Lenovo

eBook | February 2025

Global

CIO Playbook 2025
It’s Time for AI-nomics

Research insights by

IDC

Introduction

It's been one year since the last CIO Playbook, and Lenovo has once again engaged IDC to conduct a study to understand how organizations globally have fared with their AI journeys. This eBook draws insights from custom research commissioned by Lenovo, surveying 2,920 IT and business decision-makers (ITBDMs) from mid-to-large organizations globally.

AI-nomics From an Enterprise Perspective

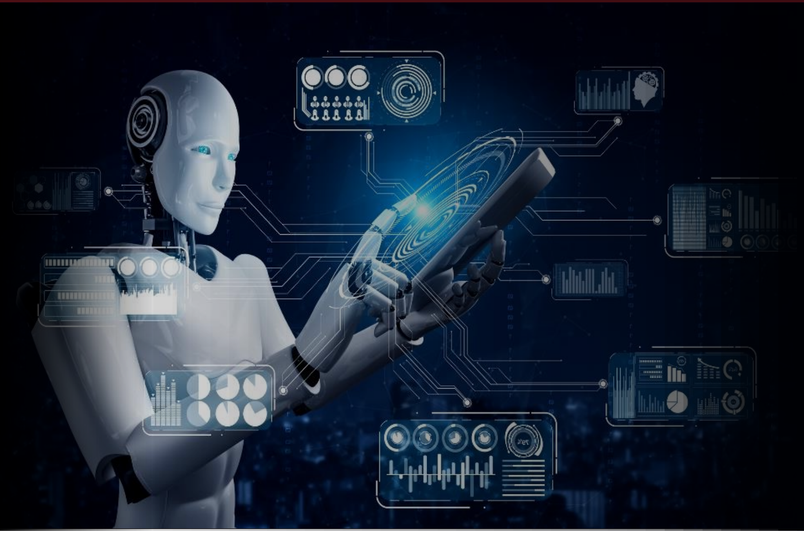
The research highlights the shifting priorities of enterprises, which are now focusing on business outcomes rather than just the AI technology itself. Enterprises increasingly recognize and prioritize the transformative impacts of AI. The research found that there will be a notable shift in AI spending towards Generative AI (GenAI) in 2025 and a greater focus on back-office/operational AI use cases, particularly in IT, where organizations have seen the most success so far. Expectations are high, and businesses aren't just looking for financial returns, but also for the operational and productivity benefits that come with successful AI implementation.

Investment Priorities for the Next Wave of AI Implementation

This eBook delves into key foundational areas for AI success , such as data, governance/compliance, digital infrastructure, and AI-powered devices, which organizations have identified as investment priorities to fuel the next wave of AI implementation. These investments are crucial for building scalable AI solutions that can deliver measurable business outcomes.

Read on for a summary of key insights and takeaways for chief information officers (CIOs) to consider for 2025, followed by a deeper dive into the findings.

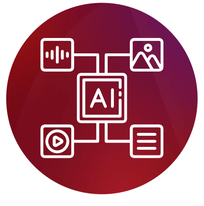
Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920



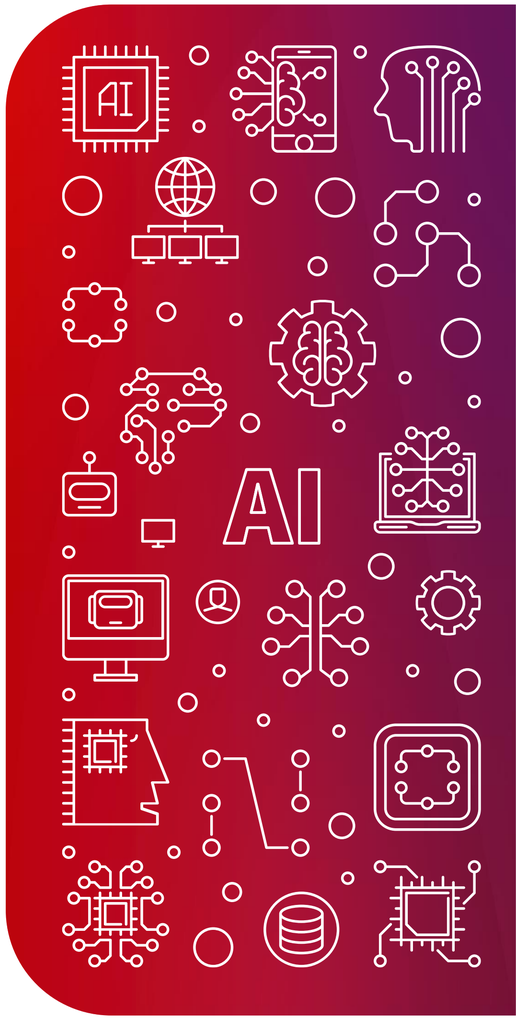
Key Findings: AI set to reach mainstream adoption this year, but not without some growing pains

Strategic AI Investments for Business Value: Organizations are prioritizing AI investments to build robust foundations for business value, focusing on data, partners, infrastructure, security, and AI application development.

Data Quality and Hybrid Infrastructure are Critical: Strong AI governance and data quality are essential. Organizations are addressing these by enhancing data management and analytics capabilities. On-premises and hybrid cloud infrastructures will lead AI workloads.



GenAI and Edge Devices Arrive: AI investments will surge, with 42% allocated to GenAI in 2025. AI-powered edge devices are seen as productivity boosters, with 90% of organizations planning or exploring AI-powered PC rollouts.



CIO Strategic Imperatives

Here are some key insights from IDC's research involving 2,920 IT and business decision makers (ITBDMs), along with considerations for CIOs for 2025:

	Insights	Considerations for CIOs for 2025
1	Business Priorities **FOCUS SHIFTS FROM TECH DEPLOYMENT TO BUSINESS OUTCOMES** Organizations are moving past AI experimentation to leveraging it for tangible business outcomes such as higher productivity, enhanced customer experience, and business growth.	Take a strategic view of AI and prioritize initiatives that drive business outcomes and deliver positive ROI. In addition to technical metrics, consider business KPIs, such as impact on business process efficiency, customer experience and financial performance, to evaluate ongoing performance and overall project success.
2	AI Adoption **HIGH OPTIMISM ABOUT AI, BUT ADOPTION MATURITY VARIES** 50% of organizations have adopted AI, but most are still in early stages, grappling with challenges like unclear ROI, insufficient data, and a lack of in-house expertise.	AI starts with data: focus on strengthening data management processes and reinforcing security and governance frameworks. Promote multidisciplinary collaboration for AI skills development and establish a robust process for ROI measurement.
3	AI Investment & Sentiment **AI SPENDING EXPECTED TO SURGE SIGNIFICANTLY ACROSS ALL REGIONS** In 2025, 41% of AI investments will flow to GenAI, a marked jump from 2024. GenAI initiatives will focus on building a portfolio of use cases across ITOps, software development, cybersecurity, and supply chain.	Build a robust and scalable data infrastructure to manage large and growing volumes of data. Implement AI governance measures to ensure effective data management and compliance
4	AI Governance & Compliance **GRC UNDERPINS RESPONSIBLE AND ETHICAL USE OF AI** In 2025, 41% of AI investments will flow to GenAI, a marked jump from 2024. GenAI initiatives will focus on building a portfolio of use cases across ITOps, software development, cybersecurity, and supply chain.	Develop and implement a robust GRC framework and policies to identify and mitigate risks, while ensuring regulatory compliance. Cultivate a culture of risk-awareness and individual accountability throughout the organization.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

CIO Strategic Imperatives (continued)

Here are some key insights from IDC's research involving 2,920 IT and business decision makers (ITBDMs), along with considerations for CIOs for 2025:

	Insights	Considerations for CIOs for 2025
5	AI Services **AI DEPLOYMENT HEAVILY DEPENDENT ON PROFESSIONAL SERVICES** Poor data quality is hindering AI success, prompting organizations to invest in enhancing their data management capabilities through trusted professional services partnerships.	Evaluate requirements for professional services in terms of data management, system integration, user training and support for AI systems' management. Clearly define project performance metrics such as costs, timelines and ROI, and regularly review progress.
6	AI Data **STRONG EMPHASIS ON DATA INITIATIVES TO PROPEL AI SUCCESS** 33% of organizations are prioritizing the development of their data management capabilities, with data analytics topping the list for 2025 tech investments.	Strengthen the organization's data infrastructure and capabilities to support AI projects. Collaborate with HR to develop skills development programs for data management.
7	AI Infrastructure **AI DEPLOPYMENT PREFERENCES LEAN TOWARDS ON-PREMISE AND HYBRID APPROACHES** 63% of organizations have highlighted that their AI workloads will primarily be on-prem or hybrid cloud.	Evaluate deployment options based on key factors such as data security and regulatory requirements, cost implications, integration complexity with legacy systems, skills requirement etc. to determine the best approach for AI deployment
8	AI Devices **AI-POWERED PCS SET FOR SIGNIFICANT GLOBAL UPTAKE** 42% of organizations believe that AI-powered devices boost employee productivity and experience. As a result, 90% are piloting, planning, or exploring AI-powered PC rollouts in the mid-to-long term.	Assess the need for AI-powered devices across business functions and align adoption plans with device refresh cycles. Invest in user training to enable workforce to effectively use these devices.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

Global Insights

Business Priorities

Moving Beyond Technology to Business Outcomes

Business Priorities - Global

	2024	2025	YoY Change
Improving **employee productivity**	7	1	+6
Improving **regulatory compliance**	13	2	+11
Improving **customer experience** & **satisfaction**	2	3	-1
Increasing **revenues** & **profit** growth	3	4	-1
Improving **sustainability**	5	5	-
Applying emerging **AI technologies** (e.g., GenAI)	1	9	-8

Considerations for CIOs

Take a strategic view of AI and prioritize initiatives that drive business outcomes and deliver positive ROI. In addition to technical metrics, consider business KPIs, such as impact on business process efficiency, customer experience and financial performance, to evaluate ongoing performance and overall project success.

- AI has emerged and organizations are now shifting from experimentation to becoming an AI-fueled business. The focus is now on aligning digital and AI initiatives with strategic and tangible business outcomes, such as increased productivity, enhanced customer experience and business growth.
- AI can improve customer experience by providing personalized interactions, automating customer service tasks, offering instant responses, and predicting customer needs.
- Regulatory compliance is a key organizational priority, driven by the need to mitigate risks and build customer trust.
- When thoughtfully deployed, AI can positively impact environmental sustainability by optimizing resource usage, improving energy efficiency, and enhancing operations (e.g., predictive maintenance to reduce waste).

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Adoption

High Optimism About AI, but Adoption Maturity Varies

Considering or **evaluating** AI, but with no plans — **13%**

Planning to start using AI in the next 12 months — **36%**

Non-Adopters: Beginning the Journey

While about half of the organizations are lagging in AI adoption, primarily due to a lack of skills or expertise to operate and manage AI systems and persisting data security and privacy concerns, many are planning to adopt AI in the near future, indicating strong enthusiasm and motivation to harness AI's potential to transform operations, improve efficiency and drive competitive advantage.

Early stages of development/implementation — **21%**

Supporting different **pilot** projects/use cases — **25%**

AI is **systematically adopted** across the enterprise — **5%**

Adopters: On the Path of Implementation

Half of the organizations have adopted AI, but most are still in the early stages of implementation or experimentation, testing the technologies on a small scale or in specific use-cases, as they work to overcome challenges of unclear ROI, insufficient AI-ready data and a lack of in-house AI expertise.

Supplementary Insights

33 AI POCs ▶ **4** AI Production Launches

The high number of AI POCs but low conversion to production indicates the low level of organizational readiness in terms of data, processes and IT infrastructure.

