



The state of AI 2024

Challenges to adoption and key strategies
for organizational success

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Introduction

Artificial intelligence has become central to how organizations drive efficiency, improve productivity, and accelerate innovation. The release of ChatGPT in 2022 ushered in an AI hype cycle and moved the technology to the top of boardroom and political agendas worldwide.

Conversational generative AI chatbots, such as ChatGPT and Google Bard, are transformative technologies that can enhance workforce productivity by automating various organizational tasks. Now, organizations are identifying considerable potential for these technologies within multiple business areas. They're seeing particular advantages in development, operations, and security use cases, where they can use generative AI-based solutions to write software code, create dashboards, and enable users to query data through natural language.

These solutions promise to help organizations keep up with the pace of digital innovation by enabling teams to deliver new, more secure applications and services at record speed. Alongside the clear advantages of generative AI, however, there are challenges and risks that organizations need to manage, including the potential for manipulation and bias.

This report explores these challenges and highlights how technology leaders can overcome them by taking a composite approach to AI, where teams combine multiple data modalities and different types of artificial intelligence—such as generative, predictive, and causal AI—to drive fast, precise, and trustworthy answers and automation.



Types of AI

Causal AI

Causal AI determines the exact underlying causes and effects of events or behaviors in digital systems based on the system's topology, or structure, including the dependencies between individual components within the system.

Predictive AI

Predictive AI trains machine learning models to learn from historical data and make predictions about future events based on patterns from that data.

Generative AI

Generative AI uses its training data to create text, images, code, or other types of content that reflect its users' natural language queries.

Composite AI

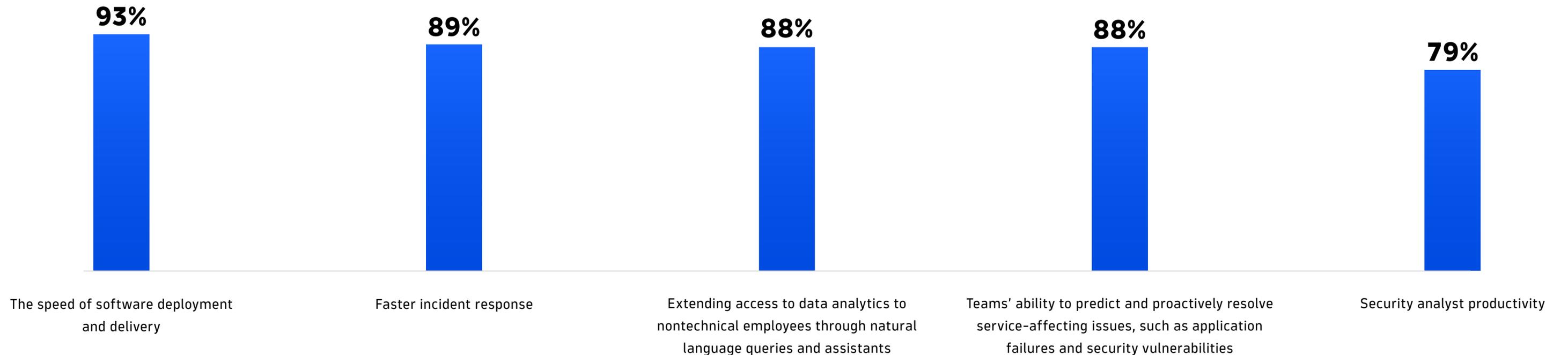
Composite AI combines multiple types of artificial intelligence and data sources. This enables more advanced reasoning and brings precision, context, and meaning to the outputs produced by generative AI.

