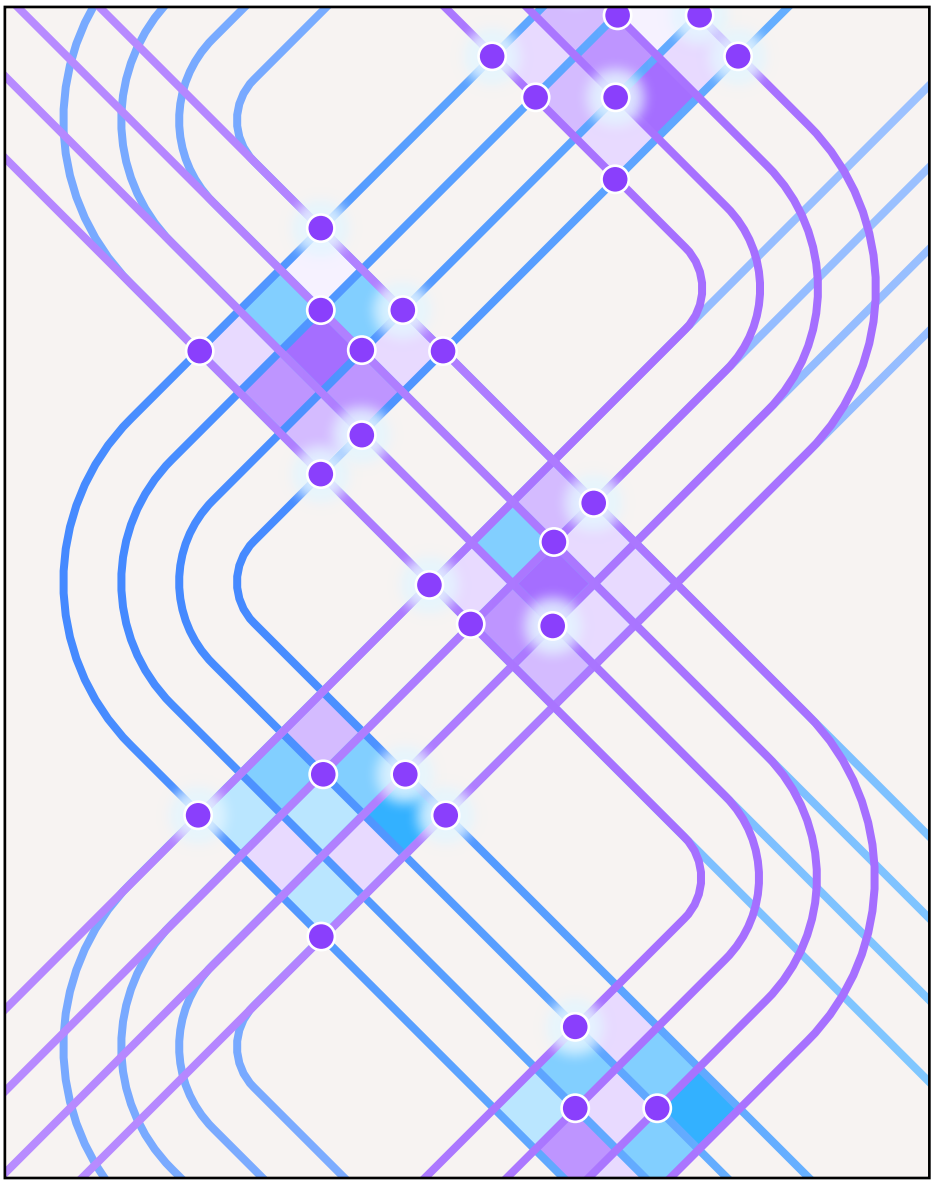


Cut the cost of complexity

Get more from your technology with intelligent IT automation

IBM

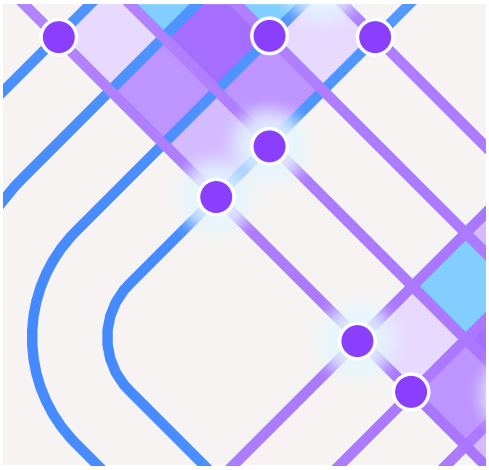
Contents

How IBM can help

IBM has been empowering organizations to optimize operations and achieve business agility through automation for more than a century. Clients can unlock the potential of IT automation through IBM's consulting offerings and enterprise-grade Automation Platform solutions integrated with AI and generative AI. By leveraging IBM's advanced capabilities, organizations can streamline workflows, enhance resilience, and accelerate business outcomes.

For more information about services from IBM Consulting, visit https://www.ibm.com/consulting/aiops

For more information about IT automation solutions from IBM Software, visit https://www.ibm.com/solutions/automation



Key takeaways

The entire IT estate—not just the AI portfolio—plays a role in building a more profitable and productive AI-powered enterprise.

Intelligent automation dramatically improves IT efficiency.

Organizations attribute a 31% reduction in IT costs to intelligent automation.

Transformation and growth are now top IT priorities.

67% of the average enterprise IT budget is now dedicated to improving IT and the business—rather than keeping the lights on—up from just 33% in 2023.

AI makes IT more valuable to the business.

Organizations that have broadly implemented generative AI in their IT processes attribute a 90% ROI to digital transformation.

AIOps and automation puts IT ahead of the hackers.

Two in three highly automated companies leveraging AIOps platforms have reduced their attack surface and threat risk and improved proactive mitigation by driving consistency and standardization at scale.