Source: IDC FERS Wave 4 Survey, 2024

Considerations for CIOs

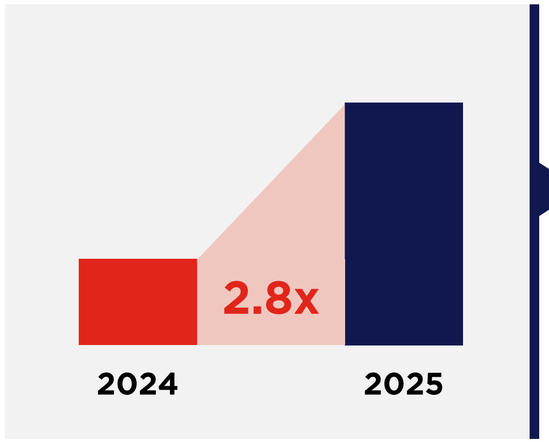
AI starts with data: focus on strengthening data management processes and reinforcing security and governance frameworks. Promote multidisciplinary collaboration for AI skills development and establish a robust process for ROI measurement.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Investment & Sentiment

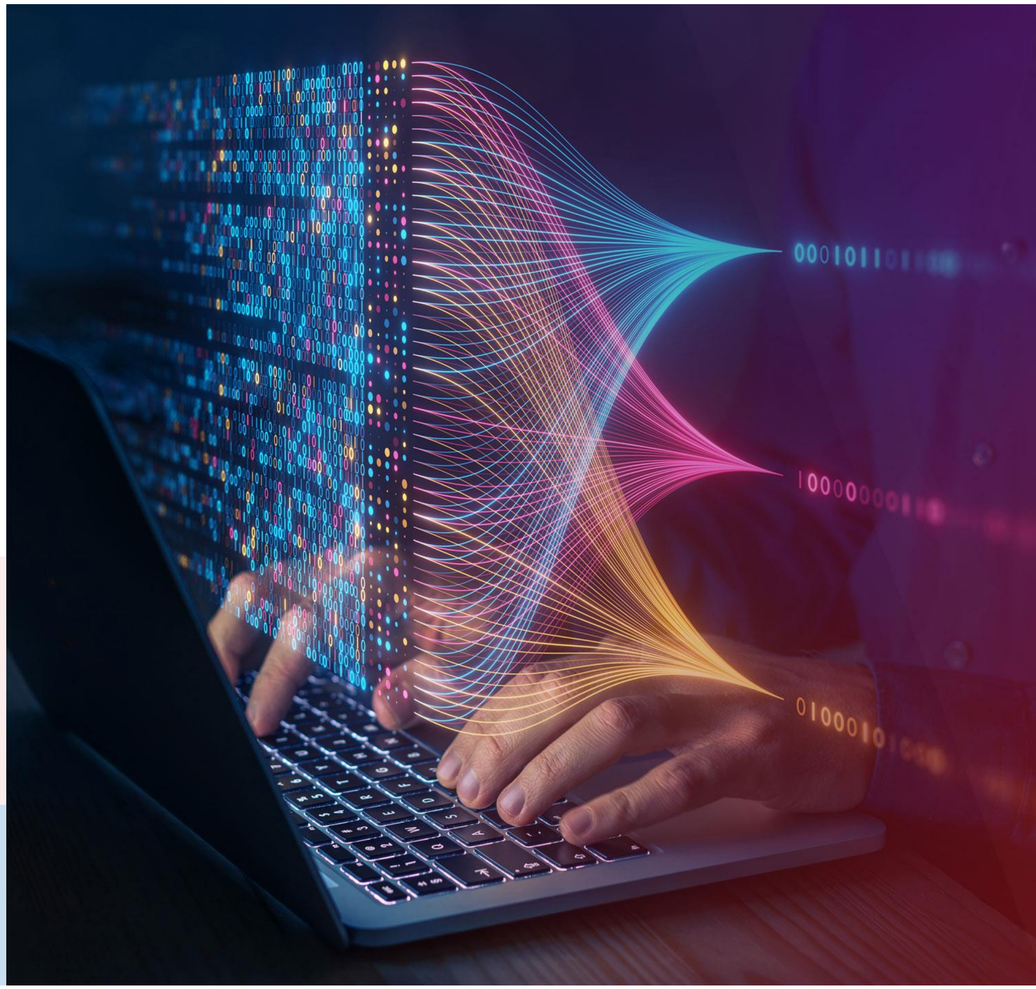
AI Spending Expected to Surge Significantly Across all Regions

Growth in AI as a % of IT Spend



Top AI Investments in the Next 12 Months

1. Data science & business **intelligence**
2. IT **consulting** & **services** for AI projects
3. **Data center** & **edge** AI infrastructure
4. **Security** & **privacy** for AI
5. AI **embedded applications**



- As companies gear up for broader AI deployment, prioritizing modern infrastructure for data and applications becomes essential.
- Spending on AI initiatives is projected to nearly triple over the next 12 months, with significant investments in data science/business intelligence and IT consulting & services.

Considerations for CIOs

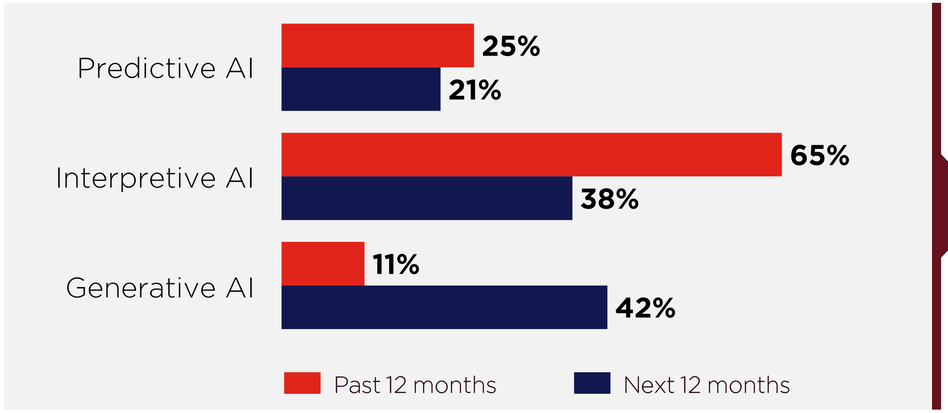
Build a robust and scalable data infrastructure to manage large and growing volumes of data. Implement AI governance measures to ensure effective data management and compliance.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Investment & Sentiment (continued)

Generative AI Gains Momentum

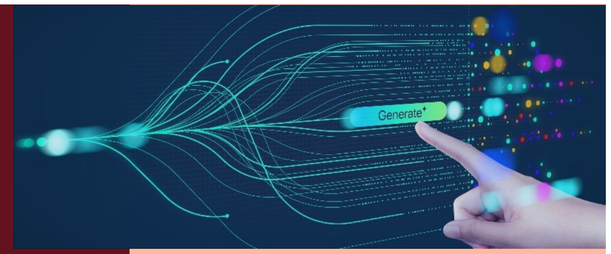
AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Business Functions Adopting AI Use Cases

1. IT Ops
2. Cybersecurity
3. Software Development
4. Marketing
5. Supply Chain



IDC Observation

Organizations globally are prioritizing IT use cases.

- Over the next 12 months, tech and business leaders will shift focus from interpretative AI to Generative AI use-cases to drive key business outcomes such as higher productivity and efficiency, better customer experience and the creation of new business opportunities.
- Interpretive AI will continue to be deployed in use-cases where business decisions rely on AI output or in industries like healthcare, finance and legal, where transparency and explainability are critical. Predictive AI will continue to be an important area for investment.
- Key functions that will adopt AI include IT operations and software development. While the former will use AI primarily for service automation and financial operations use-cases, software development will leverage AI for planning and development purposes to boost process efficiency.

Considerations for CIOs

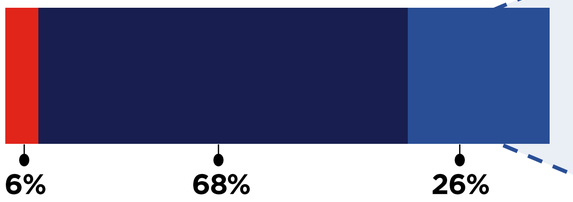
Create a comprehensive plan and roadmap to integrate various AI capabilities into different business processes, outlining the purpose, objectives and success metrics for each application. Seek partners with portfolio experience who understand the applicability of different AI technologies and capabilities across the IT stack.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Investment & Sentiment (continued)

Despite Exceeding Expectations, Some Remain Skeptical About AI Adoption

Has AI Met Expectations of AI Adopters?



- Fell short of expectations
- Met expectations
- Exceeded expectations

Early Successes (Exceeding Expectations)

The following are the top use case categories implemented by respondents who reported that **AI has exceeded their expectations** so far.

IT Ops
Top Use Cases

- **FinOps** use cases
- **End-user experience** use cases

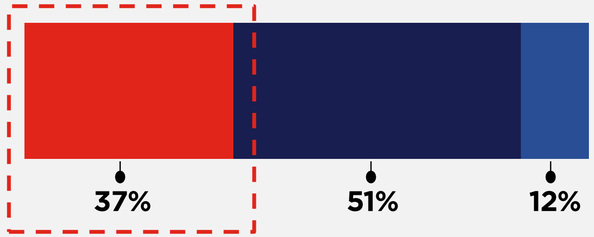
Software Development
Top Use Cases

- **Planning** use cases
- **Development** use cases

Marketing
Top Use Cases

- **Advertising** & **creative** services use cases
- **Campaign** marketing use cases

Management Sentiment Toward AI (AI Adopters)



- Neutral/some reservations/skeptical
- Generally positive
- Highly enthusiastic

- One quarter of AI adopters highlighted that AI projects implemented by their organizations surpassed expectations, primarily in areas of IT operations, software development and marketing.
- While nearly all AI projects met or exceeded expectations, slightly more than one-third of management remains skeptical about AI adoption. This indicates a significant number of adopters are still apprehensive about fully committing to AI deployment due to ongoing challenges.

Considerations for CIOs

Prioritize quick-win AI projects to demonstrate business value and develop a comprehensive measurement framework to assess the progress and success of AI initiatives on an ongoing basis.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Investment & Sentiment (continued)

Delivering on AI-nomics: Address Roadblocks by Bridging the Skills Gap and Solving the Data Conundrum

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1	**Data quality** issues
2	IT **infrastructure**/**network** costs
3	Problems **integrating AI** with existing systems & processes
4	Challenges **scaling AI across the enterprise**
5	Challenges deploying AI solutions at **endpoints**

Top **Factors** for **Successful AI** Implementation Moving Forward

1	Ensuring data **sovereignty** & **compliance**
2	Availability of **quality data**
3	Employee **training** & **upskilling**
4	Ease of **integrating AI** with existing systems & processes
5	Availability of internal **AI expertise**

- Identifying and resolving issues pertaining to high-quality data availability and integration complexities with legacy systems are crucial for the successful implementation and operations of AI projects. If not managed effectively, these challenges can lead to project failure, so overcoming them is necessary to achieve a high success rate with AI initiatives.
- Development of internal AI skills and expertise is crucial for AI success and will help overcome challenges in scaling the technology across the organization.

Considerations for CIOs

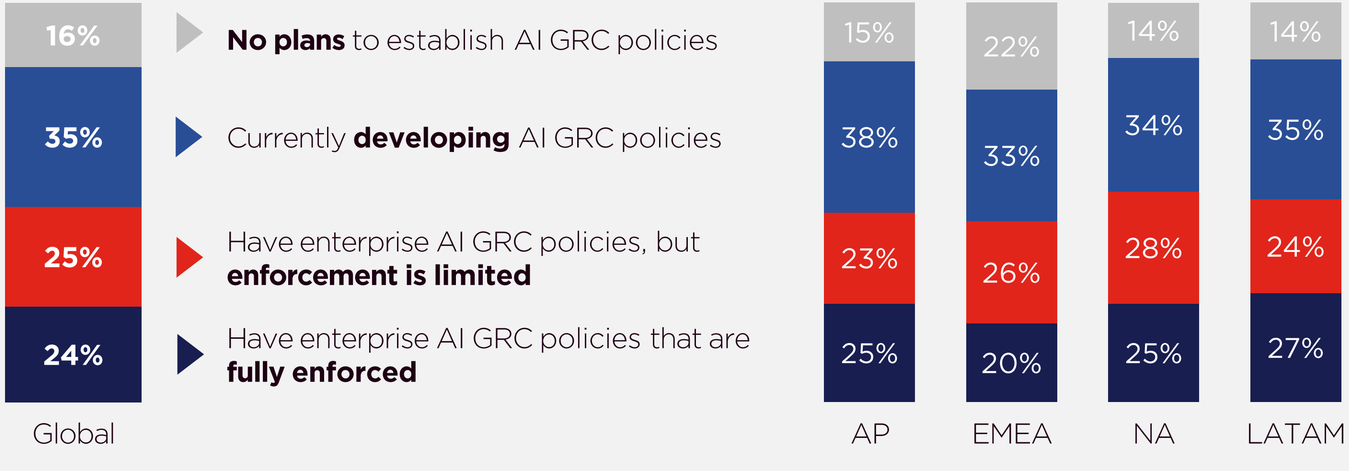
Ensure collaboration between IT and line of business executives to prioritize AI-enabled business models and develop a strategy to treat data as a product. Additionally, foster a mindset shift and capability uplift, clarifying AI-ready data management responsibilities and providing training on best practices.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Governance & Compliance

GRC Underpins Responsible and Ethical Use of AI

Organizations' Approach to **Governance, Risk, and Compliance (GRC)**



Most Important Aspects of AI-related GRC

1. Greater AI **accountability** & **reliability**
2. **Ethical AI** frameworks
3. Improved **model governance** & **policy control**

- GRC is a foundational element of AI strategy, with half of the organizations establishing and enforcing related policies with a focus on enhancing AI system's accountability and reliability, establishing comprehensive Ethical AI frameworks and improving model governance and policy control. This underscores the strong emphasis on risk management and regulatory compliance to ensure responsible and ethical AI practices.

