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IT Modernization Maturity Assessment Prepares Enterprises for AI-Fueled Digital Business Success

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Defining IT Modernization

IT modernization represents the strategies organizations use to maintain support for existing mission-critical systems, workloads, and data while simultaneously driving the innovation that emerging digital technologies, such as AI, enable.

In today's digital business environment, an organization's ability to grow its revenues, deepen customer relationships, and drive employee productivity depends heavily on its capacity to leverage AI, access and analyze critical data, automate vital processes, scale operations as necessary, and ensure that it applies security, performance, and cost controls consistently across the entire business and IT landscape.

Keeping the current business on track while simultaneously building the necessary infrastructure and operational capabilities for an AI-infused future can be challenging. IT modernization strategies provide enterprise leaders with road maps for improving the organization's business outcomes, governing IT investment priorities, standardizing operational policies, and ensuring that the organization fully realizes the expected ROI on IT and digital business investments, including AI.

IDC's research shows that the most impactful IT modernization efforts take a comprehensive approach that coordinates technology spending and strategies across a wide range of interrelated domains to create full-stack digital business and technology road maps to drive the organization forward. IDC's *IT Modernization Maturity Study,* sponsored by Rocket Software, identifies six critical pillars that individually improve business outcomes in the near term and collectively contribute to enabling a new wave of AI-enabled, automated digital business innovation.

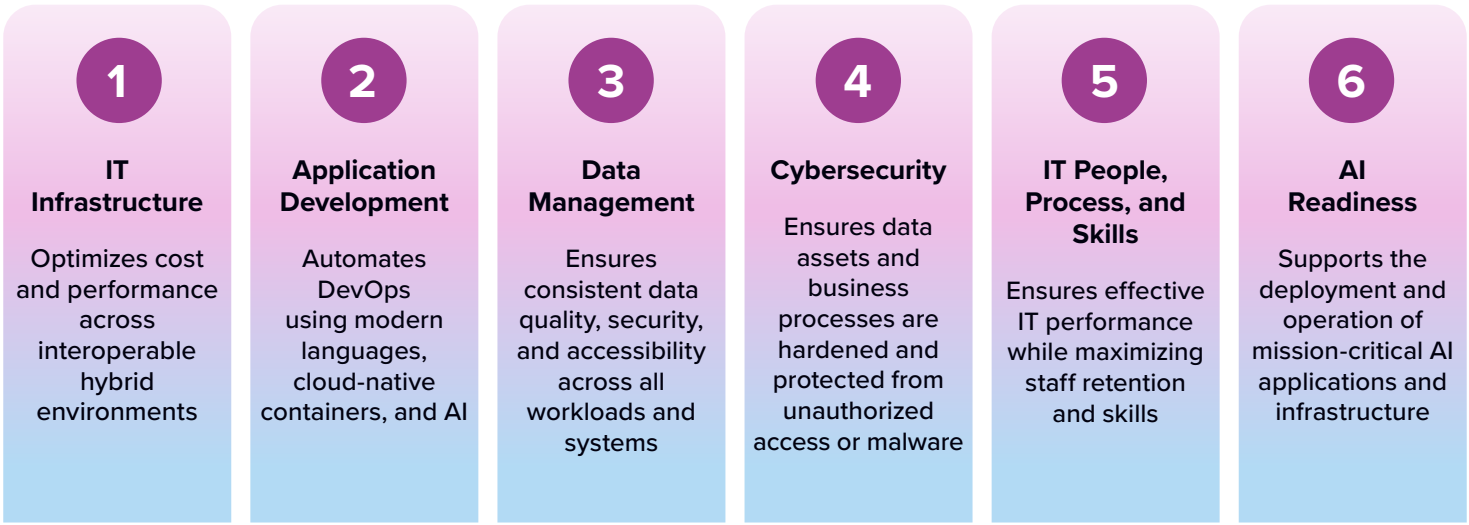
About This Study

This report summarizes key findings from IDC's *IT Modernization Maturity Study,* sponsored by Rocket Software, March 2025, which polled 822 IT modernization decision-makers worldwide to assess how investments in IT modernization are impacting year-over-year improvements to the organization's top-priority business outcome improvements. Please refer to Appendix 1: Methodology for the study's demographic information.

Organizations with the highest levels of maturity across each of these six pillars can expect to experience higher levels of year-over-year business outcome improvement and will be best positioned to compete in today's AI-fueled digital business markets (see **Figure 1**).

FIGURE 1

Six Pillars of IT Modernization



Source: IDC, 2025

IT modernization must be a core priority for IT organizations that need to maintain existing mission-critical systems, workloads, and data while simultaneously allowing the organization to harness emerging digital technologies and prepare to fully exploit the promise of AI.

IDC examined a range of potential areas for business improvement associated with an organization's IT modernization strategies and spending.

Across all customers and industries, the areas of business outcome improvement most associated with IT modernization maturity are:

- Increased operational efficiency
- Revenue growth
- Improved employee productivity
- Faster innovation
- Improved customer satisfaction

AI and IT Modernization

The advent of AI is forcing many organizations to invest in a new wave of IT modernization initiatives to ensure all relevant company and third-party data is valid and securely accessible by AI models to deliver timely and accurate results and effective business process automations.

By correlating levels of business outcome improvement with current and planned IT modernization activities, IDC identified four IT modernization maturity brackets. IT modernization experts, the top tier, lead in terms of business outcome improvement and implementation for comprehensive modernization programs. The other three groups (leaders, pioneers, and explorers) trail the experts due to gaps in modernization investment and the lack of business and IT alignment.

By studying the current state and future plans for IT modernization across these four groups, IDC can identify specific, actionable areas of investment that all organizations need to consider as they advance their digital business plans.

- **IT modernization experts** have the highest levels of year-over-year business improvements, often twice as high as less mature organizations. They have typically prioritized and coordinated modernization programs across infrastructure, application development, data management, and other domains. They represent the top 10% of organizations with the most comprehensive IT modernization strategies and the highest overall levels of business outcome improvement linked to IT modernization investments.
- **IT modernization leaders** experience healthy levels of annual business outcome improvements and have typically taken several steps to modernize their IT environments. However, they have often not fully coordinated efforts across pillars, with some areas overdue for investment. They represent 30% of all organizations.
- **IT modernization pioneers** have begun taking the initial steps toward creating a strategic IT modernization approach but are still working to fully fund programs and deliver results. As a result, their levels of business outcome improvements noticeably lag those of IT modernization leaders and experts. They represent 30% of all organizations.
- **IT modernization explorers** are in the earliest stages of their IT modernization journey, often tackling modernization requirements on a tactical project-specific basis, with little or no framework for a bigger, more coordinated set of investments. They may lack internal metrics and KPIs to help prioritize investments and struggle to document the business value and longer-term ROI relating to their efforts. These organizations typically lag far behind industry experts when it comes to delivering significant levels of business outcome improvements. They represent the 30% of organizations with the lowest maturity levels.