Introduction

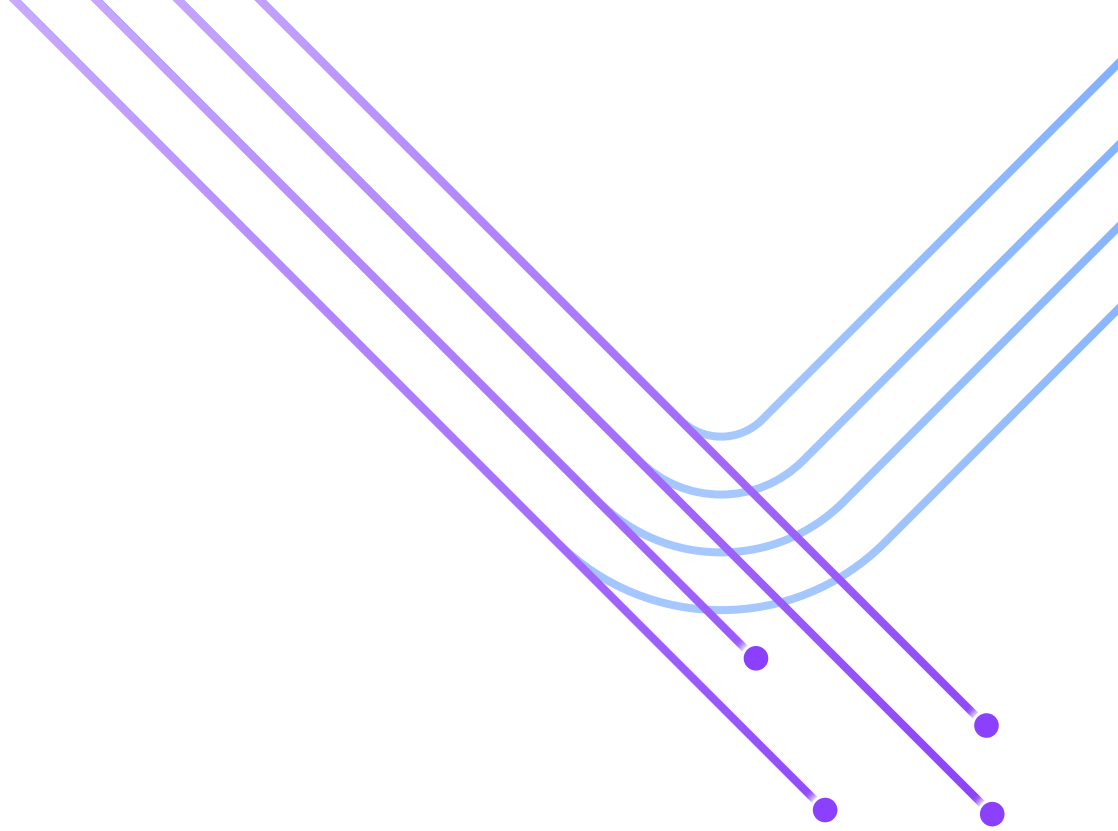
Automate, innovate, elevate

IT is the powerhouse of the modern enterprise, dictating how fast it can move—and how much value it can deliver. But getting more from technology in an AI-first landscape requires overcoming persistent obstacles.

IT complexity and opaque workflows obscure opportunities. Disconnected data silos and outdated technology inhibit solutions. Few organizations are reaching their full potential.

What defines organizations with the most advanced IT automation? They see higher revenue growth, lower costs, better cybersecurity, and amplified business value. Breakthrough analysis from the IBM Institute for Business Value (IBM IBV) reveals that highly automated organizations—those that have made the most progress with embedding AI in IT—have greater integration, deeper visibility, better data governance, and more advanced cloud adoption.

These findings came from extensive analysis of benchmarking data provided by IT leaders—including CIOs, CTOs, and vice presidents or directors of IT—from 680 companies across 18 industries and 21 countries (see “Research methodology” on page 26). We assessed IT automation platforms and capabilities across processes, infrastructure, and security.



We found that highly automated organizations attribute a 10% increase in revenue to their digital transformation efforts. They also attribute a 28% reduction in IT costs, a 16% reduction in time-to-market for new IT products and services, and a 36% reduction in cybersecurity incidents (see “By the numbers: The business value of intelligent IT automation” on page 10).

These outcomes are fueled by the flywheel created by intelligent IT automation and digital transformation—including data and application modernization and migration, hybrid multicloud management, mainframe modernization, and process automation. AI agents are also driving results by autonomously handling a broad range of tasks, from incident handling to cloud provisioning to compliance management.

Intelligent IT automation uses AI and machine learning to deliver workflows that integrate seamlessly across the enterprise and act autonomously based on what they’ve learned.

Think of it this way: The right data, cloud, and AI strategies enable intelligent IT automation at scale, which powers IT and business transformation. Transformation supports updated data, cloud, and AI strategies, which position the organization to capture new value. This flywheel yields broad benefits, giving teams the tools and time they need to develop innovative products and services, tap into new technologies, and drive revenue growth (see Figure 1).

The end goal is to infuse generative AI across enterprise IT, using AI agents to enable autonomous operations at scale. But progress only accelerates if organizations successfully manage complexity across the board.

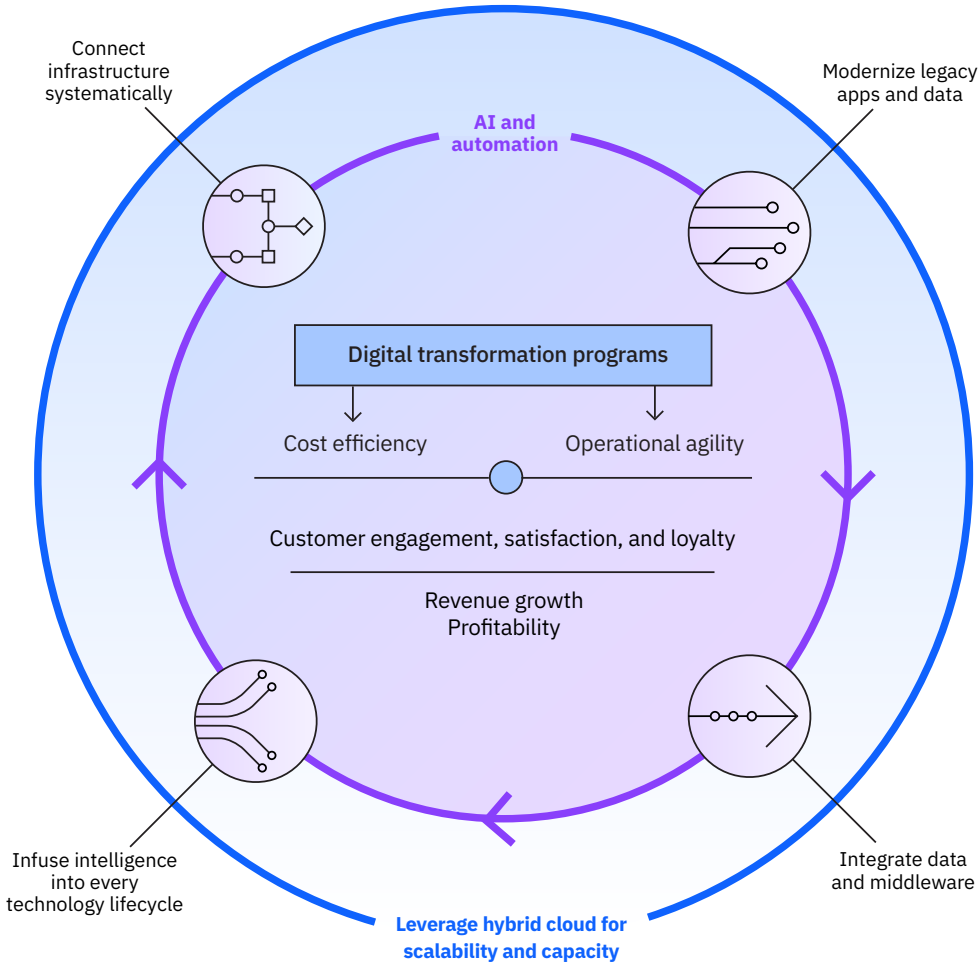
That means the entire IT estate—not just the AI portfolio—plays a role in building a more profitable and productive AI-powered enterprise. In this report, we'll answer three big questions about what it takes to unlock the true value of intelligent IT automation—and drive measurable business results:

- How can reducing IT complexity cut costs and drive growth?
- What does it take to build effective end-to-end workflows?
- How can optimizing operations increase the value of AI-powered IT transformation?

Highly automated organizations attribute a 10% increase in revenue to their digital transformation efforts.

Figure 1

IT transformation accelerates business innovation and growth



Section 1

The unseen consequences of complexity

IT spend is soaring—up 50% between 2023 and 2025—rising from 6% of revenue to 9%[1]. That's partly due to increased AI investments, but even more because the focus of IT has shifted: 67% of the average enterprise IT budget is now dedicated to improving or transforming IT and the business—rather than keeping the lights on—up from just 33% in 2023 (see Figure 2).

This reallocation represents dramatic progress. But still, 33% of IT budgets are devoted to maintaining existing systems. Persistent challenges, such as shadow IT and technical debt, prevent IT departments from achieving their full potential.

