AI Agents

Artificial intelligence (AI) agents are rapidly becoming central to the financial sector, transforming how organizations gather, analyze and act on information.

Unlike traditional AI or finance automation, AI agents operate with a degree of autonomy—or "agency." They can perceive data, reason about it and take context-sensitive actions. Gartner predicts that by 2028, 33% of enterprise software applications will include agentic AI, up from less than 1% in 2024.[1]

Traditional AI responds to predefined inputs based on past data. Generative AI creates new content (outputs) by learning patterns from historical information—but still relies on human intervention, such as prompts, for every step.

AI agents go further: they can act independently, learn and adapt in real time, and coordinate with other agents to make decisions and continuously improve, much like humans. By 2028, at least 15% of day-to-day work decisions will be made autonomously through agentic AI, up from zero percent in 2024, according to Gartner.[1]

Agentic AI systems combine large language models (LLMs), machine learning and generative AI to perform complex tasks. Unlike standalone LLMs that just generate responses based on their training data, AI agents can connect to external tools and data sources, retrieve real-time information and carry out actions. They plan, adapt and learn from past interactions, making them useful for real-world tasks such as automating IT processes, generating code, or, in the financial sector, supporting financial analysis.

How AI agents are applied in finance

AI agents are already being deployed in trading, compliance, reporting, risk management and customer service. One of their most impactful uses is in financial reporting and accounting, where they streamline data collection, validation and disclosure. Agents can manage financial workflows from month-end close to audit readiness, flag discrepancies and enforce compliance. This frees finance leaders and teams to focus less on manual reconciliations and more on delivering insights, while also raising expectations for transparency and governance.

Auditing is another area affected by AI agents. They can break down audit procedures into smaller tasks, execute them autonomously and produce structured outputs for review. This speeds up the process and reduces errors.

Customer engagement is a major application. AI-powered assistants now provide personalized guidance, automate service interactions and act as financial coaches that adapt to user behavior. As these systems learn and scale, they can create more tailored, accessible experiences for customers.

Agentic AI enhances risk management by continuously monitoring transactions, contracts and communications. Agents adapt to evolving threats and regulatory requirements. This helps enable dynamic responses to fraud risks or shifting market conditions.

As advanced fintech, AI agents are moving the industry toward greater autonomy, efficiency and strategic insight. They support faster closes, smarter audits, proactive risk management and more personalized customer engagement.

At the same time, their autonomy introduces challenges around oversight, explainability and systemic risk. The future of finance will depend not just on adopting AI agents, but on governing them responsibly to help ensure they deliver innovation while maintaining accountability and trust.

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Why AI agents in finance are important

AI agents are important in finance because they represent a fundamental shift in how the industry operates—not just in terms of efficiency, but in the very nature of financial decision-making and accountability. Finance has always relied on people and processes to interpret data, apply judgment and execute actions.

With AI agents, many of these tasks no longer need to be done step-by-step by humans. Instead, AI agents work with minimal human oversight to manage workflows, coordinate across functions and deliver insights in real time. This allows the finance function to shift its focus from handling mostly transactions to driving strategy and value, while still relying on human judgment and strategic direction.

Other reasons why AI agents are important to financial operations include:

Expanded scale and scope: Humans can only process so much information at a time. AI in finance and finance-focused gen AI help AI agents to handle massive, complex datasets without interruption. This transforms reporting, compliance and risk assessment from periodic snapshots into real-time financial processes. Agents fundamentally alter the ways risks are managed, opportunities are identified, and strategies are executed. Organizations can move from reactive decision-making to proactive and predictive approaches.

Greater inclusion of smaller markets: AI agents also make finance more inclusive by reaching customers and markets that were once too costly or complex to serve. They help enable microfinance in underserved communities and provide personalized digital banking at scale. These capabilities redefine what finance can achieve and who it can reach.

Trust and transparency: AI agents support consistency, reliability and accountability by maintaining continuous audit trails, validating data at every step and generating explainable outputs for regulators, boards and stakeholders. This shift strengthens both the speed and the integrity of financial operations.

AI agents in finance use cases

The journey to success with AI agents requires a willingness to pause and take stock of your technology estate. You need to assess where your web of technology is strong enough to support growth—and where it's failing to feed the organization the data it needs to thrive.[2]

AI agents are reshaping many areas of finance by taking on tasks that once required significant manual effort. The following use cases highlight where these agents are making an impact:

Algorithmic trading

In the trading world, AI agents watch market movements and execute trades automatically. Unlike older trading programs that follow fixed rules, newer agents can adjust their strategies as conditions change.

For example, if news breaks that impacts oil prices, an AI agent can quickly adjust a portfolio's energy holdings before a human trader has time to act. This adaptability allows institutions to respond faster and stay competitive in fast-moving markets.

Auditing

In auditing, AI agents help by breaking down big, repetitive tasks into smaller, automated steps. They can review thousands of transactions, highlight unusual patterns and even draft parts of audit documentation for human review.

Imagine an agent that continuously tracks transactions throughout the year and keeps an up-to-date log of potential risks. By the time the formal audit starts, much of the groundwork is already done. Auditors can focus on judgment and analysis instead of data checking.