Key Findings

IT Modernization Maturity Drives the Highest Levels of Business Outcome Improvement

Considering how an organization's annual rate of business outcome improvement correlates with its IT modernization maturity level uncovers striking evidence of modern IT's importance in fulfilling almost any type of high-priority business activity improvement objective. Whether the business is working to advance employee productivity, increase customer satisfaction, accelerate innovation, or drive new revenue, IT provides the core platforms necessary to access and share business data, connect employees and customers, identify areas ripe for automation, and enable employees to work faster and smarter.

IDC's study shows that organizations with the highest levels of IT modernization maturity typically experience twice the levels of improvement of the least mature organizations. For example, IT modernization experts report a 28% year-over-year improvement in employee productivity, compared to just a 14% improvement for IT modernization explorers. These expert organizations generally take a comprehensive view of modernization that considers the interrelationship of infrastructure, data, development, security, operating models, and AI to create multistep road maps to support the transformation of complete business processes. Less mature organizations typically take more tactical and project or piecemeal approaches that fail to deliver the maximum potential value (see **Figure 2,** next page).

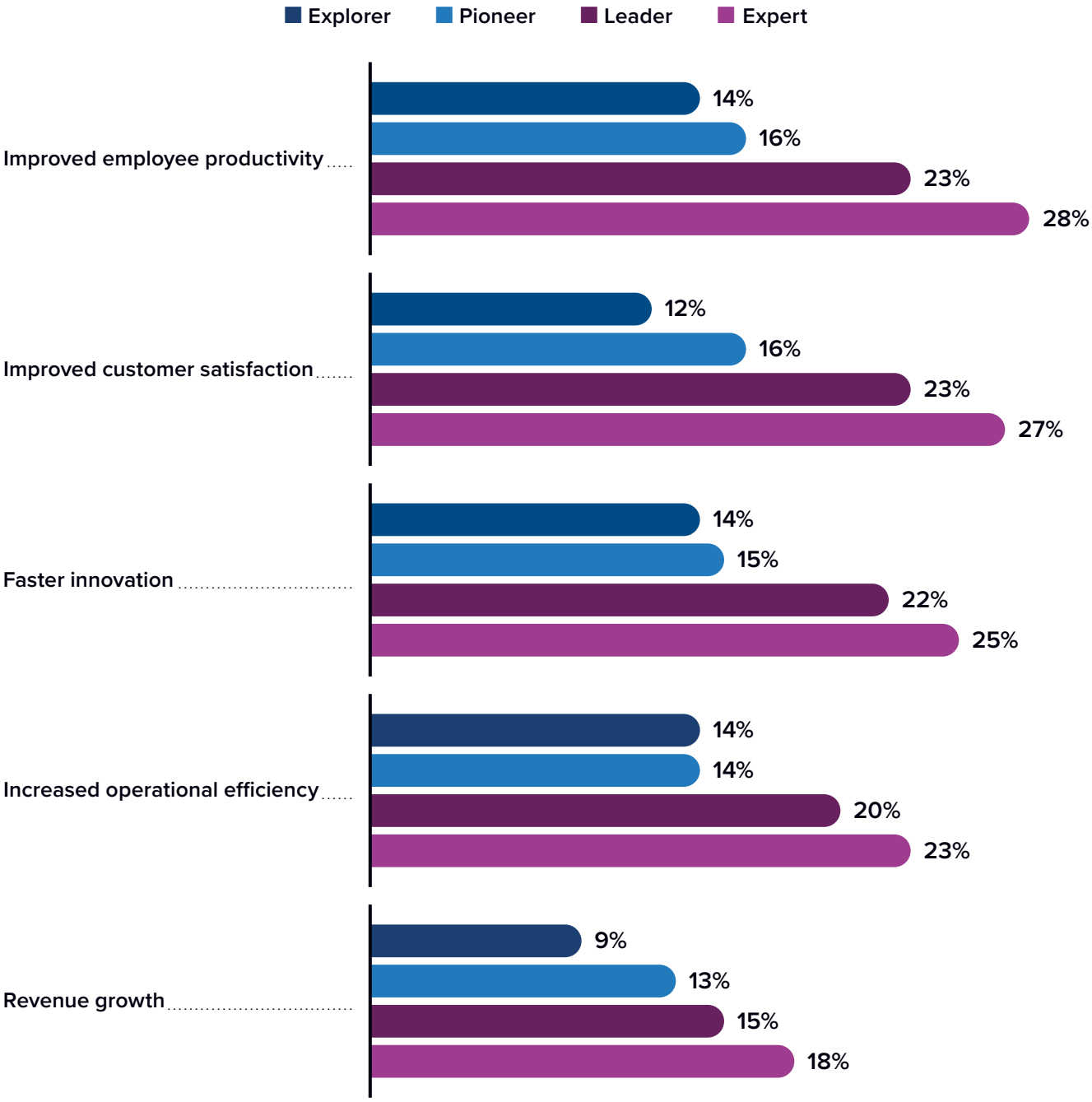
A similar analysis of the level of improvement for critical IT and business KPIs shows that the most mature IT modernization experts often see KPI improvements increasing at twice the rate of those by the least mature IT modernization explorers.

For example, experts experience an annual improvement of 25% for KPIs relating to data quality and compliance, more than double the 12% rate for explorers (see **Figure 3,** page 9).

FIGURE 2

Impact of IT Modernization Maturity on Annualized Rates of Business Outcome Improvement

What annual percentage change, in the past 12 months, did your organization experience in each of the following as a result of investments in IT modernization?



