Microsoft

The AI Strategy Roadmap: Navigating the Stages of AI Value Creation

The following materials will help you prepare your AI strategy roadmap. As you navigate the contents, we encourage you to:

1. Explore the drivers of AI readiness

and the opportunities that suit your organization's unique needs.

- Business strategy
- Technology and data strategy
- AI strategy and experience
- Organization and culture
- AI governance

Explore the drivers

2. Get guidance on the profiles of each stage

of AI readiness to map out your roadmap and create value with AI.

- Exploring
- Planning
- Implementing
- Scaling
- Realizing

Explore the stages

3. Dive deeper into industry insights

to discover the best AI practices tailored to your organizational profile.

- Financial services
- Healthcare
- Manufacturing
- Retail

Explore the industries

Introduction

Part 1

Understanding the factors that drive AI readiness

Part 2

Guidance for leaders at every stage

Part 3

Insights and use cases unique to your industry

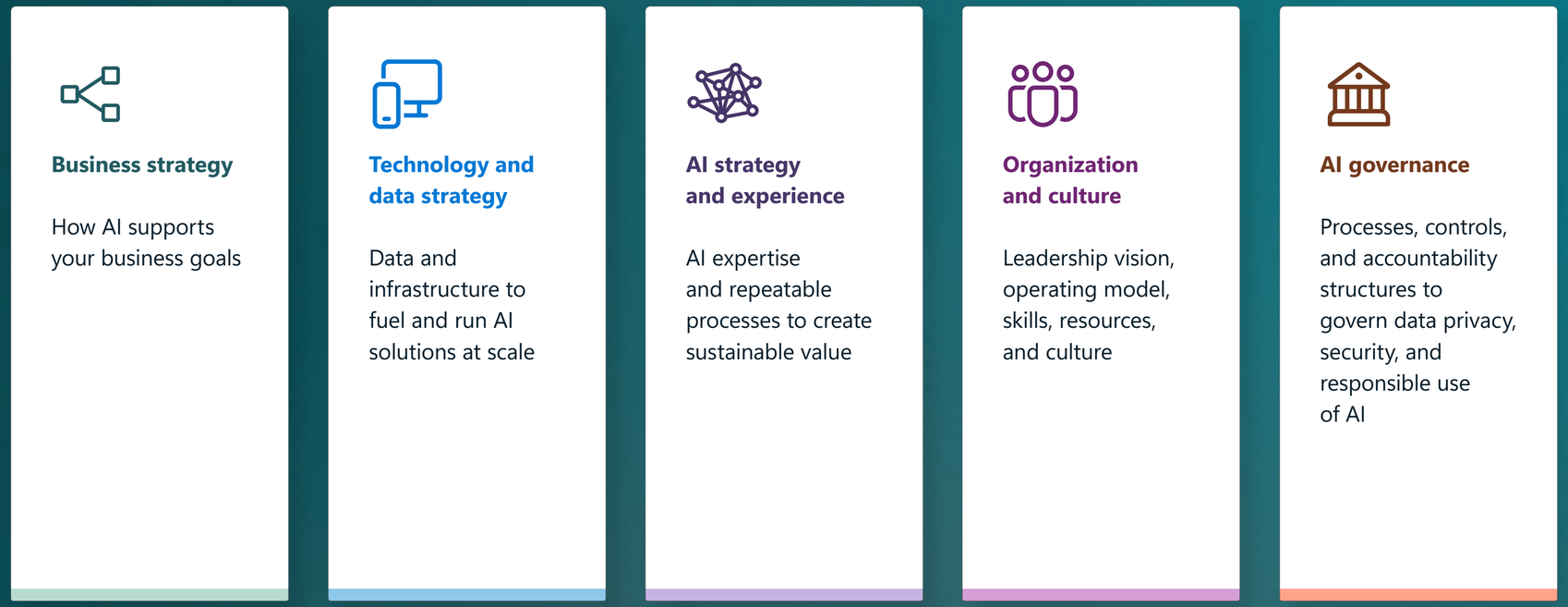
Conclusion

Executive summary

AI has come a long way since 1956, when John McCarthy first coined the term at a conference he organized at Dartmouth College.[1] The unprecedented pace of innovation, along with the accessibility of ChatGPT and other generative AI tools, has galvanized virtually every organization. AI is already augmenting customer and employee experience, improving business processes, and revealing opportunities for innovation and growth across teams, organizations, and industries.

Given the number of AI technologies, the number of possible uses, and the range of opportunities, it can be challenging to know what to prioritize and where to start. In *Building a Foundation for AI Success: A Leader's Guide*, we identified five drivers of organizational AI readiness to deliver value with AI (see Figure 1).

Figure 1: Five drivers of AI readiness



Research study from

1,300+

information technology and business leaders across a range of industries and regions

Microsoft commissioned IPSOS to conduct a research study to better understand these drivers and their impact on AI readiness, including qualitative data from experts and quantitative data from more than 1,300 information technology and business leaders across a range of industries and regions.[2] IPSOS then used the survey data to build a predictive model to help leaders focus on the highest-value actions they can take to realize value with AI.

The study that follows is based on the survey findings. It identifies emerging best practices for organizations at every stage of AI readiness and includes guidance on the next best steps that are most likely—based on your organization's unique profile—to help you achieve your goals.

Following are the key findings:

AI value creation isn't only about technology.

It's well understood that successful technology projects depend as much on people and processes as they do on the technology itself. Our research offers insights into the five drivers that contribute to an organization's AI readiness to deliver value with AI.

While operational efficiency and cost optimization will always be important, organizations increasingly prioritize growth-oriented use cases as they realize value from AI.

Thirty-seven percent of organizations in the most advanced AI readiness stage report a focus on use cases such as expanding their product and service portfolio and accelerating innovation, compared to 20% in the earliest stage.

Leaders tend to overestimate how prepared their organizations are to realize value from AI.

At the beginning of our survey, we asked leaders to assess their organization's level of AI readiness. We then repeated the question once they'd completed the survey. While 34% initially placed their organizations at the highest two stages of AI readiness, only 28% still did so after answering all questions, suggesting that the survey raised points they may not have initially considered. IPSOS then built a predictive model to determine where organizations would actually fall based on their answers to all questions.[3] The model yielded an even more conservative view: Only 25% fell into the highest two stages of AI readiness—nine percentage points lower than their initial assessment.

Leadership vision and support are by far the strongest drivers of success.

This doesn't replace other critical success factors. It simply means that a leader-driven AI strategy correlates most strongly with the ability to create value with AI.

Your roadmap depends on where you start.

Your AI strategy needs to account for the unique characteristics of your organization and, critically, where it is on its AI journey, whether it is just starting out with AI, in the planning stage, actively implementing AI projects, scaling AI across the business, or realizing measurable value at scale.

Part 1

This section lays out the factors that drive AI readiness and include guidance to help you accelerate your organization's ability to create value with AI.

There is no single path to value creation with AI, and each organization has different business models, histories, and experiences.

A company in a highly regulated industry is likely to have a well-developed set of governance processes. A larger organization that has been using machine learning or neural networks for years is likely to be well-versed in agile development methodologies. Given the newness of generative AI, most organizations are still likely to be exploring use cases and potential impacts. And, of course, individual leaders differ in their approach to technology as a business enabler.

The pages that follow represent the emerging best practices related to business strategy, technology and data readiness, AI strategy and experience, organization and culture, and AI governance. The intent is to help you identify areas of strength or opportunity so you can build or refine an AI strategy that is personalized to your organization's unique needs.

Driver 1: Business strategy

Ensuring that AI projects serve strategic business objectives

The first step in any AI business strategy is to determine what you're solving for. This will inform which use cases you'll select, how you'll prioritize them, how you'll measure success, and how you'll invest in AI for maximum impact. Clear business goals for AI promote alignment of AI projects to strategic objectives—such as efficiency and revenue generation—that the C-suite and board care about and that are therefore more likely to generate visibility and funding.

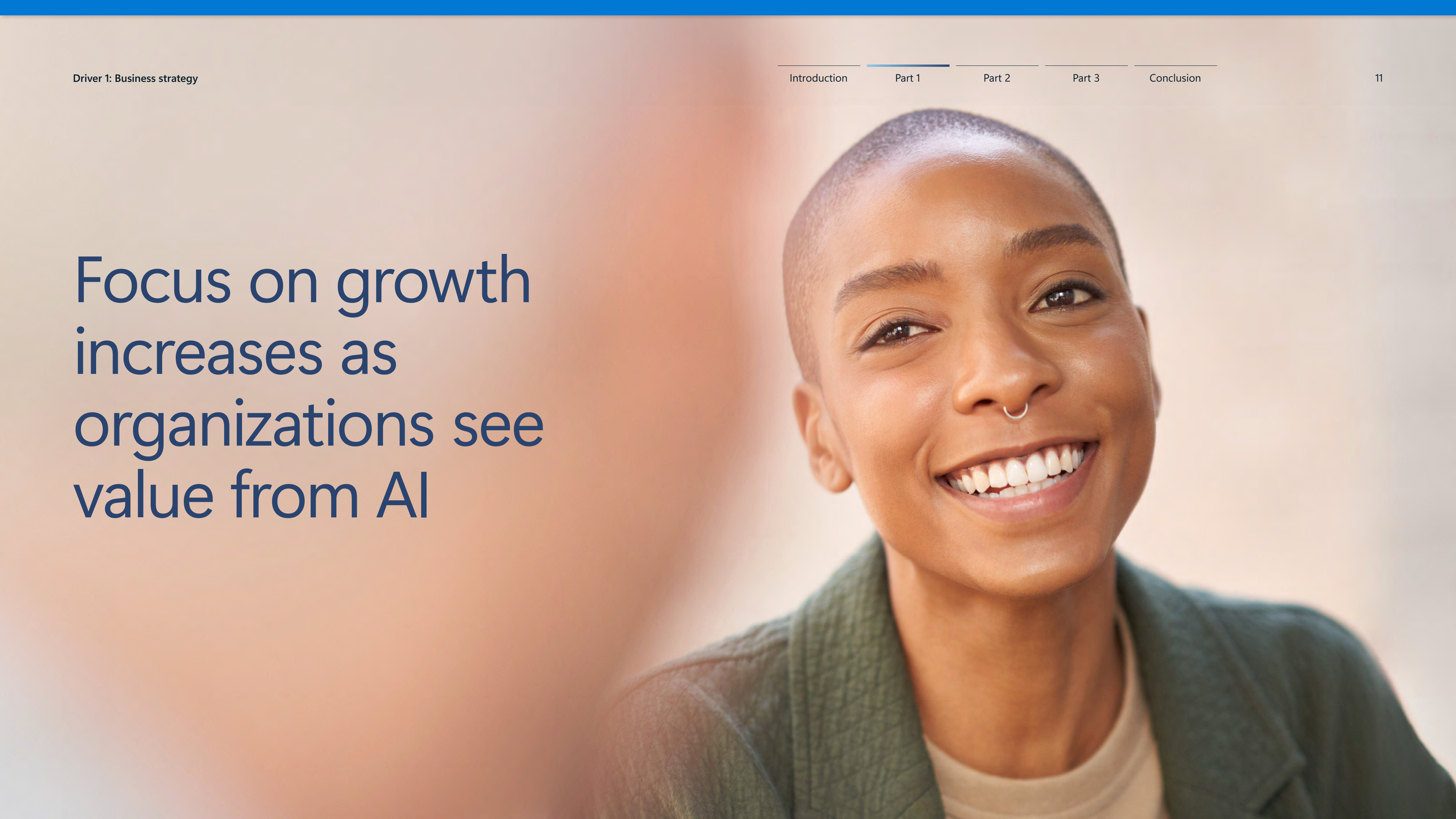
As organizations progress along their AI journey, some priorities remain at the top, while others change over time (see Figure 2). For example, organizations in the "exploring" stage should begin by making sure that their AI projects support business objectives but progress to use case selection and approval by the "planning" stage.

