

Research report

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# Capitalizing on generative artificial intelligence

The role of a chief AI officer and a unified asset strategy

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# Foreword

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Artificial intelligence (AI) has dramatically altered how we interact with the world and how it interacts with us. Over the past decade, conveniences slipped unobtrusively into our lives as things grew more “intelligent” – our cars, appliances, retail and streaming apps, phones, scales, even our suitcases. The progress mainly enabled by data scientists activating discriminative AI use cases and machine learning capabilities typically arrived without much fanfare from the general public.

By contrast, generative AI is flourishing on a groundswell of support from citizens ready to discover inspiration while losing the tedium from their jobs and personal pursuits. Developers, engineers, marketers, creators, educators, legal and finance professionals, healthcare providers and researchers, and many others have joined data scientists in their quest to uplift the human condition one use case (or sometimes, one question) at a time.

According to our research with IT and data decision-makers, 93% of respondents’ organizations already use generative AI in some capacity. But it’s not all smooth sailing. Similar to long-standing shadow IT concerns, the ready availability of generative AI tools has created a form of “shadow AI.” End users wield AI without the education, guidance, discipline, and control data scientists and other experts have long brought to the AI value vs. risk equation. The media has documented generative AI threats at length, but briefly, the highlights are concerns about privacy, security, bias and fairness, misinformation and fake content, intellectual property, and job displacement.

We wanted to understand what IT and data leaders know about their organizations’ top generative AI uses and the barriers to success. We hypothesized that two critical elements could help these organizations navigate generative AI opportunities and risks, so we turned to the independent research firm Vanson Bourne to test the hypotheses. The results of this study with 700 IT and data decision-makers unfold on the following pages. We hope this information helps our readers along their journey to rapid and responsible generative AI adoption.

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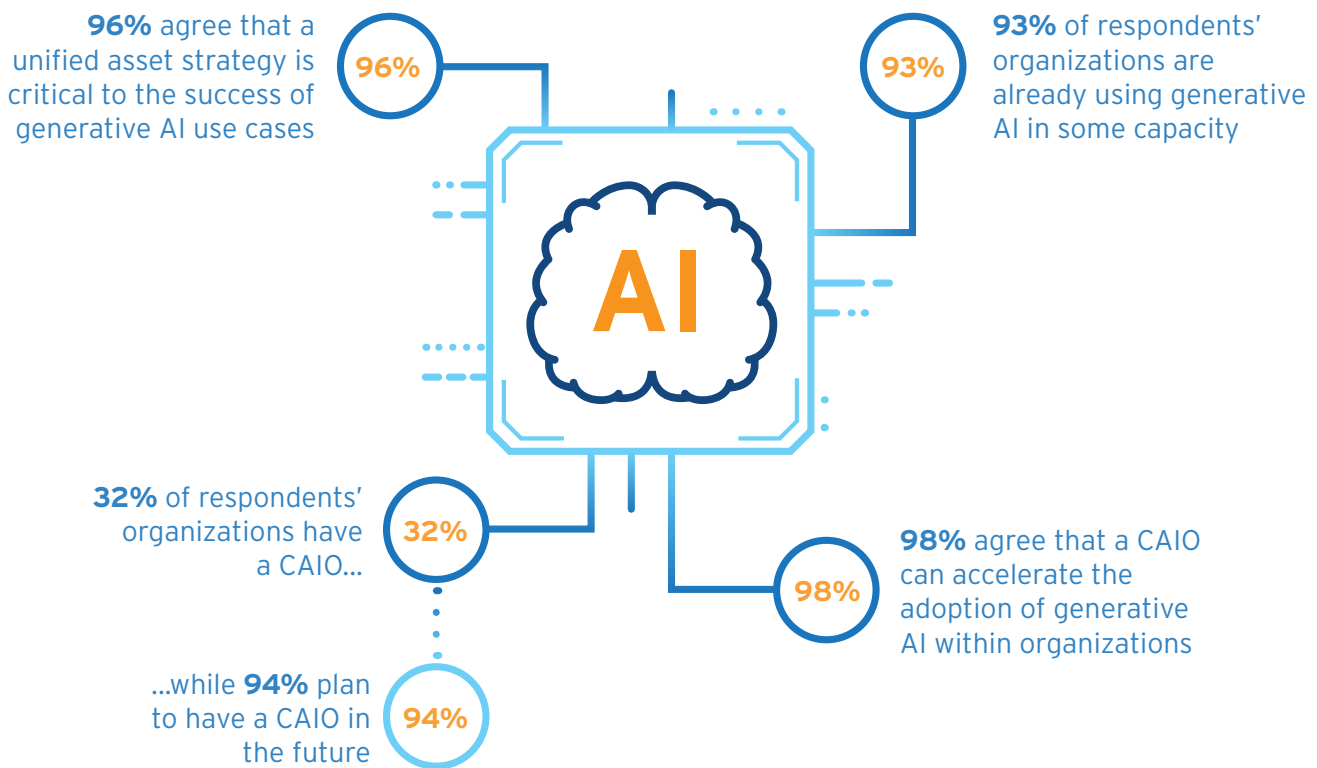