AI investment is increasing

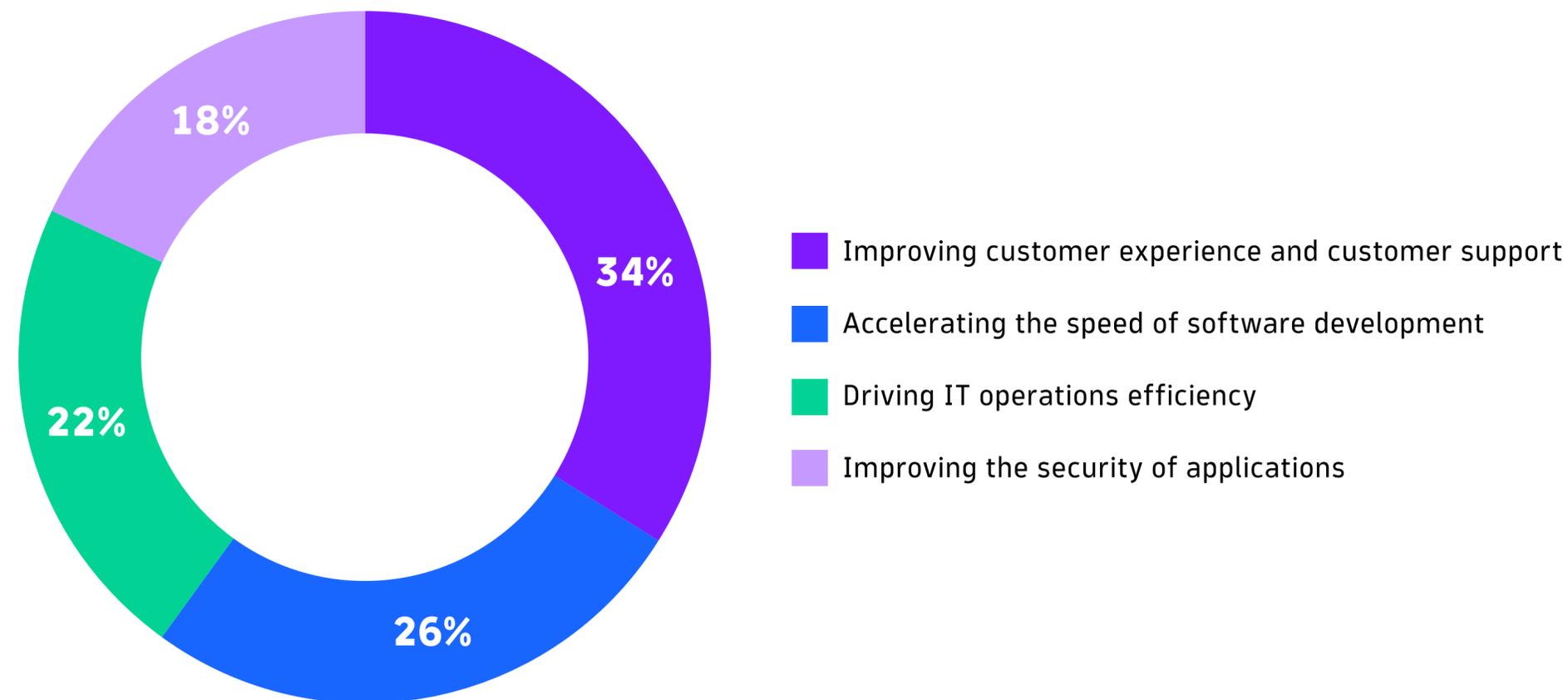
As digital innovation continues to accelerate, organizations are increasing their investments in AI to improve productivity, automate tasks, reduce costs, and keep pace with the competition. AI has vast potential to drive efficiencies for a broad range of use cases.

Many parts of an organization stand to benefit from the efficiency and insight that AI offers—from call center agents and software engineers to C-level executives. While many organizations have just begun to explore the range of potential business use cases, many are prioritizing their investments in AI-based tooling and services to support development and operations teams.

The top improvements that technology leaders expect AI to deliver include the following:



Technology leaders identify the following as their highest priority for investing in generative AI:



83%
of technology leaders say AI has become mandatory to keep up with the dynamic nature of cloud environments.

CHAPTER TWO

AI will improve organizational processes

AI is becoming invaluable in increasing development, operations, security, and business teams' productivity. It can accelerate key tasks, such as writing new software code and suggesting bug fixes. Organizations can also use AI to strengthen their security posture by reducing the manual effort involved in application vulnerability management and enabling teams to respond to threats in real time.

These applications of AI allow teams to focus on more strategic and high-level tasks, such as planning new features, building a more secure software architecture, and improving customer experiences. Ultimately, this will enable teams to spend more time driving innovation that helps an organization to anticipate and meet the needs of its customers and end users.

Nearly three-quarters of IT operations, development, and security teams plan to use AI to become more proactive in executing their work.