One area that becomes markedly more important over time is a clear investment plan for AI across the business. It stands to reason that this would be less urgent in the earlier stages, when there are fewer AI projects to manage, but it becomes critical by the time organizations reach the implementation stage as by then they tend to have a larger portfolio of AI projects to rationalize.

Figure 2: Business strategy opportunities by stage of AI readiness

Stage	Top opportunities	Next area(s)
Exploring	• AI objectives support business objectives • AI used for real-time decision-making	• Prioritized, approved, and socialized use cases for AI • A clear investment plan for AI implementation across the business
Planning	• Prioritized, approved, and socialized use cases for AI	• AI used for real-time decision-making
Implementing	• Prioritized, approved, and socialized use cases for AI	• AI objectives support business objectives • AI used for real-time decision-making • A clear investment plan or AI implementation across the business
Scaling	• Prioritized, approved, and socialized use cases for AI	• A clear investment plan for AI implementation across the business
Realizing	• Prioritized, approved, and socialized use cases for AI	• A clear investment plan for AI implementation across the business

Focus on growth increases as organizations see value from AI



Increasing operational efficiencies, reducing costs, improving productivity, and optimizing costs are the most commonly cited goals for AI among business and technology leaders. But our research also found that as organizations realize greater value from AI, they tend to increase their focus on growth-oriented objectives such as accelerating innovation, retaining and increasing revenue, and attracting investments and funding.

Figure 3 shows the percentage of organizations that report that they are seeing value at each stage of AI readiness, from 3% at the earliest "exploring" stage to 96% at the most advanced "realizing" stage. Figure 4 demonstrates how focus on growth nearly doubles as organizations report value from AI: 37% at the "realizing" stage prioritize growth compared to 20% in the "exploring" stage.

Figure 3: Percentage of organizations that report realizing value at each stage of AI readiness

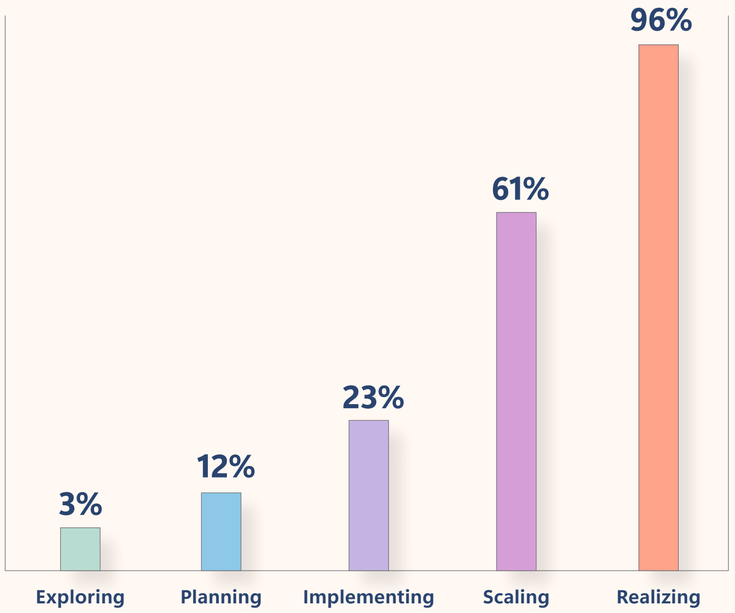
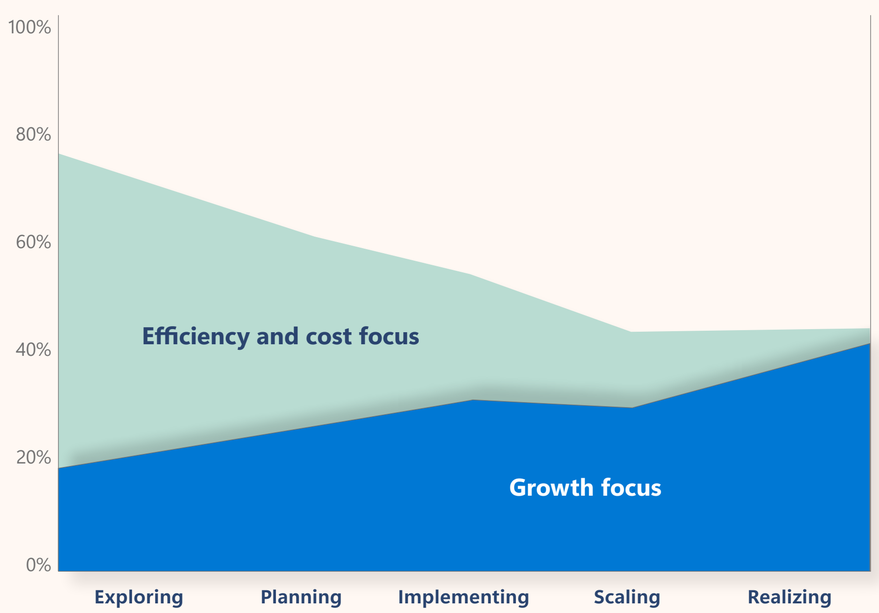


Figure 4: Focus on growth increases as organizations realize value from AI



Driver 2: Technology and data strategy

The data and infrastructure needed to deploy AI at scale

While aligning AI projects with organizational objectives is key to building a business case for AI, technology and data strategy makes it possible to progress from proof of concept to production and, eventually, scale. As shown in Figure 5, access to quality data is the first priority from the "exploring" to "implementing" stages, but it falls to second position as organizations progress to the "realizing" stage.

This is not because access to data becomes less important, but rather because the organization has addressed its initial access needs and is now concerned with higher-order questions such as whether the data is in the right format and accurately represents their target audiences and objectives.

The next priority for organizations implementing AI is, of course, a dedicated cloud infrastructure built to run large AI models at scale.

While data may be the fuel for AI, cloud infrastructure is the engine. Access to the computing power, analytics capability, storage, reliability, security, and performance capability of a cloud platform is what enables AI projects to generate value so they can move beyond the proof-of-concept stage.

Figure 5: Technology and data strategy opportunities by stage of AI readiness

Stage	Top opportunities	Next area(s)
Exploring	• Access to complete and relevant data for AI modeling purposes • Using AI for improving security	• Dedicated cloud infrastructure
Planning	• Access to complete and relevant data for AI modeling purposes	• Dedicated cloud infrastructure
Implementing	• Access to complete and relevant data for AI modeling purposes	• Dedicated cloud infrastructure • Data accurately represents relevant customers and business objectives
Scaling	• Data accurately represents relevant customers and business objectives	• Access to complete and relevant data for AI modeling purposes
Realizing	• Data accurately represents relevant customers and business objectives	• Access to complete and relevant data for AI modeling purposes • Having the right data in the right format

The good news

Most organizations already understand the importance of data and technology infrastructure. Among organizations at the “exploring” and “planning” stages, more than two out of three began with their infrastructure on premises and are already in the process of migrating to the cloud. As they continue to progress, we see a corresponding shift as more of their infrastructure moves to the cloud.

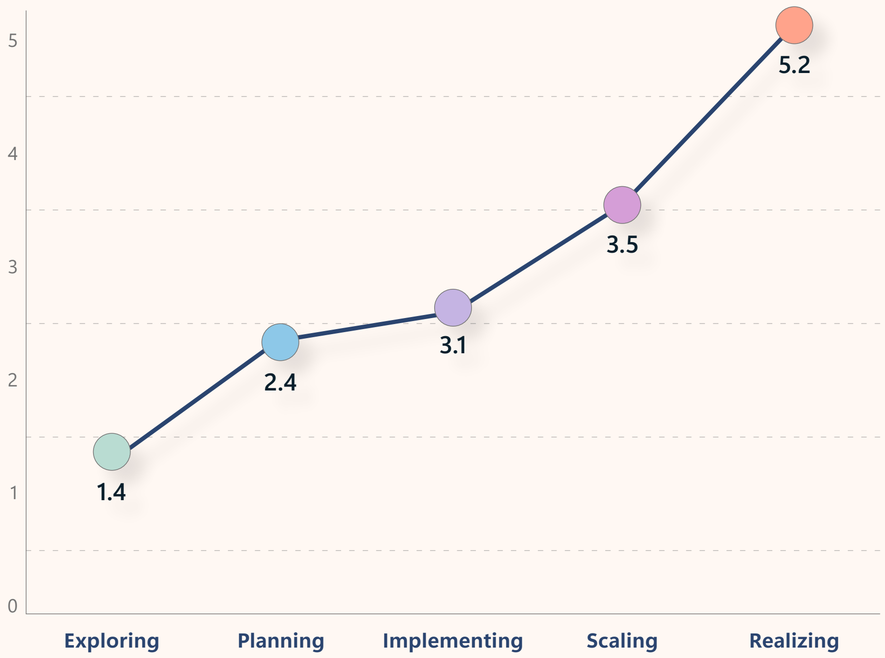
Driver 3: AI strategy and experience

The organization's understanding of, experience with, and processes to support AI at scale

AI is a spectrum of technologies with differing histories, approaches, and use cases. For the purposes of this study, we defined AI to include machine learning, neural networks, and generative AI. Despite their differences, each requires a degree of understanding (of the respective models and technologies and how to use them), repeatable processes and workflows (to enable scale), and organizational capability (to speed the path to value).

One metric that correlates with value creation is the number of departments within an organization that are using AI. Organizations in the "realizing" stage report more than three times the number of departments using AI as those in the "exploring" stage. (See Figure 6.)

Figure 6: Average number of departments using AI in their day-to-day functions



It’s (mostly) about the use cases

For those in the “exploring” stage, the priorities are people (diverse business and technology roles and experiences) and processes (standard, repeatable processes to develop and deploy AI solutions). Once the organization is in the “implementing” stage, however, the focus shifts to aligning AI models with use cases, as using the right tool for the right job can make or break the ability to realize value (see Figure 7).

Interestingly, repeatable processes and workflows shift back to first position at the “scaling” and “realizing” stages, albeit with a different focus this time. While organizations are keen to develop repeatable processes and workflows at the beginning of their AI journey, their focus later shifts to scaling them so they can enable systematic, repeatable ROI across the business. This also tracks with the fact that AI has higher stakes at the later stages, as by now it has proliferated across much more of the organization.