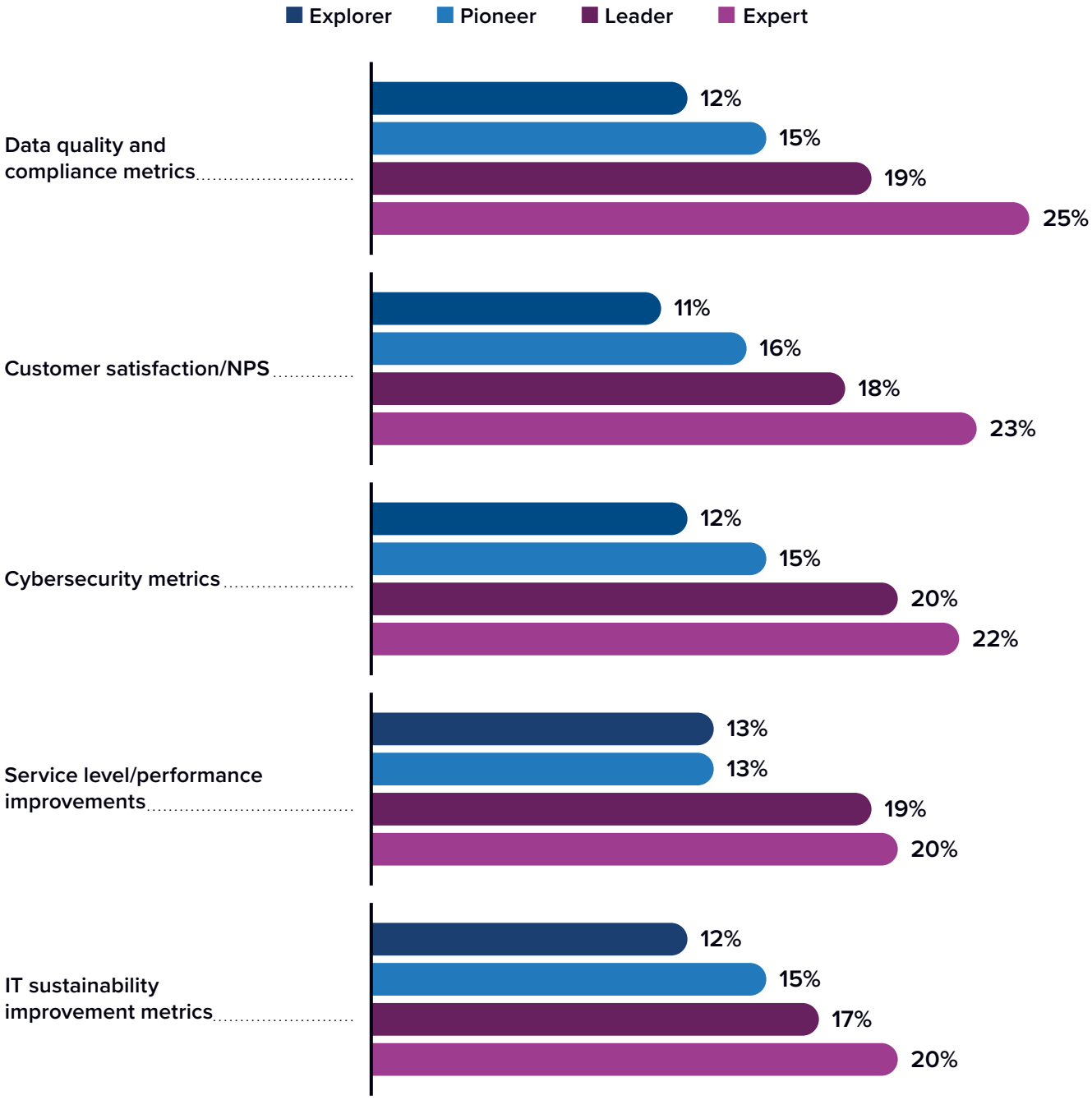
n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

For an accessible version of the data in this figure, see Figure 2 Supplemental Data in Appendix 2.

FIGURE 3

Impact of IT Modernization Maturity on Annualized Rates of KPI Improvement

What annual percentage change, in the past 12 months, did your organization experience in each of the following IT modernization metrics?



n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

For an accessible version of the data in this figure, see Figure 3 Supplemental Data in Appendix 2.

IT modernization experts, on average, devote **47% more budget** to modernization activities than the least mature IT modernization explorers.

IDC's analysis shows that across the six most important pillars of IT modernization, regardless of the company's size, experts devote an average of 47% more budget to modernization activities than the least mature IT modernization explorers. For example, an expert organization with an annual infrastructure budget of $50 million might spend $15.5 million on modernization, while an explorer with the same budget might spend closer to $12 million. Over time, the explorer will develop a larger gap between current capabilities and required, modern resources and will slowly fall further behind the experts.

By looking at how IT modernization experts are setting current priorities and planning for emerging challenges across all pillars, IT decision-makers can develop a structured assessment of their own level of IT modernization maturity and identify gaps or areas they need to prioritize for improvement over time. This, in turn, will help drive budgets, KPIs, and operational priorities to ensure that the organization's IT strategy will align with business needs and expectations going forward.

The Six Pillars of IT Modernization Maturity

IT infrastructure includes public cloud computing and storage services, as well as servers, mainframes, storage, and networking systems in datacenters, colocation facilities, and edge sites. Most enterprises rely on a hybrid mix of infrastructure assets. In many cases, these infrastructure resources represent several generations of computing and storage, ranging from mainframes to distributed servers to the cloud.

Application development includes the tools and processes for writing new cloud-native application code, updating and extending existing client-server and mainframe applications, documenting and testing code, automating CI/CD pipelines, and integrating in-house applications with third-party SaaS services. These capabilities impact all mission-critical applications, from web applications for ebusiness to mission-critical mainframe-based transaction processing to emerging AI-enabled use cases.

Data management addresses capabilities relating to management and compliance for data quality, security, accessibility, and overall data stewardship. Data management systems maintain data privacy, compliance, and security across the data life cycle and enable business and IT analysts to track and validate data sources and trustworthiness.

Cybersecurity focuses on ensuring the organization's IT systems, data assets, and business processes are hardened and protected from unauthorized access, malware, or corruption. The increasing digitization of business and broad distribution of computing and analytics across edge and mobile endpoints demands that organizations rethink perimeter-based cybersecurity and implement zero trust strategies that enforce broad-based access control, compliance, and validation processes.

IT people, processes, and skills are critical to designing, implementing, and operating effective IT environments. However, staff retention and skills development can be difficult when technological innovation moves quickly, and teams must keep older systems running, even as they also need to make time to master new capabilities and implement new processes and tools. The emergence of AI as a top business priority is exacerbating IT people and skills challenges.

AI readiness is emerging as a top priority for every aspect of IT modernization. Generative AI and emerging multimodal agentic AI approaches are driving the demand for more agile, scalable, and high-performance infrastructure. They are transforming the nature of application development and requiring more comprehensive approaches to data management and cybersecurity. They also increase the complexity of IT operations, even as they promise to deliver more automation and intelligence across the IT operations landscape.

Experts Focus Infrastructure Modernization Efforts on AI, Consolidation, and Interoperability

IT infrastructure is a critical pillar of any IT modernization program. Infrastructure provides the computational horsepower and network connectivity necessary to connect people, processes, and data across the organization. A poorly architected infrastructure environment can result in silos that make it difficult to share data, automate processes, or respond to customer concerns in a timely manner. Decisions may be delayed, critical information may be hard to find, employee productivity may fall due to downtime and operational inefficiencies, and the costs to maintain the environments may become difficult to support.

IT modernization experts understand how inefficient and fragmented infrastructure can bog the entire organization down. They also recognize the importance of infrastructure modernization in enabling their organization's AI vision. As a result, 82% of IT modernization experts are prioritizing deploying AI-ready infrastructure over the next two years. They recognize the need to provide developers and data scientists with accelerated, scalable, and flexible computing resources to support GenAI and emerging agentic AI use cases.