76%

IT operations teams

74%

Development teams

73%

Security teams

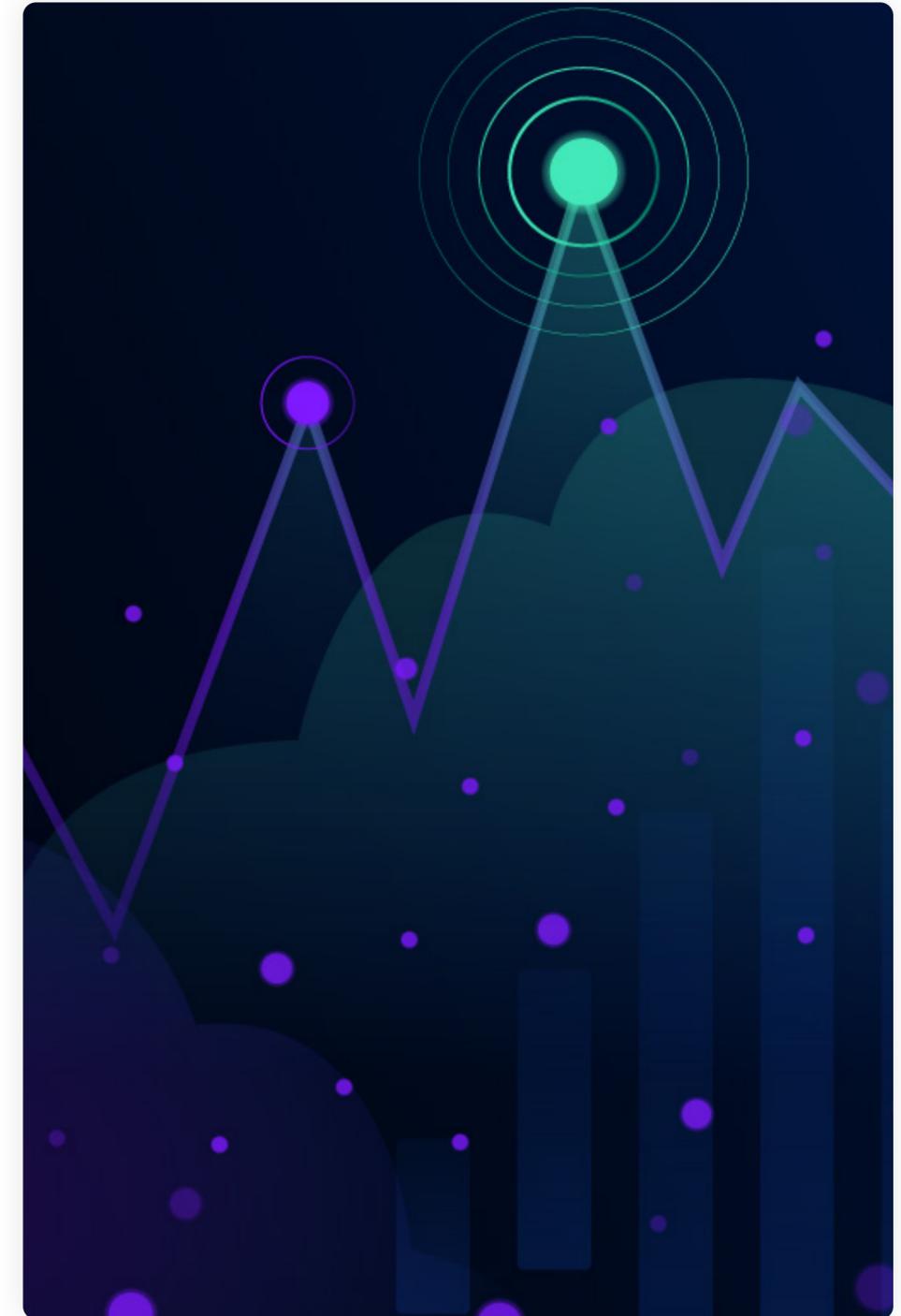
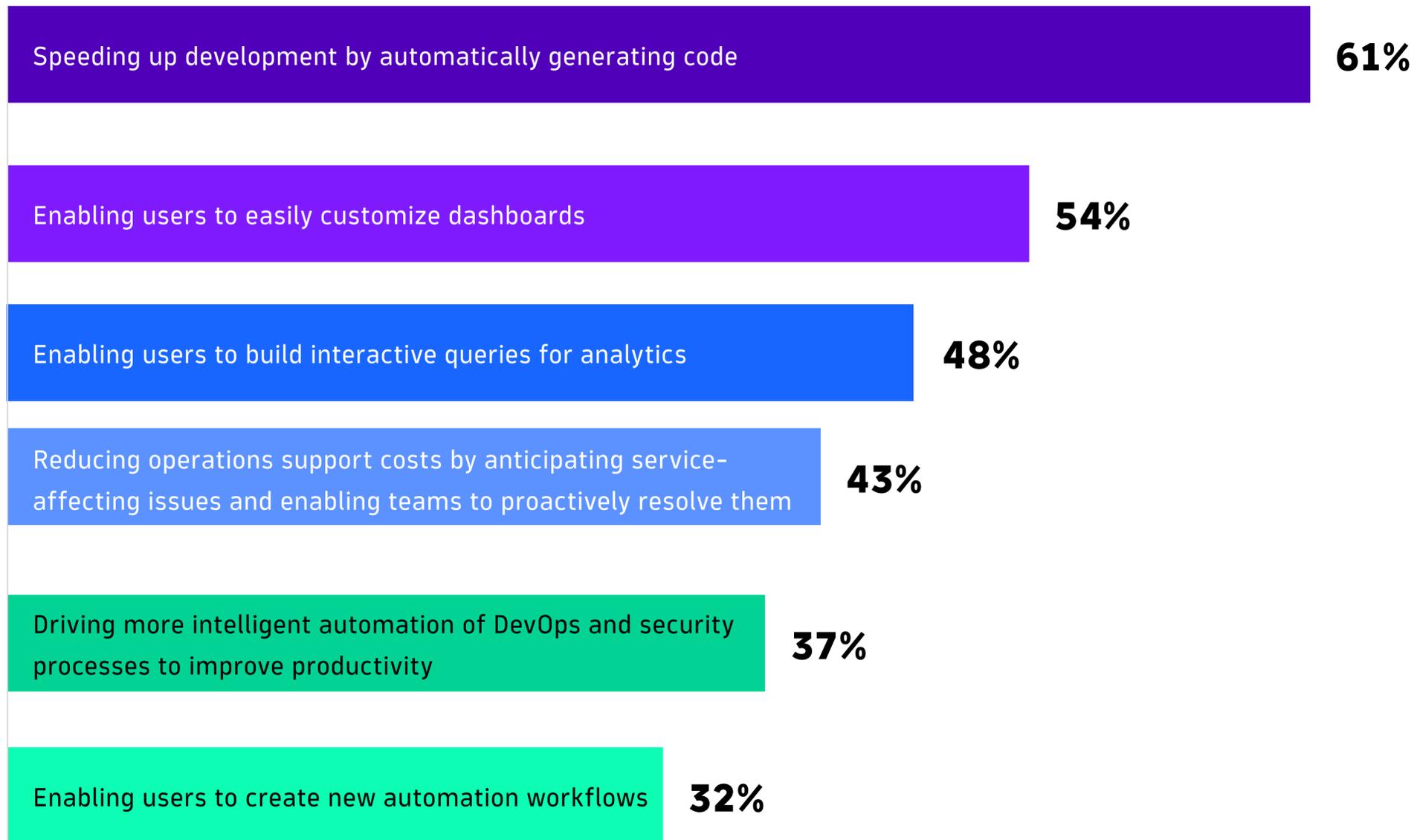
60%