Figure 7: Drivers of AI strategy and experience by stage of AI readiness

Stage	Top opportunities	Next area(s)
Exploring	• Processes to create a standard repeatable process for development and deployment of AI • Diversity of roles and experiences of people involved in AI projects	Identifying AI models best suited for an organization’s AI use cases
Planning	• Identifying AI models best suited for an organization’s AI use cases	Processes and workflows to create a standard repeatable process for development and deployment of AI
Implementing	• Identifying AI models best suited for an organization’s AI use cases	Diversity of roles and experiences of people involved in AI projects
Scaling	• Processes and workflows to create a repeatable process for development and deployment of AI solutions	Identifying AI models best suited for an organization’s AI use cases
Realizing	• Processes and workflows to create a repeatable process for development and deployment of AI solutions	Identifying AI models best suited for an organization’s AI use cases

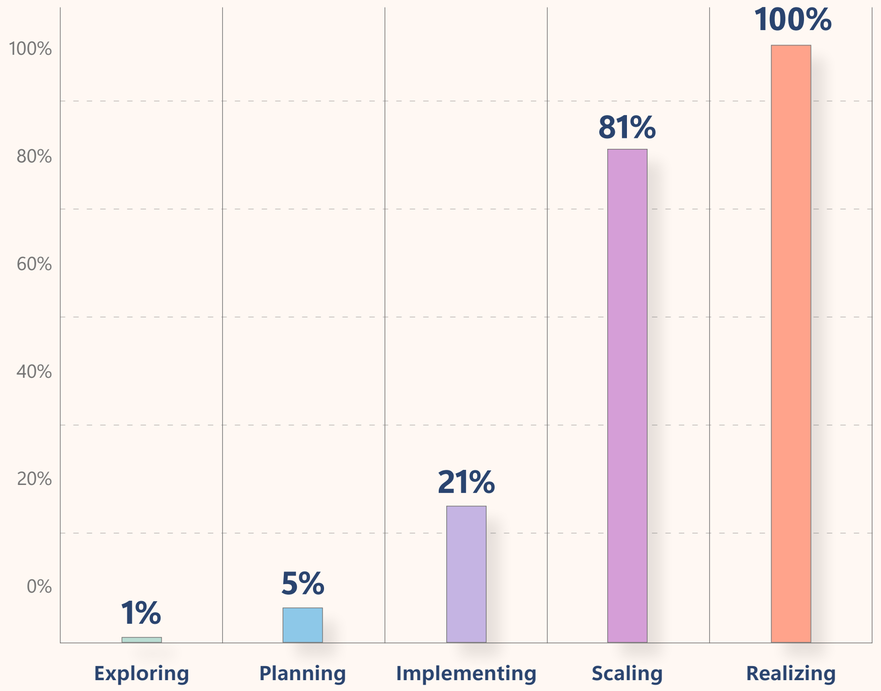
Driver 4: Organization and culture

Operational and human factors that support value creation with AI

Senior leaders play a critical role in the organization's ability to create value with AI. One hundred percent of leaders of organizations at the "realizing" stage have clearly communicated their vision of, and commitment to, AI as critical to the business, compared to 1% at the "exploring" stage (see Figure 8).

This does not mean that leadership support replaces other critical success factors. It simply means that a leader-driven AI strategy is most strongly associated with AI value creation, especially when considering that business objectives, investment strategy, and resourcing all start at the top and require ongoing leadership support.

Figure 8: Percentage of organizations whose leadership clearly communicates vision and commitment to AI



100%

of leaders of organizations at the “realizing” stage have clearly communicated their vision of, and commitment to, AI as critical to the business.

Many additional factors contribute to the ability to realize value with AI (see Figure 9). The availability of AI subject-matter experts is the second organizational priority for all levels, as they contribute to institutional knowledge and ground what's possible in practical realities. An operating model for AI—whether it's a center of excellence (also called a "center of enablement") or an aligned team of experts—becomes a necessity as AI becomes more prevalent throughout the organization and requires more programmatic attention.

We also see that organizations tend to add a chief AI officer as they mature in their use of AI. The survey shows that 64% of organizations in the "realizing" stage have appointed a chief AI officer, compared to 6% in the "exploring stage". Finally, a culture that values agile decision-making and the scientific method is an important driver of success, as it creates a climate for testing and learning that is essential to continuous improvement and organizational agility.

Percentage of organizations that have appointed a chief AI officer

64% in the "realizing" stage

36% in the "scaling" stage

18% in the "implementing" stage

9% in the "planning" stage

6% in the "exploring" stage

Figure 9: Organization and culture opportunities by stage of AI readiness

Stage	Top opportunities	Next area(s)
Exploring	Leadership has clearly communicated vision and importance of AI	• Availability of experts to contribute to AI projects
Planning	Leadership has clearly communicated vision and importance of AI	• Availability of experts to contribute to AI projects
Implementing	Leadership has clearly communicated vision and importance of AI	• Availability of experts to contribute to AI projects
Scaling	Leadership has clearly communicated vision and importance of AI	• Availability of experts to contribute to AI projects
Realizing	Leadership has clearly communicated vision and importance of AI	• Availability of experts to contribute to AI projects • Employee understanding of how AI supports strategy

Driver 5: AI governance

The processes, controls, and accountability structures to govern AI at scale

AI governance—encompassing data privacy, security, and responsible development and use of AI—did not emerge as a top overall driver of AI value in this study, suggesting perhaps that both IT and business decision-makers see AI governance as an organizational necessity rather than an enabler of business value. This may seem surprising given its critical importance for reducing risk and promoting trust, but a deeper look yields some useful insights.

On average, organizations reported the lowest AI readiness scores in AI governance (49% in the "exploring" and "planning" stages) compared to the other four drivers. Industry affiliation matters as well; organizations in highly-regulated industries are, understandably, likely to be more advanced in their AI governance maturity. For example, the healthcare industry reported the highest percentage in the top two stages (26%) compared to the average (22%). It is possible that these numbers may change as the regulatory landscape evolves. Nevertheless, AI governance—comprising security, data privacy, and responsible development and deployment of AI systems—remains a critical enabler of business value and trust.

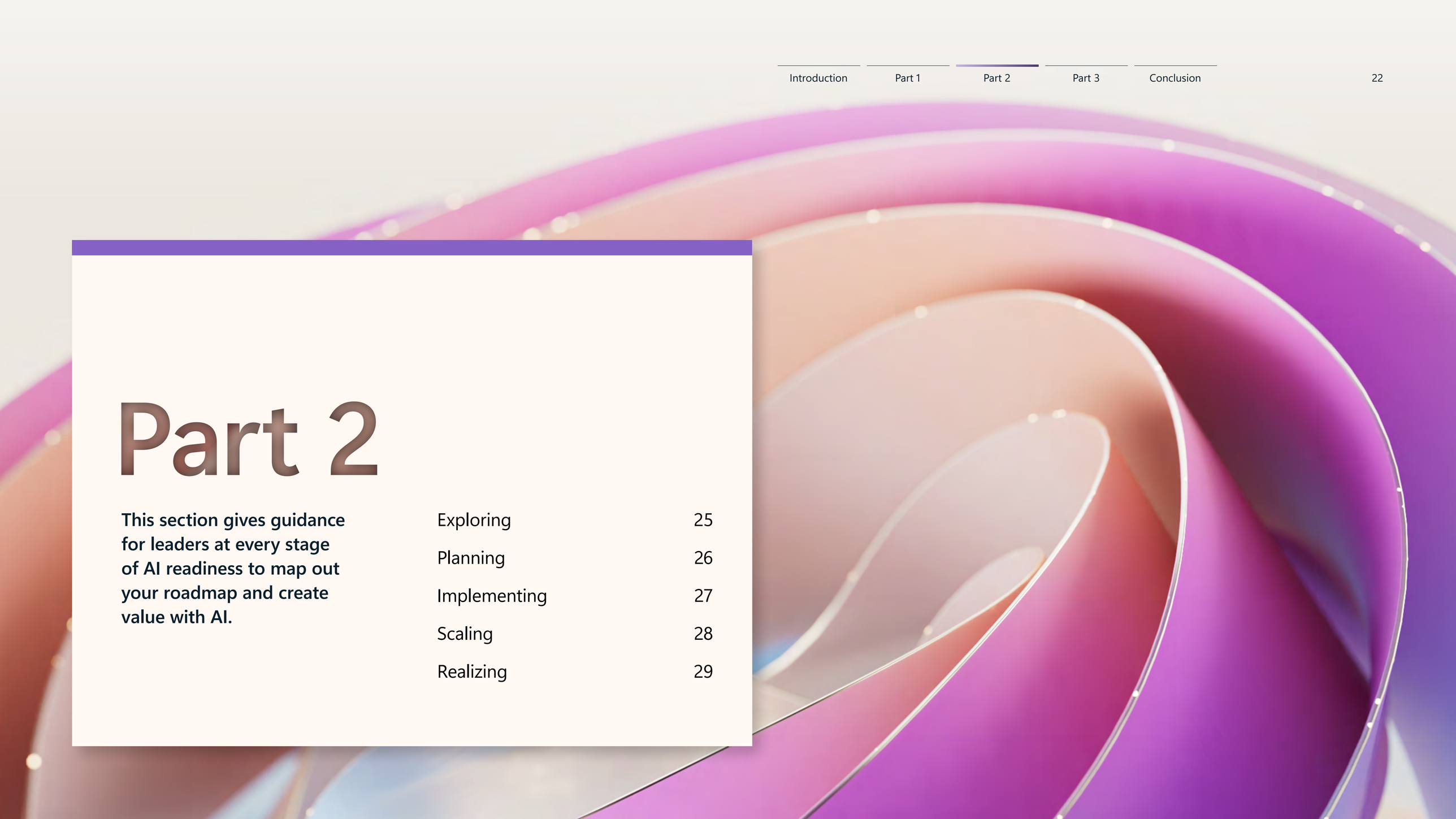
In the early stages, organizations can most effectively increase their AI readiness by focusing on processes and controls for transparency and explainability of AI tools (see Figure 10). Security and compliance of third-party tools ties for the first position in the "exploring" stage, while the focus on using AI to proactively prevent malicious attacks increases as organizations move into the "planning" stage.

By the time they have reached the "realizing" stage, however, organizations are looking at a more complex and sophisticated AI environment. At this stage, priority is given to systems and processes to inform users of the applicable use cases of models and tools, along with performance metrics to identify issues and opportunities that may be affecting results.

On average, organizations reported the lowest AI readiness scores in AI governance (49% in the "exploring" and "planning" stages) compared to the other four drivers.