- More than a fifth of EMEA organizations have no plans to develop AI GRC policies, the highest among all regions. This is likely due to the complex regulatory landscape in the region, which makes the development of GRC policies in compliance with local, regional and international mandates challenging.

Considerations for CIOs

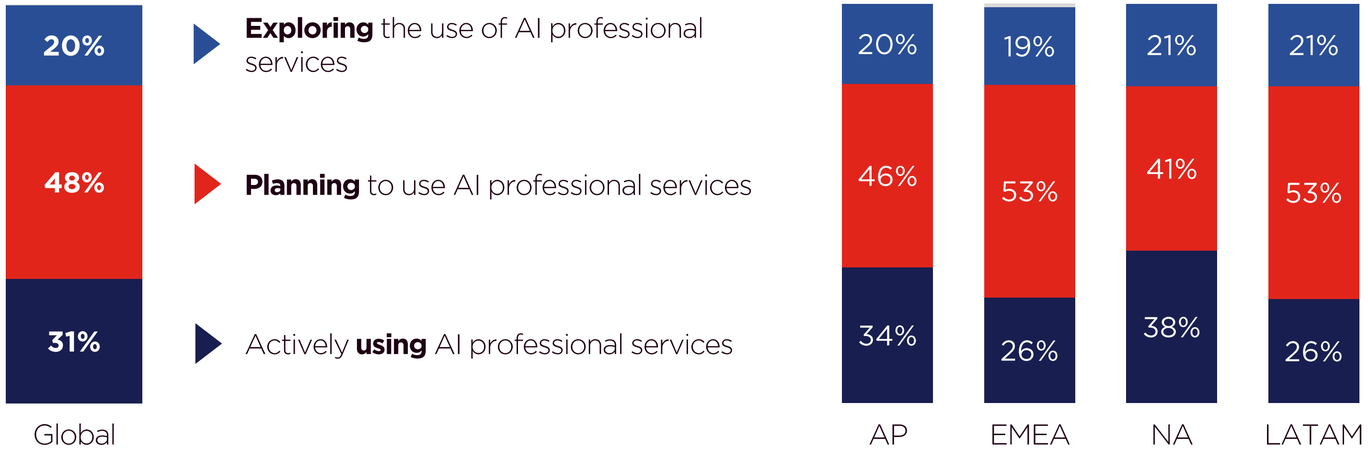
Develop and implement a robust GRC framework and policies to identify and mitigate risks, while ensuring regulatory compliance. Cultivate a culture of risk-awareness and individual accountability throughout the organization.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Services

AI Deployment Heavily Dependent on Professional Services

Current Usage of **AI Professional Services**



- Most organizations are leveraging professional services partnerships for AI deployment, driven by data management challenges, particularly the availability of high-quality data. Professional service providers can help organizations organize their data to be AI-ready and optimize processes.
- Professional services are also used to bridge gaps in in-house AI expertise, a key challenge for AI adoption, and to strengthen the organization's data security and risk management posture.

What Do Organizations **Seek in a Partner**?

1. AI **knowledge** & **expertise** (including scaling AI solutions)
2. Support for **data management**
3. Support for data **security** & privacy
4. Support for AI **modeling** & **development**

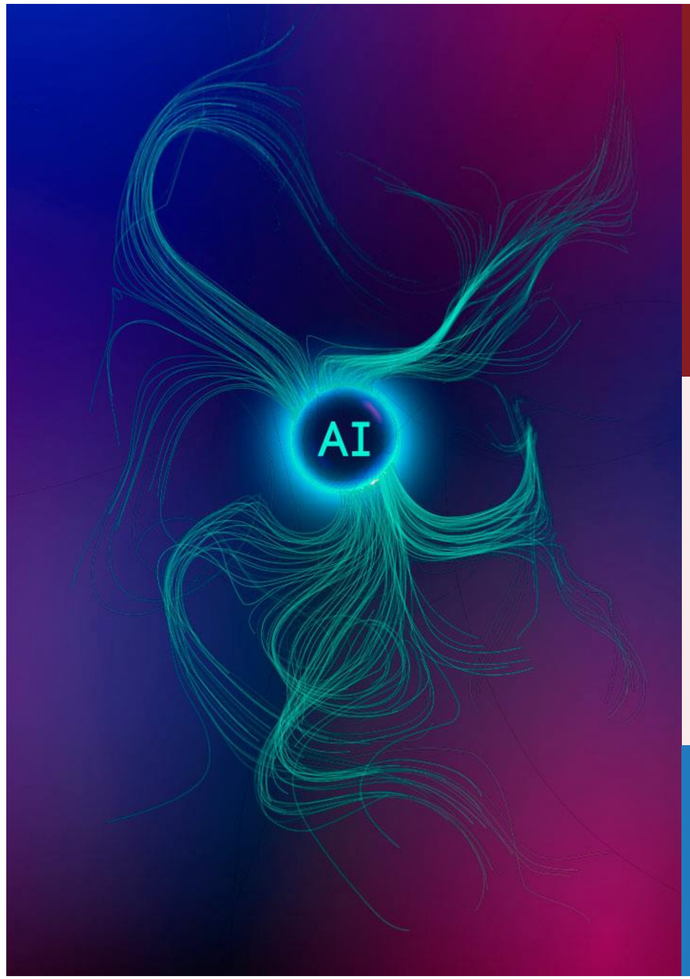
Considerations for CIOs

Evaluate requirements for professional services in terms of data management, system integration, user training and support for AI systems' management. Clearly define project performance metrics such as costs, timelines and ROI, and regularly review progress.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

AI Data

Organizations to Double Down on Data to Power AI Success



Survey Insights

Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

33% of organizations globally highlighted that they will be **developing data management** capabilities in the next 12 months.

Data Science and **Business Intelligence** will be the **#1 investment area** for organizations in 2025.

- Data is the cornerstone of an organization's AI strategy. Ensuring high quality data is crucial, as poor-quality data is the leading cause of AI project failures. Recognizing this, organizations are committing to enhancing their data quality to ensure success of their AI initiatives.
- One in three organizations prioritize the development of their data management capabilities, with data science and business intelligence being the top priorities for tech investment in 2025. This focus highlights the importance of building capabilities to enable data-driven decision-making, enhance risk management and drive innovation.

Considerations for CIOs

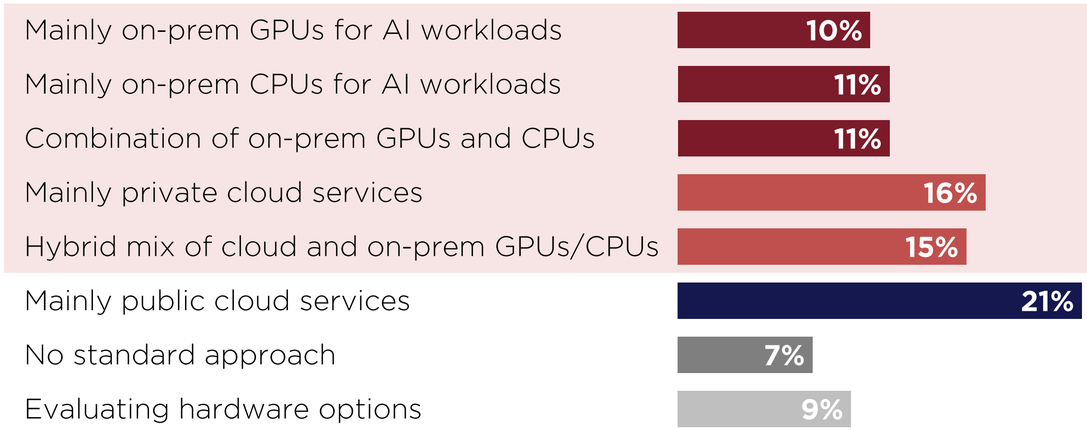
Strengthen the organization's data infrastructure and capabilities to support AI projects. Collaborate with HR to develop skills development programs for data management.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

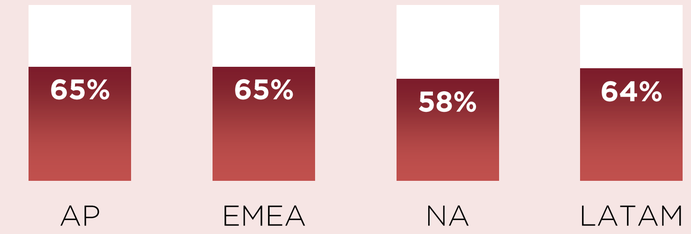
AI Infrastructure

AI Deployment Preference Leans Toward On-Premise and Hybrid Approaches

Primary **Infrastructure Approach** to AI Workloads



63%
primarily use on-premises and/or hybrid cloud-on-premises solutions.



- Organizations are primarily leveraging on-premise infrastructure to deploy AI workloads or adopting a hybrid approach. While the on-premise option provides greater security and control over the infrastructure, the hybrid approach combines these advantages with the flexibility, scalability and performance benefits of cloud solutions.

- Only a fifth of organizations are using public cloud services for AI deployments, highlighting the significant challenges of data security and privacy, as well as limited customization opportunities associated with public cloud solutions.

Considerations for CIOs

Evaluate deployment options based on key factors such as data security and regulatory requirements, cost implications, integration complexity with legacy systems, skills requirement etc. to determine the best approach for AI deployment

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

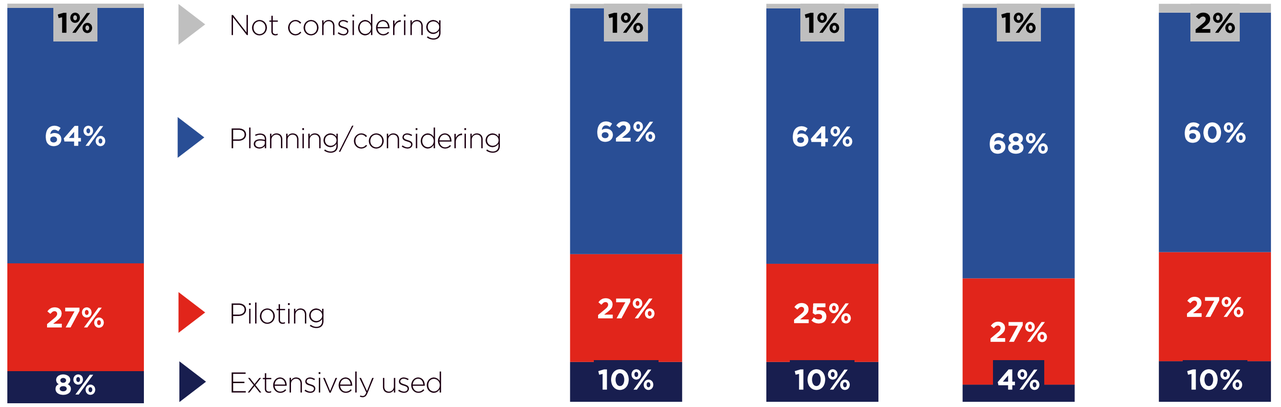
AI Devices

AI-Powered PCs Set for Significant Global Uptake

Survey Insights

42% of organizations highlighted that they believe that **AI-powered devices** boost employee **productivity** and **experience**.

AI-Powered PCs Adoption



- While nearly all organizations are in some phase of AI-powered PC adoption, two-thirds are considering investing in these devices and are expected to make the switch as their device refresh cycles approach.
- Key benefits of adopting AI-powered PCs include the ability to summarize large amounts of information and provide efficient search capabilities, saving users time and boosting productivity. Additionally, these devices help to enhance user experiences, offer greater customizability and come with advanced feature sets.
- IDC forecasts that 88% of all PCs shipped in 2027 will be AI enabled.

Source: IDC#US52635024, October 2024

Considerations for CIOs

Assess the need for AI-powered devices across business functions and align adoption plans with device refresh cycles. Invest in user training to enable workforce to effectively use these devices.