DevOps teams

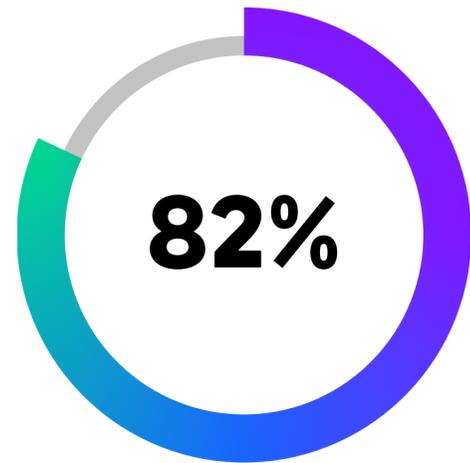
59%

Business teams

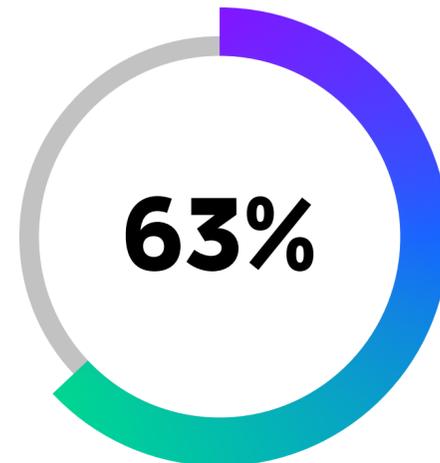
Technology leaders are increasing their investments in AI to support the following areas over the next 12 months:



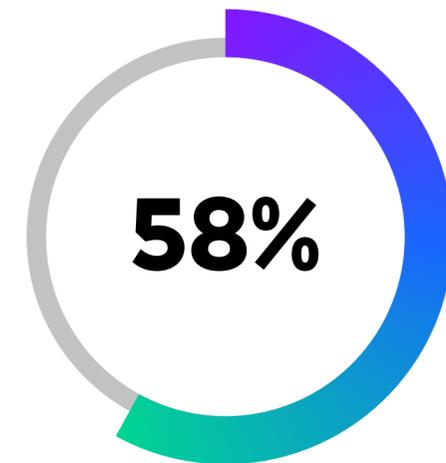
Technology leaders say AI will be critical to the success of the following development, security, and operations use cases:



Threat detection,
investigation,
and response



Automating complex
operations tasks



Eliminating false alerts
and the manual effort
of validating code deployments

CHAPTER THREE

AI is essential to taming multicloud complexity

Organizations need a more mature approach to monitoring and analytics to tame the growing complexity and enormous amount of data generated by their clouds.