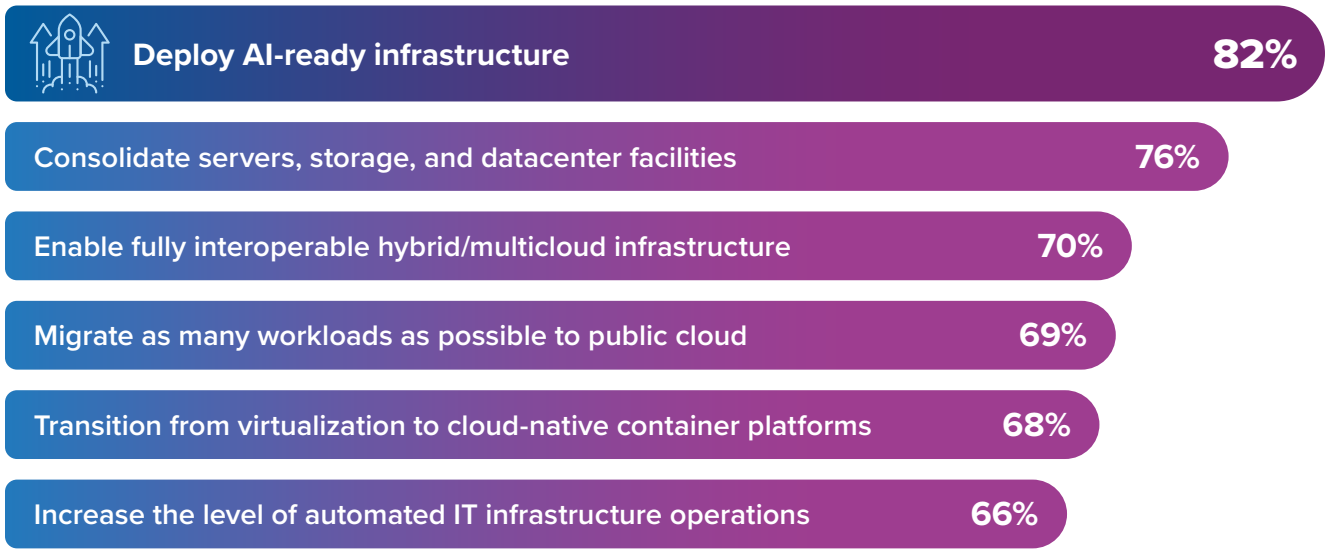
To free up budget and datacenter capacity and staff, 76% of experts are planning to consolidate datacenter servers, storage, and facilities, and 70% are planning to enable fully interoperable hybrid/mulitcloud infrastructure (see **Figure 4,** next page).

82% of IT modernization experts are **prioritizing deploying AI-ready infrastructure** over the next two years.

FIGURE 4

Top Expert IT Infrastructure Modernization Priorities

What will be your organization's most important IT infrastructure modernization goals over the next two years?



n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Fewer (22%) of the less mature explorers are prioritizing AI-ready infrastructure. More often, they expect to continue to rely on traditional infrastructure architectures built around commodity servers and cloud IaaS platforms. Experts are implementing sophisticated workload-specific strategies to make infrastructure technology decisions, while explorers take more incremental and tactical approaches.

Experts are leading infrastructure modernization efforts in many ways:

- **77%** are evaluating and taking steps to remediate infrastructure-related cybersecurity risks, including considering the impact of configuration and software updates, AI deployments, edge computing systems, and mobile devices.
- **66%** are proactively evaluating the business risk related to data quality and data integration challenges due to a lack of system and cloud interoperability, legacy system downtime, and similar infrastructure modernization risks.
- **61%** are actively planning how to address any potential infrastructure supply chain disruptions.

Experts understand that infrastructure modernization is a continuous work in progress, as applications, analytics tools, and infrastructure technologies continue to evolve.

Experts are also taking the lead in accelerating the transition from legacy virtualization platforms to more modern, cloud-native container infrastructure. They are taking a hard look at the tradeoffs between usage-based cloud services, on-premises datacenters, self-managed colocation-based infrastructure, and managed service alternatives.

When making these decisions, the experts consider cost, performance, and security, as well as the access to new technologies, ongoing scalability, operational efficiencies, and automation that different infrastructure options offer. They invest in upskilling staff and make contingency plans for infrastructure supply chain disruptions.

Rather than dealing with business risks, cost concerns, or security constraints on a tactical, project-specific basis, the experts take steps to include the full range of business, IT, and security stakeholders from the beginning of any modernization effort. They work with technology partners that know their industry and have a track record of implementing similar infrastructure modernization tasks, and they take steps to build a solid business case for upgrades and migrations. Perhaps most importantly, experts understand that infrastructure modernization is a continuous work in progress, as applications, analytics tools, and infrastructure technologies continue to evolve.

Organizations working to improve IT infrastructure maturity must ensure that ongoing funding for these projects is a part of every annual budget. They need to prioritize investments that will help improve infrastructure utilization efficiency and must take steps to standardize platforms, APIs, and operational controls to enable consistent automation, training, support, and user experiences. They also need to create a governance model as a partnership between IT and business stakeholders.

Experts Emphasize Application Development Modernization to Improve Quality and Productivity with AI

AI-infused software development technologies are rapidly transforming the application development landscape. As a result, 76% of IT modernization experts are planning to increase in-house AI development skills and are prioritizing efforts to improve data pipeline quality to access, clean, and move data across application development and AI life cycles.

Seventy-five percent of experts have specific plans in place to address ongoing DevOps best practice implementation to modernize and containerize existing custom apps. They also plan to take full advantage of SaaS-based alternatives to packaged ISV applications when appropriate.

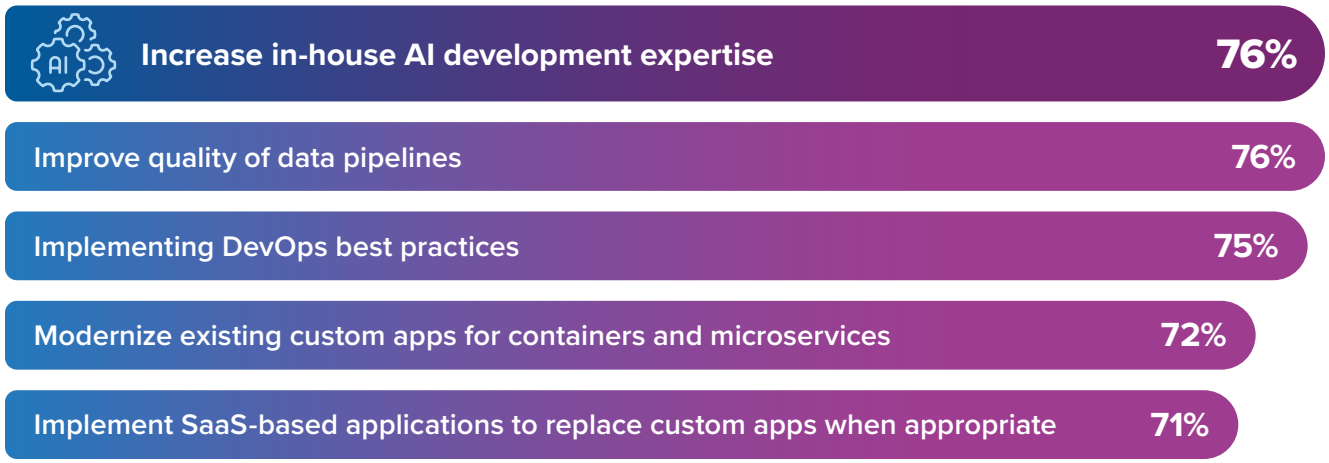
By comparison, less than a quarter of the least mature IT modernization explorers are currently prioritizing AI-enabled software development capabilities. They have similarly lower levels of interest in improving data pipeline quality or implementing DevOps best practices. Rather, they primarily focus on maintaining existing in-house code and ISV software (see **Figure 5,** next page).

