

Put AI to work

Finance



IBM

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There's a unique opportunity for AI in the enterprise finance function. Despite the distinct restrictions and multiple overlapping responsibilities in finance, bold firms have already realized ROI by applying AI solutions. We've learned from them to outline the why, what and how of getting real value from AI in finance.

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Financial services in the age of AI

With a unique responsibility in every part of the business as well as specific demands for dependability and accountability, finance professionals are feeling squeezed from all directions. AI has the potential to change the status quo.

Financial services in the age of AI

Today's CFOs and finance teams are facing challenges in multiple areas. They need to drive digitization, make purchasing decisions for the whole enterprise and maximize returns on digital investments. They also need to adapt the enterprise to changing customer spending habits. In a survey conducted among CFOs, many ranked the balance sheet as their top concern, along with a triple squeeze of achieving profitable growth, managing inflation and navigating talent shortage.¹





Additionally, CFOs must meet expectations even within the C-suite. For instance, they need to collaborate closely with CEOs to advise on budget allocation. They must understand how their tech investments are performing and identify where the enterprise is getting the most value, enabling CEOs to accelerate business transformation and growth.

Leading CFOs say CTOs are their most important relationship, with 72% identifying them as highly important or critical.² As technology becomes a key driver of business strategy, CFOs must work hand in hand with CTOs to ensure investments align with financial goals and drive sustainable growth.

In short, where once CFOs reported on past activity and provided high-level strategic input, they’re now expected to be granular, weighing in at a tactical level. If you’re a CFO today, everything is your problem.³

Generative AI (gen AI) offers finance teams a new tool to address these complex and challenging situations. Gen AI is going to have an impact on finance, as in virtually every enterprise function. This guidebook explores how CFOs can get the most from gen AI, including how to prepare for it, where to apply it, and what they need to make it a valuable addition to their finance function.

02

AI in finance is the key to staying ahead

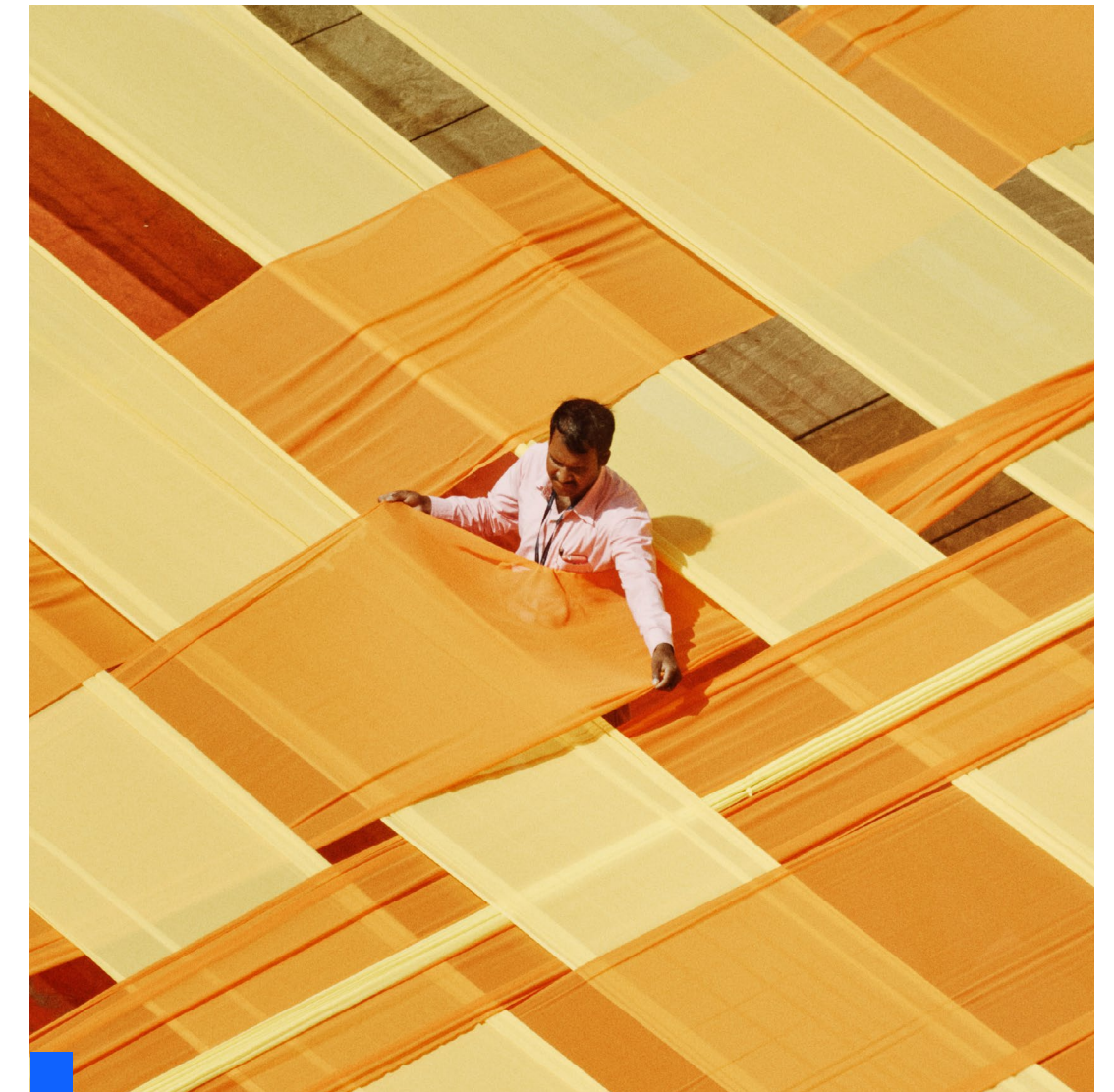
In finance, risk is inevitable, but not adopting AI is a bigger one. Embracing AI is no longer a choice; it's a necessity. There are many areas of finance where dependable automation and intelligent acceleration can really deliver value—and already has.