They are increasingly looking for AI capabilities that enable them to maximize the value of their observability, security, and business events data in new use cases, from automated attack blocking to cloud cost management. These capabilities help development, operations, and security teams make more informed decisions about how to optimize processes and drive value for the business. To succeed, organizations need AI that delivers predictable, trustworthy, and precise answers in real time, so teams can understand what is happening in their cloud environments and automate complex business processes with confidence.

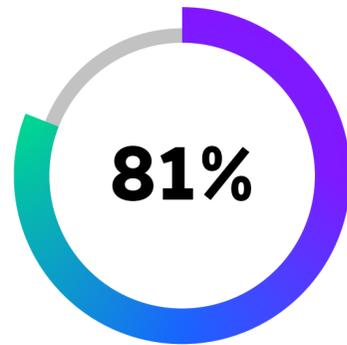
88%

of technology leaders think AI will enable cloud cost efficiencies by supporting FinOps (IT cost optimization) practices

87%

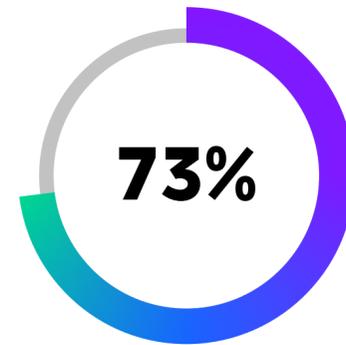
of technology leaders say AI-powered issue prevention and remediation are critical to managing multicloud complexity

**Technology leaders plan to increase AI investment in the next 12 months
to support the following use cases:**

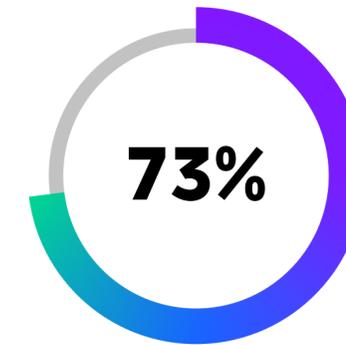


Automating analytics
to handle the growth
of observability, security,
and business events data*

*This encompasses user behavior, conversions, and sentiment analysis data stemming from hybrid cloud and multicloud environments.



Generating insight
from observability,
security, and business
events data

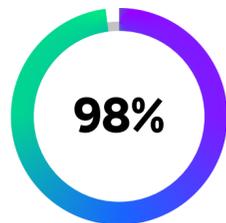


Enabling self-service
so nonexperts can query
observability, security,
and business events data
to answer their own questions

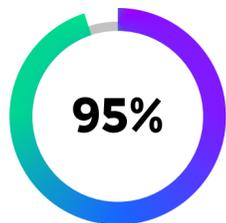
Minimizing AI risk is an urgent priority

Despite the clear benefits of AI, some difficulties arise when integrating the technology into an organization's operations and using it to automate processes and workflows. One of the most significant challenges is achieving meaningful AI-generated responses that users can trust. It's well known that generative AI can "hallucinate," creating inaccurate or inconsistent statements. To address this, teams need a way to quickly and easily engineer AI prompts that contain detailed context and precision.

However, as organizations enable their teams to use AI in this way, they must also be mindful of the potential security and compliance risks. They need sufficient guardrails surrounding handling data that AI models ingest, or employees could accidentally expose sensitive information. This need will drive demand for AI platforms that are purpose-built with security and privacy requirements in mind.

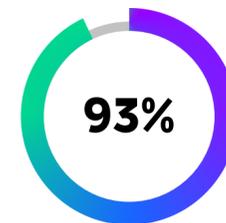


98% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation

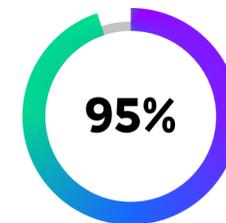


95% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that provide data on current states and accurate predictions for the future**

**Based on a smaller subset of the full sample base



93% of technology leaders are concerned that AI could be used for nonapproved uses as employees become more accustomed to using AI models and tools such as ChatGPT



95% of technology leaders are concerned that using generative AI to create code could result in data leakage as well as improper or illegal use of intellectual property

CHAPTER FIVE

AI will have a widespread organizational impact

AI is poised to improve productivity and workforce satisfaction throughout an organization, reducing manual toil and creating opportunities to develop new skills. Beyond the use cases for development, operations, and security teams, AI will give nontechnical workers easier access to analytics through natural language queries and virtual assistants. This will dramatically reduce the burden on development, operations, and security teams and enable more team members throughout the business to make informed, data-driven decisions.