76% of IT modernization experts are planning to **increase in-house AI development skills.**

FIGURE 5

Top Expert Application Development Modernization Priorities

What will be your most important application development modernization goals over the next two years?



n = 83 (IT modernization decision-makers representing the top 10% most mature organizations); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Fundamentally, IT modernization experts aim to focus development dollars where they can make the most difference to the business while ensuring development activities are as efficient and as automated as possible.

AI-infused application development tools and skills development are front and center for experts:

- **71%** are planning to proactively invest in AI for automated application code development and quality testing.
- **70%** are investing in cloud-native and AI application developer skills training and retention.
- **66%** are working to implement consistent GitOps developer tools and code repositories to make code reuse easier and more automated.

Organizations working to improve application development maturity can learn from expert organizations and increase their investments in AI-infused application development automation and code assistance tools to enable developers to work more efficiently and reduce errors and rework. They may need to increase their funding and level of corporate commitment to updating developer skills and make it a priority to accelerate efforts and bring new knowledge into the organization by working with experienced technology partners.

Experts Invest in Data Management Quality, Cleanliness, and Compliance

With the growth of AI, data management modernization is becoming a primary focus of IT modernization decision-makers. Effective AI models must have access to valid and clean data that is contextually available via RAG and other types of AI reasoning analytics. Data needs to be consistent, access needs to be secure and automated, and requirements for data privacy, security, and compliance require addressing at every step in the process.

In comparison to less mature organizations, IT modernization experts place a much greater priority on improving data quality, cataloging data assets, centralizing storage, and assigning clear and consistent data stewardship responsibilities. Some 81% of experts prioritize improving data quality, as they recognize that having high-quality, consistent data available across the organization is mission-critical to enabling data-driven decision-making and helping their organization to fully exploit data-intensive AI-enabled opportunities.

Similarly, 80% prioritize creating and maintaining a complete inventory of all data assets, and 78% prioritize data centralization. In many cases, these organizations are looking to cloud storage to support broad data access, although the security and compliance needs of specific data types and use cases will often force a final decision if there is a choice between cloud and on-premises options (see **Figure 6,** next page).

81% of experts prioritize **improving data quality.** High-quality, consistent data is mission-critical to enabling data-driven decision-making and helping their organization to fully exploit data-intensive, AI-enabled opportunities.

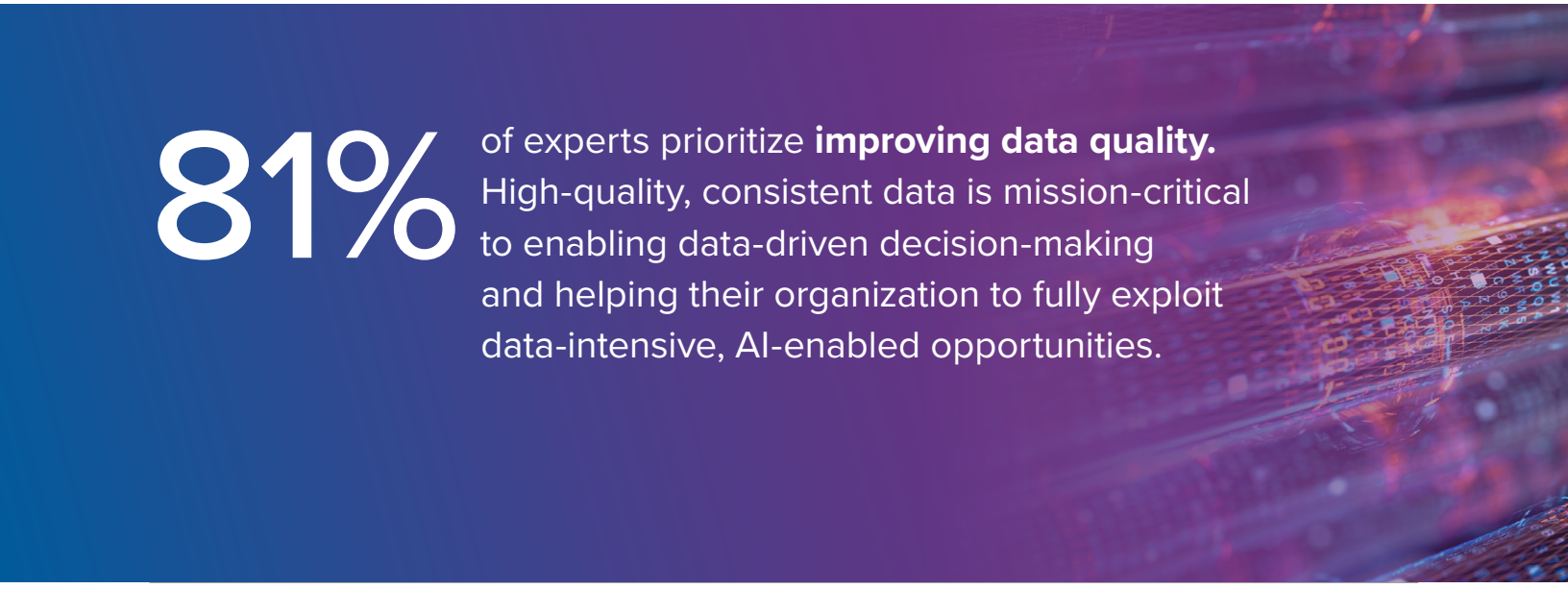


FIGURE 6

Top Expert Data Management Modernization Priorities

What will be your most important data management modernization goals over the next two years?

n = 83 (IT modernization decision-makers representing the top 10% most mature organizations); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

By comparison, data management is an area that many of the least mature IT modernization explorers are just beginning to consider. It is also an area where the gaps may potentially deepen over the next two years, as organizations with mature data management will be better positioned to gain value from AI investments. Organizations that struggle to maintain data quality and access will find it difficult to apply AI technologies to complex business processes and agentic AI decision-making activities that require visibility across many diverse data types and sources.

To ensure the success of their AI strategies, the most mature expert organizations are taking specific steps to strengthen their data modernization and compliance capabilities. Specifically:

- **71%** are taking specific steps and making investments to minimize errors and bias in AI outputs.
- **70%** are setting very high priorities and KPIs for data quality and cleanliness.
- **66%** are placing increased emphasis on defining and consistently implementing policies and audits related to data access, change control, and compliance.
- **60%** are increasingly emphasizing data inventory, labeling, and cataloging.

86%

of experts **prioritize improving data governance and compliance** to ensure consistent and universal data protection across the organization.

In addition to making specific investments in data management tools and processes, the experts also recognize the need to work more closely across business and IT, with 66% taking steps to increase IT and business collaboration in data management.