AI in finance is the key to staying ahead

Finance processes are among the most critical in an organization, requiring automation and augmentation that leave no room for error. However, due to the complexity and sensitivity of financial operations, CFOs have yet to fully embrace AI. Finance teams often prioritize automation based on feasibility, tackling simpler processes first while leaving more complex, high-risk tasks for later.

Structural challenges represent a significant barrier for many organizations, as they continue to struggle with siloed systems, fragmented data governance and numerous ERP and financial applications. These manual processes not only hinder operations but also create an arduous task of extracting and validating data, which ultimately stifles agility and efficiency. This widespread issue may explain why the majority of organizations have limited their adoption of AI to just one or two of the four essential finance workflows discussed on page 17.⁴

However, embracing AI more broadly could unlock untapped potential in financial processes and drive substantial improvements in operational performance. Moreover, there are many areas in finance where quicker and more accurate ingestion of information can mean major productivity gains and elimination of errors. Gen AI can be applied to these hard-to-automate areas, empowering faster and better data-driven decisions based on historical data, market trends and AI foundation models that can identify patterns and anomalies often missed by traditional analysis methods.



At its core, AI can support finance professionals so they can focus on higher-value activities. And surveys show that AI adoption means better performance by the finance organization.

Organizations rise to top finance performance as they mature in their adoption of AI in the finance function.⁴ And for all four key finance processes, a significantly higher percentage of organizations that have implemented AI end to end—with an IT strategy that integrates AI, cloud and app modernization—achieved top quartile ROI (more than 30%) compared to those that haven't.⁴

Financial analysis and reporting teams have long made use of AI tools and will be one of the areas most impacted by gen AI, bringing self-service capabilities into many new realms of the business.

There are text-based productivity use cases in several sectors where gen AI can be adopted now, and the benefits for mature AI adopters in finance are already significant. Benefits include a 33% faster budget cycle time for planning and monthly close, 43% reduction in uncollectable balances and 25% lower cost per invoice paid.⁴

