AI Priorities Study 2023

# A look at how companies are leveraging AI and Generative AI

**Amidst the fervor over AI** and more recently, Generative AI, companies are actively in exploration and early deployment mode, yet it's still early days for enterprise deployment.

Foundry's inaugural 2023 AI Priorities Survey, which canvased 965 global IT decision-makers about their AI and Generative AI plans, found companies of all sizes and across industries ramping up investment levels in AI, including traditional IT systems fortified with AI-infused capabilities. As companies move forward, they are drawn to the magnitude of efficiency, cost savings, and innovation possibilities with AI. Yet the enthusiasm is tempered by concerns about privacy, security and ethical use case risks along with implementation challenges ranging from integration to scarcity of skilled AI talent.

## The AI journey sets sail

Half of companies surveyed have AI technologies on their radar screen and are researching products and potential use cases. Nearly a quarter (24%) are piloting new AI initiatives and 13% are implementing AI technology within a business unit. Only 8% have implemented AI technology enterprise-wide, slightly higher at larger companies with over 1,000 employees (11%) as well as those in the high-tech sector (14%). Larger companies are also more likely to be in the exploration stage with AI (54% compared to 45% of companies with less than 1,000 employees).

**74%** of organizations are researching or piloting AI initiatives.

**Business outcomes driving AI investments**

- Increasing employee productivity **48%**
- Enabling innovation **43%**
- Gaining a competitive edge **41%**

Companies are evaluating AI investments for a range of business opportunities, including increasing employee productivity (48%), enabling innovation (43%), and gaining a competitive edge (41%). Service sector firms (58%) and enterprise shops (50%) were most interested in AI's potential for ramping up employee productivity while high-tech (52%) and service industry firms (47%) saw an opportunity to leverage the technology to gain a competitive edge. SMB companies with under 1,000 employees were more likely to view AI as a lever for competitive advantage (42% compared to 40% of larger players) as well as for developing new products and services (39% vs. 31% of enterprise companies).

Within the business ranks, there are few fully implemented instances of AI technologies, with IT departments (10%) and customer service (9%) leading the charge. Most companies are taking a longer-term strategy with AI and are in the process of implementation, with IT (40%) and research and development (38%) business units, along with companies in the high-tech (51%) and education (44%) sectors, further along than their counterparts. Nearly all business units are planning to implement AI within the next 12 months; however, respondents in do not expect AI capabilities to be applicable for their distribution (58%) and logistics groups (54%).

AI applications are popping up to support a wide variety of use cases, from data analytics, cited by 57% of respondents, to employee productivity (54%), process automation (53%), and customer service (42%). Customer service applications ranked higher for companies in the financial (57%) and retail (57%) sectors while cybersecurity AI applications were more prevalent among healthcare company respondents—33% compared to 29%

**Current use cases for AI capabilities**

Data analysis
**57%**

Employee productivity
**54%**

Process automation
**53%**

overall. Viewed through a global lens, EMEA companies favored AI for data analytics applications (60%) while North America (56%) and EMEA (57%) firms were more likely to employ AI to boost productivity as compared to APAC respondents, at 50%.

Advanced analytics and predictive modeling, a central part of the AI equation, are also gaining ground, primarily fueling advanced data analysis (40%), optimization and efficiency (35%), and predictive modeling (34%) use cases. Enterprises with over 1,000 employees were further along with analytics and predictive modeling applications across the board.

**Only 34% of IT decision-makers feel that their organization currently has the right data and technology in place to enable effective AI.**

The Foundry research revealed companies are currently most satisfied with leveraging AI for personalization and segmentation (39%) workloads with fraud detection and cybersecurity next in line, both cited by 37% of respondents. Use of AI for data analytics, employee productivity, and customer service applications were also viewed favorably. Retail firms had a much higher satisfaction rate when it came to tapping AI for cybersecurity (63%) and fraud detection (60%) applications. Data analytics use cases fared better among services companies (43%) and those in

the EMEA region (49%). Frustration with AI popped up most significantly when aligned with decision support systems (27%), predictive maintenance (26%), and process automation (25%) applications.

As companies advance their AI journeys, most see the potential for efficiencies, including using the technology to reduce their workforce, cited by more than half of overall respondents (54%) and 67% of EMEA companies. Millennials (66%) and Gen X (58%) IT decision makers surveyed were more apt to view AI as tool for headcount reduction as compared to Gen Z, at only 38% of respondents. As a whole, most organizations don't feel entirely ready for AI applications—slightly more than a third (34%) say they have the right data and technology in place to enable effective AI, although the sentiment was significantly higher among high-tech firms, at 47%.