Credit assessment and underwriting

Traditional credit reviews can be slow and based on limited data. AI agents improve this by analyzing a wider range of inputs — from payment histories and financial statements to data like utility bills or transaction patterns. They can quickly assess risk, recommend credit terms and even explain the reasoning behind their decisions. This makes underwriting faster, more consistent and more inclusive, particularly for people or businesses with thin credit files who might otherwise be overlooked.

Customer service and engagement

Banks and fintech companies are increasingly turning to AI agents to improve customer service and customer support. These agents often work alongside AI-driven chatbots and virtual assistants that handle routine questions, such as "What's my balance?" or "Did my payment go through?" But AI agents go further than bots. They can coordinate across systems, analyze customer behavior and deliver personalized financial guidance.

For instance, if a customer consistently overspends near the end of each month, an AI assistant might suggest a budgeting tool or recommend moving money into savings earlier in the cycle. This personalization helps customers feel supported while encouraging better financial habits. So far, 16%

of clients worldwide are comfortable with a branchless, fully digital bank as their primary banking relationship.[4]

Financial planning and forecasting

In a survey of finance managers, conducting financial analysis and creating forecasts was the area where they saw gen AI having the most impact.[2] AI agents are enhancing how finance teams forecast market trends and plan for the future. By pulling in data from internal systems, market sources and economic news feeds, they can build forecasts that update automatically as conditions change.

For instance, if raw material costs rise or demand shifts in a key market, an agent can adjust financial models and highlight the impact on revenue and margins. This allows finance leaders to test "what if" scenarios and respond more quickly to change, making planning more dynamic and less reliant on static, point-in-time assumptions.

Financial reporting

AI agents are changing how finance teams handle reporting. Instead of waiting until month-end to reconcile accounts and pull information together, agents can continuously gather data from multiple systems—such as enterprise resource planning (ERP) platforms, billing tools and external data feeds connected through application program interfaces (APIs)—and analyze it in real time. They can also review journal entries as they are created and spot missing entries, unusual transactions or mismatches as soon as they occur.

For example, if revenue from a contract is recorded incorrectly, an AI agent can trace the journal entry back to the contract terms, check for compliance with accounting standards and suggest the correct treatment. By automating both the collection and validation of financial data, AI agents make reports more accurate, ready faster and far less stressful compared to the traditional "crunch time" close.

IBM's finance team began addressing the traditionally manual, repetitive and time-consuming journal entry process a few years ago. It launched the Jobotx initiative in 2024, expanding RPA automation capabilities using IBM® watsonx Orchestrate™ and IBM Apptio™ Enterprise Business Management (EBM). These tools addressed persistent issues like inconsistent data validation, cycle time delays and scalability.

By combining AI, RPA and cost-based automation prioritization, IBM began standardizing and accelerating journal processing across regions in a more intelligent and adaptable way. With end-to-end process automation, cycle times for financial close and reconciliation were projected to be cut by more than an estimated 90%, Also, the company could potentially achieve an estimated annual cost savings of approximately USD 600,000.[5] In 2025, IBM was named a leader in the Gartner® Magic Quadrant for finance and accounting business process outsourcing.[6]

Fraud detection and risk management

58% of leading CEOs expect AI to have a transformative impact on the enhancement of security and risk management.[3] Financial institutions use AI agents to monitor risks in real time. For example, an agent can scan thousands of credit applications and instantly assess which ones may carry higher default risk, using financial data and outside information like news or market conditions. Similarly, in fraud detection, agents can notice unusual transaction behavior—like sudden large transfers on a

dormant account—and immediately flag them. This makes it easier to stop problems early, rather than reacting after the fact.

Pakistan's Askari Bank worked with IBM to help meet its government's new cybersecurity rules. The new policy called for banks to maintain baseline security capabilities, including security operations centers (SOCs) and automated response tools that work around the clock. The resulting new SOC cut the number of security incidents from roughly 700 per day to fewer than 20. It also reduced average remediation times from 30 minutes to 5 minutes.[7]

Regulatory compliance

In a study about gen AI adoption, 53% of executives had concerns about the constraints introduced by regulations and compliance.[2] AI agents are helping financial institutions stay ahead of these complex and fast-changing regulations. Instead of relying on periodic reviews, agents can continuously monitor transactions, communications and documentation against regulatory requirements.

For example, an AI agent might check whether loan agreements comply with disclosure rules or whether client communications meet fair-lending standards. These systems can also analyze large volumes of regulatory updates, highlight relevant changes and even recommend adjustments to internal policies. By automating these checks in real time, AI agents reduce the risk of noncompliance, minimize costly penalties and free compliance teams to focus on other issues.

Treasury and liquidity management

Managing liquidity across accounts, currencies and subsidiaries is challenging. AI agents can monitor cash flows in real time, forecast short-term funding needs and suggest the most efficient allocation of capital.

For example, if a subsidiary is projected to have a shortfall, an agent can flag the issue early, propose reallocating funds or trigger pre-approved actions. This proactive oversight helps companies maintain stability while optimizing their use of working capital.