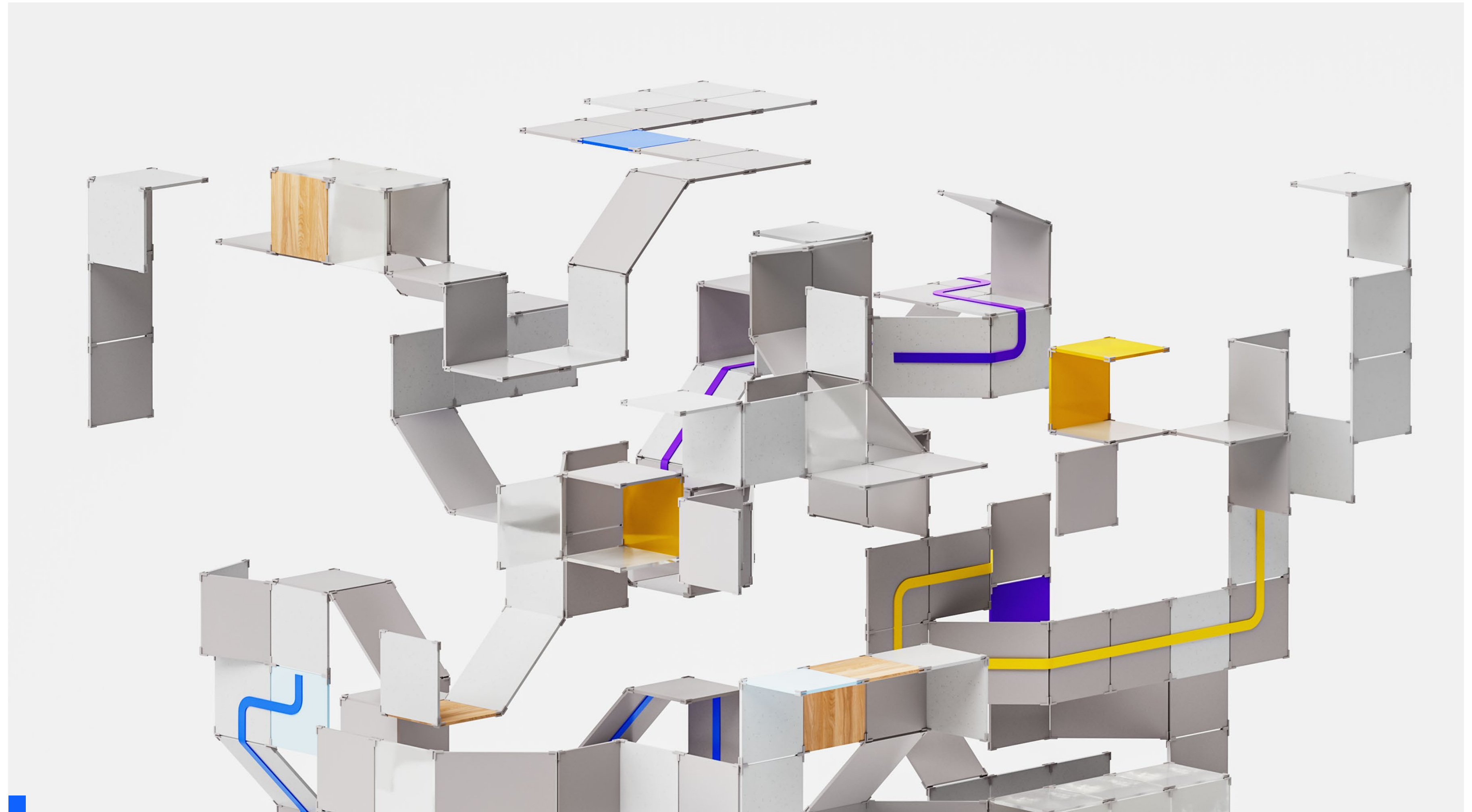
These benefits are so compelling that the opportunity cost of not adopting AI is significant, and organizations that opt for a wait-and-see approach risk rapidly falling behind. And they are expected to multiply as gen AI is applied to more ambitious use cases in areas such as regulatory compliance, forecasting and designing new accrual methods. In a recent study, 601 global finance managers surveyed agreed that gen AI can expand the reach of AI in finance.

Predicting anomalies (47%), explaining variances (41%), generating scenarios (40%), creating reports (39%) and managing accounts—both payables (38%) and receivables (38%)—are the areas that will realize the most value.⁵

Clearly, AI can revolutionize finance. But for the successful implementation of AI, finance leaders will need to get actively involved in the analysis process—weigh risks, materiality and potential financial exposures—and partner with other business units from the beginning.

Ensuring trust and transparency in AI-driven finance

Despite the widespread enthusiasm for leveraging gen AI for business, especially from board members and investors, many business leaders still have concerns about its adoption.



In a recent study, the IBM Institute for Business Value found that responding executives have four top concerns about gen AI adoption.⁶

61%

have concerns about data lineage or provenance.

57%

have concerns about data security.

53%

say that a lack of proprietary data will be a barrier to successful generative AI initiatives.

45%

have concerns about data privacy.



How your organization succeeds with gen AI is influenced by how you select, govern, analyze and apply data across it. Huge volumes of data from different sources are used to train gen AI models. Therefore, implementing governance, management and ethical frameworks that operate end to end is key if you wish to adopt AI safely and responsibly.

IBM has long followed core principles grounded in commitments to trust, transparency and fairness to guide how we handle client data and insights—and how we develop and deploy new technologies.

To continue this practice in the age of AI, IBM has developed a [multidisciplinary, multidimensional approach](#) that embeds ethical principles into AI applications and processes. With IBM's [Principles for Trust and Transparency](#) and [Pillars of Trust](#) as the foundation for our AI ethics initiatives, we're helping people and organizations adopt AI responsibly, and with clear purpose.

Transform finance operations with gen AI

AI is no longer just an add-on in finance—it's becoming the centerpiece of finance transformation. Gen AI is reshaping the industry by streamlining key processes and unlocking efficiency. It enables finance teams to focus on strategic decision-making by automating commentary for financial dashboards, analyst communications and sales analysis—providing 90% more time for decision support.⁷

Additionally, it helps reduce revenue loss by 60% to 70% by automating claim validation and minimizing unnecessary payouts.⁷ These advancements aren't just about efficiency; they directly impact the bottom line, making AI adoption a competitive imperative in finance. But harnessing the potential of AI to fundamentally transform finance requires a mix of vision and technology. Enterprises need to put AI to work at the strategic core of the business—not just add it on to existing systems—to solve challenges and help achieve their business objectives.