Source: IDC CIO Playbook 2025 Survey, commissioned by Lenovo, n=2,920

Insights by Industries

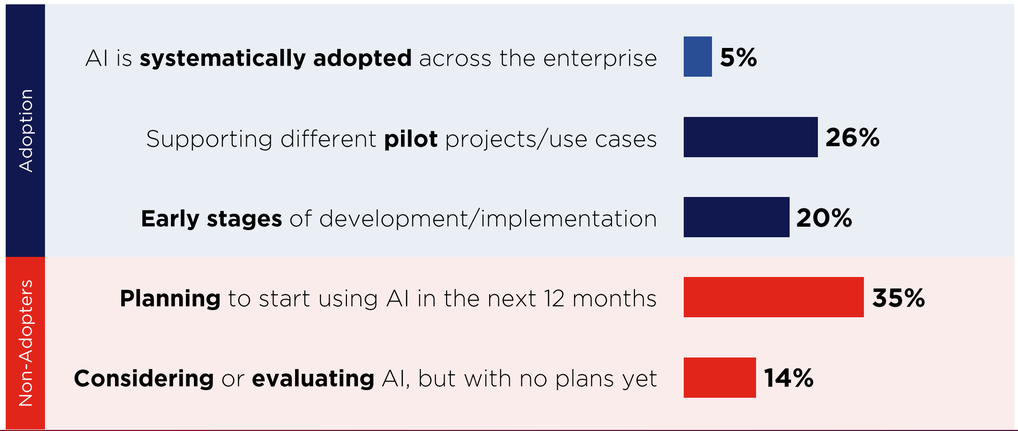
BFSI Overview

The banking, financial services and insurance (BFSI) industry depends on advanced technology for secure transactions, fraud detection, and personalized digital banking experiences. The sector also relies on robust data analytics and AI for risk assessment, claims processing, and tailored services. In 2025, the BFSI sector is poised to leverage AI to enhance customer experience and drive digital innovation. With 35% planning to start using AI and 26% supporting pilot projects, the focus is on interpretive (43%) and generative AI (37%) implementations. The keys to success will be addressing data quality and a heavy regulatory and compliance burden, while engaging with partners with strong AI capabilities.

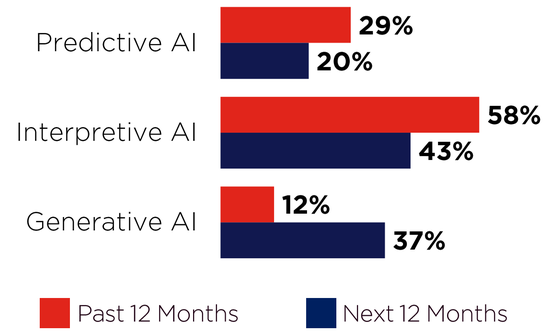
Business Priorities for 2025

1. Improving customer experience & satisfaction
2. Driving digital business innovation
3. Improving employee productivity
4. Applying emerging AI technologies (e.g., generative AI)
5. Enhancing decision making

Current **AI Adoption**

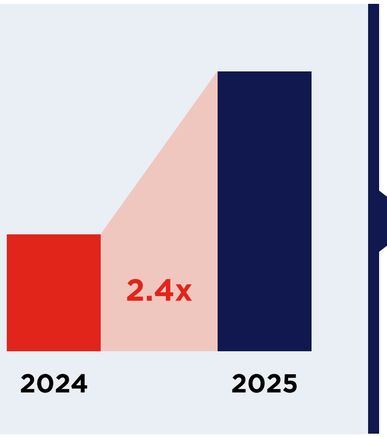


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. IT Ops
2. Software Development
3. Cybersecurity
4. Customer service
5. R&D

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Data quality issues
2. GRC requirements/security issues
3. Challenges scaling AI across the enterprise (including lack of departmental support)
4. Application latency/performance issues
5. Challenges deploying AI solutions at endpoints

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Access to partners with strong AI capabilities
2. Ensuring data sovereignty & compliance
3. Availability of AI-powered PCs & edge devices
4. Ease of integrating AI with existing systems & processes
5. Availability of internal AI expertise

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, BFSI n=475 | BFSI = Banking, Financial Services, and Insurance

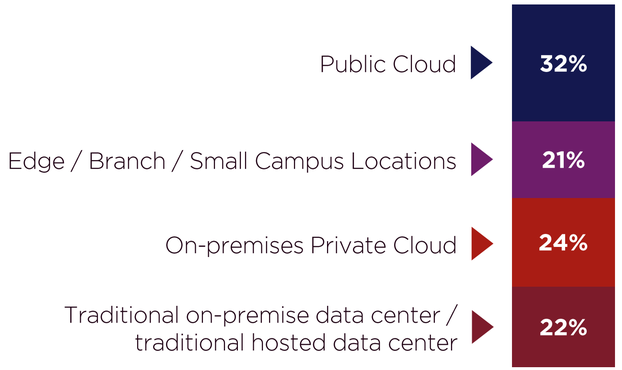
BFSI Overview (continued)

Data quality issues remain key for BFSI AI projects in 2025, necessitating robust data management support. BFSIs often have data silos and inconsistent data formats. Fragmented and variability of data types across different systems and departments hinders comprehensive analysis. From an infrastructure technology perspective, 62% of BFSIs are adopting on-premises, private, or hybrid infrastructure for AI workloads, organizations are increasingly seeking partners for AI expertise and data security. The adoption of AI-powered PCs is on the rise, with 40% planning integration to enhance operational efficiency and 28% piloting their use to evaluate productivity impacts.

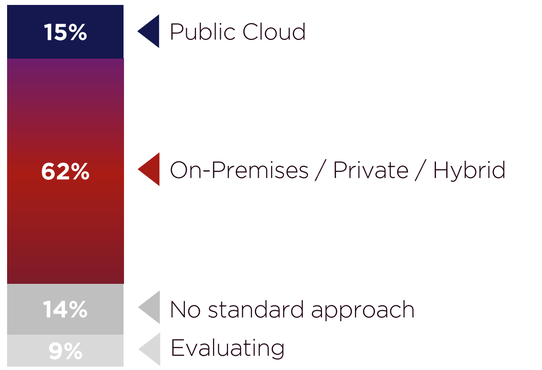
Survey Insights

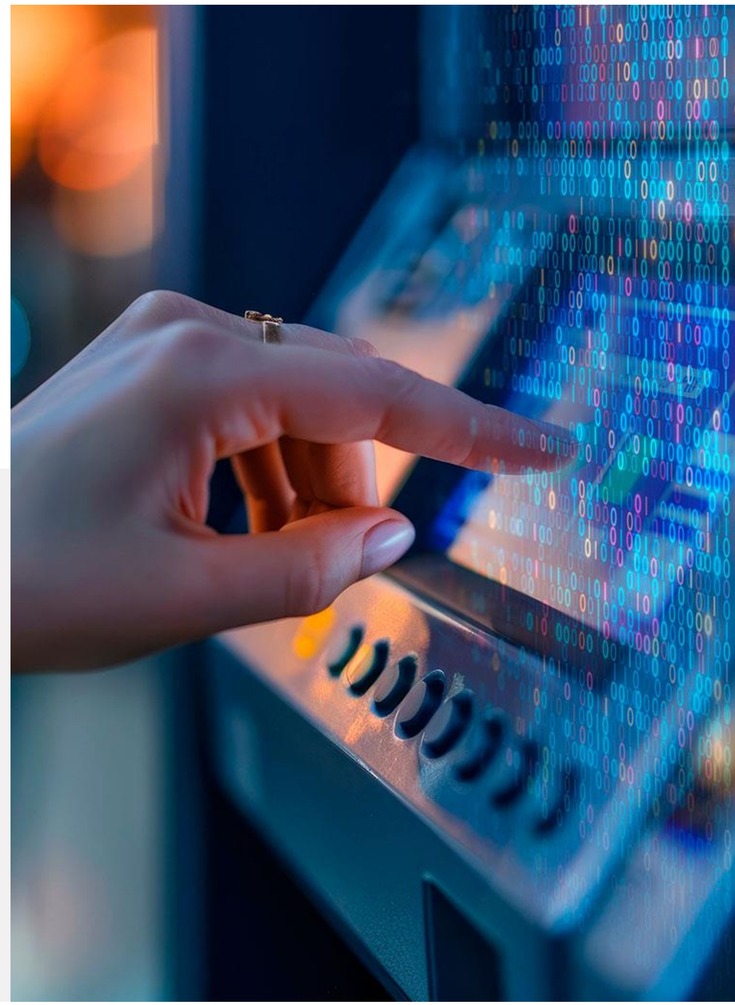
Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

Overall **Infrastructure** Deployment – Next 12 Months



Primary **Infrastructure** Approach to **AI Workloads**

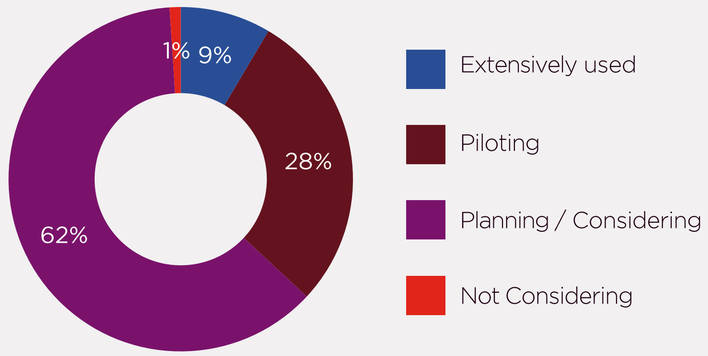




What Do Organizations **Seek in a Partner**?

1. Support for data management
2. AI knowledge & expertise (including scaling AI solutions)
3. Support for data security & privacy
4. Support for AI modeling & development

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, BFSI n=475 | BFSI = Banking, Financial Services, and Insurance

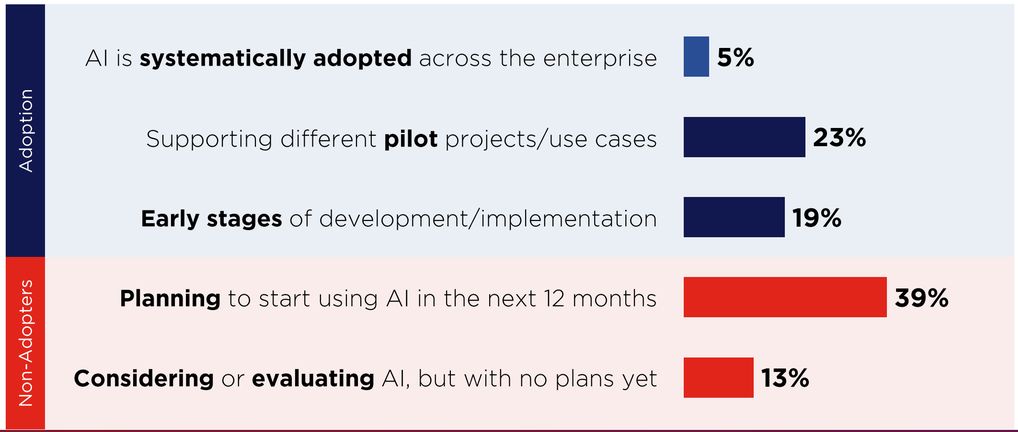
Retail Overview

Retailers are increasingly relying on advanced technology solutions for inventory management, personalized marketing through data analytics and AI, and seamless omnichannel platforms. Robust cybersecurity measures are also essential to protect customer data and maintain trust. As a result, retailers will be deploying AI in 2025 to enhance decision-making and regulatory compliance, with 39% planning to start using AI within the next 12 months. Interpretive (41%) and generative AI (39%) are key focus areas, driven by a 186% increase in AI spending. Success hinges on employee training, quality data, and seamless integration with existing systems, addressing inhibitors like scaling challenges and data quality issues.

