-time collaboration capabilities. Organizations do more with their data and reach AI-driven insights faster with Snowflake and AWS. Find a partner to extend your Snowflake capabilities.

With Snowflake Marketplace, financial services companies can access live, ready-to-use data, services and Snowflake Native Apps for use cases related to investing, portfolio management, quant research, risk management, sales and marketing, insurance and beyond. Learn more about use cases and Snowflake Marketplace providers that can help financial service organizations make the most of their data in the Snowflake Marketplace Guide.

Since security and governance are key priorities for financial services firms, strict controls are required in these areas. Snowflake reduces data replication by allowing data sharing entirely within the platform, so it's more secure than legacy data-sharing methods such as FTP, SFTP or email.

By simplifying access to data, the Snowflake AI Data Cloud for Financial Services makes it easier for banks, asset managers, insurers, payment processors and other intermediaries to collaborate securely. That leads to faster decision-making and improved competitiveness.

With operational and IT burdens alleviated, enterprises can do more with less and focus more on development. Snowflake also equips companies to deliver custom applications faster and more securely than ever by keeping their most precious assets — their data and the models they create from it — close at hand.



LIVING IN THE AI PRESENT

The landscape indicates that 2025 will be the year that leading enterprises figure out how to implement generative AI — as a crucial component of the enterprise technology stack — across the business. Gen AI applications may spur better data-driven decision-making. It's also clear that unified data management and governance will be critical to making those efforts a success, both for financial services companies and the greater business community.

Today's forward-thinking organizations are creating more complex LLM applications, making AI more available across the enterprise, and seeing the benefits of a unified data platform. Thanks to the power of the Snowflake AI Data Cloud, the hype surrounding AI is beginning to transform into real business benefits.

Snowflake makes enterprise AI easy, efficient and trusted. Thousands of companies around the globe, including hundreds of the world's largest, use Snowflake's AI Data Cloud to share data, build applications, and power their business with AI. The era of enterprise AI is here.

Learn more at **snowflake.com**

(NYSE: SNOW)