To fully embed AI at the strategic core of finance, enterprises are turning to AI agents and AI assistants to drive efficiency, security and decision-making. AI assistants enhance customer interactions by providing secure, real-time banking support—handling balance inquiries, loan applications and fraud alerts—while also offering personalized financial insights. AI agents, on the other hand, go beyond reactive support, proactively safeguarding financial operations. They monitor transactions in real time, helping detect and prevent fraud before it escalates, and continuously refine risk models. In trading and investment, AI agents help analyze market trends, execute trades and adjust portfolios autonomously, helping businesses stay ahead in an increasingly competitive landscape.



The world of gen AI is shifting from simple assistants to autonomous agents that tackle complex tasks and boost productivity. This isn't a sudden leap but a continuum. Assistants will become increasingly sophisticated, often invoking agents.

AI Assistants

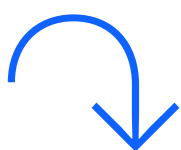


Empower teams to effectively perform tasks, even without specialized knowledge, across various business processes and applications

Features and capabilities of AI assistants

- Single-step processes
- Information retrieval
- Prescriptive tasks

AI Agents



Empower teams to complete multistep tasks, coordinate workflows, leverage tools and utilize reasoning to enhance productivity

Features and capabilities of AI agents

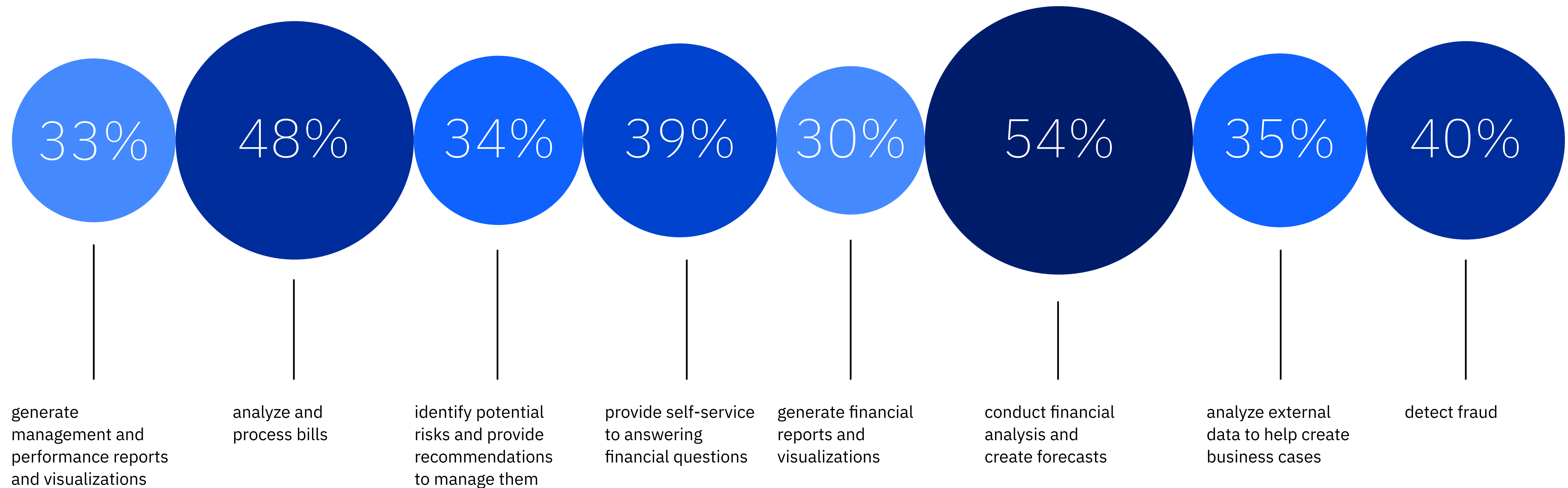
- Multistep processes
- Autonomous action-taking
- Self-correction

03

Put AI to work in financial services

The four key finance workflows—O2C, FP&A, R2R and P2P—can each benefit in different ways from the addition of gen AI. Based on our experience with finance and AI transformation, here are the areas to focus on within each workflow.

Where finance managers
see gen AI impacting
financial processes⁴



Different finance workflows have different areas of applicability for gen AI. An experienced partner can help you identify areas where gen AI can have the most valuable impact and link together the technology pieces needed to support those use cases.

Based on IBM’s experience through the whole combined ecosystem of finance and AI transformation services, the following are the applicable areas, key processes and benefits in each of the four key finance workflows.