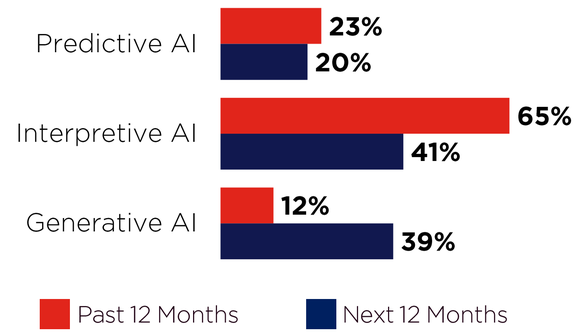
Business Priorities for 2025

1. Improving regulatory compliance
2. Enhancing decision making
3. Improving employee productivity
4. Improving sustainability
5. Optimizing supply chain/inventory

Current **AI Adoption**

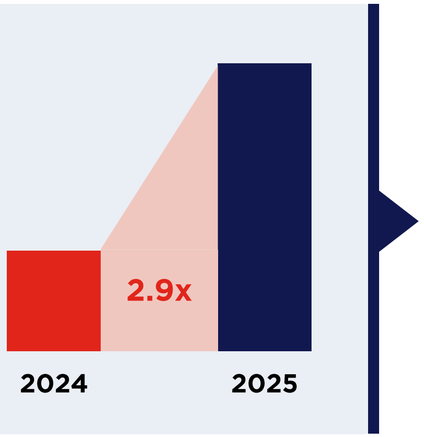


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. Marketing
2. IT Ops
3. Sales
4. Cybersecurity
5. Customer service

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Challenges scaling AI across the enterprise (including lack of departmental support)
2. Data quality issues
3. Problems integrating AI with existing systems & processes
4. IT infrastructure/network costs
5. Unavailability or cost of AI expertise

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Employee training & upskilling
2. Availability of quality data
3. Ease of integrating AI with existing systems & processes
4. Availability of internal AI expertise
5. Availability of AI-powered PCs & edge devices

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Retail n=349

Retail Overview (continued)

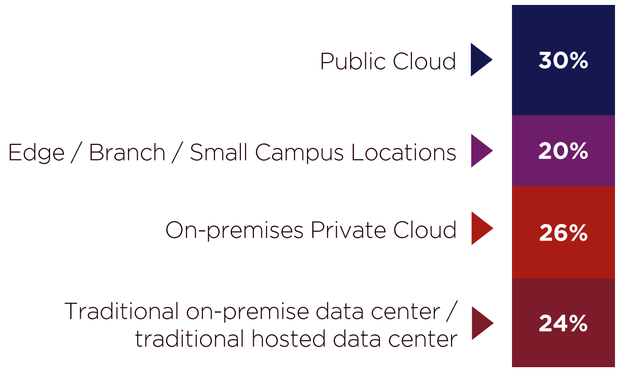
Like many other industries data quality issues remain significant for retailers. Missing or insufficient data can affect inventory management, customer insights, and overall business operations, leading to suboptimal performance. Variability in data formats and standards across different systems and channels can lead to inaccuracies and hinder effective decision-making.

This is emphasizing the need for robust data management support in AI projects in 2025. With 69% adopting on-premises, private, or hybrid infrastructure for AI workloads, retailers seek partners for AI expertise and measurable business outcomes. The adoption of AI-powered PCs is gaining momentum, with 51% planning integration to enhance operational efficiency and 20% piloting their use to assess productivity impacts.

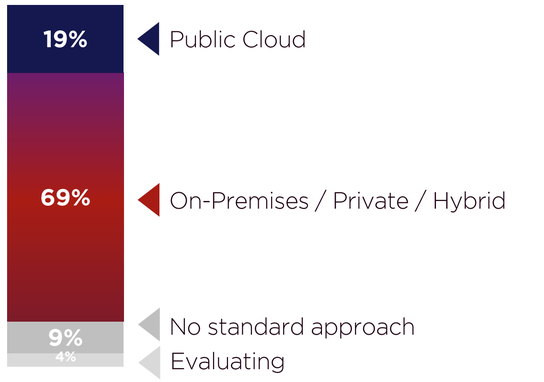
Survey Insights

Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

Overall **Infrastructure** Deployment – Next 12 Months



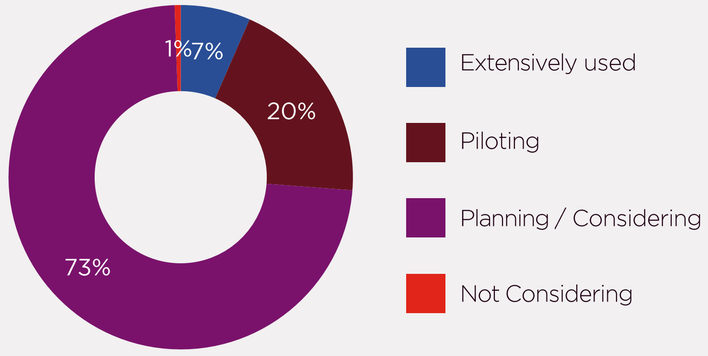
Primary **Infrastructure** Approach to **AI Workloads**



What Do Organizations **Seek in a Partner**?

1. Support for data management
2. AI knowledge & expertise (including scaling AI solutions)
3. Ability to help our organization deliver measurable business outcomes
4. Depth of partnerships with AI solution providers (ISVs, alliance partners)

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Retail n=349

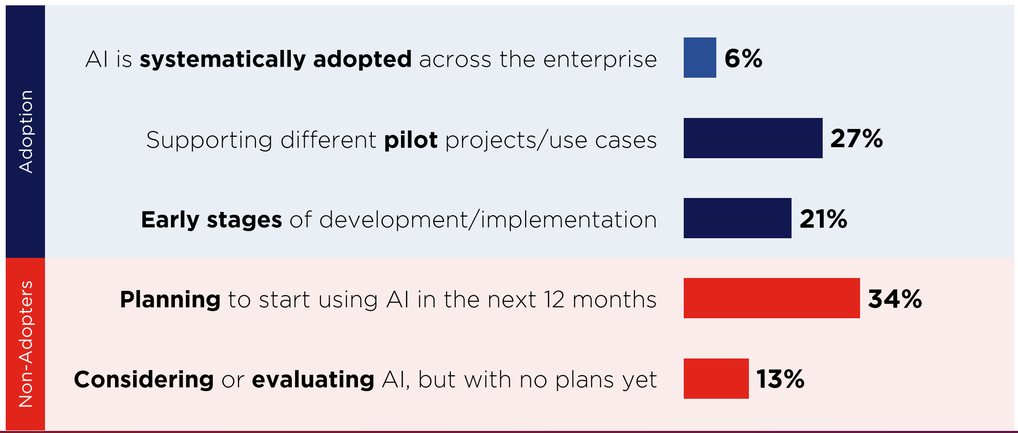
Manufacturing Overview

While the manufacturing sector is large and diverse, companies at its core have an ongoing focus on operational efficiency and product quality enhancement. To that end, the manufacturing sector is leveraging AI in 2025 to enhance customer experience, employee productivity, and decision-making, with 34% planning to start using AI within the next 12 months. Interpretive (39%) and generative AI (39%) are key focus areas, driven by a 159% increase in AI spending. Success hinges on adequate budget, management commitment, and strong AI partnerships, addressing inhibitors like scaling challenges, IT infrastructure costs, and data quality issues.

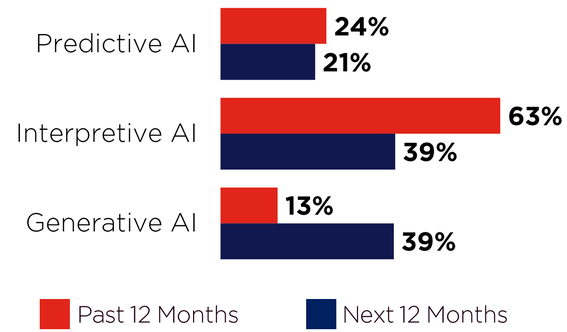
Business Priorities for 2025

1. Improving customer experience & satisfaction
2. Improving employee productivity
3. Enhancing decision making
4. Increasing revenues & profit growth
5. Reducing business risk & cyber threats

Current **AI Adoption**

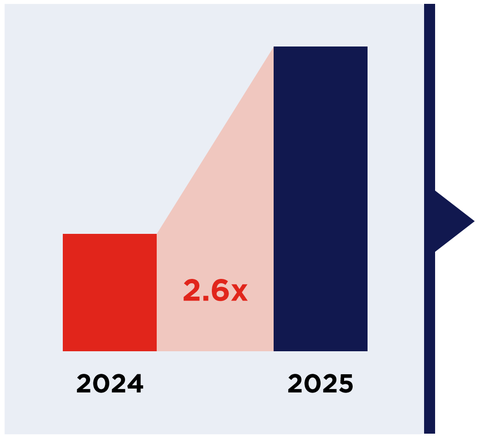


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. Software Development
2. IT Ops
3. Sales
4. Supply Chain
5. Marketing

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Challenges scaling AI across the enterprise (including lack of departmental support)
2. IT infrastructure/network costs
3. Data quality issues
4. Unavailability or cost of AI expertise
5. Application latency/performance issues

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Adequate budget & management commitment
2. Access to partners with strong AI capabilities
3. Ensuring data sovereignty & compliance
4. Access to adequate hybrid compute & storage resources
5. Ease of integrating AI with existing systems & processes

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Manufacturing n=302

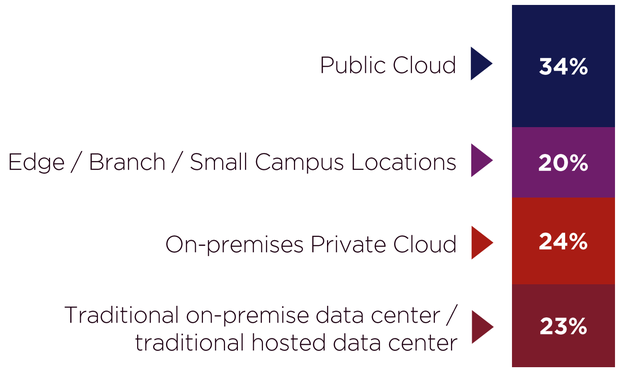
Manufacturing Overview (continued)

Data is at the heart of AI in manufacturing; production data, supply chain data, and quality control data are critical inputs for manufacturers. To enhance operations, approximately one-third of manufacturing organizations plan to develop data management capabilities, addressing a key inhibitor for AI projects. The primary infrastructure approach is to adopt on-premises, private, or hybrid infrastructure for AI workloads. Manufacturers seek partners for AI knowledge to help scale solutions. The adoption of AI-powered PCs is on the rise among manufacturers, with 30% piloting or extensively using them to help drive productivity.

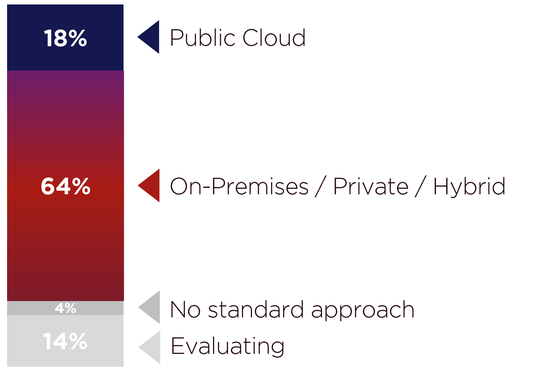
Survey Insights

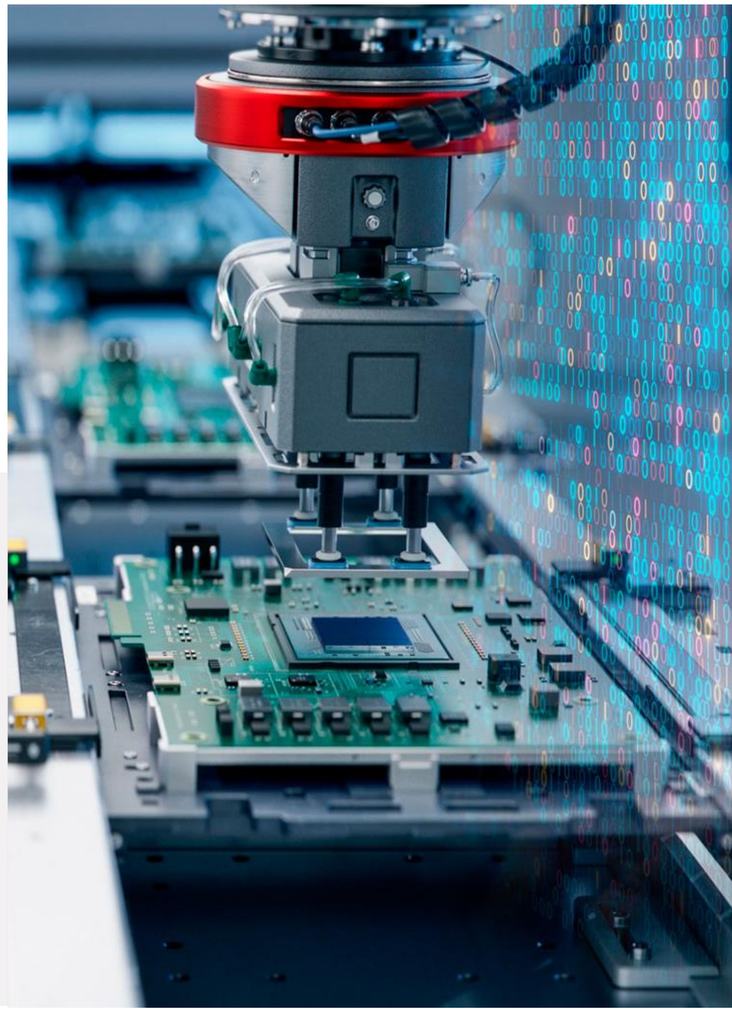
35% of organizations highlighted that they will be developing **data management capabilities** in the next 12 months.