Less mature organizations working to improve data management maturity need to bring together data, IT, and business teams and align on policies and processes to improve and integrate the full spectrum of data quality, cleaning, transformation, and migration across the internal enterprise IT and data ecosystem. They need to prioritize investments that will help improve data access and ensure that AI models and inferencing engines are using data as efficiently as possible.

Experts Prioritize Cybersecurity, Resilience, and Compliance

Data management and cybersecurity concerns are closely related. IT modernization experts recognize that ensuring data protection, preventing unauthorized access, and maintaining operational resilience, compliance, and auditability are all crucial elements of a mature IT environment. AI is creating additional cybersecurity challenges due to concerns about exposing confidential or private data and the need to maintain visibility into data lineage and provenance to support audit-related regulatory reporting requirements. Experts also recognized that they need to start planning for quantum-resistant cryptography and fully protect in-flight, in-use, and at-rest data using software- and hardware-based strategies, including confidential computing.

The most mature expert organizations clearly understand the critical relationship between data management and cybersecurity. Some 86% of experts prioritize improving data governance and compliance to ensure consistent and universal data protection across the organization. Their goals illustrate a solid understanding of automation's importance in ensuring consistent, secure data management and compliance, with 77% identifying it as a top element of their overall cybersecurity strategy. They also prioritize implementing advanced encryption (76%) and zero trust and related access control security, such as multifactor authentication (71%). Additionally, 69% are planning for more automation for audit trails and better tracking of data lineage and IP ownership (see **Figure 7,** next page).

FIGURE 7

Top Expert Cybersecurity Modernization Priorities

What will be your most important cybersecurity modernization goals over the next two years?

n = 83 (IT modernization decision-makers representing the top 10% most mature organizations); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

The most mature expert organizations recognize that implementing an effective cybersecurity strategy requires every member of the organization to align and consistently implement policies and to remain constantly aware of potential threats from phishing and social engineering intrusions.

Expert organizations typically call out the need for investments in policy automation and change management when setting cybersecurity priorities. These include:

- **57%** will implement a consistent and well-enforced set of data security, privacy, and compliance policies.
- **54%** will define and support robust change management processes related to the implementation of zero trust strategies to ensure full compliance across the workforce and systems.
- **48%** will conduct ongoing monitoring and planning to address new and unexpected changes to data privacy, sovereignty, and compliance requirements, including ongoing communication and coordination with the organization's CISO and regulatory teams — particularly important for organizations in highly regulated industries such as financial services, government, or healthcare.

Organizations working to improve their overall cybersecurity profile can benefit from emulating the policies and technology strategies that expert organizations are implementing. In particular, organizations can improve their cybersecurity strategies by increasing collaboration with business, IT, and security teams to define, implement, automate, and continually strengthen cyberdefenses by educating the workforce and implementing modern cybersecurity defenses.

Experts Invest in IT People and Process Modernization

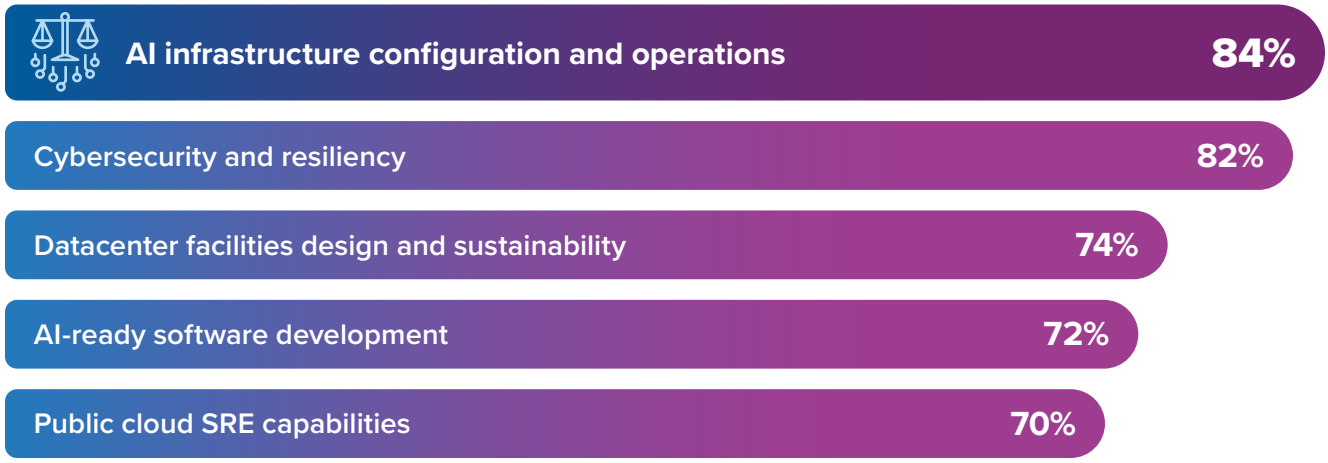
As most other IT modernization pillars have demonstrated, AI is exerting a significant impact on enterprise plans for investments in IT people, processes, and automation.

Mature expert organizations are prioritizing the modernization of staff and skills focused on AI infrastructure configuration and operations (84%), cybersecurity and resiliency (82%), and datacenter facilities design and sustainability (74%) (see **Figure 8**).

FIGURE 8

Top Expert Data Management Modernization Priorities

What will be your most important data management modernization goals over the next two years?



n = 83 (IT modernization decision-makers representing the top 10% most mature organizations); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

They understand that having appropriate in-house knowledge about AI infrastructure and development technologies and best practices will be critical to making the best possible decisions about how to evolve the organization's overall IT outlook and its ability to cost-effectively extract the full value out of its IT investments.