1

Order to cash (O2C)

AI-driven innovations in O2C help with credit scoring, pricing decisions and the prevention of payment frauds. AI collects, prepares and distributes data from documents and unstructured data, surfacing insights at key moments to optimize decision-making and accuracy. In the key metric of uncollectable balances, half of AI adopters credit AI with a decrease of at least 2% and one-quarter credit AI with a decrease of at least 8%.⁷

2

Financial planning and analysis (FP&A)

AI and advanced analytics rank as key components of the FP&A process, galvanizing and orchestrating planning and performance management. AI can partially automate the labor-intensive process by parsing through data on the market, company performance, competitor information, pricing and operations. The AI model can identify anomalies, enhance forecasting, optimize pricing and provide recommendations, as well as apply trend analysis, correlation analysis—including pattern and anomaly detection—and neural networks for financial forecasting. With neural networks, AI determines the relationship among data and uses it to predict new data, resulting in higher forecast accuracy. When AI is used for market performance comparison, FP&A teams can factor in more variables and internal and external influences.

3

Record to report (R2R)

In the general accounting and reporting area, AI-powered workflow and data models could include a reconciliation module that helps users aggregate subledger transactions and perform risk-based reconciliations and cognitive forecasting.

4

Procure to pay (P2P)

An AI-powered workflow, underpinned by data models, optimizes touchless processing and provides a unified interface for buyers, suppliers, procurement and finance staff. Invoices are validated against business rules, coded and matched to the purchase order automatically. Spend and pricing intelligence provides insights during sourcing. AI automates procurement operations and manages inquiries from buyers and suppliers. Automating P2P with AI has been shown to increase productivity and permit finance to detect more fraudulent invoices.

Key processes

O2C

- Manage sales orders
- Process customer credit
- Invoice customers
- Process accounts receivables
- Manage and process collections
- Manage and process adjustments and deductions

FP&A

- Perform integrated financial planning
- Perform planning and budgeting
- Perform management and performance reporting
- Perform forecasting and modeling

R2R

- Process journal entries
- Reconcile the general ledger
- Post and reconcile intercompany transactions
- Perform consolidations and process eliminations
- Close the books
- Perform fixed assets accounting
- Perform financial reporting

P2P

- Procure products and services
- Process accounts payables

Benefits⁴

- 43% reduction in uncollectable balances
- 32% decrease in days sales outstanding (DSO)
- 28% decrease in the cycle time from transmission of invoice to receipt of payment

- 25% lower cost for planning, budgeting and forecasting
- 33% faster budget cycle time
- 4% higher overall forecast accuracy
- 57% lower sales forecast error

- 31% lower cost per journal entry
- 33% faster cycle time for the monthly close
- 2% more journal entries that are error-free first time

- 25% lower cost per invoice paid
- 32% faster cycle time from receipt of invoice until approved and scheduled for payment
- 3% more purchase orders processed error-free first time

■

To meet the demands of today's finance business leaders, organizations must innovate continuously. But innovation doesn't happen in silos.

That's why IBM has invested significantly in elevating and supporting our business partners. We combine industry domain expertise with our innovative solutions to better meet the needs of our clients. Our business partners use gen AI to deliver turnkey solutions with the simple goal of making it easier for finance and accounting teams to report, plan and forecast. [Breakaway Technologies](#), an IBM Gold Partner, provides an out-of-the-box solution for managed markets contract analysis, discount forecasting and reserve reporting, and this solution can help clients better predict and plan while improving productivity.



04

Take the next step

Understanding what to do with gen AI is one thing, but implementing the technology is entirely different. We recommend focusing on these three tasks: defining the right business case, selecting high-value tasks for automation, and applying FinOps.