# Executive summary

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As organizations embrace opportunities associated with generative AI, they also grapple with the challenges and risks it raises. In a global study sponsored by Iron Mountain, Vanson Bourne explored with IT and data decision-makers how their organizations are using and plan to use generative AI, the barriers they face, and whether having a chief AI officer (CAIO) and a unified asset strategy could help accelerate adoption, while lowering enterprise risk.

This research, conducted across six countries with 700 IT and data decision-makers, indicates that most (**93%**) of respondents' organizations already use generative AI in some way. While most (**98%**) agree that a CAIO can accelerate generative AI adoption even further, only **32%** currently have a CAIO on board. That number is expected to grow to **94%**. Meanwhile, an overwhelming majority of those surveyed (**96%**) agree that a unified asset strategy for managing both digital and physical assets is critical to the success of generative AI initiatives.



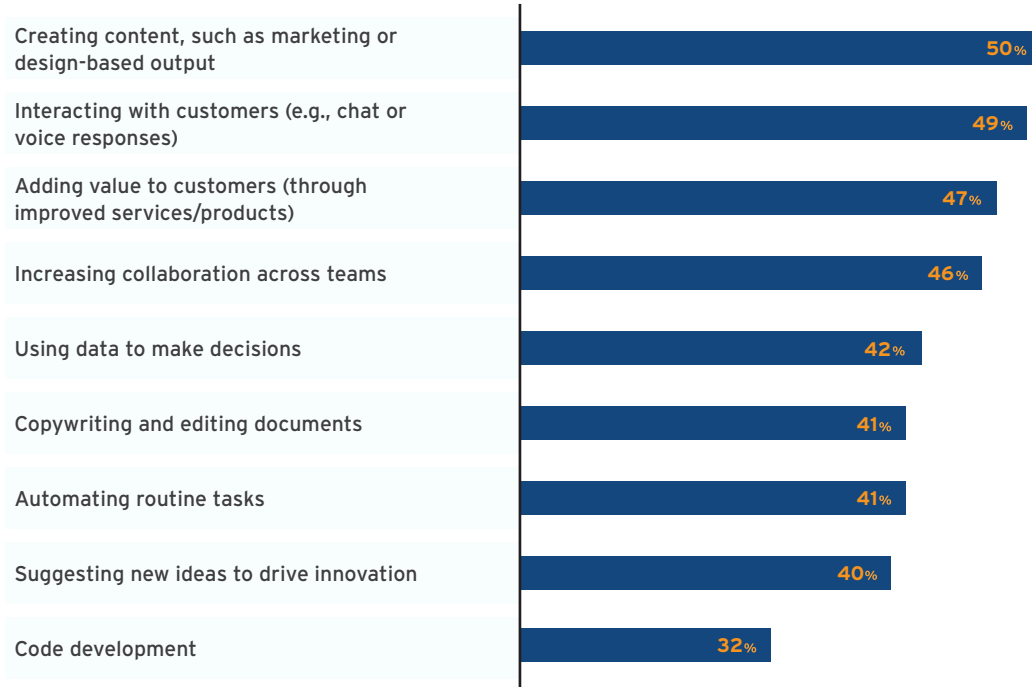
The research reveals a powerful connection between the challenges that generative AI presents, the value of a CAIO and a unified asset strategy to address them, and the ability of a CAIO to implement a unified asset strategy.

## Top uses of generative AI

In organizations that are already using generative AI, these use cases topped the list: create content (50%), interact with customers (49%), add value to customers through improved services and products (47%), and increase collaboration across teams (46%) (Figure 1).