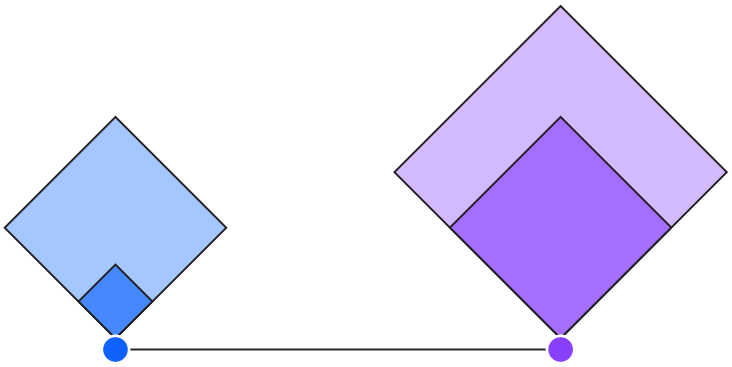
Shadow IT, or the software, cloud services, and tools purchased directly by business units without IT oversight, represents 24% of total IT budgets.[2] For a $10 billion company that spends 8% of revenue on IT, this represents $192 million annually. As IT budgets continue to grow, shadow IT spending is expected to increase proportionally, creating additional inefficiencies, security risks, and challenges for centralized IT management.

Shadow IT and technical debt prevent IT departments from achieving their full potential.

What about technical debt? Outdated systems, poor code quality, and deferred maintenance continues to accumulate. According to Forrester, 75% of technology decision-makers say technical debt will rise to a moderate or high level of severity by 2026 due to the complexity that AI solutions add to IT estates.[3] Plus, as cloud spend continues to rise, so will cloud waste, unless companies can tackle the complexity within their IT estate. In 2024, 78% of cloud professionals estimated that as much as half of their cloud spend was wasted.[4]

Figure 2

IT budgets are shifting toward business transformation



2023

IT spend:
$600 million

Business and IT transformation spend:
$200 million

2025

IT spend:
$900 million

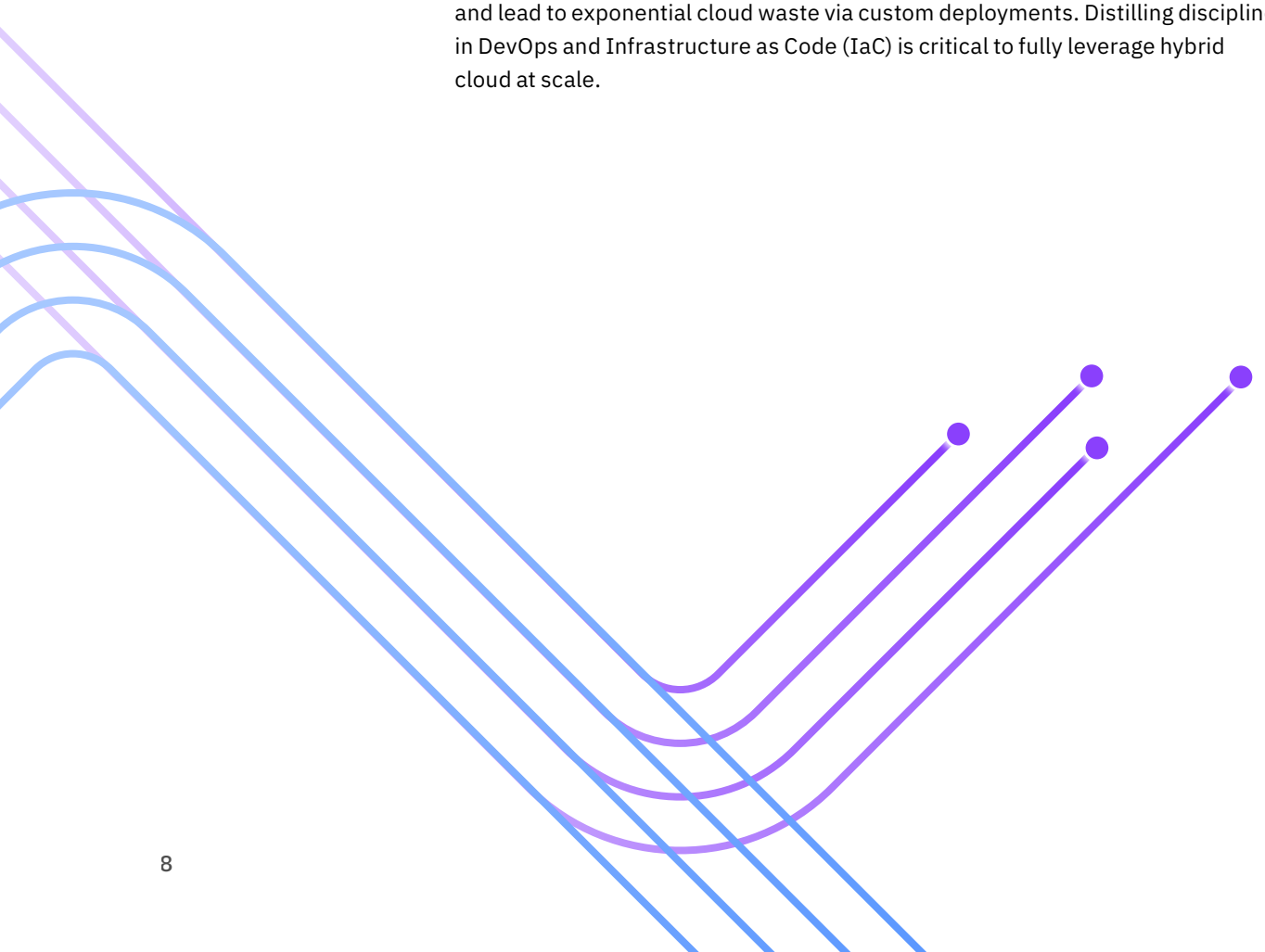
Business and IT transformation spend:
$600 million

Budget figures reflect average spend for an organization with $10 billion in annual revenue.

Our research reveals that highly automated organizations have been able to address this complexity more effectively than peers. When compared with organizations that have less advanced AI capabilities, they spend less on IT without compromising on business outcomes: 6.8% of revenue compared to 8% for less automated organizations (see "Research methodology" on page 26). These highly automated companies employ only 90 IT staff per $1 billion in revenue, versus 140 for less automated peers. In short, embedding AI in IT helps organizations do more with less.

A key enabler of this progress is hybrid cloud adoption, which serves as the backbone for AI in IT operations (AIOps) platforms, intelligent IT automation initiatives, and broader transformation efforts. Highly automated organizations are almost nine times more likely to have completed more than 75% of their cloud migration than less automated organizations (see Figure 3).

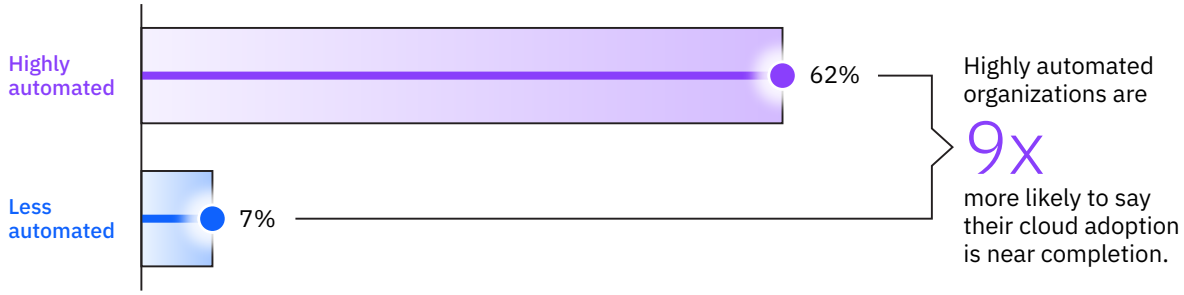
Hybrid cloud environments allow organizations to combine technologies, architectures, and methodologies best suited for what they want to achieve, focusing on outcomes, designing for integration, and adapting to change. But deploying hybrid cloud at scale in a consistent, repeatable manner is paramount. Without disciplined execution, large-scale deployment can leave security gaps and lead to exponential cloud waste via custom deployments. Distilling discipline in DevOps and Infrastructure as Code (IaC) is critical to fully leverage hybrid cloud at scale.