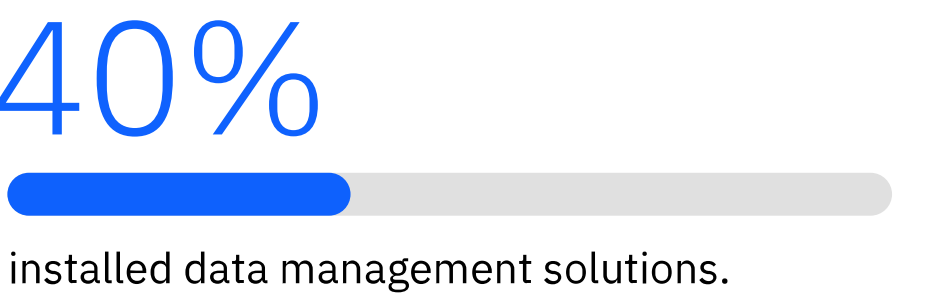
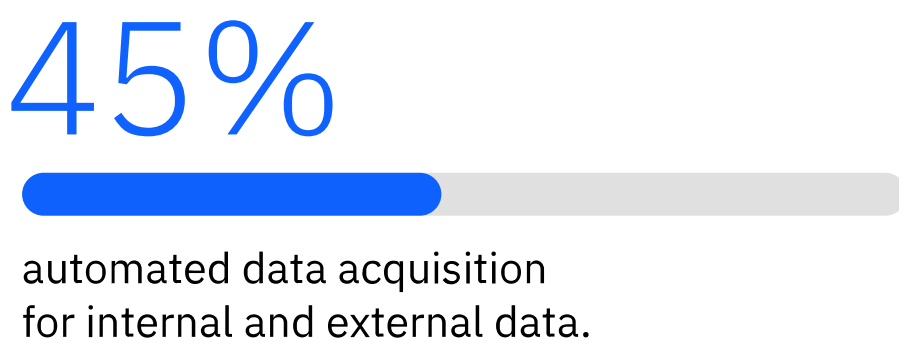
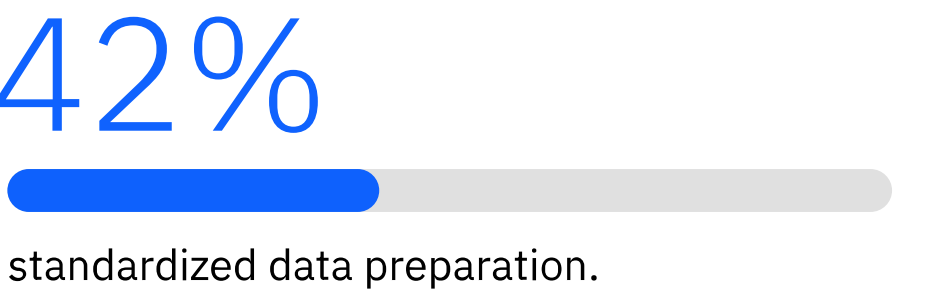
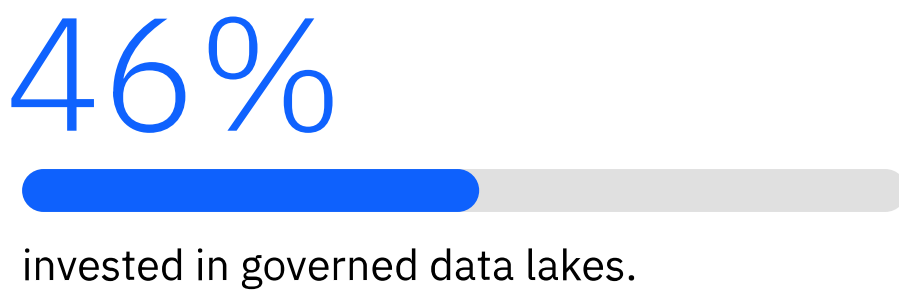
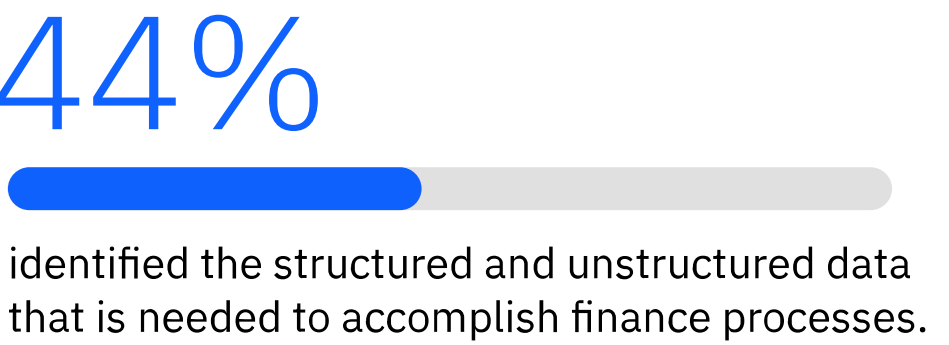
Take the next step

As enterprises transition from the *hype* to the *how* of gen AI, it becomes even more critical to understand the costs of—and the value derived from—investments in the technology.

CEOs and their CFOs know they need to tread carefully while adopting it, but they also feel the need to act fast. Still, according to an IBM Institute for Business Value study, 60% of organizations surveyed have not yet developed a consistent, enterprise-wide approach to gen AI.⁸

AI and gen AI initiatives can only be as successful as the underlying data permits, so enterprises should undertake a variety of data initiatives to support their AI strategy, ranging from process mining to data governance. Respondents in a global study were asked, “Which initiatives has your finance organization undertaken to support its AI strategy?”⁴

Initiatives finance organizations have undertaken to support their AI strategy⁴



1

Additionally, finance departments deploying AI should follow a structured approach to identify and assess potential risks. They should also:

- Comply with privacy and security regulations, policies and practices to ensure that data collection and usage practices meet requirements.
- Establish clear governance structures, including the definition of roles and responsibilities of all stakeholders involved in AI implementation.

But even as you lay this data, infrastructure and process groundwork, how can you be sure your approach to gen AI will accommodate organizational and technology changes?

Here’s where you can benefit from a solid strategy based on experience drawn from thousands of successful AI engagements.

We’ve provided three tested recommendations to get you started.

Define a business case for your AI improvement initiatives.