Notably, those in the finance industry are far less likely to use generative AI to interact with customers (29%) than those in the healthcare industry (64%). Public sector respondents lead the way in content creation (77%), in stark contrast to those in the media and entertainment sector (32%).

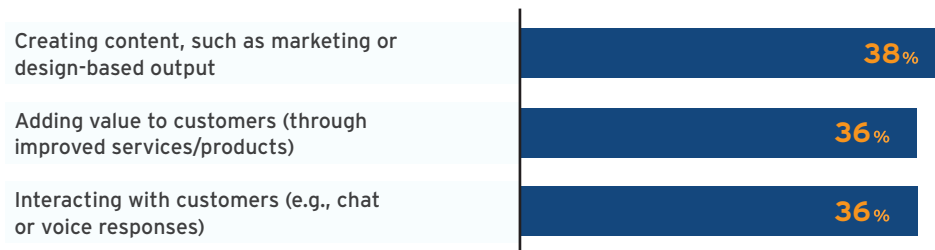
## Top generative AI use cases currently



**Figure 1:** How is generative AI being used in your organization? [653 respondents] Asked of respondents whose organizations are currently using generative AI.

## Top three most important future use cases

The top three ranked future use cases are content creation (38%), value add to customers (36%), and interaction with customers (36%) (Figure 2). Respondents who work in the financial services (47%), legal (45%), and healthcare (45%) industries are much more likely to use generative AI for customer interaction in the future.



**Figure 2:** What are the most important use cases for generative AI in your organization in the future? Combination of responses ranked first, second, and third [653 respondents] Asked of respondents whose organizations are currently using generative AI.

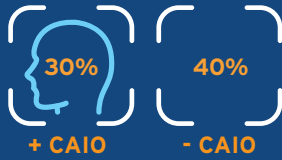
# Challenges in implementing strategic and responsible generative AI



Organizations who currently have a CAIO are less likely to report "planning for IT resources to train and implement genAI models" as a challenge.



Organizations that do not have a CAIO are far more likely to see "ensuring generative AI models are accurate, unbiased, and transparent" as a challenge.



Given the widespread concerns reported by media outlets and individuals, the host of challenges uncovered by our research is not surprising. Tied at the top of the list is planning for IT resources to train and implement generative AI models (38%) and sourcing, protecting, and preparing data from physical and digital assets for use in model training (38%) (Figure 3). It's worth noting that respondents from organizations who currently have a CAIO are less likely to report planning for IT resources to train and implement generative AI models as a roadblock (32% for those with a CAIO and 41% for those without a CAIO).

Another distinct challenge is ensuring that generative AI models are accurate, unbiased, and transparent (37%). Organizations that do not have a CAIO are far more likely to see this as a challenge (40%) than those with a CAIO (30%).

In addition, more than a third (36%) identify protecting and managing the data and assets created by generative AI as a challenge. This problem will grow along with data volumes, mainly due to unstructured data used to train generative AI and produced by generative AI. Organizations with a CAIO are less likely to feel this impact (32%).

Other barriers include creating and enforcing generative AI policies (35%) and complying with generative AI-related regulations and guidelines (35%). Compliance with generative AI-related regulations and guidelines is a less commonly cited problem for respondents with a CAIO than for those without a CAIO (31% vs. 37%, respectively).