Mature cloud capabilities allow highly automated organizations to see where their resources could be used more effectively—including where AI agents could improve performance—and make changes quickly. Real-time visibility lets them measure the impact of each shift, iterate as needed, and unravel the costly complexity that inhibits growth. Organizations can then turn visibility into action with automated testing that self-optimizes cloud estates to avoid bottlenecks and optimize savings across the board.

Figure 3

Highly automated organizations operate in mature hybrid cloud environments



Percentages reflect respondents who say cloud adoption is at least 75% complete.

By the numbers

The business value of intelligent IT automation

What's the return on AI-powered digital transformation? The answer to this simple question is dizzyingly complex.

That's because the business impact of digital transformation varies widely depending on industry, organizational and technological maturity, competitive dynamics, and the scope of initiatives undertaken. To provide a clearer view, we've developed an illustrative example that estimates potential outcomes using the average improvements on key business metrics attributed to digital transformation initiatives over the last two years by highly automated companies.

The dollar figures outlined here represent the potential top- and bottom-line value a highly automated company could deliver annually by coupling digital transformation with intelligent IT automation. When creating a value case, organizations must tailor assumptions to their industry, region, size, technological maturity, market dynamics, and regulatory environment to ensure the results reflect their unique circumstances.

For further context, a detailed appendix (see page 27) outlines the range of improvement achieved by companies across industries to reflect variability, as well as the full set of assumptions we used as the basis of our analysis.

Business outcomes are fueled by the flywheel created by intelligent IT automation and digital transformation.

The following calculations assume an average company generates $10 billion in annual revenue and spends 8% of revenue ($800 million) on IT.

Revenue growth

10% → **increase in revenue**

$1 billion in additional revenue

Example: A retail organization uses intelligent IT systems to optimize inventory allocation and ensure seamless e-commerce functionality.

16% → **reduction in time to market**

$400 million in accelerated revenue

Example: A manufacturing electronics company automates IT workflows for supply chain monitoring and integration, enabling faster delivery of new product lines.

Cost savings

22% → **reduction in operational costs**

$1.6 billion in savings

Example: A telecommunications provider automates IT network monitoring and predictive maintenance, minimizing disruptions and improving operational efficiency.

28% → **reduction in IT costs**

$224 million in savings

Example: A software company automates routine IT support and maintenance tasks, freeing up resources for higher-value development projects.

Cost avoidance

31% → **reduction in downtime costs from high-severity IT incidents**

$37 million avoided

Example: An electric power utility automates incident response workflows and leverages Infrastructure as Code (IaC), minimizing grid disruptions during peak demand periods.

36% → **reduction in downtime costs from cybersecurity incidents**

$72 million avoided

Example: A banking institution automates IT workflows for vulnerability patching and compliance reporting, minimizing disruptions to financial services.

Case study

Al Rajhi Capital modernizes investment services to deliver seamless customer experiences[5]

Al Rajhi Capital, one of the leading financial services companies in the Middle East, faced an urgent need to modernize its infrastructure in an increasingly digital-first world. As competition grew and customer expectations shifted, the company encountered infrastructure challenges in the pursuit of enhancing its digital offerings.

The main issue was Al Rajhi Capital's fragmented technology landscape. Over the last two decades, the business had accumulated siloed systems with varying approaches and technologies, making it difficult to integrate services, adapt to market changes, and scale to meet the company's ambition.

"To continue growing and to meet the expectations of modern investors, we needed to break down these silos and offer a seamless, unified experience," says Khalid Abu El-Soud, Lead Solution Architect at Al Rajhi Capital. "We understood that the company had to embark on a journey to unify its platforms, enhance operational efficiency, and deliver a superior customer experience."

Al Rajhi Capital implemented a cloud-based platform to create a modernized middleware that unified the disparate systems. This enabled the development of a new digital SuperApp, as it is called internally, that aggregates all investment services—brokerage, asset management, and investment banking—into a unified, user-friendly interface. The integration layer, coupled with event streaming capabilities, facilitated seamless communication between diverse systems and external data points.

“Through our app, we now offer exclusive, innovative services that set us apart from the competition,” says Chief Information Officer Ahmad Al Rifai. “Customers can access real-time information from different bourses, such as the Tadāwul and others around the world, enabling them to explore new investment opportunities instantly, diversify their portfolios, and maximize returns.”

Business volume has surged by 40% on the brokerage side since the launch of the app and customer onboarding for asset management has increased by 1,000%.

“IBM’s technology allowed us to innovate at an unprecedented pace. International customer growth also saw a dramatic rise,” explains Ghassan Lama, Vice President and Head of IT DevOps. “In the last year, we went from being the number two brokerage firm in Saudi Arabia to number one. At the same time, we went from being the sixth largest mutual fund in the country to the second largest. Our growth has been exceptional.”

Broker business volume has increased 40%—and customer onboarding for mutual funds has surged 1,000%—since Al Rajhi Capital launched its “SuperApp” that aggregates its investments services.

Section 2

Delivering on the promise of end-to-end workflows

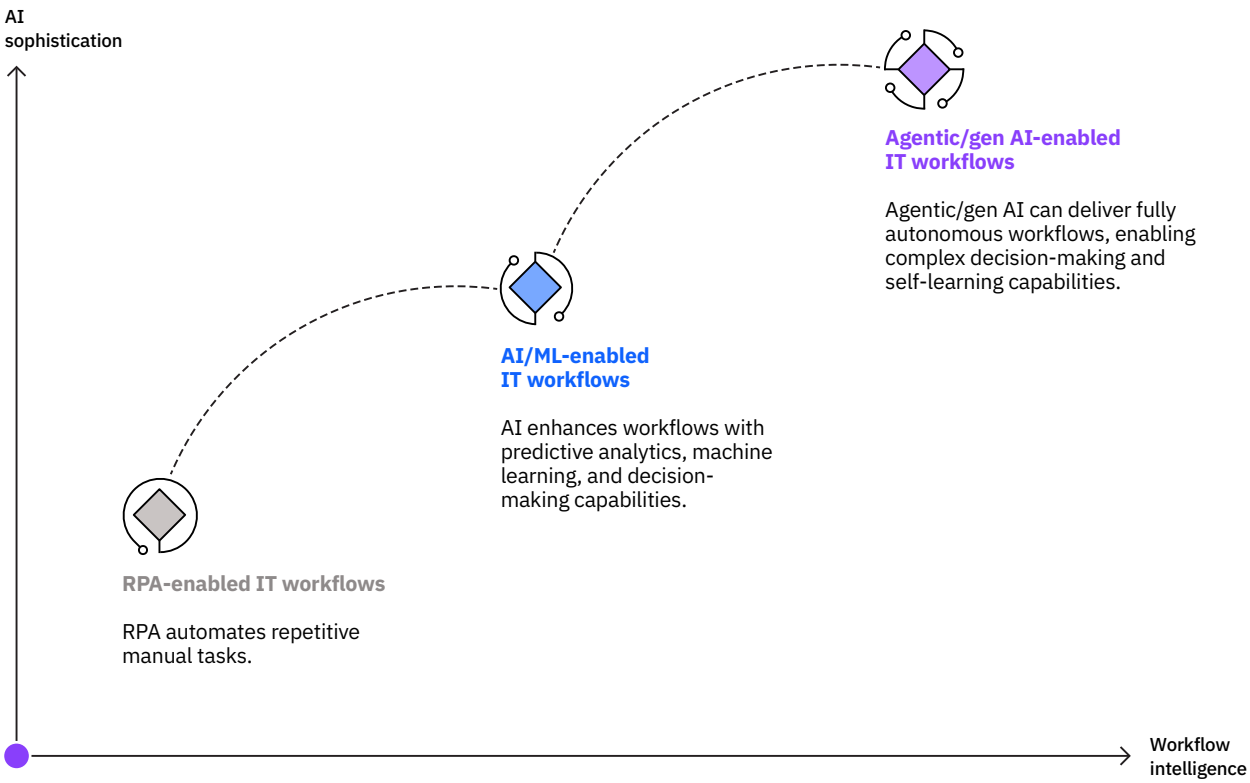
In a perfect world, intelligent automation would create seamless, self-directed workflows that require minimal human intervention. IT systems would autonomously identify, resolve, and optimize processes in real time. AI agents would handle most routine tasks, freeing employees to focus on strategic innovation and transformative business growth.