This business case should include three justifications:

- Prioritizing potential benefits and risks
- Ensuring there’s alignment with the broader strategy
- Secure funding

To quantify these justifications, you’ll need to use project-specific, high-level operational and financial metrics that measure cost, speed and quality. Tracking and reporting the appropriate metrics is key to demonstrating the ROI from AI.

The following are some examples:

O2C metrics include total cost, cost as a percent of revenue, payment processing time, collections efficiency, customer satisfaction, DSO, percent of invoices processed without error, average revenue per customer and delinquency rates.

FP&A metrics include margins, budget cycle time, accuracy of forecasts for sales and volume, and compliance.

R2R metrics include ROI, close cycle time, query response time, accuracy of financial statements, percent of manual journal entries, percent of error-free journal entries and intercompany reconciliation rate.

P2P metrics include cost per invoice, working capital, cycle time to process an AP invoice, credit cycle time and percent of error-free purchase orders.

The finance leaders surveyed noted significant results against performance metrics, which improve over time.

IBM Business Partners are proactively working to help their clients improve their risk management processes. QuantumStreet AI, an IBM Business Partner that specializes in investment and wealth management, is embedding AI technology to improve the workflows of its investment managers.

“We at QuantumStreet AI are excited about expanding our use of Watson Discovery and Watson Studio into IBM’s foundation models watsonx.ai™ and watsonx.data™. These capabilities will allow nontechnical investment managers much needed access to AI/ML tools, enabling them to identify market opportunities and manage risk.”

Chida Khatua
CEO of QuantumStreet

2

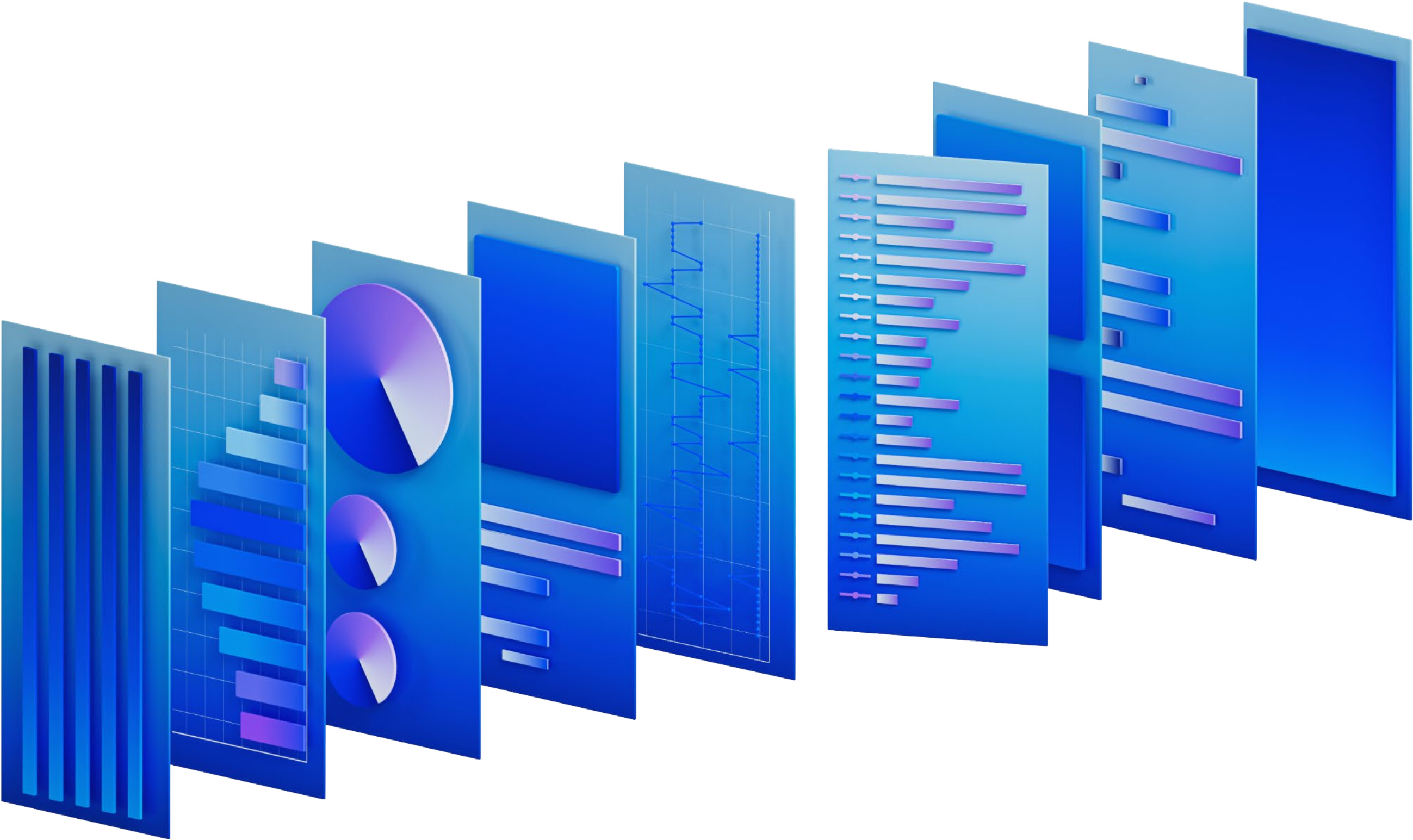
Attack labor-intensive tasks that are ripe for gen AI automation.