## Challenges that generative AI brings to organizations

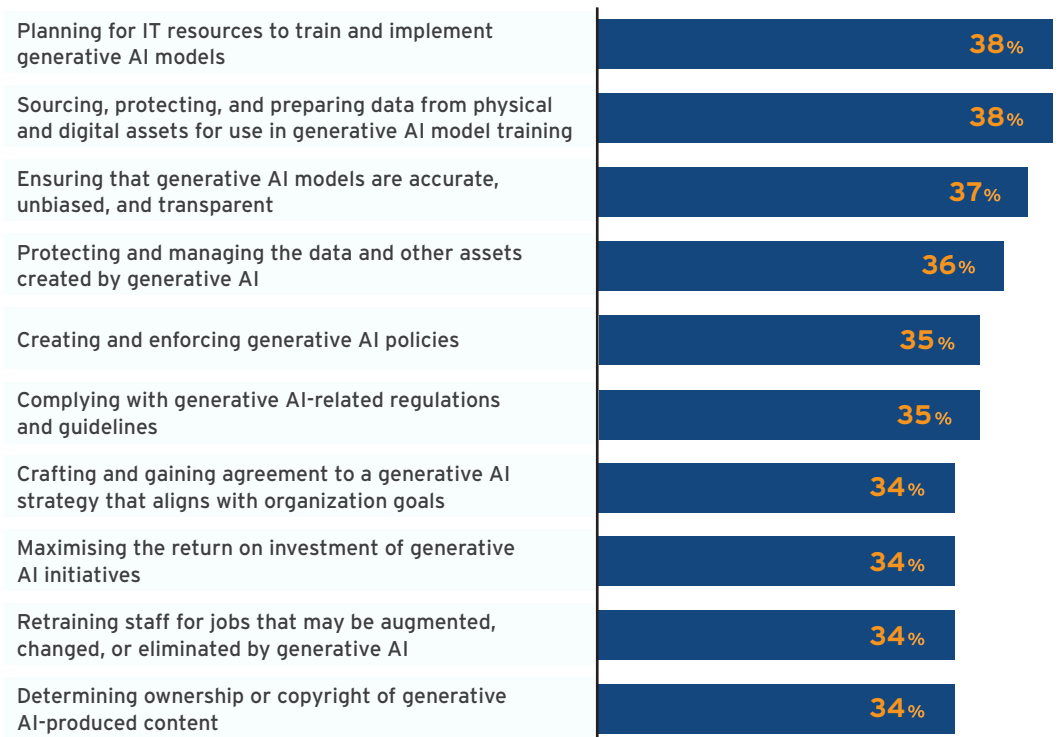


Figure 3: What challenges does generative AI bring to organizations? [700 respondents] Showing the top ten challenges.

# The CAIO as a catalyst for opportunity



**98% agree that a CAIO can accelerate generative AI adoption.**



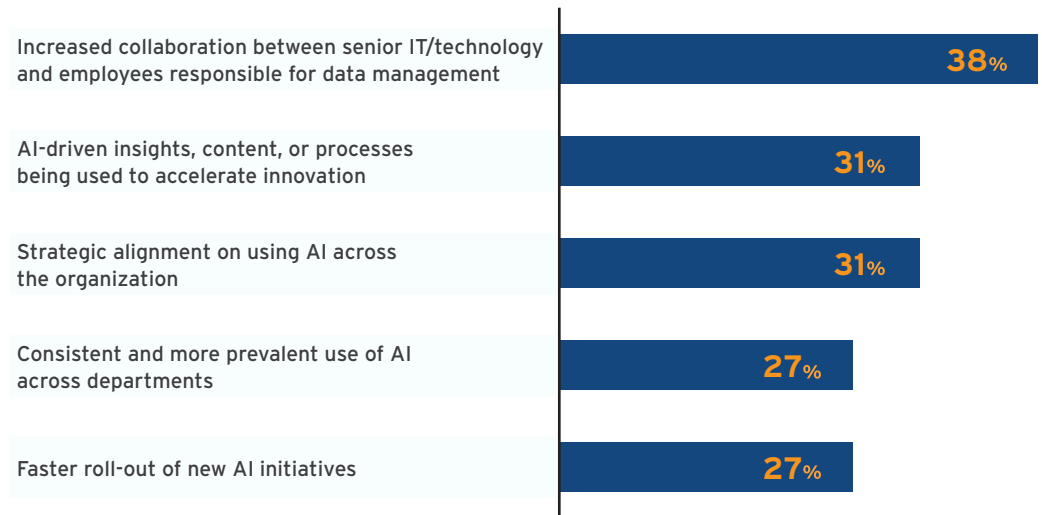
Most respondents (**98%**) agree that a CAIO can accelerate generative AI adoption. Likewise, **94%** say that organizations should already have a CAIO, but only about one-third (**32%**) say their organizations have onboarded one. Still, **94%** of organizations that lack a CAIO expect this role to be added in the future.

When we asked about the top five benefits CAIOs bring to an organization, the most crucial benefit was eliminating silos between IT and data management executives and teams (**38%**) (Figure 4).

This benefit was identified more often by decision-makers in business and professional services (**53%**) and less frequently in the insurance sector (**28%**), where a faster roll-out of new AI initiatives (**35%**) was the most cited benefit.

Value creation through using AI-driven insights, content, or processes to accelerate innovation ranked second at **31%**, which ties with strategic alignment across the organization. Consistent and more prevalent use of AI (**27%**) and faster rollout of new AI initiatives (**27%**) round out the top five.