Figure 10: AI governance opportunities by stage of AI readiness

Stage	Top opportunities	Next area(s)
Exploring	• Controls for ensuring transparency, explainability, and interpretability of results • Security and compliance for third party sharing of AI-generated data	• Assessing the impact of AI on people, organizations, and society • AI system accountability for bias, impacts, safety, and security
Planning	• Controls for ensuring transparency, explainability, and interpretability of results • Security and compliance for third party sharing of AI-generated data	• AI system accountability for bias, impacts, safety, and security
Implementing	• Controls for ensuring transparency, explainability, and interpretability of results • AI proactively prevents cyberattacks on infrastructure and data	• AI system accountability for bias, impacts, safety, and security
Scaling	• Systems to inform AI use cases, performance metrics, and limitations	• AI proactively prevents cyberattacks on infrastructure and data • System to address copyright and IP ownership • Controls for storage, processing, and sharing of sensitive information and personally identifiable information (PII) • Controls for ensuring transparency, explainability, and interpretability of results
Realizing	• Systems to inform AI use cases, performance metrics, and limitations	• Controls for storage, processing, and sharing of sensitive information and personally identifiable information (PII)



Part 2

This section gives guidance for leaders at every stage of AI readiness to map out your roadmap and create value with AI.

Figure 11: Profiles of each stage of AI readiness

Exploring

Organizations at this stage are just starting out with AI. They are learning about and experimenting with it in select areas of the organization.

Profile data

- 16% Are at this stage
- 20+ yrs. Average age of organization
- 300 to 10K Number of employees
- 21% Cloud first
- 3% Seeing significant value from AI

Planning

Organizations at this stage are actively assessing, defining, and planning an AI strategy, running proofs of concept, and planning for AI deployments.

Profile data

- 23% Are at this stage
- 20+ yrs. Average age of organization
- all sizes Number of employees
- 20% Cloud first
- 12% Seeing significant value from AI

Implementing

Organizations at this stage are moving from proofs of concept and pilots into production.

Profile data

- 36% Are at this stage
- 15 yrs. Average age of organization
- 500 to 10K Number of employees
- 20% Cloud first
- 23% Seeing significant value from AI

Scaling

Organizations at this stage are scaling AI projects across the organization.

Profile data

- 20% Are at this stage
- 5-15 yrs. Average age of organization
- 500 to 10K Number of employees
- 31% Cloud first
- 61% Seeing significant value from AI

Realizing

Organizations at this stage are realizing repeatable and measurable value across the organization.

Profile data

- 5% Are at this stage
- 5-15 yrs. Average age of organization
- 1K to 10K Number of employees
- 52% Cloud first
- 96% Seeing significant value from AI

The next section lays out the most effective steps you can take now to build momentum toward your goals, based on your organization's stage of AI readiness.

The charts on the following pages use standard competition ranking (also known as "1224" ranking, as used in sports such as golf), to assign the priority of each opportunity. This means that if there's a tie among opportunities, two or more have equal priority.

Stage 1: Exploring

If your organization is largely in the "exploring" stage, the most effective focus area is AI strategy and experience. This means gaining as much knowledge and experience with AI models as possible, ideating on potential processes or workflows to create or optimize, and building a diverse team that reflects the input of multiple stakeholder groups and experiences.

We also see a three-way tie for second position among technology and data strategy, organization and culture, and business strategy, reflecting that each of these drivers has comparable priority at this stage.

Top opportunities at the exploring stage

AI strategy and experience

Rank #1

- Processes to create a standard repeatable process for development and deployment of AI
- Diversity of roles and experiences of people involved in AI projects
- Identifying the AI models best suited for their respective AI use cases

Technology and data strategy

Rank #2 (tie)

- Access to complete and relevant data for AI modeling purposes
- Using AI for improving security
- Dedicated cloud infrastructure

Organization and culture

Rank #2 (tie)

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Business strategy

Rank #2 (tie)

- AI objectives support business objectives
- AI used for real-time decision-making
- Prioritized, approved, and socialized use cases for AI
- A clear investment plan for AI implementation across the business

AI governance

Rank #5

- Controls for ensuring transparency, explainability, and interpretability of results
- Security and compliance for third-party sharing of AI generated data
- Assessing the impact of AI on people, organizations, and society
- AI system accountability including bias, impacts, safety, and security

Stage 2: Planning

As organizations move into this stage, a more formalized business strategy becomes the priority, as a strong business case is critical to any project's ability to move from proof of concept to implementation and scale. The priorities should be to identify the use cases most likely to drive value and align on how you will measure impact.

At this stage, we see a two-way tie for the second priority between technology and data strategy and organization and culture. This reflects the importance of choosing the right use cases to ensure that AI projects map to business priorities, access to complete and relevant data and a robust cloud infrastructure, as well leadership vision and support.

Top opportunities at the planning stage

Business strategy	Technology and data strategy	Organization and culture	AI strategy and experience	AI governance
Rank #1	Rank #2 (tie)	Rank #2 (tie)	Rank #4	Rank #5
• Prioritized, approved, and socialized use cases for AI • AI used for real-time decision-making	• Access to complete and relevant data for AI modeling purposes • Dedicated cloud infrastructure	• Leadership has clearly communicated vision and importance of AI • Availability of experts to contribute to AI projects	• Identifying AI models best suited for its AI use cases • Processes to create a standard repeatable process for development and deployment of AI	• Controls for ensuring transparency, explain-ability, and interpret-ability of results • AI system accountability measures including bias, impacts, safety, and security • Security and compliance for third-party sharing of AI generated data

Stage 3: Implementing

At this stage, the organization has addressed its initial AI platform and data needs and is now preparing to scale, which requires strong leadership support as well as AI and business expertise.

At this point, the focus should shift to organization and culture, which encompasses operations, skills, resources, leadership vision, and cultural AI readiness. This will prepare you for the next two stages: scaling AI solutions and realizing consistent and measurable value. Business strategy remains in second position, tied with AI strategy and experience.

Top opportunities at the implementing stage

Organization and culture

Rank #1

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Business strategy

Rank #2 (tie)

- Prioritized, approved, and socialized use cases for AI
- AI objectives support business objectives
- AI used for real-time decision-making
- A clear investment plan for AI implementation across the business

AI strategy and experience

Rank #2 (tie)

- Identifying AI models best suited for AI use cases
- Diversity of roles and experiences of people involved in AI projects

Technology and data strategy

Rank #4

- Access to complete and relevant data for AI modeling purposes
- Data accurately represents relevant customer base and business objectives
- Dedicated cloud infrastructure

AI governance

Rank #5

- Controls for ensuring transparency, explain-ability, and interpret-ability of results
- AI proactively prevents attacks to infrastructure and data
- AI system accountability measures including bias, impacts, safety, and security

Stage 4: Scaling

By the time they have reached the "scaling" stage, organizations have deployed AI applications and systems across a few of their business functions. Organization and culture continue to be the top priority, while business strategy remains in second position, likely reflecting a focus on identifying and evaluating new use cases.

At this stage we also see the rising importance of a clear investment plan for AI, given the increasing prevalence of AI across the business and the importance of rationalizing the AI portfolio. From an industry perspective, we see that banking, financial services, and insurance over-index at this stage.

Top opportunities at the scaling stage

Organization and culture

Rank #1

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Business strategy

Rank #2

- Prioritized, approved, and socialized use cases for AI
- A clear investment plan for AI implementation across the business

AI strategy and experience

Rank #3

- Creating repeatable processes and work-flows for development and deployment of AI solutions
- Identifying AI models best suited for its AI use cases

Technology and data strategy

Rank #4

- Data accurately represents relevant customer base and business objectives
- Access to complete and relevant data for AI modeling purposes

AI governance

Rank #5

- Systems to inform stakeholders about applicable use cases of AI, performance metrics, and limitations
- AI proactively prevents attacks to infrastructure and data
- System to address copy-right and IP ownership
- Controls for storage, processing, and sharing of sensitive information and personally identifiable information
- Controls for ensuring transparency, explain-ability, and interpretability of AI results and tools

Stage 5: Realizing

By the time an organization has reached the "realizing" stage, it has demonstrated success in scaling AI projects and is achieving consistent and measurable value across the organization. Priorities are essentially similar to the "scaling" stage.

The most common industries in this stage are healthcare, technology, and retail, which are using AI applications and AI-assisted solutions across most of their business functions.

Top opportunities at the realizing stage

Organization and culture

Rank #1

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects
- Employee under-standing of how AI supports strategy

Business strategy

Rank #2

- Prioritized, approved, and socialized use cases for AI
- A clear investment plan for AI implementation across the business

AI strategy and experience

Rank #3 (tie)

- Creating repeatable processes and work-flows for development and deployment of AI solutions
- Identifying AI models best suited for its AI use cases

Technology and data strategy

Rank #3 (tie)

- Data accurately represents relevant customer base and business objectives
- Access to complete and relevant data for AI modeling purposes
- Having the right data in the right format

AI governance

Rank #5

- Systems to inform stakeholders about applicable use cases of AI, performance metrics, and limitations
- Controls for storage, processing, and sharing of sensitive information and personally identifiable information

Your roadmap to creating value with AI depends on where you are on your AI journey.

What makes sense for a midsize, cloud first retailer in the United States may not be relevant for a German pharmaceutical company, a Japanese manufacturer, or a financial services firm based in India. Similarly, your next best step depends on where you are today—whether you're starting to explore AI, are in the planning phase, or are scaling large implementations across the business. Each stage comes with a set of priorities that lays the foundation for the next stage.

Figure 11, on the following page, describes the five stages of AI readiness we have identified based on our survey data.

Part 3

This section breaks down insights unique to your industry to help you discover the best practices and opportunities tailored to your organizational profile.

Not all industries are on the same path, and each has unique objectives and priorities.

In Part 1, we explored the main drivers of AI readiness, and in Part 2, we examined each stage of AI readiness in detail. Now, in Part 3, we compare AI readiness among four industries: financial services, manufacturing, healthcare, and retail.

You'll learn which AI readiness stage is most common for each industry, as well as the primary drivers and opportunities that affect time to value. We guide you through AI readiness trends, detailing how each industry is navigating its own AI journey, including the primary drivers of AI readiness and the next opportunities in each industry to advance to the next stage. Whether or not you see your own industry among these pages, these insights can help provide context on business factors that may be relevant to your journey and determine strategic steps to accelerate your time to value.

Understand the factors influencing AI readiness across industries.

We see early movers across all industries among the more than 1300 respondents to the AI readiness survey. While cloud adoption correlates with AI readiness, we also see other indications of momentum. On average, 20% of companies now have a chief AI officer—a signal that senior leadership sees AI as strategic enough to the business to warrant a C-level executive to oversee AI strategy and execution across the business.

Financial services leads in AI spend per month while also deploying AI across a wider variety of department, led by data and analytics departments where 61% are deploying AI. However, only 7% of organizations in the financial services industry report consistently high ROI from AI projects.

Healthcare's AI readiness is driven by IT investment, with 18% of companies having a chief AI officer and 20% being cloud first. Despite being one of the sectors with the highest average monthly AI spend, the percentage of healthcare organizations in the "Realizing" stage (5%) is consistent with the average. This is likely a result of the diversity, sensitivity and highly regulated nature of the sector.

Manufacturing surpasses the industry average for AI management, with 28% of organizations having a chief AI officer. The sector also outperforms the industry average, with 8% reporting consistently high ROI from AI projects. These figures highlight the significant value gained from integrating AI into manufacturing processes.