However, organizations must implement AI adoption policies, so employees understand how to use these technologies in a safe and compliant way. They also need to recognize that not all AI is created equal. More complex use cases require a composite approach combining multiple types of AI and different data sources. If organizations get their strategy right, AI will significantly boost the workforce, creating an environment where humans work alongside technology in a way that aids and enhances their skill sets to deliver lasting business value.

62%

of organizations have already changed the job roles and skills they are recruiting for because of AI

28%

of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Technology leaders identify the top challenges affecting successful AI adoption as the following:

89%

The ability to automatically and intelligently optimize AI prompts

87%

Team skills or training

86%

Improving the accuracy and quality of the information AI ingests

81%

Managing regulatory risks

86%

Enhancing the explainability of the answers AI provides

86%

Quality of data used as an input for model training and prompt engineering

82%

Eliminating bias

The Dynatrace difference

The world needs software to work perfectly. So, Dynatrace unifies observability and security analytics using AI that combines causal, predictive, and generative techniques in a single platform. This approach gives teams the precise answers and intelligent automation they need to deliver exceptional digital experiences at scale. Our comprehensive approach to observability and security analytics and automation—which we call cloud done right—empowers organizations across the globe to simplify cloud complexity, speed innovation, and do more with less in the modern cloud.

Methodology

This report is based on a global survey of 1,300 CIOs, CTOs, and other senior technology leaders involved in IT operations and DevOps management in large enterprises with more than 1,000 employees, conducted by Coleman Parkes and commissioned by Dynatrace.

The sample included 200 respondents in the U.S., 100 in Latin America, 600 in Europe, 150 in the Middle East, and 250 in Asia Pacific. For a detailed breakdown of findings by region, refer to the global data summary appendix.

Industries spotlight



Financial services

Given the increasing hype surrounding AI in 2023, coupled with resource shortages, financial services companies are focusing on automation and plan to significantly increase investments in AI. Some 98% of financial services organizations now believe AI can enable the adoption of FinOps practices to better manage and control cloud expenditures. In general, some 96% of financial services respondents are concerned that generative AI, while useful, could result in leakage and improper or illegal use of others' intellectual property.

Most financial services respondents believe multicloud environments are increasingly complex to manage, difficult to protect, and challenging to architect to deliver outstanding experiences. In fact, three-quarters of financial services respondents see AI as a means to reduce this complexity. Further, 86% said they believe AI is becoming mandatory, as it is impossible for teams to manually keep pace with the size, speed, and dynamic nature of cloud environments.



Retail

As the macroeconomic terrain remains dynamic and volatile, retailers are seeing a change in the consumer landscape. They not only have to appeal to the growing number of digital-native consumers, but also look to attract customers who frequent physical stores. AI and automation have become game changers for retail-focused IT teams.

As retailers make efforts to deliver innovation, an average of 73% of technology leaders said their company plans to increase its AI investment to support DevOps use cases in the next 12 months. Respondents say their company sees improving customer experience and support as the highest priority for investing in generative AI to support DevOps use cases (39%). Time to market is also a key priority, with 95% of respondents saying AI can improve the speed of software delivery and deployment.



Government

Government agencies focus on delivering public services and protecting the citizenry. With the goal of earning the public's trust, government respondents rank improving customer experience and support (32%) as the highest priority for investing in generative AI to support DevOps use cases.

But among the various verticals, 99% of government agency respondents are concerned about how generative AI could be susceptible to unintentional bias, error, and misinformation if poor-quality or inaccurate data is used to generate answers.

Like other industries, 85% of government agencies believe multicloud complexity is making it more difficult to deliver outstanding citizen and user experiences. And a majority (91%) agree that AI-powered issue prevention and intelligent remediation are critical to managing multicloud complexity.



Transportation

While the travel industry outlook has improved over the past couple of years, the industry faces headwinds as well. Stiff competition, economic strains, a volatile supply chain, and a tight labor market all force transportation leaders to rethink how their businesses operate.

Not surprisingly, 47% of travel industry respondents—the most of all industries—said improving customer experience and support is the highest priority for investing in generative AI to support DevOps use cases.

Respondents also believe AI will help them compete in areas such as faster incident response and the ability of teams to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities. Among respondents, 90% said AI will be critical for success with threat detection, investigation, and response.

Finally, 92% of transportation industry respondents said multicloud complexity makes it more difficult to deliver outstanding customer experiences.