## Benefits of having a CAIO



**Figure 4:** What are/would be the benefits to organizations having a CAIO? [700 respondents] Showing the top five selected answer options.

Collectively, these presumed benefits reinforce the need for CAIOs to bridge the gap between IT teams and other employees. They also highlight the criticality of having a skilled and focused leader to drive AI strategy and implementation across the organization.



# What a CAIO can help organizations achieve

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IT and data decision-makers believe a CAIO can ignite revolutionary change in organizations by guiding and championing generative AI adoption. But what varied tasks should a CAIO achieve relative to generative AI? The top five responses focus on ensuring that:

- **A unified asset strategy is in place (50%).**  
This strategy helps organizations discover, manage, and optimize digital and physical assets used in generative AI applications. Seventy percent of public sector participants identified this need, compared to **38%** of media and entertainment respondents.
- **Resource needs are orchestrated (49%).**  
This orchestration includes working across the organization so that talent, training, and implementation capabilities are in place to accelerate generative AI adoption.
- **Ethical practices are followed (48%).**  
Respondents want to know that the generative AI models used by their organization are reliable, fair, and transparent.
- **Data input and output are managed appropriately (46%).**  
Specifically, participants want data input to and output from generative AI models to be governed, secured, and managed responsibly across its lifecycle.
- **Ownership risk is addressed (46%).**  
Respondents want the CAIO to help the organization navigate uncertainties regarding copyright and ownership of content created by generative AI.





# The multi-faceted role of a CAIO

When asked about the responsibilities of a CAIO, IT and data decision-makers highlight the need for CAIOs to be strategic visionaries, ethics and risk managers, and AI practice leaders. The following sections elaborate on the research findings aligned to these facets of the role.

## Strategic visionary

CAIOs are needed to shape an organization's AI future, aligning initiatives with long-term enterprise goals and market trends, optimizing data strategy, and creating a unified asset strategy to support AI initiatives. Doing so requires strategic foresight to anticipate and leverage AI advancements that enable a competitive edge. Below are strategic responsibilities with percentages of respondents who agree that responsibility is important.

### Responsibilities

#### **Creating a unified asset strategy for physical and digital assets used in and produced by AI applications (53%)**

This task involves managing physical and digital assets related to AI, ensuring their effective interaction, utilization, optimization, governance, and lifecycle management.

#### **Working with IT and data managers to optimize a data strategy for AI (53%)**

Achieving this requires a focus on data quality, accessibility, scalability, alignment with AI objectives, and full lifecycle management from creation or digitization to end-of-life.

#### **Shaping organizational AI strategy (42%)**

Organizational strategy development means identifying a strategic AI roadmap and collaborating to integrate AI into business processes.

These responsibilities demonstrate the pivotal role a CAIO should take in aligning AI initiatives with business objectives, managing essential resources, and steering the organization toward a future in which AI is a fundamental driver of growth and innovation.

## Ethics and risk manager

CAIOs are crucial in cultivating trust in AI through responsible use. Doing so means establishing high ethical standards, ensuring transparency in use, and fostering accountability through robust ethics, privacy, and security governance frameworks to guide policy, actions, and decisions that protect organizations from evolving AI-related risks. The responsibilities that fall into this category are shown below, along with the percentage of respondents who flagged that responsibility.

### Responsibilities

#### Developing AI policies and company guidance (45%)

This task is critical to minimizing risk without putting the brakes on innovation. CAIOs are essential to crafting, securing agreements to, and updating policies and guidance that align with the company's goals, ethical standards, and regulatory requirements for the responsible use of AI.

#### Securing data and/or work product resulting from AI use (43%)

CAIOs are needed to perform two vital roles in this area:

- Establishing robust data governance and security frameworks to protect data and the work products arising from AI use
- Fostering an organizational culture that prioritizes data privacy and security.

#### Ensuring ethical use of AI (42%)

The CAIO must address ethical concerns related to AI, such as bias, transparency, and societal impact.

This requires implementing guidelines and practices so that AI systems are fair, accountable, and do not perpetuate existing biases or inequalities.

These responsibilities highlight the indispensable role of the CAIO in developing AI policies, securing data and work products, and guiding the ethical use of AI, thus safeguarding the organization's integrity while driving innovation.