While AI agents are quickly coming of age, most organizations are still far from reaching this ideal state. However, highly automated organizations are closer than their peers. Our benchmarking data show that 89% of highly automated organizations have implemented generative AI or are optimizing it at scale within their IT processes, compared with only 15% of less automated organizations.

One speed bump on the path to agentic AI-enabled workflows is the fact that intelligent IT automation happens in waves (see Figure 4). The evolution from robotic process automation (RPA) to AI-enabled workflows to agentic AI depends on industry, organizational readiness, technological infrastructure, and the availability of structured, accessible, high-quality proprietary data that can be used to train the underlying models. Improvements might be made in one area, then fed back into the system to accelerate progress in another. It's not always a linear progression.

Figure 4

The evolution of intelligent IT workflows

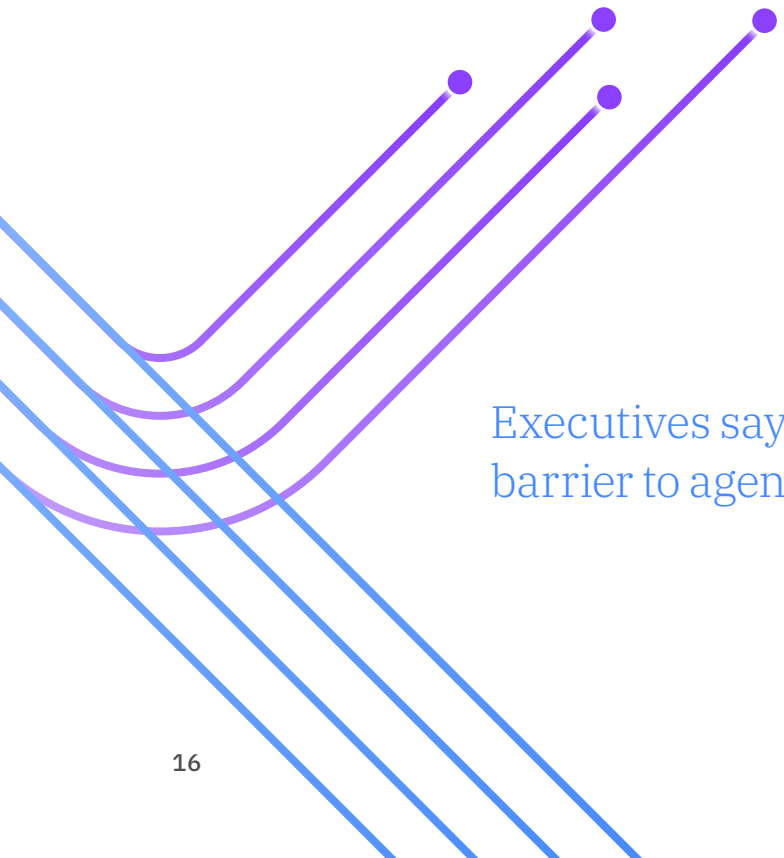


For example, an organization might use RPA for back-office tasks while piloting AI-enabled workflows for customer insights. Or an industry could leapfrog stages due to specific needs or market pressures. The boundaries between these stages can blur, as some RPA tools now incorporate machine learning or AI features.

This journey often amplifies integration and interoperability challenges. Half of organizations, for example, say they have disconnected technology that limits how they can use their data.[6]

To address this, highly automated organizations are more likely to use AIOps platforms that standardize processes, eliminate redundancies, and streamline data flows (see Figure 5). These platforms give IT leaders the visibility they need to cut costs, increase operational tempo, strengthen security posture—and drive revenue growth.

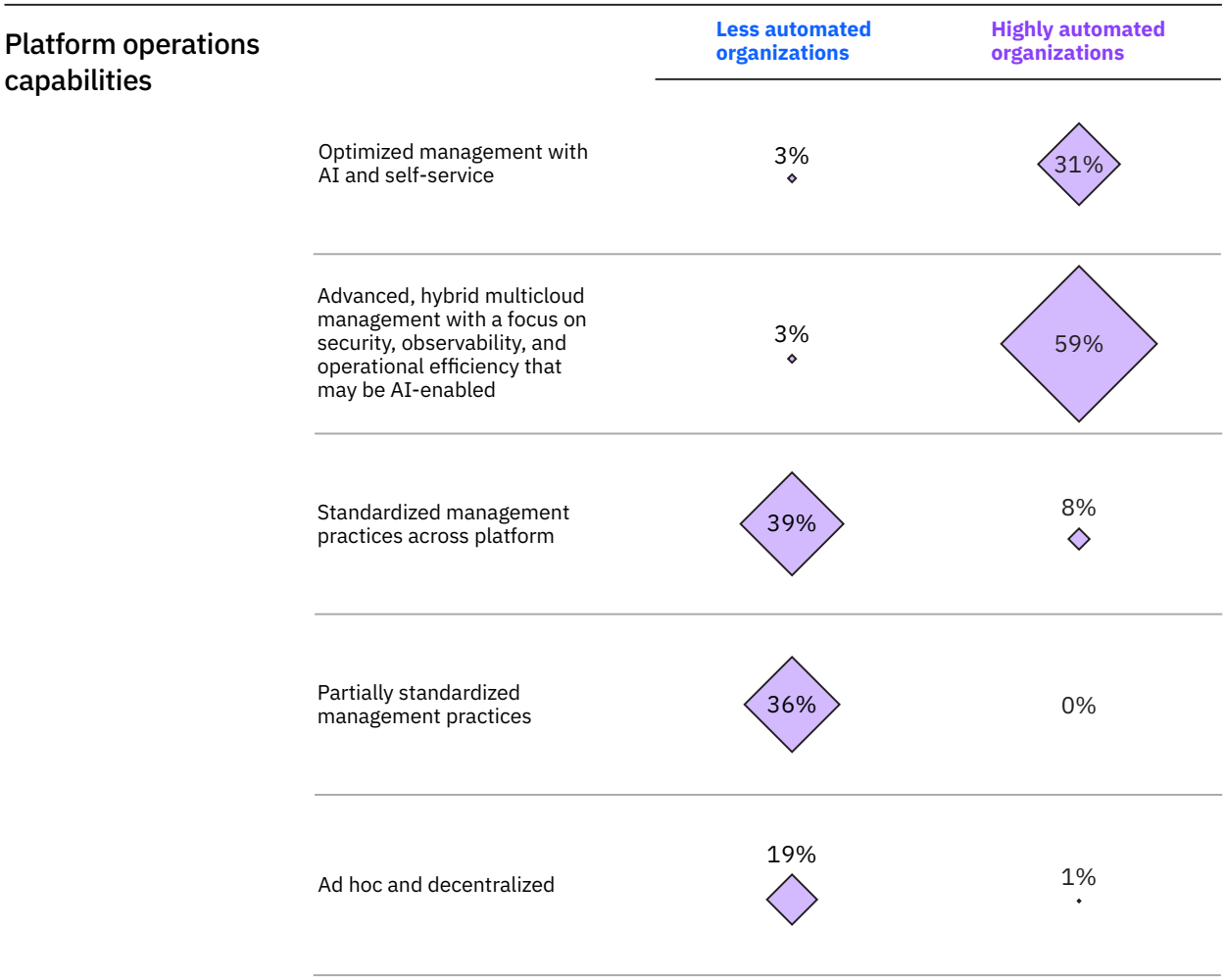
For highly automated organizations, initiatives that connect key workflows have helped increase the automation of transactional processes by 26% over the past two years. These organizations also cite a 22% reduction in operational costs due to IT and business transformation initiatives that include automation and AI. As AI agents handle more tasks autonomously, these costs could continue to fall.