Overall **Infrastructure** Deployment – Next 12 Months



Primary **Infrastructure** Approach to **AI Workloads**

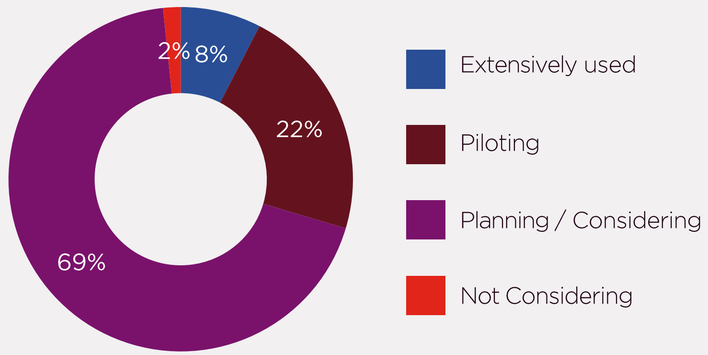




What Do Organizations **Seek in a Partner**?

1. AI knowledge & expertise (including scaling AI solutions)
2. Support for data management
3. Ability to help our organization deliver measurable business outcomes
4. Support for data security & privacy

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Manufacturing n=302

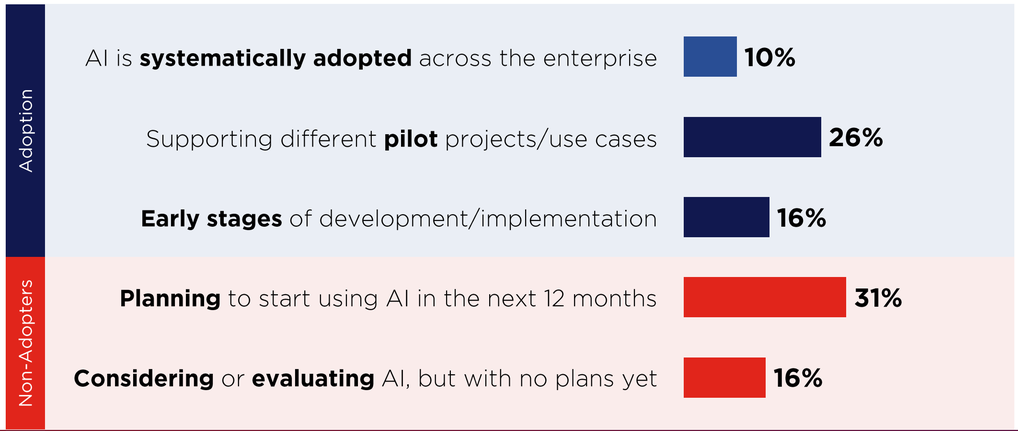
Telecommunication / Cloud Service Provider Overview

AI is ripe for adoption in the telecom and cloud service provider industry. Companies in this data-heavy, high-tech sector are prioritizing AI in 2025 to enhance customer experience and revenue growth, with 31% planning to start using AI within the next 12 months. Generative AI (42%) and interpretive AI (35%) are key focus areas, driven by a 190% increase in AI spending. Success hinges on seamless integration with existing systems, employee training, and internal AI expertise, addressing inhibitors like data quality issues and IT infrastructure costs.

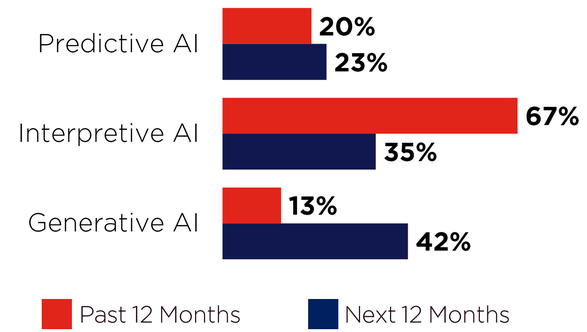
Business Priorities for 2025

1. Improving customer experience & satisfaction
2. Improving sustainability
3. Increasing revenues & profit growth
4. Optimizing supply chain/inventory
5. Increasing business agility & responsiveness

Current **AI Adoption**

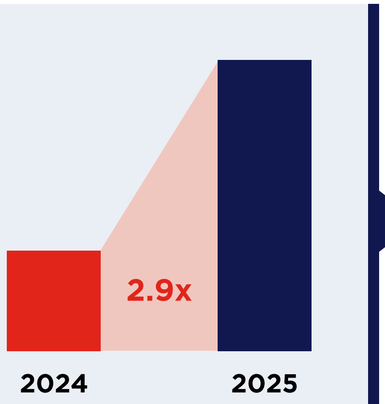


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. IT Ops
2. Engineering/R&D
3. Customer service
4. Software Development
5. Cybersecurity

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Data quality issues
2. IT infrastructure/network costs
3. Lack of budget or management buy-in
4. Challenges deploying AI solutions at endpoints
5. Problems integrating AI with existing systems & processes

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Ease of integrating AI with existing systems & processes
2. Employee training & upskilling
3. Availability of internal AI expertise
4. Ensuring data sovereignty & compliance
5. Availability of quality data

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Telco / CSP n=410

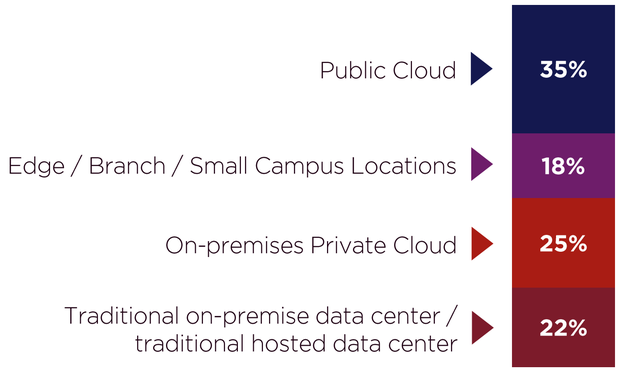
Telecommunication / Cloud Service Provider Overview (continued)

Data on network performance, traffic patterns, and infrastructure status for optimizing operations and planning, as well as insights on customer behavior, preferences, and service usage, are critical for service providers. However, data quality issues remain key for AI projects in telecommunications and cloud service providers, emphasizing the need for robust data management. With 63% adopting on-premises, private, or hybrid infrastructure for AI workloads, organizations seek partners for as-a-service offerings, data security, and strong AI solution partnerships. The adoption of AI-powered PCs is progressing, with 14% extensively using them today and 35% piloting their use to evaluate productivity impacts.

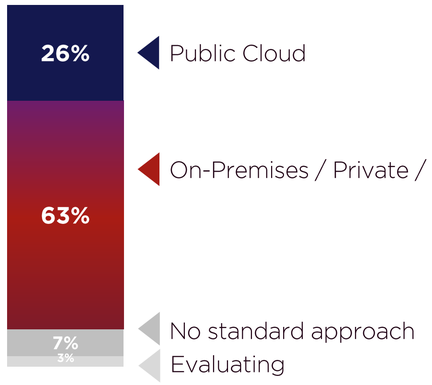
Survey Insights

Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

Overall **Infrastructure** Deployment – Next 12 Months



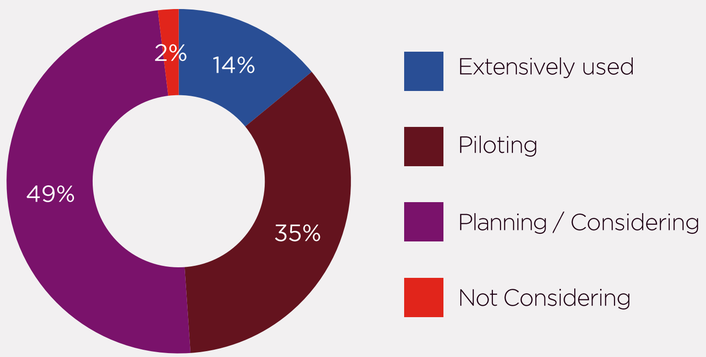
Primary **Infrastructure** Approach to **AI Workloads**



What Do Organizations **Seek in a Partner**?

1. Provision of as-a-service (i.e., SaaS / IaaS / PaaS) pricing & offerings
2. Support for data security & privacy
3. Depth of partnerships with AI solution providers (ISVs, alliance partners)
4. Support for GRC

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Telco / CSP n=410

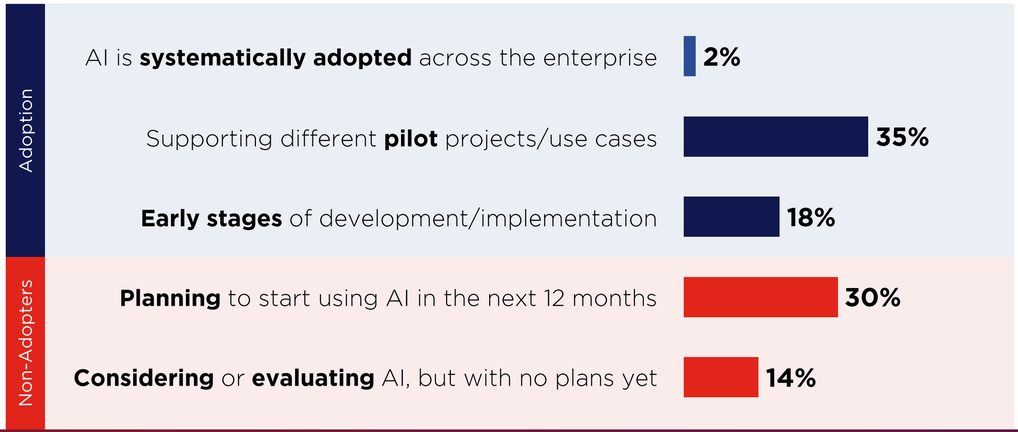
Healthcare Overview

While the healthcare sectors across the world have significant differences, a shared goal for healthcare organizations globally is improving patient outcomes. This involves enhancing the quality of care, ensuring patient safety, and providing personalized treatment through advanced technologies and data-driven insights. Healthcare organizations are prioritizing AI in 2025 to enhance patient outcomes, ensure regulatory compliance, and improve clinical productivity, with 30% planning to start using AI within the next 12 months. Generative AI (49%) and interpretive AI (30%) are key focus areas, driven by a 208% increase in AI spending. Success hinges on internal AI expertise, data sovereignty, and the availability of AI-powered devices, addressing inhibitors like data quality and integration with existing healthcare systems.