## Practice leader

CAIOs are vital to the practical application of AI across the organization, working with other leaders to optimize AI processes and adapt to AI-driven innovations. This role spans technology selection to implementation and entails continuous integration of the latest industry best practices. Key responsibilities are listed below, with the percentage of those who selected the responsibility indicated in parentheses.

### Responsibilities

#### Collaborating across departments to maximize the benefits of AI (48%)

The CAIO must work across the organization to understand their needs, facilitate communication, and align AI solutions with their goals.

#### Ensuring that the best AI tools are available across the organization (47%)

Providing access to the most appropriate AI tools that also meet the needs of various functions is crucial.

#### Initiating and leading AI implementations (43%)

Overseeing the practical aspects of AI integration, including project management, technology selection, and deployment of AI solutions, is necessary to move projects from concept to enterprise value.

#### Conducting research on AI best practices (42%)

The swift evolution of AI use cases and supporting technologies requires staying on top of the latest developments. By doing so, CAIOs can effectively apply their evolving knowledge to continually improve and advance the organization's AI initiatives.

The responsibilities highlighted by the research demonstrate that the CAIO must lead hands-on efforts to plan, activate, and continuously improve the organization's AI practice.

# How a unified asset strategy fills gaps

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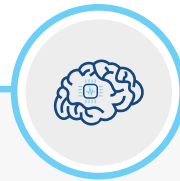
Most respondents agree that a unified asset strategy is critical to the success of generative AI use cases. We defined this concept as a strategy for managing, protecting, and optimizing physical and digital assets used in and produced by AI applications.

*Why would so many IT and data decision-makers agree on the value of a unified asset strategy?*



**96%**

agree that a unified asset strategy is critical to the success of generative AI use cases.



A unified asset strategy helps organizations accelerate AI-driven innovation by evolving their digital and physical asset lifecycle approach, optimizing asset protection and management at scale, and catalyzing value creation.

A unified asset strategy is a comprehensive framework for solving the multi-dimensional challenges identified by IT and data decision-makers. Implementing the elements of the framework empowers enterprises to realize more value from their digital and physical assets as new AI technologies such as generative AI emerge.

The framework can help organizations fill strategic, ethics and risk management, and practice gaps identified as challenges by participants.

## Strategy



### Aligning generative AI strategy with organizational goals

A unified asset strategy harmonizes AI initiatives and asset management while providing for secure and environmentally sustainable retirement of digital and physical assets in keeping with enterprise objectives.



### Maximizing the return on investment (ROI) of generative AI initiatives

A unified asset strategy can help improve ROI by managing digital and physical assets involved in AI, enhancing data quality, streamlining operations, mitigating risks, and enabling flexible scale that is responsive to the changing needs of the organization.

## Ethics and risk management



### Creating and enforcing generative AI policies

Information governance is critical to a unified asset strategy. Governance contributes to policies that address ethical use, data privacy, and security. Aligning these policies with the organization's goals and the nature of its assets enables more effective policy creation and enforcement.



### Complying with generative AI-related regulations and guidelines

The strategy includes mechanisms for staying abreast of evolving regulations and policies and protecting and managing assets to remain compliant.

## Practice



### Planning for IT resources

Through effective full lifecycle asset stewardship and a scalable operating model, a unified asset strategy facilitates efficient resource planning, allocation, and management so IT teams can prepare for training and deploying generative AI models.



### Sourcing, protecting, and preparing data

The unified asset strategy framework encompasses comprehensive lifecycle management of physical and digital assets. It involves digitizing physical assets and enriching them with metadata for improved discoverability and accessibility, extracting valuable information from unstructured data, and protecting sourced and generated data against unauthorized access.



### Ensuring that models are accurate, unbiased, and transparent

Robust data governance, intelligent document processing and content services, and storage scalability enable quality and diversity of data to reduce bias and enhance model accuracy.



### Protecting and managing data and other assets created by generative AI

A unified asset strategy supports creating protocols for the storage, security, and lifecycle management of generated assets so that they are safeguarded and used in compliance with privacy standards and organizational policies.

A unified asset strategy addresses an array of challenges posed by generative AI adoption. The framework encompasses physical and digital asset lifecycle management and protection, intelligent document processing, content services, compliance, ROI optimization, and more. Through these elements, it provides a foundation for accelerating and amplifying generative AI impact while reducing enterprise risk.