Software and digital services

Software-as-a-service (SaaS) applications are exploding alongside increasing digital modernization and cloud adoption. Software and technology businesses face intense pressure to innovate at an increasingly faster pace without sacrificing performance or security. Therefore, it isn't surprising that this industry is adopting AI as part of its DevOps processes to speed up development (70%), automate queries (53%), and create automated workflows (34%).

Interestingly, the software and technology industry is not enamored of generative AI except for speeding up development (38%). Respondents in this sector note that eliminating bias (84%) is an important consideration in successful AI adoption.

Software and technology company respondents are also at the forefront of adopting AI and automation to reduce the complexity of managing their multicloud environment (78%).

Global data summary

Regional highlights

Brazil

Sample base: 50 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 88% |
| Security analyst productivity | 88% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 86% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 84% |
| Faster incident response | 82% |

- 96% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 98% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 92% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Brazil

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Team skills or training | 94% |
| Managing regulatory risks | 92% |
| The ability to automatically and intelligently optimize AI prompts | 90% |
| Improving the accuracy and quality of the information AI draws on | 90% |
| Enhancing the explainability of the answers AI provides | 82% |
| Quality of data used as an input for model training and prompt engineering | 82% |
| Eliminating bias | 80% |

- 86% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 14% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Mexico

Sample base: 50 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 92% |
| The speed of software deployment and delivery | 90% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 82% |
| Security analyst productivity | 80% |
| Faster incident response | 72% |

- 94% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 98% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 98% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Mexico

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| The ability to automatically and intelligently optimize AI prompts | 96% |
| Team skills or training | 92% |
| Eliminating bias | 90% |
| Improving the accuracy and quality of the information AI draws on | 88% |
| Enhancing the explainability of the answers AI provides | 88% |
| Quality of data used as an input for model training and prompt engineering | 86% |
| Managing regulatory risks | 84% |

- 96% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 4% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

U.K.

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 92% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 92% |
| Faster incident response | 91% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 90% |
| Security analyst productivity | 87% |

- 91% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 90% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 81% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

U.K.

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Team skills or training | 93% |
| Enhancing the explainability of the answers AI provides | 92% |
| Eliminating bias | 91% |
| The ability to automatically and intelligently optimize AI prompts | 91% |
| Managing regulatory risks | 90% |
| Improving the accuracy and quality of the information AI draws on | 87% |
| Quality of data used as an input for model training and prompt engineering | 85% |

- 46% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 48% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

France

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 93% |
| Faster incident response | 92% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 90% |
| Security analyst productivity | 89% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 88% |

- 91% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 99% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 94% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

France

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Quality of data used as an input for model training and prompt engineering | 94% |
| Team skills or training | 94% |
| Enhancing the explainability of the answers AI provides | 86% |
| Eliminating bias | 85% |
| Managing regulatory risks | 83% |
| Improving the accuracy and quality of the information AI draws on | 82% |
| The ability to automatically and intelligently optimize AI prompts | 79% |

- 64% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 32% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Germany

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 93% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 93% |
| Security analyst productivity | 89% |
| Faster incident response | 86% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 82% |

- 91% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 99% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 98% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Germany

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Team skills or training | 95% |
| Quality of data used as an input for model training and prompt engineering | 94% |
| The ability to automatically and intelligently optimize AI prompts | 89% |
| Enhancing the explainability of the answers AI provides | 88% |
| Improving the accuracy and quality of the information AI draws on | 87% |
| Managing regulatory risks | 83% |
| Eliminating bias | 81% |

- 74% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 25% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Italy

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 93% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 93% |
| Faster incident response | 91% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 88% |
| Security analyst productivity | 87% |

- 92% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 91% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 94% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Italy

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Team skills or training | 94% |
| The ability to automatically and intelligently optimize AI prompts | 89% |
| Quality of data used as an input for model training and prompt engineering | 88% |
| Managing regulatory risks | 86% |
| Improving the accuracy and quality of the information AI draws on | 86% |
| Enhancing the explainability of the answers AI provides | 85% |
| Eliminating bias | 79% |

- 60% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 37% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Spain

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 92% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 86% |
| Security analyst productivity | 85% |
| Faster incident response | 84% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 80% |

- 81% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 100% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 98% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Spain

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Managing regulatory risks | 89% |
| The ability to automatically and intelligently optimize AI prompts | 89% |
| Enhancing the explainability of the answers AI provides | 84% |
| Improving the accuracy and quality of the information AI draws on | 83% |
| Eliminating bias | 82% |
| Quality of data used as an input for model training and prompt engineering | 80% |
| Team skills or training | 79% |