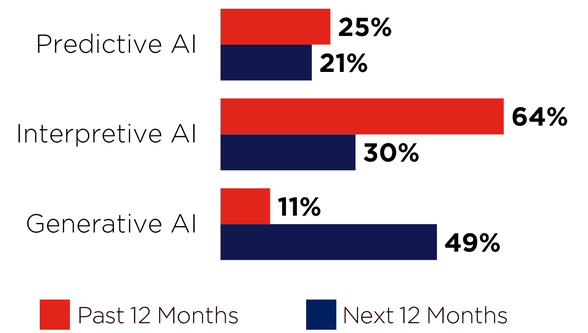
Business Priorities for 2025

1. Driving digital business innovation
2. Improving regulatory compliance
3. Improving employee productivity
4. Optimizing supply chain/inventory
5. Increasing business agility & responsiveness

Current **AI Adoption**

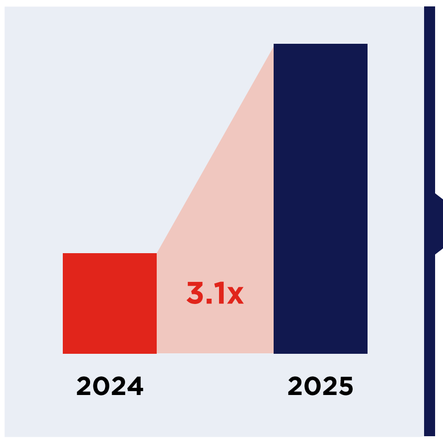


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. IT Ops
2. Software Development
3. Marketing
4. Cybersecurity
5. Engineering/R&D

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Data quality issues
2. Application latency/performance issues
3. Unavailability or cost of AI expertise
4. Unrealistic expectations from senior management
5. Problems integrating AI with existing systems & processes

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Availability of internal AI expertise
2. Ensuring data sovereignty & compliance
3. Availability of AI-powered PCs & edge devices
4. Ease of integrating AI with existing systems & processes
5. Access to partners with strong AI capabilities

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Healthcare n=222

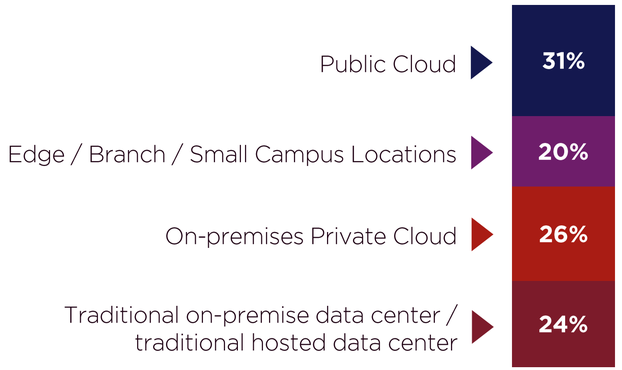
Healthcare Overview (continued)

Healthcare is becoming increasingly data-centric. Critical data types for AI in healthcare include patient data for personalized treatment, clinical data for diagnostics and treatment planning, and operational data for optimizing healthcare delivery and reducing costs. Healthcare organizations are facing significant challenges with data quality, the primary inhibitor for AI projects. To address this, 64% are adopting on-premises, private, or hybrid infrastructure for AI workloads and seeking partners for AI expertise, measurable outcomes, and infrastructure support. Additionally, the adoption of AI-powered PCs is on the rise, with 42% planning integration to enhance operational efficiency and 27% piloting their use to evaluate productivity impacts.

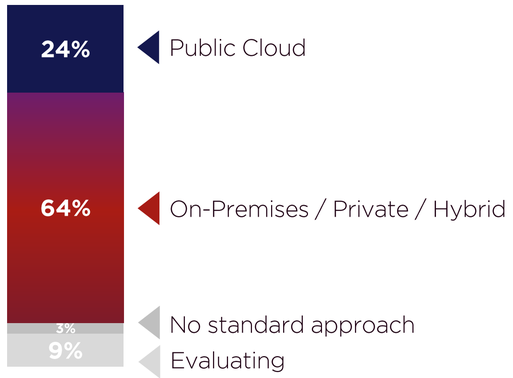
Survey Insights

Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

Overall **Infrastructure** Deployment – Next 12 Months



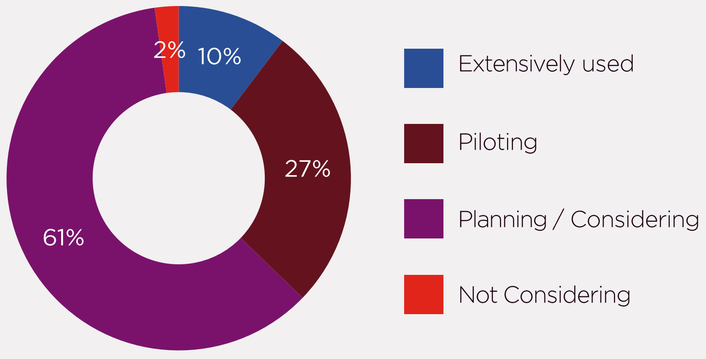
Primary **Infrastructure** Approach to **AI Workloads**



What Do Organizations **Seek in a Partner**?

1. AI knowledge & expertise (including scaling AI solutions)
2. Ability to help our organization deliver measurable business outcomes
3. Support for AI modeling & development
4. Infrastructure & hardware support for AI workloads

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Healthcare n=222

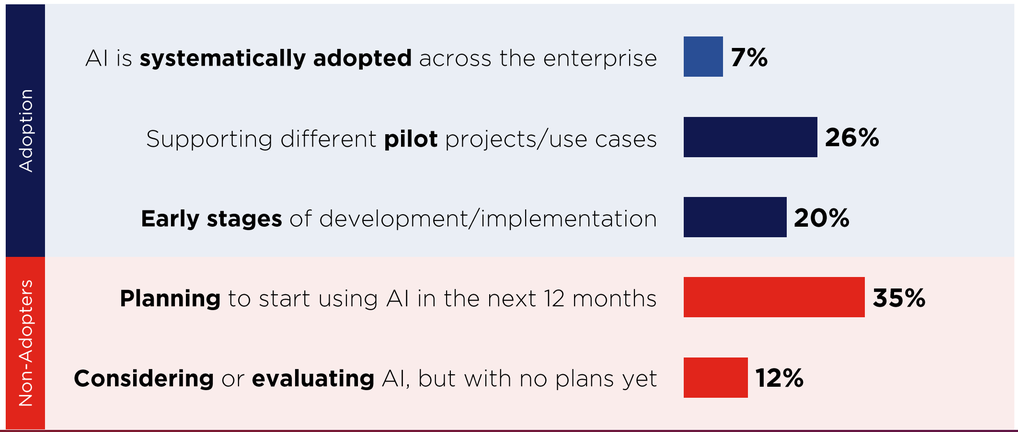
Government Overview

The vast and diverse government sector has multiple priorities, but chief among them is driving digital transformation to modernize processes and services. To help achieve this, governments are prioritizing AI in 2025 to improve employee productivity, as well as regulatory compliance and sustainability, with 35% planning to start using AI within the next 12 months. Generative AI (54%) and interpretive AI (28%) are key focus areas, driven by a 153% increase in AI spending. Success hinges on ensuring data sovereignty, availability of AI-powered devices, and quality data, addressing inhibitors like data quality issues and integration challenges.

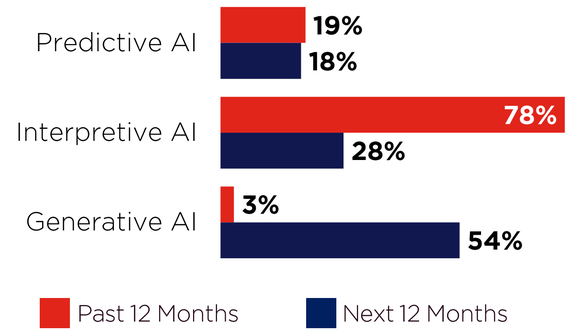
Business Priorities for 2025

1. Improving employee productivity
2. Improving regulatory compliance
3. Improving sustainability
4. Driving digital business innovation
5. Reducing business risk & cyber threats

Current **AI Adoption**

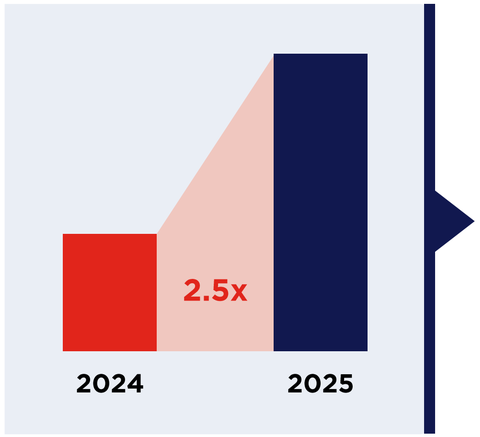


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. Marketing
2. IT Ops
3. Software Development
4. Finance
5. Cybersecurity

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Data quality issues
2. Challenges scaling AI across the enterprise (including lack of departmental support)
3. Problems integrating AI with existing systems & processes
4. GRC requirements/security issues
5. Lack of budget or management buy-in

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Ensuring data sovereignty & compliance
2. Availability of AI-powered PCs & edge devices
3. Availability of quality data
4. Availability of internal AI expertise
5. Ease of integrating AI with existing systems & processes

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Government n=187

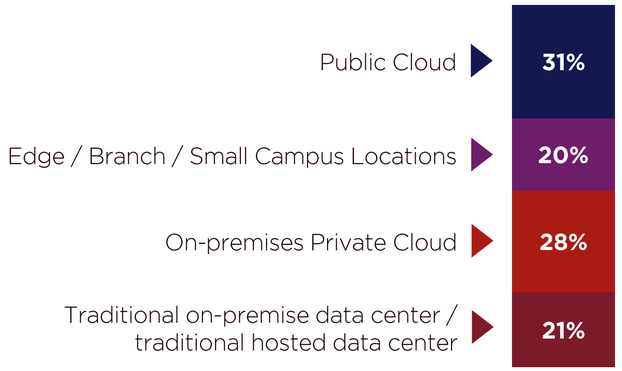
Government Overview (continued)

Critical data types for AI projects in government are citizen data for personalized services, operational data for improving efficiency and resource allocation, and security data for enhancing cybersecurity measures. Like other industries, data quality issues remain the top inhibitor for AI projects in government, highlighting the need for robust data management solutions. With 67% adopting on-premises, private, or hybrid infrastructure for AI workloads, governments seek partners with deep AI expertise and strong solution provider relationships. The adoption of AI-powered PCs is progressing, with 43% planning integration to boost operational efficiency and 27% piloting their use to evaluate productivity impacts.

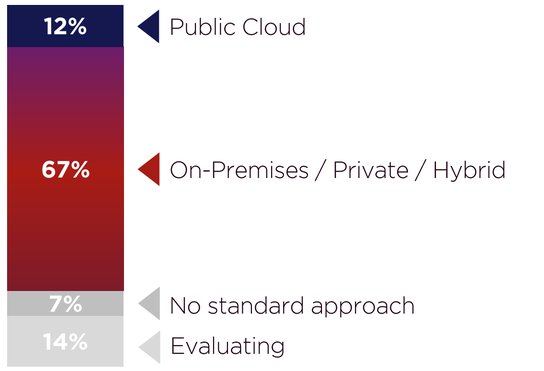
Survey Insights

Data quality issues are the **#1 inhibitor** causing AI projects to fall short of expectations.

Overall **Infrastructure** Deployment – Next 12 Months



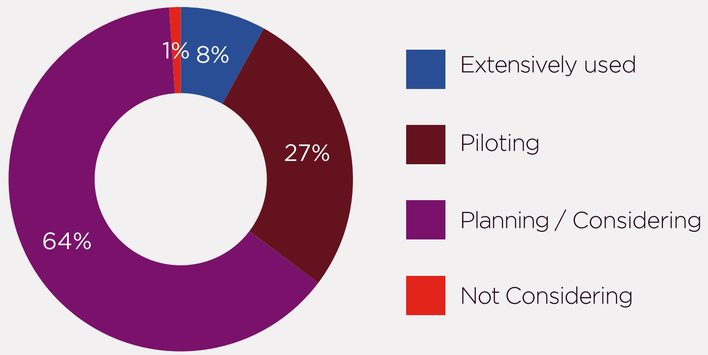
Primary **Infrastructure** Approach to **AI Workloads**



What Do Organizations **Seek in a Partner**?

1. Depth of partnerships with AI solution providers (ISVs, alliance partners)
2. AI knowledge & expertise (including scaling AI solutions)
3. Support for AI modeling & development
4. Support for data management

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Government n=187

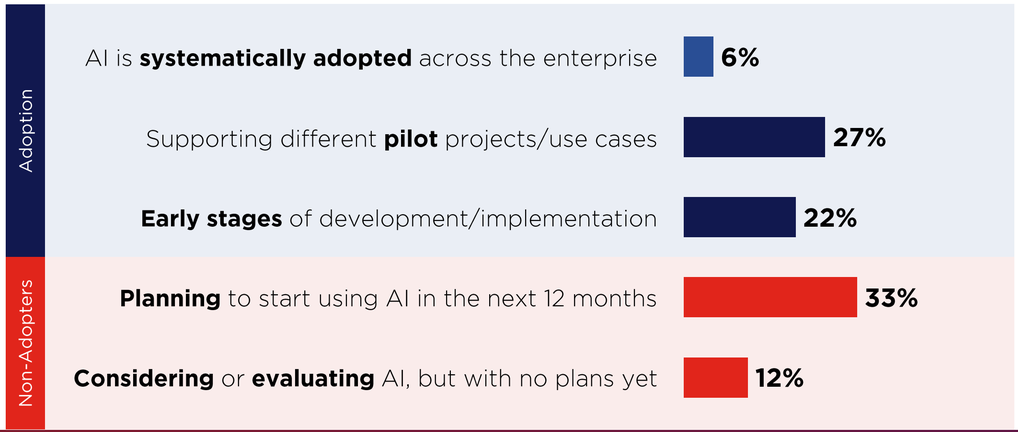
Education Overview

The educational sector faces numerous challenges, and modernizing the tech stack will be crucial for driving change. This includes eliminating technical debt, enhancing cybersecurity, and improving back-office systems, as well as broader issues like sustainability and teaching resources. Educational institutions are prioritizing AI in 2025 to improve sustainability, regulatory compliance, and employee productivity, with 33% planning to start using AI within the next 12 months. Generative AI (43%) and interpretive AI (32%) are key focus areas, driven by a 160% increase in AI spending. Success hinges on ensuring data sovereignty, availability of internal AI expertise, and access to hybrid compute and storage resources, addressing inhibitors like data quality issues and integration challenges.