## AI spending and budgets

2023 was not the year for dedicated technology spend for AI projects. Forty-five percent of companies have yet to earmark a portion of their budget to fund AI initiatives with slightly more than a third (36%) allocating specific dollars. This differs significantly by company size as 45% of enterprise ITDMs report to have a specific AI budget compared to only 27% for SMBs. High-tech (44%) and manufacturing (43%) companies were
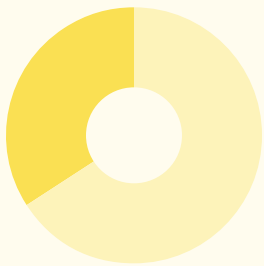
## Do organizations have dedicated technology budgets for AI projects?

**36%** Yes

**45%**
Enterprise

**27%**
SMB

most likely to carve out spend for AI as were companies in the APAC region (46%). Younger respondents were more likely to have dedicated AI budgets, including Millennials (56%) and Gen Z (78%).

Of IT decision-makers who report that their organization has a dedicated technology budget for AI initiatives, 61% of them expect spending for AI projects to increase in 2024 with more than a quarter (26%) anticipating no significant change to existing funding levels. Enterprises are more likely to expect an increase in budgets (65%), compared to 54% for SMBs.

Overwhelmingly, IT departments plan to invest the most dollars in AI technology next year, at 55%, compared to their counterparts in R&D (38%), customer service (29%), and marketing (24%). Not surprisingly, R&D teams in high-tech firms are making the biggest investments

in AI, at 58%, while IT departments in education (65%), financial services (63%), and government (63%) shell out even more dollars for the technology.

Business unit and department heads still control most of the AI technology spend as opposed to IT departments. For example, business units are coordinating AI budgets for customer service (42%), marketing (42%), and distribution, purchasing, and HR (all 41%). IT is primarily limited to oversight of AI spend for its own agenda, at 43% of respondents. Forty-four percent of respondents confirmed they are willing to pay vendors more for AI-infused products.

Of those who have a dedicated AI budget, **61%** expect their spending to increase in 2024.

## A still challenging landscape

Given the relative immaturity of most companies' AI initiatives, challenges abound. Half of responding companies are grappling with IT integration (including governance, maintenance, and security) issues along with the lack of in-house expertise for design and deployment and making the business case for AI. The lack of internal skills is a bigger problem for companies in the education space (62%) and regionally, for North American

respondents (58%). IT integration is a major hurdle for 60% of responding firms in the government and non-profit sectors. Enterprise firms seems to be having a harder time with a wider swath of issues, including IT integration, business case, lack of inhouse expertise, and competing priorities among business units. This is likely connected to the fact they are doing more overall with AI. Smaller firms' biggest issue is finding the right technology partner, cited by 37%.

The ethical implications of AI technologies are a struggle for nearly all companies, with 94% of IT decision makers citing some sort of related challenge. Data privacy remains the biggest issue, at 41%, and higher for companies in healthcare (53%) and in the EMEA region (48%). Security and robustness (32%), transparency and explainability (29%),

**89% of organizations have methods in place to manage or mitigate potential risks associated with AI**

and bias and fairness (26%) are other difficult ethics challenges that need to be addressed, according to respondents.

Nearly all (89%) of responding organizations have put some methods in place to manage or mitigate potential risks associated with AI. Human oversight and control is the most prominent solution, cited by 42% of respondents, and followed by continuous monitoring and auditing (36%), and

# 94%

of ITDMs have difficulty addressing ethical implications when implementing AI technologies in IT systems and processes. **The #1 issue is data privacy.**

privacy and data protection (35%). Ethical frameworks and guidelines and explainable AI and transparency, both relatively new concepts, were less established among respondents, cited by 27%.

## Interest in Generative AI swells

Despite its relatively short tenure, Generative AI has already made inroads in organizations putting it on par with broader AI initiatives. Seventy-two percent of respondents to the Foundry survey said they were actively researching Gen AI or piloting new initiatives while 12% have implemented the technology at a business unit level; only 5% introduced Gen AI at enterprise scale. There were only nominal differences based on company size.

# 72%

of organizations are researching or piloting Generative AI projects.

Companies are most interested in Gen AI for chatbots and virtual assistant use cases, cited by 56%, and higher among financial services (66%) and high-tech (63%) companies along with firms in North America (60%). Content generation (55%), industry-specific applications (48%), and data augmentation (46%) are the next most off-cited interest areas for Gen AI. Not surprisingly, education respondents (71%) were drawn to the technology for content generation while companies in the healthcare and retail sectors were partial to industry-specific Gen AI applications, both cited by 62% of respondents.