# Conclusion

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The relationship between generative AI, the CAIO role, and a unified asset strategy is evident from the research. They are interlinked, and each influences the success of the other. Organizations need all three pieces of the puzzle to balance opportunities and risks.

For more resources about how a unified asset strategy can help IT and data decision-makers and CAIOs accelerate generative AI initiatives with less risk, visit [Optimize your digital future with a unified asset strategy](#).





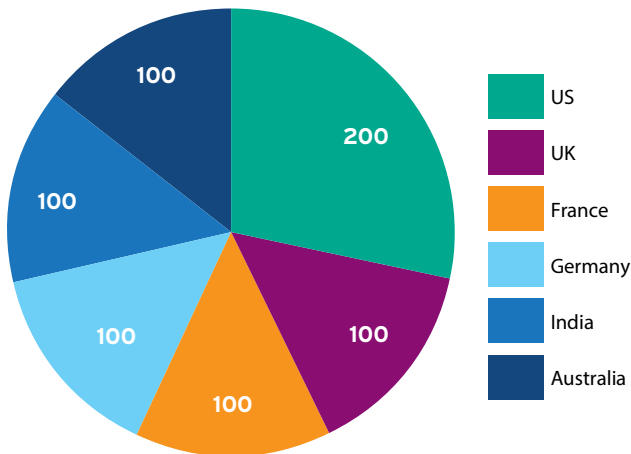
# About the research

**Iron Mountain** commissioned independent market research specialist **Vanson Bourne** to conduct this research.

The study surveyed 700 respondents from organizations with 250+ employees from across the following geographies: the US, UK, France, Germany, India, and Australia. These organizations are from a range of public and private sectors, with strong representation in financial services, healthcare, insurance, media and entertainment, manufacturing, the public sector, legal and energy. Respondents were either IT decision-makers (50%) or data decision-makers (50%).

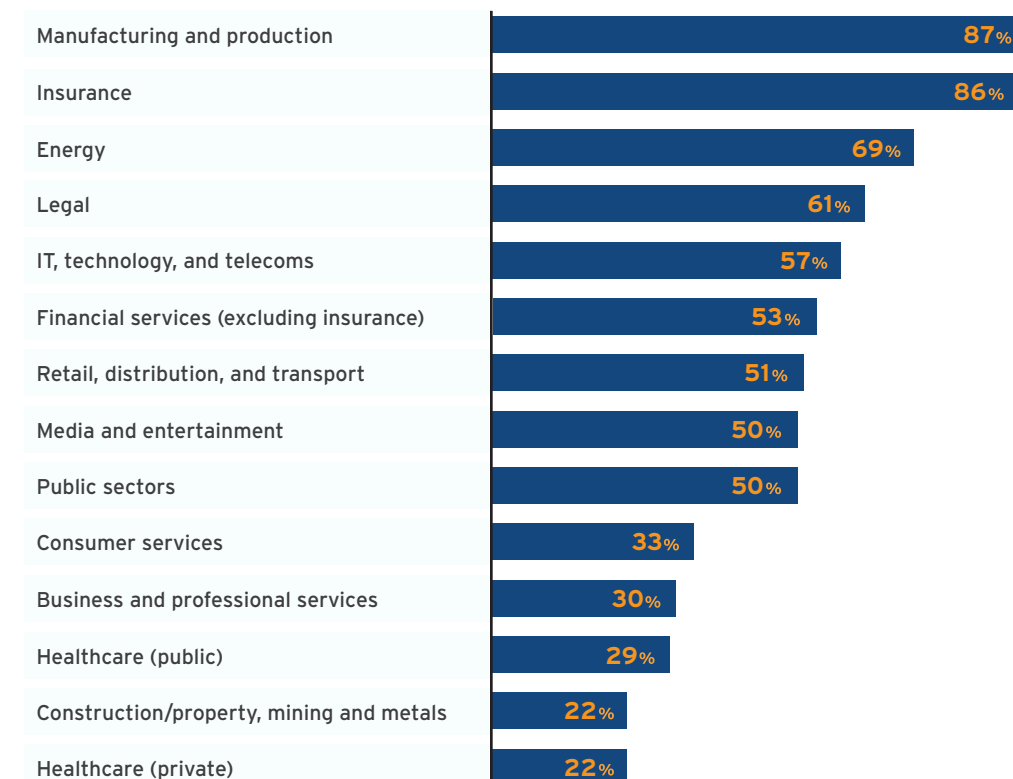
The interviews were conducted online in September and October 2023. A rigorous multi-level screening process ensured that only suitable candidates were allowed to participate.