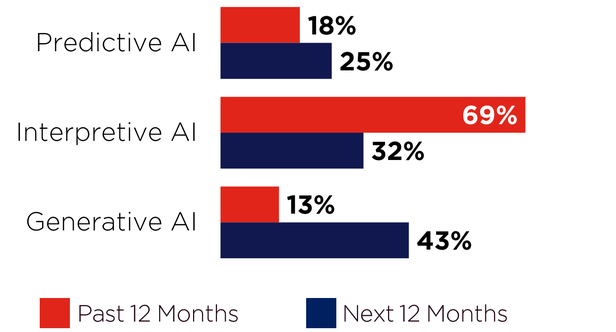
Business Priorities for 2025

1. Improving sustainability
2. Improving regulatory compliance
3. Improving employee productivity
4. Increasing revenues & profit growth
5. Improving customer experience & satisfaction

Current **AI Adoption**

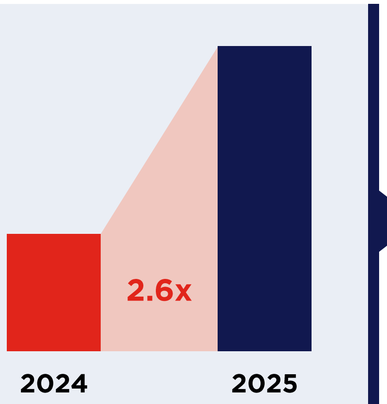


AI Implementations by Category: Past and Future



Note: Only AI adopters were eligible to answer for the past 12 months

Growth in AI as a % of IT Spend



Business Functions Adopting AI Use Cases

1. Marketing
2. Software Development
3. IT Ops
4. Customer service
5. Finance

Inhibitors That Resulted in AI Projects Not Meeting Expectations

1. Challenges deploying AI solutions at endpoints
2. Data quality issues
3. Problems integrating AI with existing systems & processes
4. Unrealistic expectations from senior management
5. Challenges scaling AI across the enterprise (including lack of departmental support)

Top **Factors** for **Successful AI** Implementation Moving Forward

1. Ensuring data sovereignty & compliance
2. Availability of internal AI expertise
3. Access to adequate hybrid compute & storage resources
4. Availability of quality data
5. Ease of integrating AI with existing systems & processes

IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Education n=195

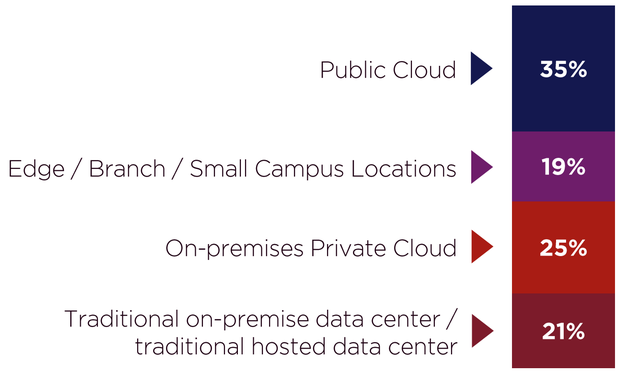
Education Overview (continued)

With 33% of educational institutions planning to develop data management capabilities in the next 12 months, addressing data quality issues is a top priority. Improved data management and AI can benefit educational institutions by personalizing learning experiences, enhancing decision-making, optimizing operations, and improving engagement. Predictive analytics and AI can be used to support at-risk students and accelerate research through advanced data analysis. The primary infrastructure approach for AI workloads includes 54% adopting on-premises, private, or hybrid models, and 28% using mainly public cloud. Educational institutions seek partners for data management, measurable business outcomes, and AI modeling support, while 46% plan to integrate AI-powered PCs to boost operational efficiency.

Survey Insights

33% of organizations highlighted that they will be developing **data management capabilities** in the next 12 months.

Overall **Infrastructure** Deployment – Next 12 Months



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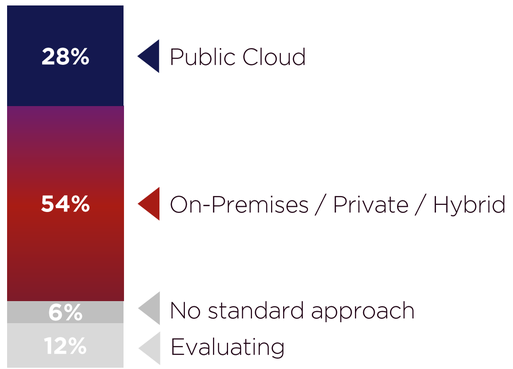
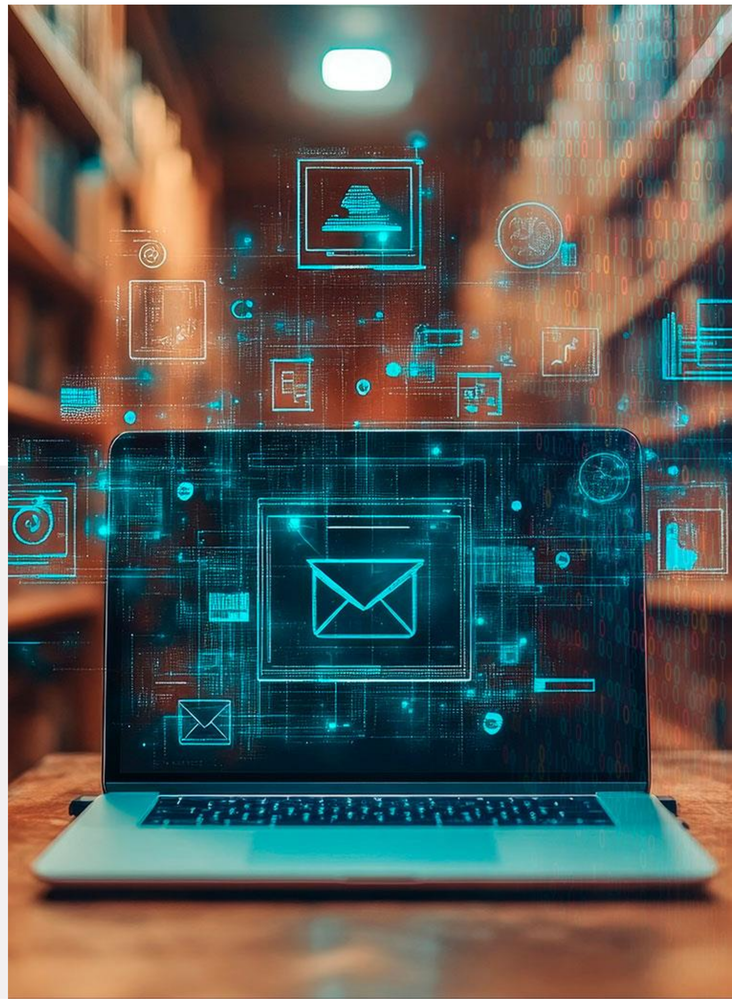
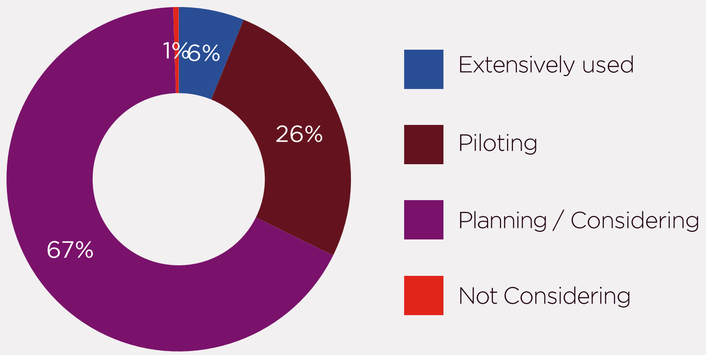




What Do Organizations **Seek in a Partner**?

1. Support for data management
2. Ability to help our organization deliver measurable business outcomes
3. Support for data security & privacy
4. Support for AI modeling & development

Next Gen Devices - **AI-Powered PCs** Adoption



IDC CIO Playbook 2025 Survey, commissioned by Lenovo, Education n=195

Research Methodology

CIO Playbook 2025 Research Methodology

The playbook was developed based on **2,920 respondents**, with the following sampling breakdown:

Markets Covered	Sample Size
APAC	900
EMEA	620
LATAM	500
NA	900

Industries Covered	Sample Size
BFSI	475
Retail	349
Manufacturing	302
Telco / CSP	410
Healthcare	222
Government	187
Education	195
Others	780

Sampling by **Organization Role**

Sampling by **Employee Size**

Lenovo

Smarter AI for All

Personalized, protected and easy to scale, Smarter AI delivers the outcomes that matter most to you and your business. With full stack AI hardware, software and service solutions, we're bringing the transformative power of AI to industries, organizations and people of all kinds.

Lenovo **AI Infrastructure and Devices**

8	80+
Platform Categories	AI-Ready Platforms

Energy efficient, secure AI Infrastructure (Edge/HPC compute, storage, networking) and powerful AI PCs and workstations.

Lenovo **Services and Solutions**

4	180+
Global COEs	Countries Served

Validated industry, use case solutions and global expertise for faster, scalable AI deployments.

Lenovo **AI Innovators**

Partner Ecosystem

165+	>30K
Enterprise AI Solutions	Channel Partners

Tested, trusted global AI partner solutions and ecosystem of AI ISVs, and channel partners.

Lenovo Hybrid AI Advantage for Enterprises

Productivity
Achieve personal, enterprise productivity and innovation

Agility
Accelerate time-to market with high performing, scalable private AI

Trust
Build and consume responsible, trusted AI and manage and protect all your data

Lenovo Hybrid AI Advantage in Action

University of Pisa

With Lenovo Neptune*, Italy's Largest University Supercomputer Becomes More Sustainable, accelerating research activities and reducing energy consumption by up to 40%.

Learn More

AI Hathboor Bikal.ai

Supports AI innovation and development with an energy efficient datacenter and HPC as a service solution.

Learn More

Liv Forever

Liv is our groundbreaking AI avatar for people living with dementia and Alzheimer's. Liv offers 24/7 companionship and guidance with the warmth of human understanding.

Learn More

SharonAI

Through Lenovo's TruScale service, SharonAI is democratizing AI computing by deploying GPU-dense servers, offering affordable, on-demand GPU access to startups and researchers.

Learn More

Mass Open Cloud

Lenovo TruScale GPU as a Service allows the MOC Alliance to establish a powerful GPU cluster for groundbreaking research through a scalable pay-as-you go model.

Learn More

Discover everything you need to succeed with AI
www.lenovo.com/SmarterAI

Bring AI to your data with Lenovo and partners

#1 business PC, workstation provider

#1 in infrastructure reliability

#1 supercomputer provider globally

Lenovo Neptune®
6th generation liquid-cooling innovation

Sources: ITIC Global Server Reliability (Mar 2024), Benchmark Report (June 2024) & Top500.org (June 2024)

The Lenovo Hybrid AI Advantage

Lenovo AI Library

Suite of functional & vertical AI use case accelerators

Lenovo

Technology
+
Partner ecosystem
+
Expertise
+
Responsible AI

- **Services**
- **Models & Software**
- **Data**
- **Infrastructure & Devices**

Services

Full lifecycle services

- **Advisory Services**
- **Support Services**
- **Managed Services**
- **Deployment Services**
- **TruScale (As-a Service)**

Devices

Powerful AI PCs, workstations & phones for hybrid workplaces

Lenovo ThinkPad

motorola FOR BUSINESS

Lenovo ThinkStation

Edge

Get powerful data-center-like computing performance

Lenovo ThinkEdge

Datacenters

Energy efficient, high-performance compute & secure, right size AI Infrastructure & software

Lenovo ThinkAgile

Lenovo ThinkSystem

Discover everything you need to succeed with AI
www.lenovo.com/SmarterAI