Retail stands out with the highest ROI from AI, driven by marketing functions. 21% of retailers have a chief AI officer, and a quarter of retailers are cloud first, showcasing their leading position in developing solutions for customer-facing experiences.

On the following page, we've compiled profiles for each industry and compared them against our global dataset, breaking down each industry's AI readiness stage and the top drivers that contribute to their AI readiness journey.

Industry profiles

Our research highlights differences across industries that impact AI readiness. See below how each industry compares.

Financial services

Spends the most on AI, with 61% of projects led by AI adoption in data and analytics departments.

Profile data

- 16% Have a chief AI officer
- 7% See consistently high ROI from AI
- $2.48M AI spend/month (mean)
- 18% Cloud first
- 61% Data and analytics — Functional driver for AI

Healthcare

Over half of AI readiness in this sector is driven by IT investment.

Profile data

- 18% Have a chief AI officer
- 5% See consistently high ROI from AI
- $2.22M AI spend/month (mean)
- 20% Cloud first
- 53% IT — Functional driver for AI

Manufacturing

Reports the most engaged leadership, with 28% of companies reporting to have a chief AI officer.

Profile data

- 28% Have a chief AI officer
- 8% See consistently high ROI from AI
- $1.99M AI spend/month (mean)
- 17% Cloud first
- 53% IT — Functional driver for AI

Retail

This sector sees the highest value from AI, with marketing functions driving adoption.

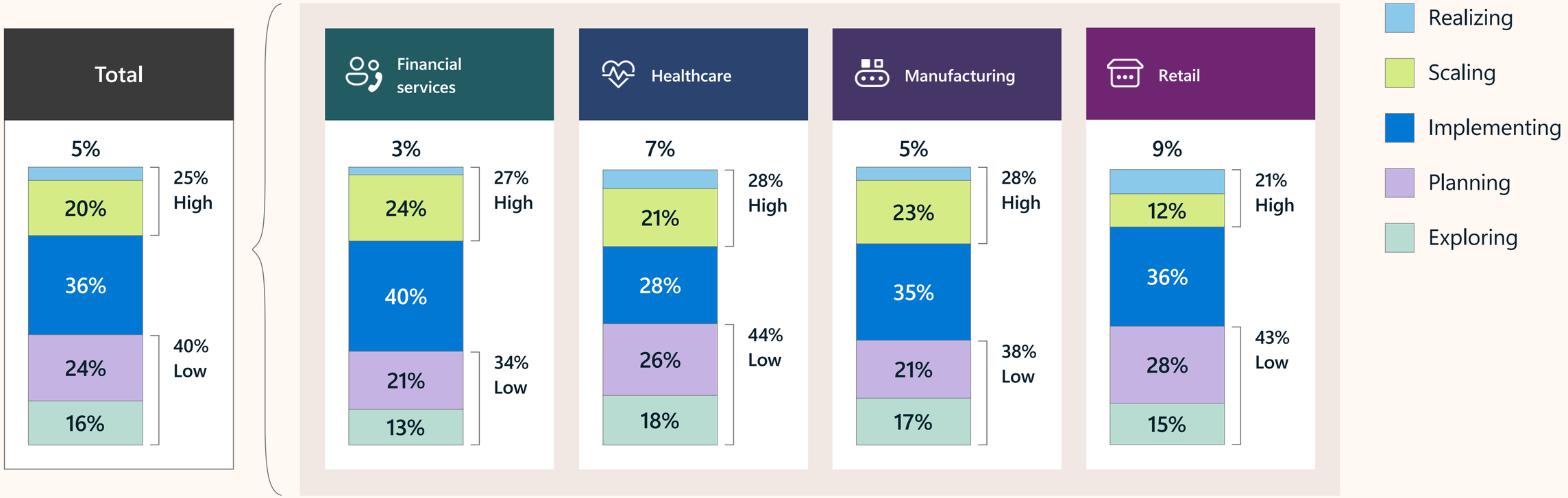
Profile data

- 21% Have a chief AI officer
- 10% See consistently high ROI from AI
- $1.83M AI spend/month (mean)
- 25% Cloud first
- 60% Marketing — Functional driver for AI

AI readiness drivers across industries

On average, 40% of companies are in the earliest ("exploring" and "planning") stages of readiness, while 25% are in the most advanced stages ("scaling" and "realizing"). The healthcare industry reports the highest number of companies in the earliest stages. This is likely a result of the diversity of organizations represented, from providers to healthcare startups to pharmaceutical companies. Retail tells a similar story, given the diversity of companies in this industry, from heritage retailers to cloud first ecommerce companies. While retail reported the highest percentage of companies at the "realizing" stage, we also saw a higher-than-average number in the early stages of their AI journey. The following pages explore these industry variations in more detail.

Figure 12: A cross-industry look at stages of AI readiness



Financial services

Financial services AI readiness summary

As demands for transparency increase and digital currencies rise alongside the continued emergence of financial technology, the financial landscape presents significant opportunities and challenges for all stakeholders. AI is helping financial service providers optimize costs, accelerate processes, and enhance the customer experience.

Among financial services organizations:

70%

Are currently using **big data analytics** in production

Cross-industry average: 58%

63%

Seek to increase **operational efficiency** through AI investment

Cross-industry average: 59%

27%

Have piloted **AI applications** or **AI-assisted solutions**

Cross-industry average: 22%

61%

Of **data and analytics departments** are currently using AI

Cross-industry average: 46%

74%

Started on premises or are in the process of **migrating to the cloud**

Cross-industry average: 69%

13%

Spend more than **$5M on AI** per month

Cross-industry average: 9%

3.4

Average number of departments **implementing AI**

Cross-industry average: 2.9

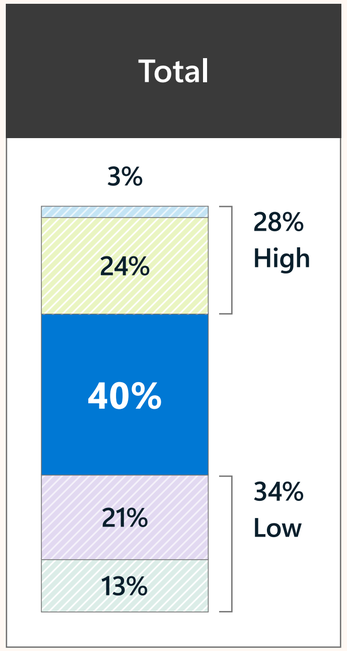
16%

Have a **chief AI officer**

Cross-industry average: 20%

Financial services AI readiness insights

Figure 13: Financial services stages of AI readiness



Overall AI readiness in financial services

The financial services sector is advancing more rapidly than other industries in terms of AI readiness, with 40% of organizations in the **"implementing" stage**. This stage is characterized by piloting, promoting, and applying AI strategies in selected business units. In the implementing stage, most organizations are beginning to yield value from their AI investments.

The finance sector is more proactive in enhancing AI implementation, as 58% allocate budgets for AI resources and projects, 54% provide AI-specific training to existing staff, and 52% create internal knowledge sharing initiatives. This commitment to AI advancement has led 27% of financial services firms to reach the "scaling" and "realizing" stage, exceeding the 25% general industry benchmark and marking them as above-average in AI leadership.

Drivers of financial services AI readiness

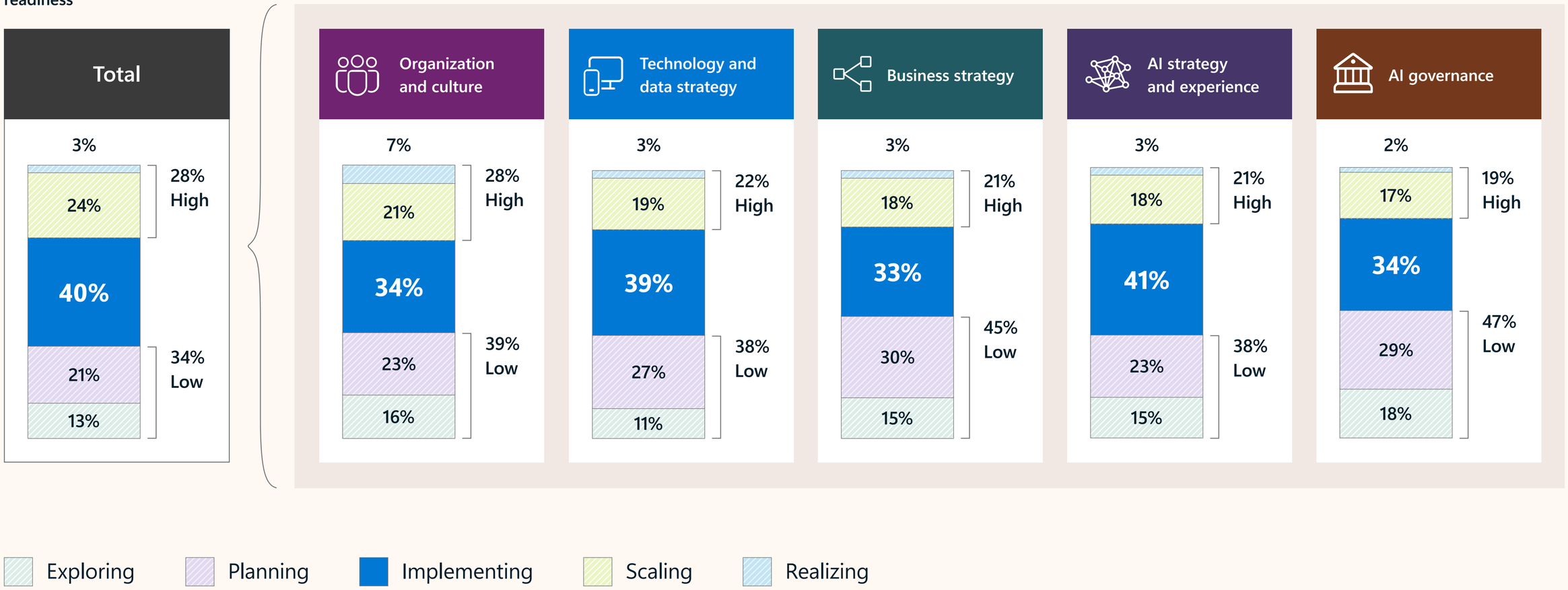
It is promising to see that 67% of working hours in banking could be affected by generative AI, which could lead to a potential increase in productivity of 22-30% for banks that use this technology effectively.[5] Yet, research indicates that financial services trail behind other sectors in **technology and data strategy** during the "scaling" and "realizing" stages. This is likely due to the additional compliance and regulatory requirements, which also causes the industry to move more deliberately in **AI governance** as evident in the fact that 19% are in the advanced stages of readiness compared to 28% across all industries. Despite these requirements, only 39% of financial institutions prioritize trustworthiness in their selection of AI tools, which is the lowest percentage across all industries and falls below the 44% average.