Benefits of AI agents in finance

AI agents are advanced AI solutions that take on repetitive, data-heavy work and enable real-time insights. They help streamline operations and improve the speed, accuracy and scalability of critical processes. Benefits also include:

Better customer experience: In customer-facing roles, AI agents deliver faster responses, personalized financial advice and anytime support. This improves satisfaction while reducing pressure on service teams.

Cost reduction: AI agents lower operational costs by reducing manual work and errors. For example, fewer staff hours are needed for routine reporting and fraud losses are prevented through early detection.

Enhanced risk management: Agents can monitor risks continuously, from credit exposure to fraud detection. Their ability to adapt to new patterns makes them effective at catching threats that might slip past more traditional, rules-based systems.

Financial inclusion: Agentic AI can help extend financial services to underserved markets by autonomously assessing creditworthiness, enabling micro-loans and providing tailored digital banking experiences at scale.

Greater efficiency: AI agents automate repetitive, time-consuming tasks such as reconciliations, journal entry or transaction reviews or expense checks. This frees finance teams from routine tasks, allowing them to focus on higher-value analysis and strategy. For example, CFOs can spend less time on manual oversight and more time driving strategic decision-making across the business.

Improved accuracy: AI agents reduce the risk of human error in financial reporting, auditing and compliance by continuously validating data and spotting anomalies. This leads to more reliable numbers and fewer costly mistakes.

Real-time insights: Instead of waiting for end-of-period reports, finance teams gain access to live data analysis. AI agents can highlight issues or opportunities as they emerge, helping organizations make quicker, more informed decisions.

Scalability: As organizations grow, AI agents can handle larger volumes of data and more complex processes without requiring proportional increases in headcount. This makes growth more sustainable.

Stronger compliance: AI agents keep pace with complex regulatory requirements by automatically checking transactions, contracts and reporting standards. They also maintain transparent audit trails, making it easier to demonstrate compliance to regulators and auditors.

Challenges of AI agents in finance

While the potential of AI agents in finance is significant, their use also introduces new complexities and risks. Still, 60% of banking CEOs say they must accept significant risk to harness automation advantages and enhance competitiveness.[4]

Autonomous decision-making raises important questions about governance, transparency and accountability, especially in this highly regulated industry. Issues such as data privacy, systemic risk and ethical considerations must be carefully managed to help ensure that AI agents enhance financial services without compromising stability or fairness. Here's a closer look at these and other challenges:

Bias and fairness: If AI agents are trained on biased or incomplete data, their decisions, such as loan approvals or credit scoring, may unfairly disadvantage certain groups. This introduces ethical concerns and potential regulatory challenges.

Data privacy and security: AI agents rely on vast amounts of sensitive data. If not properly managed, this creates risks around privacy, data breaches and misuse of customer information. Their autonomy also introduces new cybersecurity vulnerabilities.

Ethical use and trust: Even when functioning correctly, over-reliance on AI agents can raise concerns among customers and stakeholders. Ensuring ethical deployment (where AI complements rather than replaces human judgment) is essential for maintaining trust.

Lack of explainability: Many AI agents operate as “black boxes,” making it hard to understand how they reach certain conclusions. In finance—where regulators, auditors and boards demand transparency—this lack of explainability can undermine trust and compliance.

Regulatory uncertainty: Global regulations for AI are still developing. Financial institutions face uncertainty about how to deploy AI agents in line with future laws and standards, especially across

multiple jurisdictions.

Reliability and robustness: AI agents are only as strong as the data and models that support them. Poor data quality, flawed assumptions or technical failures could lead to inaccurate outputs or critical errors in decision-making.

The future of AI agents in finance

"Agentic AI promises to enhance productivity, precision and decision-making, driving financial services towards deeper process autonomy," according to the World Economic Forum.[8] AI agents are still in the early stages of adoption, but their influence on the financial sector is set to expand rapidly.

Soon, we can expect these systems to move from supporting roles toward becoming core infrastructure for financial operations. They will increasingly manage end-to-end processes, from daily reconciliations to complex scenario planning, with less need for direct human oversight. This shift has the potential to make finance more agile, allowing institutions to adapt in real time to market changes, regulatory updates or customer needs.

Longer term, AI agents could transform how financial ecosystems operate. Instead of siloed tools for reporting, compliance or customer service, networks of interoperable agents may collaborate across departments, firms and even industries.

For example, an agent that monitors regulatory changes could interact directly with another that oversees credit risk, ensuring adjustments happen seamlessly across both compliance and lending practices. As agents become more explainable and trusted, they may also play a larger role in strategic decision-making, acting as advisors to executives and boards.

This evolution will not be without challenges. 64% of CEOs say the risk of falling behind drives them to invest in some technologies before they have a clear understanding of the value they bring to the organization.[3] Questions of governance, accountability and risk will grow as agents take on more autonomy. But if financial institutions, regulators and technology providers establish strong frameworks for responsible AI, agentic systems could enable a more transparent, inclusive and resilient financial sector.