Executives say data accuracy or bias is a top barrier to agentic AI adoption today.

Figure 5

Highly automated organizations have more advanced, AI-enabled platform operations



Survey question: Which best describes your platform operations capabilities? (Select one)
Note: Not all columns add up to 100% due to rounding.

Executives say data accuracy or bias is one of the top barriers to agentic AI adoption today.[7] That's because AI systems, including AI agents, are dependent on data. The quality of the data used to train and tune AI models determines the quality of the outputs that AI agents rely on to perform tasks. Organizations that modernize their data infrastructure—clearly identifying what should be accessible to AI and what should not—are better positioned to deliver value with agentic AI-enabled workflows.

For example, many highly automated organizations that have implemented generative AI in infrastructure management are delivering value through cloud resource optimization (59%) and automated provisioning and deprovisioning (47%), compared with 6% and 7% of less automated companies, respectively. This value comes in many forms, including reduced manual intervention, operational waste, and downtime risks.

In terms of cybersecurity, two in three highly automated companies that use AIOps platforms say they have reduced their attack surface and threat risk and improved proactive mitigation capabilities by driving consistency and standardization at scale with digital transformation, automation, and AI. Only 40% of less automated peers say the same (see Figure 6).

The list of benefits goes on, from customer convenience to streamlined compliance to targeted training. These results are essential to realizing enterprise AI ambitions—and they're only made possible by the interconnectedness that intelligent IT automation provides.

Organizations that modernize their data infrastructure are better positioned to achieve agentic AI-enabled workflows.

Figure 6

Highly automated organizations say digital transformation has done more to improve business outcomes

Survey question: What change in each of the following IT indicators would you attribute to your large-scale digital transformation initiatives in the last two years? Percentages include responses of "improvement" and "significant improvement."

Client zero story

AI helps IBM deliver more value with IT spend[8]

Intentional hybrid cloud adoption leads to successful transformation and continuous innovation. With this objective in mind, the Chief Information Officer (CIO) at IBM initiated an effort to comprehensively analyze business costs and spending optimization.

This initiative aimed to reallocate the IT budget toward transforming the hybrid cloud environment. Previously, the CIO organization relied on multiple data sources and tools to get better visibility into how resources aligned to initiatives, objectives, and key results. The organization pulled ledger data and could tie out with great accuracy but lacked the overall finance, IT, and business view.

To make the right decisions, the CIO needed information and details to invest in high-priority initiatives, such as application modernization, rather than investing in stranded assets and lower priority applications.

The challenge called for a solution that could provide insights into IBM's $2.5 billion IT stack and help address the following:

- Lack of alignment between IT and business goals
- Lack of IT spending transparency needed to make impactful decisions
- Opaque total cost of ownership (TCO) to run applications and on-premises data centers[9]
- Public cloud sprawl and increased transformation costs
- Non-optimized IT spend

To address these issues, the CIO organization elected to use the technology business management (TBM) model—a framework that offers lenses into different views and creates a common language amongst those views.

The journey started in 2021 with a proof of concept (POC). The initial scope included $1.5 billion of IT cost. The POC results provided justification to expand the scope and include the remaining $1 billion of IT cost to deliver a global view of the CIO IT cost.

The cost and consumption transparency provided by the TBM model has enabled the identification of key optimization opportunities. IBM evaluated every aspect of its spend across business units and shared services, with a focus on eliminating complexity and leveraging automation and AI. Insights from TCO data have helped rationalize the CIO portfolio and allowed leaders to make more informed decisions about applications criticality, consumption, and spend. It has also helped them reinvest in transformation initiatives and establish performance optimization targets.

"Focus on progress over perfection. The key is having transparency on the data so you can improve its quality."

Christine Shortell, VP, CIO IT Strategy and Planning and Identity Services, IBM

Section 3

Optimize operations to get more from AI-powered IT

AI-powered IT delivers the greatest value when it operates at scale. Our benchmarking data reveal that highly automated organizations—those that have broadly implemented generative AI in their IT processes—attribute a 90% ROI to enterprise-level digital transformation over the past two years. Less automated organizations deliver ROI at the project or business unit level, but don't have the capabilities required to deliver these returns at enterprise scale.

Mature technical capabilities allow highly automated organizations to deliver ROI at enterprise scale. They enable the intelligent end-to-end workflows that make automation more efficient and wide-reaching. But that's only the beginning. The business impact of AI in IT is multiplied when enterprises pull the right operational levers. Using advanced methodologies and tools, such as DevSecOps, site reliability engineering (SRE), and agile frameworks to optimize IT operations and application development helps drive scalability, reliability, and agility.

Highly automated companies are more likely to leverage these tools and methods, which embed security, enable iterative development, and help ensure systems are both robust and adaptable—driving significant performance improvements. Less automated companies are more likely to be focused on practices such as design thinking and cross-functional, self-directed teams, emphasizing user-centric solutions and collaboration to establish a culture of innovation and lay the groundwork for broader automation efforts.

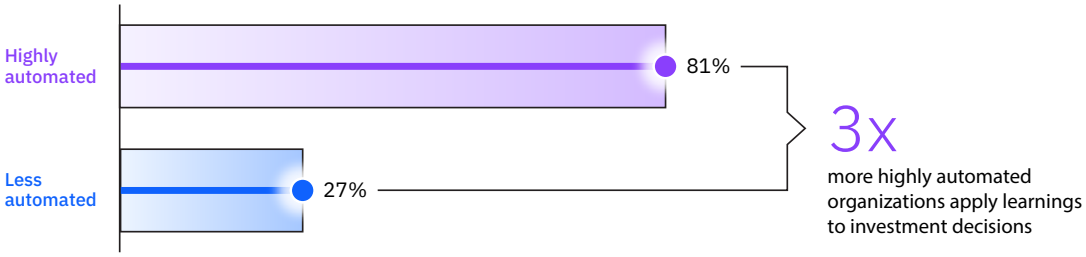
Partnerships are another crucial operational lever. Fostering better collaboration between finance and IT helps leaders distill more business value from AI-powered IT transformation. Our data show that finance teams in highly automated organizations are almost three times more likely to support enterprise-wide generative AI adoption and far more likely to analyze the outcomes of digital investments to optimize future initiatives (see Figure 7).

By taking a data-driven approach to investment analysis, finance teams can make more informed decisions about how to allocate resources, prioritize initiatives, and optimize investments for greater impact. Analyzing the outcomes of digital investments also helps finance teams identify and mitigate potential risks and challenges that could stymie transformation initiatives.

Unlocking the full potential of AI in IT requires understanding the complex interdependence of cloud, IT automation, data, and AI. Cloud computing provides the scalable infrastructure needed for AI deployment, while IT automation helps ensure efficient and reliable integration of AI models into business processes. Generative AI, trained on high-quality data, drives innovation and enhances productivity. When leveraged together, these technologies can advance digital transformation, evolve intelligent IT workflows, and create a virtuous cycle that propels organizations toward greater agility, speed, and long-term value creation.