As a professional in the financial services industry, focus on advancing from the "implementing" stage by continuing to prioritize to prioritize building a solid organization and culture linked to your business objectives. This leadership support, as well as your AI and business expertise, will prepare you for the "scaling" stage.

Exploring Planning Implementing Scaling Realizing

Financial services AI readiness drivers

Figure 14: Financial services drivers and stages of AI readiness



Financial services dominant AI readiness stage: Implementing

Most financial services companies are in the **implementing stage** with the opportunity to use **organization and culture** to advance towards realizing AI value.

Top drivers for implementing stage

Organization and culture

Rank #1

Financial institutions empower their employees through AI-assisted solutions that increase productivity, reduce friction, promote better collaboration, and make operations more efficient. These tools create a secure, innovative, and agile culture, helping employees adapt to the fast-changing sector. They enable real-time customer interaction and increase agent efficiency, enhancing customer experience and employee satisfaction.

Top trend

- Empowering banking employees

Top opportunities

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Learn how financial services companies empower employees with AI.

Business strategy

Rank #2 (tie)

Financial services companies are looking for innovative ways to use AI-assisted solutions to accelerate decision-making, improve customer experience, achieve compliance, and cultivate a collaborative and efficient workplace. Unified data platforms break down information silos, optimize operations, enhance data use, and improve compliance, fostering interdepartmental collaboration and delivering real-time insights.

Top trend

- Improve productivity through better teamwork, insights, and communications

Top opportunities

- Prioritized, approved, and socialized use cases for AI
- AI objectives support business objectives

Discover ways to improve productivity and increase access to insights.

AI strategy and experience

Rank #2 (tie)

Financial services organizations have grown more reliant on AI to create an agile foundation for growth. Modernizing infrastructure with cloud-based solutions accelerates time-to-market, keeping institutions competitive. AI and machine learning provide deeper data insights and better market responsiveness, reducing operational costs and improving customer experience.

Top trend

- Increase agility to roll out new products and services while saving on infrastructure costs

Top opportunities

- Identifying AI models best suited for AI use cases
- Diversity of roles and experiences of people involved in AI projects

Learn how firms use AI to innovate and gain a competitive edge.

Transform financial services with AI

The financial services industry is making significant progress in its AI readiness journey, with most organizations in the "implementing" stage.

To accelerate progress in AI readiness within the financial services sector, prioritize strengthening organization and culture.

There are opportunities for improvement in business strategy such as prioritizing, approving, and socializing use cases for AI. Building a robust AI strategy and experience will also push financial institutions closer to the "scaling" stage. Integrating these opportunities will fully harness the potential of AI, enabling the financial services companies to position themselves for value creation in the age of AI.

Discover more at **Microsoft Cloud for Financial Services**.

Healthcare

Healthcare AI readiness summary

Healthcare organizations are increasingly investing in AI solutions with an eye toward resilience and optimization. Early progress underscores the transformative possibilities in the healthcare sector for AI to help streamline operations and alleviate administrative burdens. This not only allows clinicians to dedicate more attention to patient care but also boosts workforce morale.

Among healthcare organizations:

12%

Spend more than **$5M on cloud** per month

Cross-industry average: 9%

62%

Seek to increase **operational efficiency** through AI investments

Cross-industry average: 59%

53%

Of **IT departments** are currently using AI

Cross-industry average: 49%

45%

Are open to **deploying new technology** after it's been tested by others and proven its value

Cross-industry average: 42%

59%

Prioritize **security and compliance** when selecting AI tools and solutions

Cross-industry average: 53%

3%

Have started on premises or have not begun migration to the **public cloud**

Cross-industry average: 6%

57%

Allocate **budget and resources** for AI projects

Cross-industry average: 51%

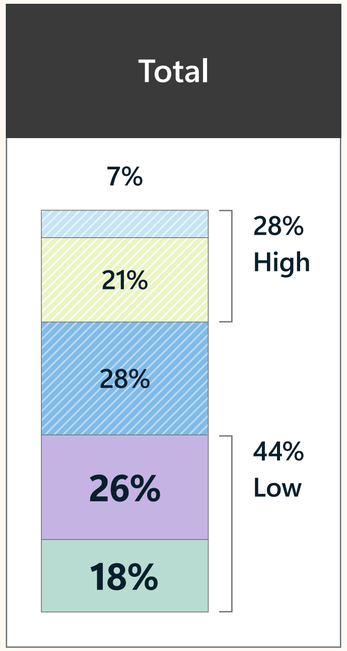
18%

Have a **chief AI officer**

Cross-industry average: 20%

Healthcare AI readiness insights

Figure 15: Healthcare stages of AI readiness



Overall AI readiness in healthcare

There is an exciting mix of AI readiness in the healthcare industry, with notable progress evident across various stages. While 28% of organizations are in the "scaling" and "realizing" stages, there's considerable optimism in most organizations, with 44% actively laying the groundwork in the **"exploring" and "planning" stages**.

These initial stages of AI readiness involve learning about AI, experimenting with it in various parts of the organization, and actively assessing, defining, and planning an AI strategy across the entire organization. The healthcare sector ranks above the 25% average in overall maturity at 28%, which is the highest of all industries in the "scaling" and "realizing" stage. Yet, 14% of healthcare organizations claim they receive no discernable value from AI, underscoring the difficulty in connecting and measuring AI investments as part of the broader business strategy.

Drivers of healthcare AI readiness

Looking at the individual drivers of AI readiness in healthcare on the following page, the research highlights the sector's advanced stage of readiness in terms of **AI governance**, likely stemming from the focus on trust and privacy as well as the regulation and compliance requirements in the industry.

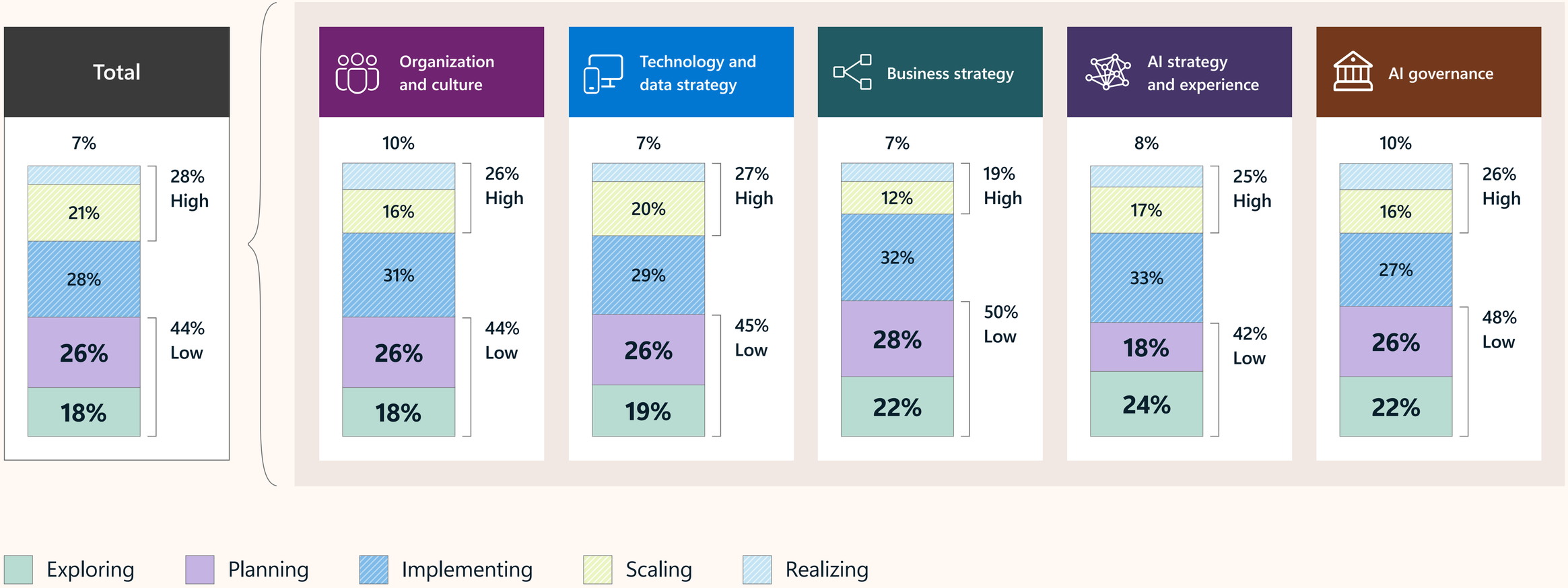
When it comes to **AI strategy and experience**, the healthcare industry leads other sectors with 25% of organizations in the "scaling" and "realizing" stages, surpassing the average. However, healthcare organizations, overall, have an opportunity to more cohesively build their **AI business strategy** with around half of organizations in the "exploring" and "planning" stages.

As a professional in the healthcare industry, focus on advancing from the "planning" stage by continuing to prioritize developing a solid AI business strategy tied to your business objectives. That foundation accelerates moving from proof of concept to implementation successfully.

Exploring Planning Implementing Scaling Realizing

Healthcare AI readiness drivers

Figure 16: Healthcare drivers and stages of AI readiness



Healthcare dominant AI readiness stages: Exploring and planning

Most healthcare companies are in the **exploring and planning stages** with the opportunity to use **business strategy** to advance towards realizing AI value.

Top drivers for exploring and planning stages

Business strategy

Rank #1

Healthcare faces a unique set of challenges impacting health and well-being including complex demographics, communications, and aging technology. Administrators and clinicians view secure, responsible, and trustworthy AI as essential for improving healthcare delivery, reducing costs, enhancing patient outcomes, and discovering new treatments. This strengthens business strategy by streamlining operations, driving innovation, and ensuring the organization remains competitive in a rapidly evolving industry.

Top trend

- Digital transformation

Top opportunities

- Prioritized, approved, and socialized use cases for AI
- AI used for real-time decision-making

Learn how to drive digital transformation.

Technology and data strategy

Rank #2 (tie)

Establishing a secure and reliable data lake infrastructure is crucial for integrating diverse sources of cross-institutional, multi-modal data. Data initiatives are essential for equipping clinicians with contextual point-of-care insights, refining AI models, and fostering collaboration among various stakeholders, including researchers, providers, payers, and pharmaceutical and medical device companies.

Top trend

- Data platform to operationalize and scale innovation

Top opportunities

- Access to complete and relevant data for AI modeling purposes
- Dedicated cloud infrastructure

Uncover how to shape the future of healthcare with secure data lakes.

Organization and culture

Rank #2 (tie)

The global shortage and turnover of physicians and nurses emphasizes the pressing need to utilize AI for streamlining administrative tasks. However, the main challenge lies in maintaining the effectiveness of AI systems, protecting patient data, and enabling secure collaboration for developing solutions. Strong leadership vision and expert input are crucial for addressing these challenges effectively.

Top trend

- Change management, recruiting, upskilling, and retaining workforce

Top opportunities

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Discover how to empower employees with Microsoft Cloud for Healthcare.

Unlock the future of healthcare with AI

Most healthcare organizations fall under the “exploring” and “planning” stages although there are varying degrees of AI readiness within the industry.