## Respondent country



Respondent country [700 respondents]

## Respondents' organization's sector



Within which sector is your organization? [700 respondents].

# About the research

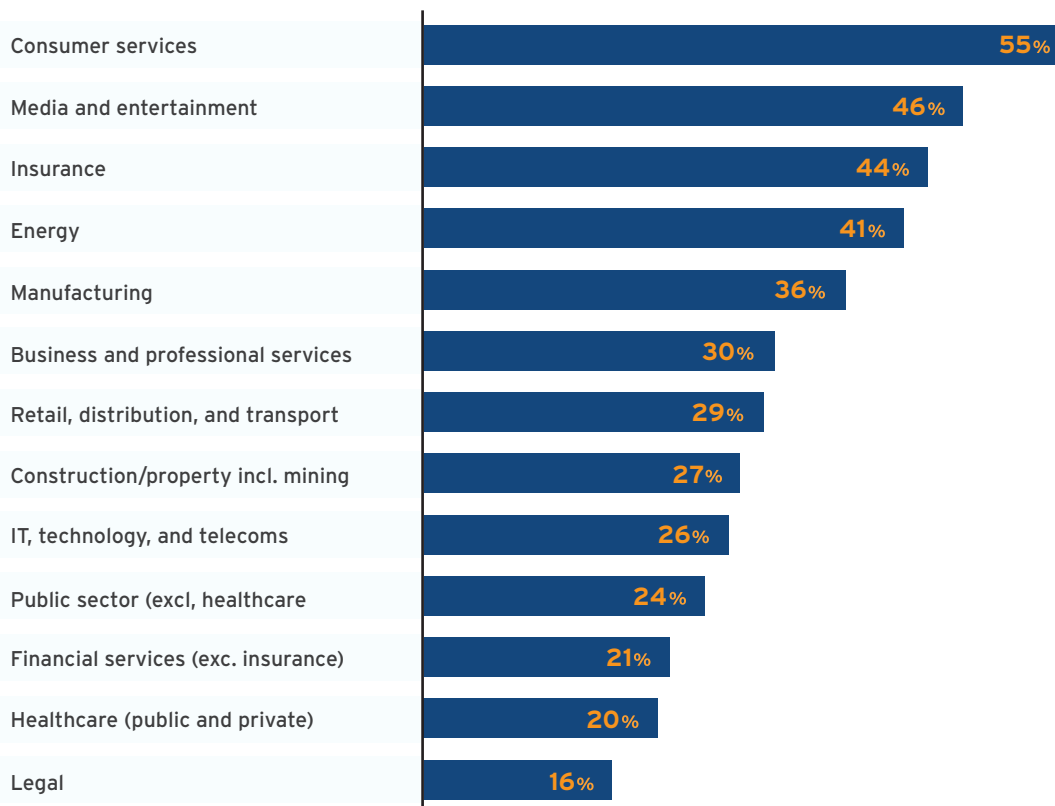
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## Respondent type



Respondent type [700 respondents]

## Respondents' organization's sector, showing the proportion who have a CAIO in place



Showing respondents' organizations who have a CAIO currently in position [700 respondents]. Split by respondents' organization's sector.

# About Vanson Bourne

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Vanson Bourne is an independent specialist in market research for the technology sector. Their reputation for robust and credible research-based analysis is founded upon rigorous research principles and their ability to seek the opinions of senior decision-makers across technical and business functions in all business sectors and all major markets. For more information, visit [www.vansonbourne.com](http://www.vansonbourne.com).



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## About Iron Mountain

Iron Mountain Incorporated (NYSE: IRM), founded in 1951, is the global leader for storage and information management services. Trusted by more than 220,000 organizations around the world, and with a real estate network of more than 85 million square feet across more than 1,400 facilities in over 50 countries, Iron Mountain stores and protects billions of information assets, including critical business information, highly sensitive data, and cultural and historical artifacts. Providing solutions that include secure storage, information management, digital transformation, secure destruction, as well as data centers, art storage and logistics, and cloud services, Iron Mountain helps organizations to lower cost and risk, comply with regulations, recover from disaster, and enable a more digital way of working. Visit [www.ironmountain.com](http://www.ironmountain.com) for more information.

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