AI code generation or code completion through use of Gen AI is already enjoying a moderate uptick, cited by 37% of respondents and much higher among high-tech (48%) firms and companies in EMEA (48%). A majority (81%) confirm that their developers will take advantage of such features, although most (47%) won't commit to a specific timeframe. Already, however, Gen AI is playing a large role in employee productivity with companies ramping up proof of concepts to test out gains—a scenario reported by 58% of survey respondents, and significantly higher among younger Gen X (72%) and Gen Z (75%) employees. More than half (55%) of overall respondents report that Gen AI is allowing employees to refocus on higher-value tasks.

Currently, content creation (26%), data analytics (23%, and software development (21%) are the primary use cases for Gen AI, but over the next six to 12 months, respondents expect to turn attention to data analytics (53%), process automation (51%), and business insights (51%). Most companies don't have a current roadmap to use Gen AI for product development, software development, and internal customer support. Enterprises (those with greater than 1,000 employees) are

**Top Gen AI use cases**
- Chatbots and virtual assistants
- Content generation
- Industry-specific applications

currently using Gen AI for data analytics (26%), internal customer support (23%), and software development (23%) with process automation and business insights use cases on the docket for the next six to 12 months, both at 53%. Similar to the general respondent pool, product development is not seen as a strong use case candidate for Gen AI for larger companies.

## Preparing for Gen AI

To prepare for what many are predicting will be a frenzied pace of adoption,

organizations are identifying use cases (57%), starting pilot programs (45%), and training and upskilling employees on Gen AI (41%). Far fewer (17%) are hiring new employees with specialized skill sets with the exception of companies in the healthcare space, at 31%.

Despite the hoopla, there have been nominal roles added to support Gen AI, according to respondents. Those that have plans to expand their talent bench have added (28%) or are seeking (30%) data scientists along with machine learning engineers, at 22% and 28% respectively.

> ## Which areas could benefit from additional Gen AI capabilities?
>
> 1. Productivity/collaboration tools
> 2. Marketing/sales systems
> 3. Security tools

There was little interest in hiring for newer titles like AI chatbot developer, prompt engineers, and AI writers and artists. Even at the executive level, less than a quarter (21%) of respondents say they are looking to establish a chief AI officer position, although that sentiment

is higher among healthcare (35%) and education (33%) respondents.

Enterprise organizations have more interest in AI-related roles, adding data scientists (38%), machine learning engineers (31%), and a quarter introducing AI researchers. Only 15% of enterprise companies have a chief AI officer, although 24% are seeking qualified candidates. SMBs are unlikely to add roles to support Gen AI, but those that plan to are gravitating towards AI researchers, data scientists, and machine learning engineers.

Augmenting existing tools and systems with Generative AI capabilities is another way companies are hoping to capitalize on its benefits. Productivity/collaboration tools (55%), marketing/sales systems (45%), and security (41%) are the key platforms where respondents believe they could benefit from additional Gen AI capabilities. In response to demand, productivity/collaboration tools, marketing/sales systems, and CRM platforms are most likely to be infused with Gen AI functionality. Productivity/collaboration tools with additional Gen AI capabilities were called out as the most likely to have a positive impact, cited by 86%, and more than half of respondents (55%) thought the category would benefit from additional

capabilities.  Overall, 55% of respondents think Generative AI-infused products would create better business outcomes.

## Hurdles to Gen AI adoption

Security and privacy concerns are the most pressing ethical implications when implementing Gen AI. Thirty-six percent of respondents called out security and cybersecurity issues as major hurdles in addition to privacy concerns. Authenticity and trust was close behind, cited by 34% of respondents, although much higher among those in the education sector, at

**Close to 1/4 of IT decision-makers are concerned that their organization is moving too fast with respect to the use of Gen AI.**

41%. Slightly over a third (36%) have put policies or systems in place to monitor use of Generative AI, a move that is more prevalent among companies in the high-tech (46%) and services (44%) sectors and across the EMEA region (46%). Regulatory compliance is another common concern, cited by 29% of overall respondents, but a bigger deal for companies in the financial services (44%) and healthcare space (51%).

With data central to successful Gen AI, and AI projects in general, there are a number of requirements that could potentially impede companies' implementations. Quality and quantity of data is the number one concern, cited by almost half (48%)

### Most pressing ethical implications to implementing Gen AI

Security and cybersecurity **36%**
Privacy concerns **37%**
Authenticity and trust **34%**

of respondents and higher among services (57%) and financial services (56%) as well as those in the EMEA region (54%). Privacy and ethical considerations surrounding data remain an issue for 41% of respondents with data variability coming in third, at 37%.  Unlabeled or weakly labeled data is another factor, cited by 29% of respondents and a bigger issue for manufacturing companies (36%).