To drive more organizations beyond the initial stages of AI readiness, focus on the development of a strong business strategy as a top driver.

There are opportunities for improvement in organization and culture, such as leadership clearly articulating the vision and significance of AI. Focusing on technology and data strategy, like using AI for improving security, will also help pave the way for progress towards the “implementing” stage where organizations will be poised to unlock the full potential of AI integration and maximize its transformative impact on the healthcare industry.

Discover more at **Microsoft Cloud for Healthcare**.

Manufacturing

Manufacturing AI readiness summary

Manufacturers encounter a variety of industry challenges, from global competition to supply-chain disruptions. However, they can overcome some of these obstacles and transform operations by embracing the latest AI technologies. This AI adoption has the power to boost efficiency, automate manual tasks, and enable the creation of customer-tailored products.

Among manufacturing organizations:

54%

Prioritize **security and compliance** when selecting AI tools and solutions

Cross-industry average: 53%

66%

Seek to increase **operational efficiency** through AI investments

Cross-industry average: 59%

24%

Of **supply-chain departments** are currently using AI

Cross-industry average: 14%

17%

Have piloted **AI applications** or **AI-assisted solutions**

Cross-industry average: 22%

25%

Believe **significant value** is achieved from AI implementation across multiple departments

Cross-industry average: 22%

56%

Are currently using **internet of things** in production

Cross-industry average: 39%

52%

Allocate **budget and resources** for AI projects

Cross-industry average: 51%

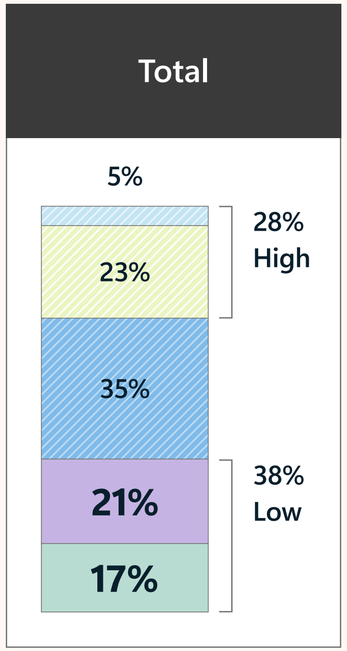
28%

Have a **chief AI officer**

Cross-industry average: 20%

Manufacturing AI readiness insights

Figure 17: Manufacturing stages of AI readiness



Overall AI readiness in manufacturing

The manufacturing industry exhibits a range of AI readiness, with 38% of organizations still in the **"exploring" and "planning" stages**. These early stages of AI readiness include learning about AI, experimenting with it in different areas of the organization, and actively assessing, defining, and planning an AI strategy organization wide. Compared to other industries, manufacturers are more actively deploying AI in Operations, R&D, and Supply Chain departments, driven by the significant impact these areas have on addressing business challenges.

Given that manufacturing is more likely to appoint AI leadership, it is no surprise that the industry excels in **organization and culture** with more organizations in the "realizing" and "scaling" stages. This driver emphasizes the operational and human factors that support value creation with AI.

Drivers of manufacturing AI readiness

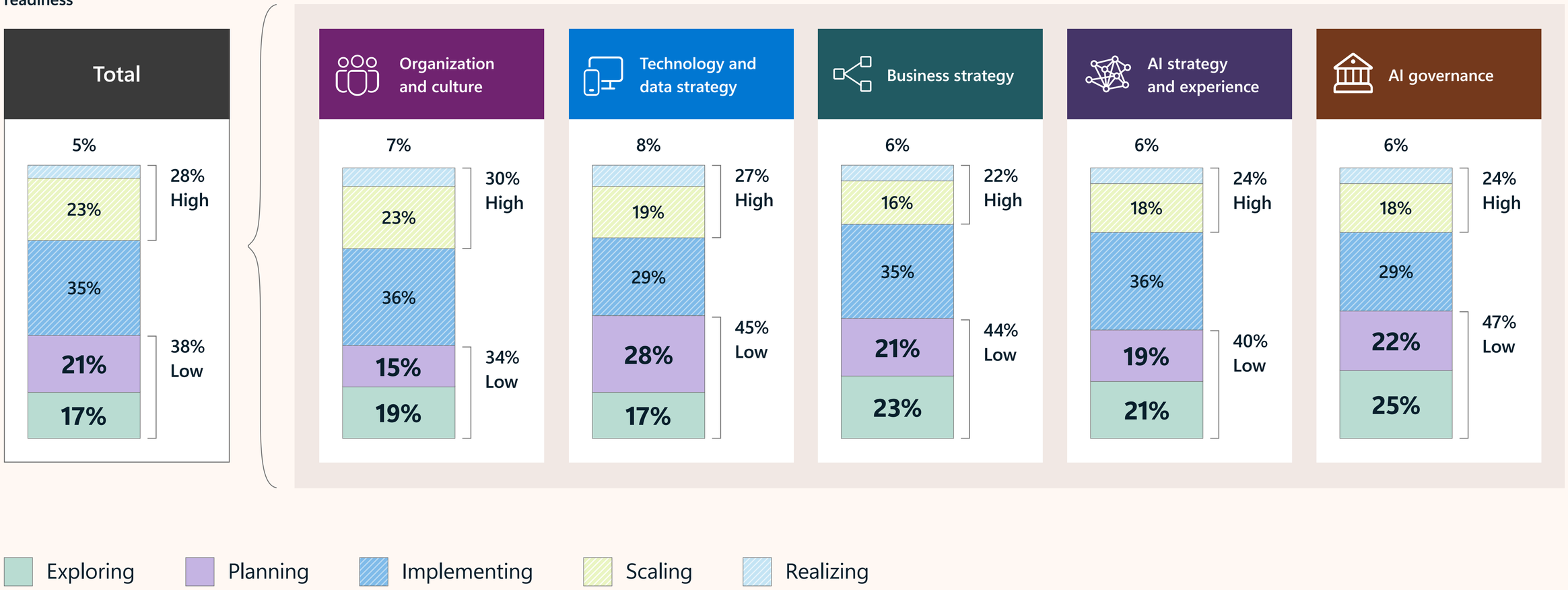
The research also highlights that manufacturing is the most progressive in **technology and data strategy**, which encompasses the data and infrastructure needed to deploy AI at scale. While data may be the fuel for AI, cloud infrastructure is the engine. Although manufacturing organizations are less likely to have started on the cloud, 9 out of 10 organizations are in the cloud or currently migrating to the cloud. Given the shift required to build AI-ready cloud and data foundations, manufacturers tend to require more investment with 23% of manufacturing organizations spending $100k to less than $500k on cloud per month, exceeding the 20% industry average.

As a professional in the manufacturing industry, focus on advancing from the "planning" stage by continuing to prioritize developing a solid AI business strategy tied to your business objectives. That foundation lets you go from proof of concept to implementation successfully.

Exploring Planning Implementing Scaling Realizing

Manufacturing AI readiness drivers

Figure 18: Manufacturing drivers and stages of AI readiness



Manufacturing dominant AI readiness stages: Exploring and planning

Most manufacturing companies are in the **exploring and planning stages** with the opportunity to use **business strategy** to advance towards realizing AI value.

Top drivers for exploring and planning stages

Business strategy

Rank #1

Manufacturers are increasingly integrating AI to meet growing customer demand for personalized, sustainable, and efficiently delivered products and services. This involves adopting unified data solutions to bridge operational and information technology, enhancing operational efficiency through root-cause analysis, knowledge discovery, and agile decision-making. This integration supports business strategy by laying a foundation for broader and more resilient innovation.

Top trend

- Personalized products that are sustainable and delivered efficiently

Top opportunities

- Prioritized, approved, and socialized use cases for AI
- AI used for real-time decision-making

Accelerate industrial transformation with Microsoft AI solutions.

Technology and data strategy

Rank #2 (tie)

Prioritizing AI-assisted solutions can help manufacturers streamline operations, enhance compliance with sustainability regulations, and manage supply-chain disruptions. Building a robust data strategy that supports system improvements and aligns with AI capabilities can lead to harmonious integration, driving immediate benefits and ongoing innovation.

Top trend

- Modernizing infrastructure and architecture

Top opportunities

- Access to complete and relevant data for AI modeling purposes
- Dedicated cloud infrastructure

Discover Azure IoT's Industrial Transformation Strategy at Hannover Messe 2024.

Organization and culture

Rank #2 (tie)

Embracing structural flexibility allows manufacturers to use AI as a catalyst for workforce transformation, enhancing the skills of engineers and non-IT staff. This strategic use of AI fosters a culture of innovation and adaptability, ensuring the workforce is equipped to meet the evolving demands of the industry.

Top trend

- Recruiting, upskilling, and retaining workforce

Top opportunities

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Introducing Copilot in Microsoft Dynamics 365 Guides, bringing generative AI in mixed reality to frontline workers.

Modernize and transform operations with AI

The manufacturing industry displays varying levels of AI readiness, with most organizations currently situated in the “exploring” and “planning” stages.

To accelerate progress in AI readiness within the manufacturing sector, prioritize crafting a comprehensive business strategy.

There are opportunities for improvement in technology and data strategy, such as using AI to modernize infrastructure and architecture. Emphasizing organization and culture, such as recruiting, upskilling, and retaining workforces, will also push manufacturing organizations closer to the “implementing” stage. This unlocks the full potential of AI for integration, maximizing its transformative impact on the manufacturing industry.

Discover more at **Microsoft Cloud for Manufacturing**.

Retail

Retail AI readiness summary

AI in the retail industry is now more powerful and accessible than ever. Advances in generative AI enable AI to tackle complex challenges that were once impractical. Today, retailers can leverage AI to deliver personalized services and enhance their resilience in an ever-changing marketplace.

Among retail organizations:

10%

Report consistently high **return on investment** from AI implementation

Cross-industry average: 7%

39%

Seek to **retain or increase revenue with customers** through AI investments

Cross-industry average: 30%

60%

Of **marketing departments** are currently using AI

Cross-industry average: 42%

28%

Have access to **SMEs in AI** for advice and consultation

Cross-industry average: 38%

54%

Prioritize **security and compliance** when selecting AI tools and solutions

Cross-industry average: 53%

40%

Upskill current staff with AI-specific training

Cross-industry average: 48%

51%

Collaborate with **external AI service providers** or **consultants**

Cross-industry average: 44%

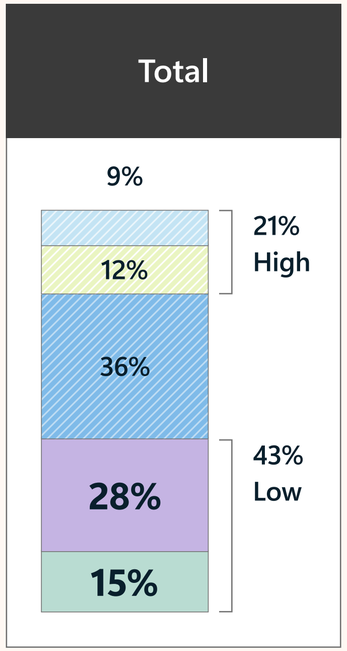
32%

Have piloted **AI applications or AI-enabled solutions**

Cross-industry average: 22%

Retail AI readiness insights

Figure 19: Retail stages of AI readiness



Overall AI readiness in retail

There's a broad mix of AI readiness in retail. Some retailers are at the forefront, consistently leveraging AI across their operations to enhance customer relationships and drive revenue. Yet, many are still at the starting blocks, with 43% of retailers in the **"exploring" and "planning" stage**. This diversity reflects the broad category of retailers, from big-box stores to boutique shops, and highlights the clear divide between companies that adopted cloud technology early on and those that didn't. About 25% of retail companies embraced cloud technology early, giving them a head start on AI. However, 8% of retailers have yet to start using cloud services, which is slightly higher than the average of 6% across industries.