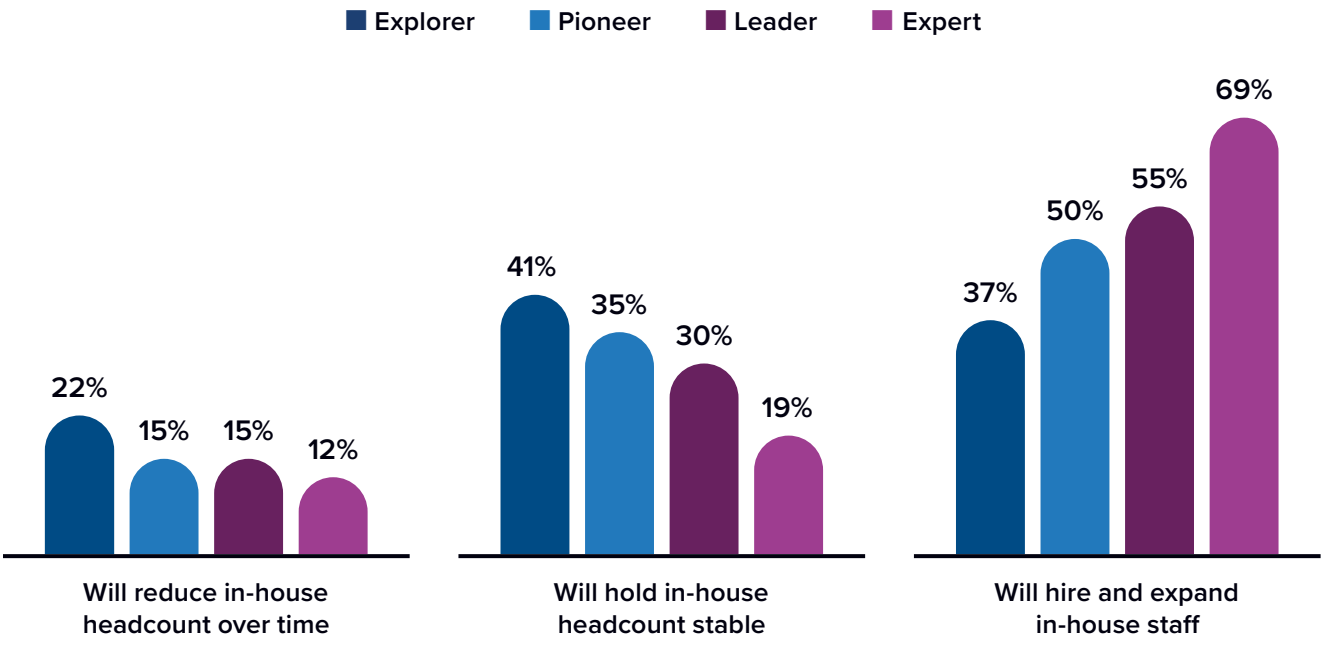
Looking to the future, most organizations are hopeful that automation and AI will help make staff more efficient; however, the experts are much more likely to continue investing in and growing internal IT staff. Specifically, 69% of the most mature expert organizations are planning to hire and expand internal staff over the next three years, versus 37% of the least mature explorer organizations (see **Figure 9**).

Among the organizations that plan to hire and expand internal staff, the need to support the increasing complexity of IT infrastructure is a top driver, followed by the need to support overall business growth.

FIGURE 9

Plans for Future Evolution of In-House IT Staff

Which of the following statements best describes your plans for the future evolution of your in-house IT staff over the next three years?



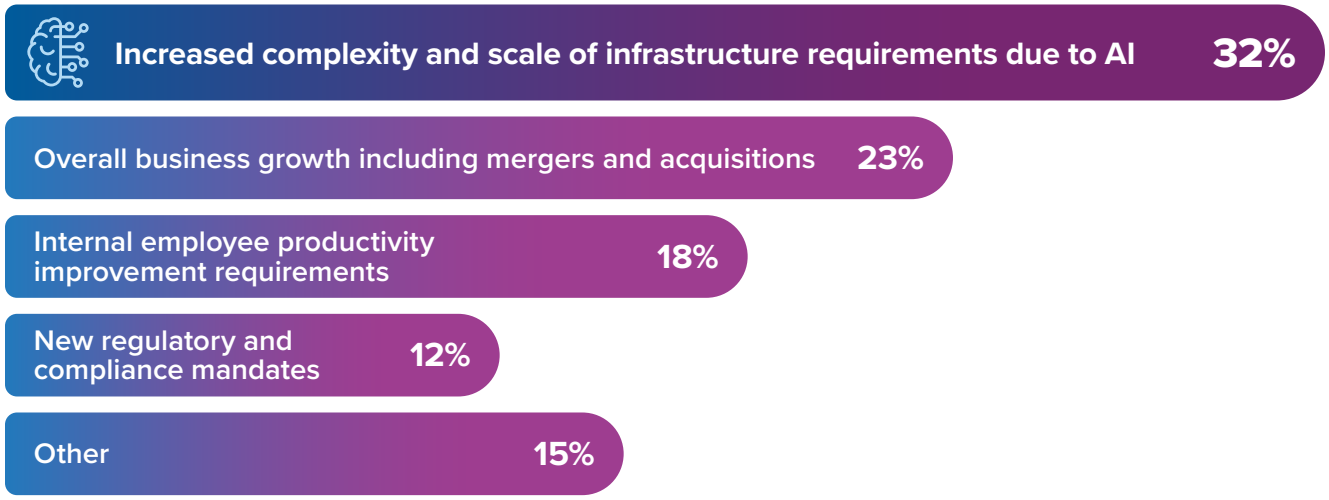
n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

For an accessible version of the data in this figure, see Figure 9 Supplemental Data in Appendix 2.

FIGURE 10

Top Drivers for Growing In-House IT Staff Among IT Modernization Experts

You indicated you will hire and expand your in-house IT staff headcount. Which of the factors below will be the most important driver of in-house staff growth?



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AI Readiness Must Reach Across All IT Modernization Initiatives

AI readiness emerges as a top-priority driver for modernization within each of the major pillars that IDC has identified. It is such an important overall consideration that IDC recommends that organizations include a specific pillar for AI readiness as part of their overall IT modernization planning effort. While each pillar will tackle AI requirements within a specific technology domain, the overall AI readiness pillar will focus the organization on assessing and planning for full-stack, end-to-end IT modernization requirements and interdependencies.

Generative AI and emerging multimodal agentic AI approaches are driving the demand for more agile, scalable, and high-performance infrastructure. They are transforming the nature of application development and requiring more comprehensive approaches to data management and cybersecurity. They also increase the complexity of IT operations, even as they promise to deliver more automation and intelligence across the IT operations landscape.

IDC's research consistently shows that application development is emerging as a top area where AI is already starting to dramatically transform IT activities. Expert organizations are generally much farther along in terms of considering how AI will transform IT requirements and operating models in the coming years. Specifically, in the next two years, 82% of experts expect AI to reduce application errors and improve code documentation. About three-quarters (74%) plan to invest in new developer skills focused on data pipelines and automation, and 65% plan to prioritize using AI to increase the use of low-code, no-code, and natural language programming interfaces (see **Figure 11**).

FIGURE 11

Expected Impact of AI on Application Development Among IT Modernization Experts

Considering the impact that AI could have on your application development approach over the next two years, which types of IT modernization investments will you prioritize?

n = 83 (IT modernization decision-makers representing the top 10% most mature organizations); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Most organizations recognize that they lack sufficient internal knowledge about how best to become AI-ready and implement AI best practices and tools. Some 99% of the most mature expert organizations report working with technology partners to support their IT modernization goals. Almost all experts (87%) list AI capabilities as a top criterion to consider when selecting partners.

For organizations in the early stages of creating an enterprise AI-readiness road map, skills technology partners can provide immediate access to technical know-how and best practices and help accelerate AI time to value.

Future Outlook: Comprehensive IT Modernization Will Drive Faster AI Time to Value

IDC's research shows that organizations with the most mature, comprehensive IT modernization strategies, reaching across the full spectrum of IT domains, are best positioned to quickly drive the highest levels of business process improvement, particularly as their organizations roll out AI workloads to create new revenue opportunities, engage more deeply with customers, and effect significant transformation and productivity improvements across almost every available digital business process.

Expert IT modernization decision-makers also devote higher budget percentages to modernization efforts, recognizing that overcoming tech debt and implementing more modern, automated, and comprehensive platforms, development, and operating models help accelerate time to value and business outcome goal achievement. Specifically, in 2025, expert organizations are prioritizing investments in IT automation, cybersecurity, AI readiness, data analytics, and data management (see **Figure 12,** next page).