Integrating Gen AI with existing systems raises a variety of trouble spots, including data integration (45%), security and privacy (45%), and user experience (34%) challenges. Companies in the healthcare space anticipate spending time hammering out security and data privacy (60%) and data integration (56%) challenges as do enterprise firms, at 50% and 48%, respectively.

When it comes to Gen AI, companies need to be mindful of moving too quickly with a technology that's changing at an unprecedented pace. Almost a

quarter (23%) of respondents expressed concerns that their organization was moving too fast with respect to the use of Gen AI, higher among companies in the education sector (32%) and APAC shops (31%). Curiously, enterprises are more likely to voice concerns about the fast pace of Gen AI adoption, 27% compared to only 19% of SMBs.

Despite the challenges and still uncharted territory, enthusiasm for AI and Gen AI remains high with companies mostly bullish on the potential for better business outcomes. The train is moving quickly, so organizations need to ramp up skill sets and work through challenges, ensuring they are well-positioned to take full advantage of AI today and in the future.
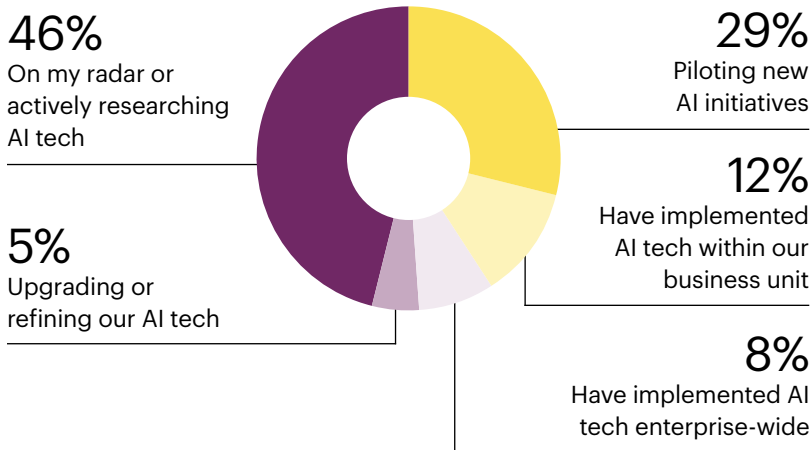
## About the survey

Foundry's 2023 AI Priorities Study is the first year of this research and was conducted to gain a better understanding of how organizations are leveraging AI and generative AI, specifically looking at their investment and implementation levels, use cases, measures of success and challenges. The study was fielded throughout August 2023 and is based on the responses of 965 global IT decision-makers who have AI and generative AI plans.

# Regional key takeaways

Is your marketing scope region-specific? Explore the key research findings from North America, Europe, and Asia-Pacific. Contact us to dive deeper into the regional results.

## North America

### Current AI activity in North America

**46%**
On my radar or actively researching AI tech

**5%**
Upgrading or refining our AI tech

**29%**
Piloting new AI initiatives

**12%**
Have implemented AI tech within our business unit

**8%**
Have implemented AI tech enterprise-wide

Only **31%** of NA ITDMs agree that their organization currently has the right data and technology in place to enable effective AI

**29%** of organizations in North America have a dedicated technology budget for AI projects currently

- **67%** expect their spending to increase in 2024

### Top AI use cases in North America

- Process automation **57%**
- Data analytics **56%**
- Employee productivity **56%**

### Satisfaction of these use cases

- Process automation **25%**
- Data analytics **30%**
- Employee productivity **32%**

### Challenges to overcome when implementing AI in North America

- Lack of inhouse expertise for design/deployment
- Business case/justification
- IT integration (governance, maintenance, security)

**75%** of IT decision-makers in North America say that their organization is actively researching or piloting Gen AI technology

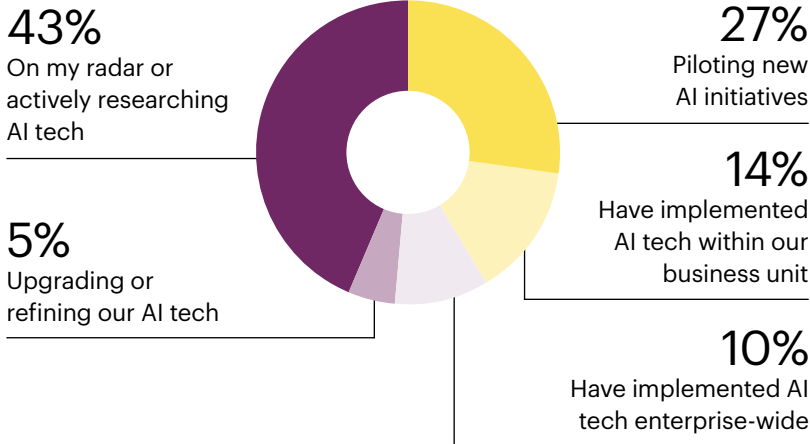### High interest in these Gen AI topics

- Integration with existing systems **46%**
- Potential applications **45%**
- Performance and limitations **37%**