Figure 7

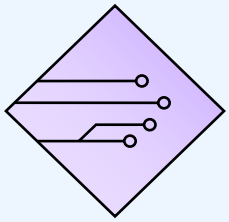
AI-powered IT transformation helps finance teams make more informed investment decisions



Percentages reflect respondents who say finance applies learnings to improve future digital investments to a significant extent.

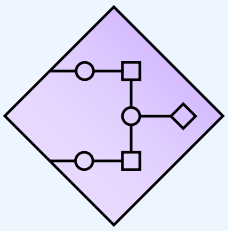
What to do

To get greater business value from IT spend, achieve AI ambitions, and make intelligent IT automation a reality, organizations should focus on four priorities: modernizing legacy applications and data, connecting infrastructure systematically, integrating data and middleware, and infusing intelligence into every technology lifecycle.



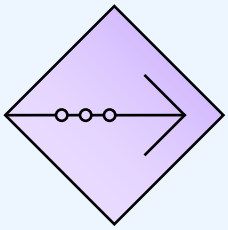
Modernize legacy applications and data

- **Align modernization efforts with business objectives.** Segregate applications and data portfolios into tiers of value and criticality to determine whether they should be simplified, automated, or eliminated. Allocate a portion of IT budget to proactively reduce technical debt.
- **Use DevSecOps and agile frameworks to automate application lifecycle management.** Implement continuous integration (CI) and continuous delivery/deployment (CD) platforms and integrate security scanning tools at key stages of development. Simulate upgrades and automate safer transitions with agentic AI.
- **Continuously improve data quality.** Establish processes to assess, cleanse, and categorize data based on relevance and accuracy. Automate data cleansing and transformation workflows to eliminate biases and ensure data usability for AI training and decision-making.
- **Integrate IT workflows into business modernization efforts.** Identify dependencies between applications and data in different environments. Use agentic AI to monitor, adapt, and optimize legacy workflows autonomously.



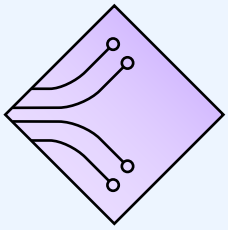
Connect infrastructure systematically

- **Automate infrastructure management tasks,** such as provisioning and capacity planning, using Infrastructure as Code (IaC) tools. Leverage agentic AI to dynamically predict resource needs, optimize provisioning, and adjust configurations in real time.
- **Enable consistent governance across hybrid environments** by deploying unified management platforms and configuring role-based access controls.
- **Embed security automation into workflows** with vulnerability scanning and compliance reporting.
- **Monitor infrastructure health using observability tools.** Increase data visibility and transparency by deploying monitoring agents, setting up dashboards, and configuring alert thresholds for critical issues.



Integrate data and middleware

- **Standardize critical processes and optimize data flows.** Prioritize high-impact business workflows. Map current data flows and create reusable workflow templates, leveraging agentic AI to uncover inefficiencies, detect patterns, and identify additional optimization opportunities.
- **Enable secure data access across teams to inform insights.** Define role-based access matrices and implement identity federation across systems.
- **Align integration strategies with enterprise goals using FinOps tools.** Track all IT spend using technology business management practices, create dashboards, and establish monthly cost review meetings with stakeholders.
- **Use integration platforms to harmonize processes and improve visibility.** Leverage hybrid integration platforms (iPaaS) to integrate workflows and processes, utilizing APIs, API gateways for standardized access, and event integration methods.



Infuse intelligence into every technology lifecycle

- **Embed generative AI to automate workflows and accelerate innovation.** Deploy pre-trained generative AI models, integrate them into existing workflows, and monitor their performance to ensure alignment with business goals.
- **Reskill IT teams to manage intelligent workflows effectively.** Conduct skills gap analyses and create role-based learning paths for AI and automation.
- **Collaborate with leaders to strategically scale AI.** Develop actionable roadmaps that prioritize investments in AI projects aligned with long-term business goals, focusing on measurable outcomes such as cost savings, revenue growth, or enhanced customer experiences.
- **Optimize costs and reinvest savings into AI-driven transformation initiatives.** Deploy technology and business management practices and FinOps tools with granular reporting capabilities and compare performance against industry benchmarks. Track savings and reinvest them into intelligent initiatives.

Research methodology

The IBM IBV, in cooperation with Oxford Economics, conducted a global, cross-industry survey in the first quarter of 2025 to understand the maturity and performance of organizations' enterprise IT capabilities.

The study employed a cross-sectional survey design, collecting responses from 680 IT leaders—including CIOs, CTOs, and vice presidents or directors of IT—that have deep insight into their organizations' IT strategies, plans, practices, and technology budgets. The survey captured key demographic variables, including respondents' geographic locations and their organizations' primary industries. Participants were drawn from 21 countries and 18 industries, including banking, retail, technology, healthcare, and government.

Because automation capabilities are central to it, IBM's Hybrid by Design Framework was used as the basis for the survey instrument. The Hybrid by Design Framework is a comprehensive architecture that guides organizations through digital transformation, leveraging hybrid cloud environments to optimize business value. It enhances agility and innovation by unifying hybrid systems, facilitating seamless data flow, collaboration, and scalability. The Framework is structured into three transformation areas—Product-led by Design, Integration by Design, and Technology by Design—spanning 12 capability domains.

Maturity in these domains progresses through five levels, from fragmented operating models (level 1) to fully embedded hybrid skills and autonomous squads (level 5). At higher levels, organizations achieve seamless integration, widespread adoption of AI and automation, and unified data governance. A separate series of questions was asked to establish which large-scale digital transformation programs have been initiated by companies in the last two years—and to evaluate their impact on IT and business KPIs.

Our analytical approach began with foundational data preparation and descriptive statistics to help ensure data quality and uncover preliminary insights.

Building on this base, we employed a predictive model built using a neural network to identify the enterprise IT capabilities that predict or drive ROI for digital transformation. The inputs (independent variables) consisted of 12 questions representing the 12 IT capability domains in the Hybrid by Design Framework, and the model ranked their importance in estimating ROI (the dependent variable).

We then developed an IT automation index using the top three predictors identified by the neural network model, which provide a well-rounded view covering infrastructure, security, and integration. To ensure this index captured the aspect of intelligent process automation, we specifically added a fourth dimension related to the application of AI in IT processes.

Once calculated, we segmented the base by IT automation index scores in quartiles, which revealed that the path to maturity reflects the evolution of intelligent workflows—and that it is nonlinear. While organizations typically mature their IT automation and AI capabilities with each stage building on the last, this progression depends on industry, organizational readiness, and technological infrastructure, including cloud and AI coupled with comprehensive data governance.

We compared the enterprise IT capabilities of organizations in the lower and upper quartiles for insight into the value delivered by the broader digital transformation they enable. This revealed that when companies with lower organizational and technological maturity—the "less automated" organizations referenced in this report—automate IT processes and workflows there are immediate performance gains, particularly in IT. But when organizationally and technologically mature companies—the "highly automated" organizations referenced in this report—automate IT processes and workflows, they are significantly more intelligent, positioning these companies to deliver sustained business and IT improvements.

Appendix

The range of improvements achieved by all surveyed companies across industries

This table provides the range of improvements achieved by surveyed companies across industries, indicating variability in results based on factors such as maturity, industry, and geographic region. These ranges should be considered when tailoring a value case to reflect specific organizational circumstances.

Metric	Bottom 25% (25th percentile)	Top 25% (75th percentile)
Revenue	5%	11%
Net promoter score (NPS)	30%	49%
Transactional processes automated	18%	36%
Time to market for new products/services	-9%	-33%
Operational costs	-14%	-34%
IT costs	-17%	-45%
High-severity incidents	-24%	-43%
Cybersecurity incidents	-19%	-56%

Full set of assumptions used as the basis of our analysis

The illustrative example on page 10 is based on averages and generalized assumptions. Organizations should adapt these assumptions to their specific circumstances, such as industry, size, and location, to ensure the accuracy and relevance of their value case.