FIGURE 12

Top Expert Data Management Modernization Priorities

What will be your most important data management modernization goals over the next two years?

n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

As businesses continue to digitize and rely on data-driven decision-making and AI in the coming years, those that have invested in comprehensive IT modernization efforts to enable an agile, scalable, secure, and workload-optimized IT foundation will be best positioned to capture new markets, improve productivity, and experience the highest possible levels of business outcome improvements.

Essential Guidance

This IT modernization maturity study offers a structured approach to evaluating the critical strengths and weaknesses that all organizations should consider when determining how to best modernize IT environments to most effectively position their enterprise to fully implement digital business priorities and gain a competitive advantage from AI in the coming years.

An effective IT modernization strategy depends on a clear understanding of top-priority business goals and dependencies they have on current and planned IT infrastructure, applications development, security, data management, and staffing plans. The most effective organizations create and maintain a road map for modernization that drives coordinated initiatives across multiple domains in a way that sequences and prioritizes each project to contribute to the overall goal with the least disruption. Successful organizations fund IT modernization as part of their ongoing IT budget process.

IDC recommends organizations conduct regular enterprisewide IT modernization assessments to coordinate individual project plans and budgets and to assess the comprehensive needs of the full organization. Developing a road map is critical, but so is keeping all the individual supporting projects on track.

By developing comprehensive and coordinated road maps and investment plans to create a fully modern IT environment, organizations will be best prepared to take full advantage of emerging, data-intensive workloads, automation, and AI technologies. The six pillars of IT modernization this paper discusses provide a structured framework and identify key areas of potential investment that can collectively propel the organization forward.

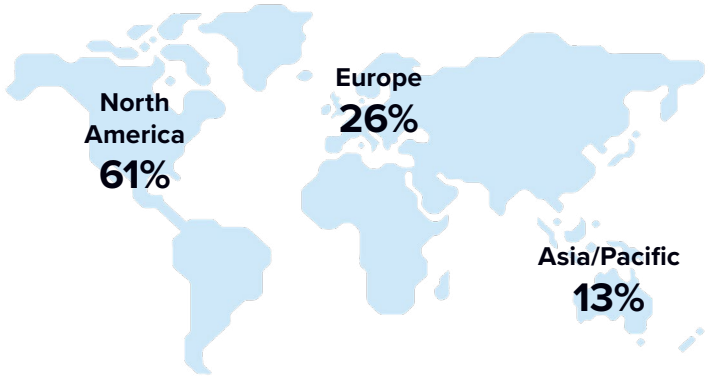
The C-suite and senior IT leaders should champion evaluations and use them to identify strategies, project priorities, KPIs, and change management initiatives. Leaders can then cascade these priorities down through individual technology teams by aligning team-specific goals and KPIs with broader priorities.

For areas with knowledge and skill gaps, leaders should consider partnering with technology partners that can share industry and technology expertise and best practices across the organization to help streamline decision-making and support the organization as it evaluates options, automates operations, and implements a more modern and agile IT environment.

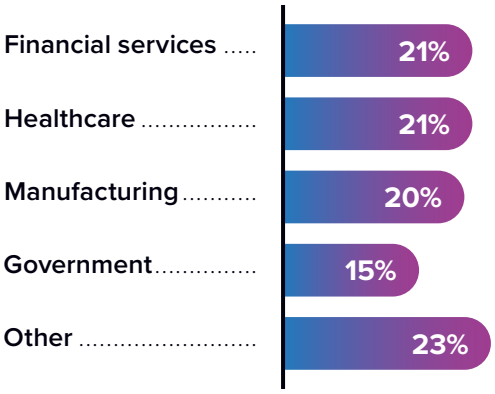
Appendix 1: Methodology

IDC collected the data for this survey and IT modernization maturity assessment via a worldwide web survey in March 2025. All participants were responsible for making decisions about their organization's IT modernization efforts. Participants represented a range of industries, geographies, and company sizes, as the figures below show.

REGION



INDUSTRY



COMPANY SIZE

n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Appendix 2: Supplemental Data

This appendix provides accessible versions of the data for the complex figures in this document. Click "Return to original figure" below each table to get back to the original data figure.

FIGURE 2 SUPPLEMENTAL DATA

Impact of IT Modernization Maturity on Annualized Rates of Business Outcome Improvement

What annual percentage change, in the past 12 months, did your organization experience in each of the following as a result of investments in IT modernization?

	Explorer	Pioneer	Leader	Expert
Improved employee productivity	14%	16%	23%	28%
Improved customer satisfaction	12%	16%	23%	27%
Faster innovation	14%	15%	22%	25%
Increased operational efficiency	14%	14%	20%	23%
Revenue growth	9%	13%	15%	18%

n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

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Appendix 2: Supplemental Data (continued)

FIGURE 3 SUPPLEMENTAL DATA

Impact of IT Modernization Maturity on Annualized Rates of KPI Improvement

What annual percentage change, in the past 12 months, did your organization experience in each of the following IT modernization metrics?

	Explorer	Pioneer	Leader	Expert
Data quality and compliance metrics	12%	15%	19%	25%
Customer satisfaction/NPS	11%	16%	18%	23%
Cybersecurity metrics	12%	15%	20%	22%
Service level/performance improvements	13%	13%	19%	20%
IT sustainability improvement metrics	12%	15%	17%	20%

n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Return to the original figure

FIGURE 9 SUPPLEMENTAL DATA

Plans for Future Evolution of In-House IT Staff

Which of the following statements best describes your plans for the future evolution of your in-house IT staff over the next three years?

	Explorer	Pioneer	Leader	Expert
Will reduce in-house headcount over time	12%	15%	19%	25%
Will hold in-house headcount stable	11%	16%	18%	23%
Will hire and expand in-house staff	12%	15%	20%	22%

n = 882 (IT modernization decision-makers); Source: IDC's *IT Modernization Survey,* sponsored by Rocket Software, March 2025

Return to the original figure

About the IDC Analysts

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Mary Johnston Turner is research vice president within IDC's Worldwide Infrastructure Research organization and global research lead for the Digital Infrastructure Strategies practice. Turner's coverage tracks enterprise tech buyer sentiment related to compute, storage, edge, operations, cloud platforms, and deployment models. Current research priorities emphasize the impact of rising requirements for data-driven AI-ready infrastructure, fit-for-purpose hybrid and multicloud architectures, autonomous operations, edge integration, and collaborative business and IT governance. Her practice emphasizes the voice of the enterprise customer, based on surveys and in-depth analysis of best practices and infrastructure investment priorities.

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Chris Drake is senior research director within IDC's Worldwide Infrastructure Research organization and is part of the Compute Infrastructure and Service Provider Trends practice. As part of the compute infrastructure research, Drake covers key trends in the computing systems, platforms, and technologies markets. This includes high-end, accelerated, in-memory, and heterogeneous computing infrastructure systems, platforms, and technologies

More about Chris Drake

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