### Factors impacting the integration of Gen AI in North America

- Security and privacy **48%**
- Data integration **44%**
- User experience **38%**

# EMEA

## Current AI activity in EMEA

43%
On my radar or actively researching AI tech

5%
Upgrading or refining our AI tech

27%
Piloting new AI initiatives

14%
Have implemented AI tech within our business unit

10%
Have implemented AI tech enterprise-wide

Only **38%** of EMEA ITDMs agree that their organization currently has the right data and technology in place to enable effective AI

**38%** of organizations in EMEA have a dedicated technology budget for AI projects currently

- **64%** expect their spending to increase in 2024

### Top AI use cases in EMEA
- Data analytics **60%**
- Employee productivity **57%**
- Process automation **56%**

## Satisfaction of these use cases
- Data analytics **49%**
- Employee productivity **44%**
- Process automation **43%**

## Challenges to overcome when implementing AI in EMEA
- IT integration (governance, maintenance, security)
- Lack of inhouse expertise for design/deployment
- Business case/justification

**66%** of IT decision-makers in EMEA say that their organization is actively researching or piloting Gen AI technology

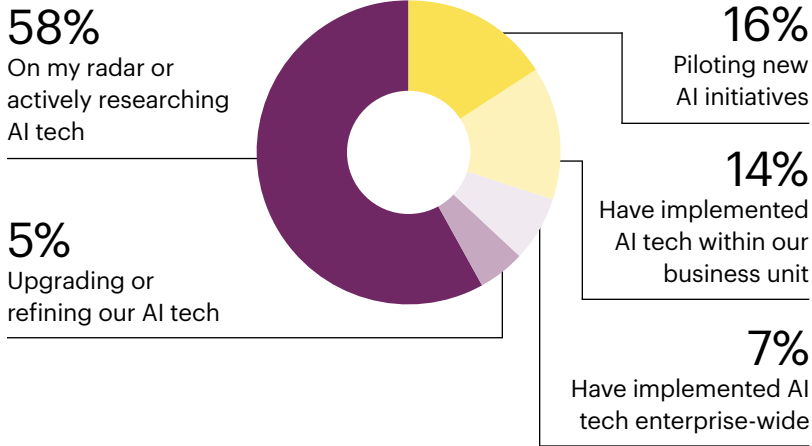### High interest in these Gen AI topics:
- Integration with existing systems **49%**
- Potential applications **39%**
- Performance and limitations **37%**

### Factors impacting the integration of Gen AI in EMEA
- Security and privacy **52%**
- Data integration **51%**
- Training and retraining **32%**

# APAC

## Current AI activity in APAC

**58%**
On my radar or actively researching AI tech

**5%**
Upgrading or refining our AI tech

**16%**
Piloting new AI initiatives

**14%**
Have implemented AI tech within our business unit

**7%**
Have implemented AI tech enterprise-wide

Only **38%** of APAC ITDMs agree that their organization currently has the right data and technology in place to enable effective AI

**46%** of organizations in APAC have a dedicated technology budget for AI projects currently

- **53%** expect their spending to increase in 2024

### Top AI use cases in APAC
- Data analytics **58%**
- Employee productivity **50%**
- Process automation **46%**

### Satisfaction of these use cases
- Data analytics **35%**
- Employee productivity **30%**
- Process automation **31%**

### Challenges to overcome when implementing AI in APAC
- IT integration (governance, maintenance, security)
- Business case/justification
- Lack of inhouse expertise for design/deployment

**70%** of IT decision-makers in APAC say that their organization is actively researching or piloting Gen AI technology

### High interest in these Gen AI topics
- Integration with existing systems **43%**
- Data requirements **36%**
- Performance and limitations **34%**

### Factors impacting the integration of Gen AI in APAC
- Data integration **45%**
- Security and privacy **37%**
- User experience **33%**

# Examining the marketplace

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**Buying process studies**
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- Customer Engagement

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**Role and priority studies**
- CIO Tech Poll: Tech Priorities
- State of the CIO

**Technology-specific studies**
- Data and Analytics
- Cloud Computing
- Digital Business
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