- 72% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 25% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Sweden

Sample base: 50 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 92% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 90% |
| Faster incident response | 88% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 84% |
| Security analyst productivity | 74% |

- 90% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 100% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 95% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Sweden

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Enhancing the explainability of the answers AI provides | 94% |
| Quality of data used as an input for model training and prompt engineering | 94% |
| The ability to automatically and intelligently optimize AI prompts | 88% |
| Managing regulatory risks | 86% |
| Team skills or training | 84% |
| Improving the accuracy and quality of the information AI draws on | 82% |
| Eliminating bias | 76% |

- 76% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 20% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Benelux

Sample base: 50 respondents (32 Netherlands, 10 Belgium, 8 Luxembourg)

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 96% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 94% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 90% |
| Faster incident response | 86% |
| Security analyst productivity | 80% |

- 94% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 100% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 94% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Benelux

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Quality of data used as an input for model training and prompt engineering | 94% |
| The ability to automatically and intelligently optimize AI prompts | 94% |
| Team skills or training | 92% |
| Improving the accuracy and quality of the information AI draws on | 86% |
| Eliminating bias | 84% |
| Managing regulatory risks | 82% |
| Enhancing the explainability of the answers AI provides | 78% |

- 74% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 24% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Middle East

Sample base: 150 respondents (65 UAE, 46 Saudi Arabia, 20 Kuwait, 19 Qatar)

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 90% |
| Faster incident response | 84% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 84% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 83% |
| Security analyst productivity | 81% |

- 90% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 98% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 93% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Middle East

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Eliminating bias | 89% |
| The ability to automatically and intelligently optimize AI prompts | 87% |
| Improving the accuracy and quality of the information AI draws on | 82% |
| Team skills or training | 81% |
| Managing regulatory risks | 79% |
| Enhancing the explainability of the answers AI provides | 77% |
| Quality of data used as an input for model training and prompt engineering | 77% |

- 81% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 15% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Australia

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| The speed of software deployment and delivery | 94% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 92% |
| Faster incident response | 90% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 86% |
| Security analyst productivity | 63% |

- 69% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 99% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 95% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Australia

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Improving the accuracy and quality of the information AI draws on | 92% |
| The ability to automatically and intelligently optimize AI prompts | 90% |
| Enhancing the explainability of the answers AI provides | 90% |
| Quality of data used as an input for model training and prompt engineering | 89% |
| Team skills or training | 79% |
| Eliminating bias | 75% |
| Managing regulatory risks | 71% |

- 41% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 29% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

Japan

Sample base: 100 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|-----|
| Faster incident response | 97% |
| The speed of software deployment and delivery | 92% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 92% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 86% |
| Security analyst productivity | 83% |

- 78% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 100% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 97% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

Japan

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| Quality of data used as an input for model training and prompt engineering | 93% |
| Improving the accuracy and quality of the information AI draws on | 91% |
| Enhancing the explainability of the answers AI provides | 90% |
| The ability to automatically and intelligently optimize AI prompts | 87% |
| Team skills or training | 86% |
| Eliminating bias | 81% |
| Managing regulatory risks | 74% |

- 65% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 27% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

India

Sample base: 50 respondents

The top improvements that technology leaders expect AI to deliver include the following:

| | |
|---|------|
| The speed of software deployment and delivery | 100% |
| Faster incident response | 92% |
| Extending access to analytics to nontechnical employees through natural language queries and assistants | 88% |
| Teams' ability to predict and proactively resolve issues that affect service, such as application failures and security vulnerabilities | 86% |
| Security analyst productivity | 64% |

- 74% of technology leaders say AI has become mandatory, as it is impossible for teams to manually keep up with the size, speed, and dynamic nature of cloud environments
- 100% of technology leaders are concerned that generative AI could be susceptible to unintentional bias, error, and misinformation
- 98% of technology leaders say generative AI would be more beneficial if it were prompted by other types of AI that can provide precise facts about current states and accurate predictions for the future*

*Based on a smaller subset of the data sample

India

Technology leaders identify the top factors affecting the success of AI adoption as the following:

| | |
|--|-----|
| The ability to automatically and intelligently optimize AI prompts | 94% |
| Improving the accuracy and quality of the information AI draws on | 86% |
| Team skills or training | 84% |
| Enhancing the explainability of the answers AI provides | 84% |
| Quality of data used as an input for model training and prompt engineering | 80% |
| Managing regulatory risks | 76% |
| Eliminating bias | 76% |

- 42% of organizations have already changed the job roles and skills they are recruiting for because of AI
- 36% of organizations plan to change the job roles and skills they are recruiting for because of AI in the next 12 months

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