1. Percentage of revenue from new products/services launched in the past year: 25%. *Note: Accelerated revenue due to faster product launches is included in the overall 10% revenue improvement.*[i]
2. Total cost of continuing operations as a percentage of revenue: 73%. *Note: IT cost reductions are included in the overall 22% operating cost reduction.*[ii]
3. Average number of non-cyber high-severity IT incidents/outages per year: Between 1 and 30. *Note: These values exclude high severity incidents resulting from cybersecurity issues.*[iii]
4. Typical service-level agreement for downtime for IT incidents: Moderate to major severity: 4–12+ hours; critical failures: 24+ hours.[iv]
5. Average number of cybersecurity incidents from minor to major severity per year: 222.[v]
6. Hourly cost of downtime: $300,000/hour (excluding legal fees, penalties, or goodwill costs). Enterprises must account for additional costs beyond remediation.[vi]

i. IBM Institute for Business Value benchmark study, physical product development. 2023. Unpublished data.

ii. IBM Institute for Business Value enterprise IT benchmarks. 2025. Unpublished data.

iii. *Global Data Center Survey 2024*. Uptime Institute. Accessed August 21, 2025. https://datacenter.uptimeinstitute.com/rs/711-RIA-145/images/2024.GlobalDataCenterSurvey.Report.pdf?version=0

iv. "Service level agreements." IT Outcomes. 2025. https://www.itoutcomes.com/sla/

v. AI impact on security benchmark study. IBM Institute for Business Value. 2025. Unpublished data.

vi. ITIC 2024 Hourly Cost of Downtime Report, ITIC, November 2024. https://itic-corp.com/itic-2024-hourly-cost-of-downtime-report

About the authors

Varun Bijlani

Global Managing Partner, Solutions and Delivery, IBM Consulting
varun.bijlani@uk.ibm.com
https://www.linkedin.com/in/varunbijlani/

Varun is a business and transformation leader with deep expertise in IT strategy, planning, and transformation. He has developed and led large IT functions and consulting practices and is focused on building strong client relationships through strategic partnerships.

Todd Kathan

Vice President, Automation Platform, IBM US
tdkathan@us.ibm.com
https://www.linkedin.com/in/toddkathan/

Todd oversees US go-to-market strategies across application development, infrastructure automation, and technology business management, aligning software solutions with diverse client needs. He brings more than two decades of experience optimizing IT and operations and an undiminished passion for improving business outcomes to client engagements.

Mostafa Zafer

Vice President, Automation, IBM MEA
mostafa@ae.ibm.com
https://www.linkedin.com/in/mostafa-zafer/

Mostafa is responsible for strategy, sales, revenue, and client advocacy for AI-powered automation solutions. He has more than 25 years of experience in sales and strategy leadership in IBM, where he has held multiple leadership positions around the world. Mostafa has also been recognized by Linkedin as an AI Top Voice.

Meenakshi Srinivasan

Senior Partner, Offering and Global Practice Leader for DevSecOps, AIOps, and IT Automation, IBM Consulting
smeena@in.ibm.com
https://www.linkedin.com/in/meenakshi-srinivasan-aa776b8/

Meenakshi leads a global practice of IBM AIOPs Services, specializing in managing hybrid cloud workloads across various client landscapes. With two decades of experience in leading many large-scale client transformations by helping formulate strategies for scaled adoption of agile, DevOps, and AIOps solutions, she is responsible for infusing AI, agentic AI, and automation for predictive and proactive management of the end-to-end IT landscape.

Minoru Aoki

Client Partner, IBM Consulting
minoru.aoki@ibm.com
https://www.linkedin.com/in/minoruaoki/

Minoru is a key member of IBM Japan's Application Operations and is responsible for driving AI adoption in custom application maintenance services, especially in the AIOps domain. He has extensive experience at AWS and Amazon, and has held various financial sector leadership roles in multicultural environments.

Jacob Dencik

Research Director, IBM Institute for Business Value
jacob.dencik@be.ibm.com
linkedin.com/in/jacob-dencik-126861/

Jacob is responsible for leading research on topics related to AI, innovation, security, economics, and sustainability. He has advised companies around the world on strategy, technology, and operations. He has also advised governments as an expert economist on competitiveness, sector/cluster analysis, and innovation.

Lisa-Giane Fisher

Global Benchmarking Research Leader and MEA Leader, IBM Institute for Business Value
lfisher@za.ibm.com
https://www.linkedin.com/in/lisa-giane-fisher/

Lisa leads benchmark research on enterprise IT and cloud and co-developed open standard process frameworks with APQC. She was instrumental in integrating business process benchmarking into IBM's Component Business Modeling (CBM) tool, helping organizations optimize operations and align IT strategies.

Contributors

James Stevenson, Global Practice and Offering Leader, Cloud Advisory

Raghava Venkat, Partner, Offering Leader, IBM AIOps Services

Edward Walsh, Strategy Consultant, Global Cloud Advisory and Hybrid Cloud Transformation

Sara Aboulhosn, Associate Creative Director

Nathan Boudreaux, Design Lead

Tegan Jones, Editorial Lead

Hebatallah Nashaat, Data and Content Management Manager

Related reports

The Great Tech Reset: How hybrid by design creates business value
https://ibm.co/great-tech-reset-book

From AI projects to profits: How agentic AI can sustain financial returns.
https://ibm.co/agentic-ai-profits

Orchestrating agentic AI for intelligent business operations
https://ibm.co/agentic-process-automation

Endnotes

1. Al Falasi, Saeed, Lula Mohanty, Irfan Verjee, Anthony Marshall, and Jacob Dencik. *Solving the AI ROI puzzle: How Chief AI Officers cut through complexity to create new paths to value.* IBM Institute for Business Value. July 13, 2025. https://ibm.biz/chief-ai-officer

2. IBM Institute for Business Value enterprise IT benchmarks

3. "Forrester's Technology & Security Predictions 2025: Tech Leaders Will Triple The Adoption Of AIOps To Reduce Technical Debt" Forrester. October 22, 2024. https://investor.forrester.com/news-releases/news-release-details/forresters-technology-security-predictions-2025-tech-leaders

4. "New Survey Finds Cloud Waste is On the Rise—Driven by Preventable Mistakes, Inefficiencies, and New AI Initiatives." Businesswire. October 8, 2024. https://www.businesswire.com/news/home/20241008442795/en/New-Survey-Finds-Cloud-Waste-is-On-the-Rise---Driven-by-Preventable-Mistakes-Inefficiencies-and-New-AI-Initiatives

5. "Al Rajhi Capital's journey to Saudi Arabia's financial summit." IBM case study. Accessed July 29, 2025. https://www.ibm.com/case-studies/al-rajhi-capital

6. Global C-suite Series. 32nd edition. *CEO Study. 5 mindshifts to supercharge business growth: Move from productivity to performance with agentic AI.* IBM Institute for Business Value. May 6, 2025. https://ibm.co/ceo-2025

7. Blair, Kate, Francesco Brenna, Nick Fuller, Brian Goehring, Brian Goehring, and Matt Sanchez. *From AI projects to profits: How agentic AI can sustain financial returns.* IBM Institute for Business Value. June 9, 2025. https://ibm.co/agentic-ai-profits

8. "Digital transformation with Apptio." IBM case study. Accessed July 29, 2025. https://www.ibm.com/case-studies/cio-apptio

9. Application TCO includes software licenses and expenses, labor cost for development and support, costs for infrastructure and infrastructure labor support, and center lease expenses.

IBM Corporation
New Orchard Road
Armonk, NY 10504

Produced in the United States of America | November 2025

137a1e2756dbaed7-USEN-01