Use gen AI tools that automate manual and mundane tasks. Focus on use cases that identify and mitigate risks before making investments that might impact core finance functions.

- Acknowledge the short-term limitations of gen AI when planning to capitalize on its full potential. While gen AI isn't proficient at numeric analysis yet, it likely will be soon. Develop value-adding use cases now to prepare for this future gen AI capability.
- Drive targeted gen AI adoption in day-to-day activities. Get individuals to use gen AI in specific daily tasks. Aligning gen AI adoption to real-world responsibilities will help overcome employee resistance and prove the value of this transformative technology.

IBM research shows that the finance areas poised to realize the greatest value from gen AI include predicting anomalies (47%), explaining variances (41%), generating scenarios (40%), creating reports (39%) and managing accounts—both payables (38%) and receivables (38%).⁶ There are many potential use cases for gen AI in finance.

- Capture and leverage institutional knowledge such as recommending accounting treatments.
- Streamline audits by analyzing data to identify discrepancies and anomalies.
- Aid in contracts and negotiations by analyzing legal language to identify potential issues, risky clauses or opportunities for improvement.



“The farther along organizations are in their AI journey, the more value is delivered ... Organizations that have advanced to the optimization phase see [the highest] ROI.”⁶

51%

Head of Finance
Automotive, United States

3

Fine tune your FinOps practices with gen AI and apply FinOps across the enterprise to make technology even more valuable.

FinOps, or financial management for cloud-based investments, should play a big part in gen AI investment decisions. It increases visibility into cloud-related financial data, helps detect operational efficiencies and measure returns. It formalizes and structures what might otherwise be a largely random process—and reduces the potential for unexplained cloud expenses.



Gen AI offers you an opportunity to improve value along two axes at once: fine tuning FinOps with gen AI and applying FinOps across the enterprise. Gen AI can make FinOps more accurate and efficient, improving cost-benefit analyses and helping teams prioritize use cases.

- Apply FinOps practices to your gen AI investments by implementing a cost estimation and tracking framework that provides clarity on the costs of gen AI projects.
- Use gen AI to enhance FinOps capabilities. Simulate financial data and scenarios that can help increase the accuracy of financial models, improve risk management and support strategic decision-making.

Most organizations that have activated a FinOps model using AI-powered software report cost savings greater than 20%.⁶

05

Ready to begin?

Now is the time to solidify competitive advantage by working with a partner that can help not just pilot and adopt AI but also scale the technology across the finance function.

From financial planning through R2R, the right partner can help you optimize productivity and innovation while prioritizing compliance and governance.



AI expertise

IBM Consulting® can help you strategize, modernize, build and manage applications with the power of AI and hybrid cloud. IBM has formed a center of excellence (CoE) for gen AI, specialized in applying the **IBM watsonx®** portfolio and IBM ecosystem partner technologies to rapidly create coherent strategies and accelerate how we solve business problems. The CoE complements more than 21,000 IBM data and AI consultants with a strong track record in AI who are already collaborating with thousands of global clients and partners to shape the future of AI.

AI platform

IBM watsonx is our portfolio of AI products, native to hybrid cloud, that's designed to provide you with the ability to train, tune and deploy gen AI across your organization, using your critical, trusted data wherever it resides.

IBM watsonx Orchestrate

IBM® watsonx Orchestrate™ helps you build, deploy and manage powerful AI assistants and agents that automate workflows and processes using gen AI. Seamlessly integrate IBM Orchestrate® with existing business systems and AI tools, in one unified experience.

IBM Garage

IBM Garage™ helps de-risk transformation while quickly scaling impact through its collaborative, value-obsessed engagement model. IBM Garage aligns work to your biggest drivers of value, transparently tracks that value as it's realized in each stage of a program and scales the new ways of working by bringing together the best of enterprise design thinking, agile development and DevSecOps practices, accelerated by gen AI tools from IBM and its partners.

IBM Planning Analytics Assistant

IBM Planning Analytics Assistant facilitates faster and smarter planning by using gen AI to simplify your workflow. From automating tasks intelligently and answering complex questions to generating insights instantly, Planning Analytics Assistant enables accurate, data-driven decisions for a customized AI planning experience.

IBM Partner Plus

IBM Partner Plus® is an extensive partner network, backed by our AI and hybrid cloud solutions, armed to meet client demands for quick tech adaptation and deep understanding. We drive innovation and growth, solving complex challenges with speed and value.



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