Drivers of retail AI readiness

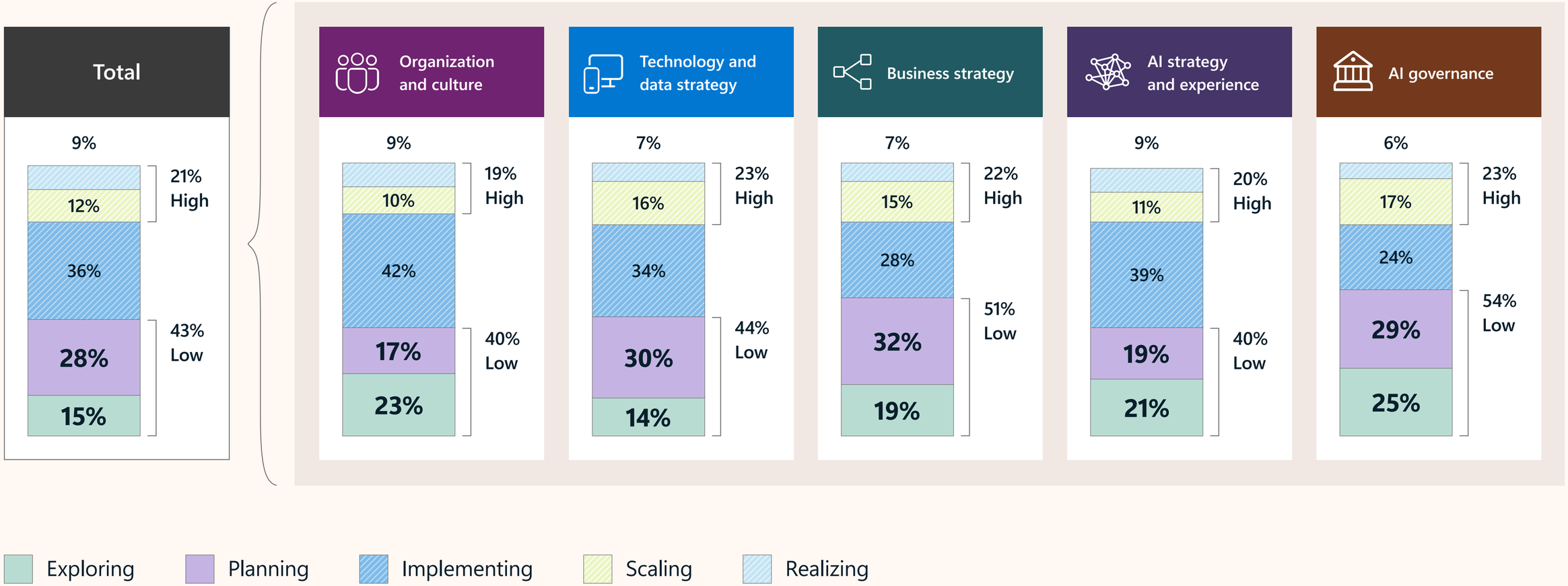
Our globally conducted research reveals that retail trails behind other industries in "scaling" and "realizing" for **organization and culture** and is slightly below average on **AI strategy and experience**. In terms of **AI governance**, a larger proportion of retail organizations are in the "exploring" and "planning" stages, at 54% combined, compared to the average of 49%. This difference represents one of the largest gaps for retail among the measured AI readiness drivers.

As a professional in the retail industry, focus on advancing from the "planning" stage by continuing to prioritize developing a solid AI business strategy tied to your business objectives. That foundation lets you go from proof of concept to implementation successfully.

Exploring Planning Implementing Scaling Realizing

Retail AI readiness drivers

Figure 20: Retail drivers and stages of AI readiness



Retail dominant AI readiness stages: Exploring and planning

Most retail companies are in the **exploring and planning stages** with the opportunity to use **business strategy** to advance towards realizing AI value.

Top drivers for exploring and planning stages

Business strategy

Rank #1

By leveraging AI, retailers can enhance their operations and deliver exceptional customer experiences. When crafting an AI strategy, retailers focus on personalizing and optimizing customer experiences, anticipating demand for popular products, recommending new products, becoming more resilient to supply-chain disruptions or stock shortages, and ensuring a harmonious experience across all customer engagement channels.

Top trend

- Streamlining omni-channel operations, unifying the supply-chain, and improving profit margins

Top opportunities

- Prioritized, approved, and socialized use cases for AI
- AI used for real-time decision-making

Discover how to shape the future of retail with business applications.

Technology and data strategy

Rank #2 (tie)

Safeguarding the trove of data from evolving threats is crucial—not just for customers but for the business itself. From point-of-sale systems and inventory logs to a vast network of supplier databases, the data estate in retail is as rich as it is varied. This complexity introduces a wide array of security challenges, making robust data security a critical focus.

Top trend

- Increased security threats from hackers, online scams, and in-store shrink

Top opportunities

- Access to complete and relevant data for AI modeling purposes
- Dedicated cloud infrastructure

Identify ways to connect your customers, your people and your data with Microsoft Cloud for Retail

Organization and culture

Rank #2 (tie)

Retail workforces are mostly young, frontline employees with high turnover. To leverage AI effectively, leaders must address fears about job replacement by clearly explaining how AI will enhance the workplace. Imagine AI as a tool to make work better—removing mundane and repetitive tasks. By focusing on how AI can enhance job satisfaction and safety, you pave the way for innovation that uplifts your teams, making their daily work more rewarding and engaging.

Top trend

- Streamlining omni-channel operations, supply-chain, and improving profit margins

Top opportunities

- Leadership has clearly communicated vision and importance of AI
- Availability of experts to contribute to AI projects

Learn how Microsoft 365 for frontline workers empowers employees.

Accelerate retail innovation with AI

The wide spectrum of AI readiness in retail reflects the variety of use cases and business types in the industry. On average, retailers are in the “exploring” and “planning” stages of AI readiness.

To advance in AI readiness, focus on developing a robust business strategy to progress to the “implementing” stage, maximizing the benefits of AI integration.

Opportunities exist to leverage strengths in organization and culture, supporting leadership to clearly communicate the vision of AI and its importance. Lean into your technology and data strategy to provide access to relevant and complete data in an embedded cloud infrastructure and ensure it’s secure.

Discover more at **Microsoft Cloud for Retail**.

Conclusion

Conclusion

This research is intended to share what we've learned from business and IT decision-makers about the emerging best practices for creating value with AI, and how they evolve as organizations progress along their AI journey. We hope these insights help you chart your path with a greater degree of clarity and confidence.

Take the next step on your AI transformation journey

1

Explore Microsoft AI solutions and see how Microsoft is empowering the world to achieve more with AI

2

Learn how to plan, strategize, and scale AI projects on Microsoft Learn

3

Discover Microsoft Copilot, your everyday AI companion for work and life

4

Try the free version of Microsoft Copilot

Definitions

AI (artificial intelligence) (1950s):
The theory and development of computer systems that are able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.[4]

Machine learning (1990s):
A subset of AI and computer science where algorithmic models are trained to learn from existing data to make decisions or predictions.

Deep learning (2010s):
A machine learning technique that uses layers of neural networks to process data and make decisions.

Generative AI (2020s):
A type of AI technology that uses algorithmic models to create new written, visual, and auditory content when given prompts or existing data.

Financial services:
One of the four key industries examined in the research, with a total of 212 individuals participating in the survey. This sector includes banking, capital markets, and insurance.

Manufacturing:
One of the four key industries examined in the research, with a total of 171 individuals participating in the survey. This sector includes industrial equipment machinery, vehicle OEMs and suppliers, chemicals, semiconductors, and aerospace.

Healthcare:
One of the four key industries examined in the research, with a total of 153 individuals participating in the survey. This sector includes healthcare payers and providers.

Retail:
One of the four key industries examined in the research, with a total of 89 individuals participating in the survey. This sector includes grocery, specialty retail, convenience, big box, and quick-serve restaurants.

Research, methodology, and modeling

Market	Total	IT decision-makers	Business decision-makers
United States	n=500	251	249
India	n=200	100	100
United Kingdom	n=200	100	100
Germany	n=207	103	104
Japan	n=206	105	101

The research behind this e-book included multiple phases conducted by IPSOS on behalf of Microsoft. In August of 2023, IPSOS conducted an expert workshop with representatives from business and academia. They then conducted a quantitative survey of enterprise business and IT decision-makers (BDMs and ITDMs) on the topic of AI readiness and success from September to October of 2023.

These decision-makers had a budget responsibility, covered a mix of business factors and departments, and represented enterprise or higher mid-market organizations (500+ employees for U.S organizations, 300+ employees for global markets). They also covered 4 core industries, financial services (212 individuals), healthcare (153 individuals), manufacturing (171 individuals), and retail (89 individuals). We obtained input from more than 1,300 decision-makers in multiple markets, including the United States, India, United Kingdom, Germany, and Japan.

The survey included more than 40 questions related to each of the five drivers of AI success: business strategy, technology and data strategy, AI strategy and experience, organization and culture, and AI governance. The analyses and models described in this paper were created using multinominal logit analysis to protect the AI readiness level of each driver using the items in the survey for each and then the overall AI readiness from the predicted assessment of the five drivers.

For each stage of AI readiness, the study identified typical values to represent the stage's characteristics and opportunities. For example, in the initial "exploring" stage, the responses to all the scale questions were at a value of 1. Similarly, for the "planning" stage, questions were set at a value of 2. The values serve as standard examples for each stage. However, the specific recommendations for an industry might differ, depending on the organization's unique situation and opportunities.

Endnotes

1. Grace Solomonoff, “The Meeting of the Minds that Launched AI,” May 6, 2023, accessed February 29, 2024, The Meeting of the Minds That Launched AI - IEEE Spectrum.

2. Please see the “Research, methodology and modeling” overview for more detail on the research and analytical approaches that support this study.

3. IPSOS created the analyses and models described in this paper using multinomial logit analyses to predict the AI readiness level of each driver using the items in the survey for each driver and then the overall AI readiness from the predicted assessments of the five drivers. The multinomial logit analysis produces probabilities for each level of AI readiness, which allows for identifying the differential opportunities that exist for each. To determine the next best opportunity, we took the predicted probabilities and calculated the expected value of AI readiness in each case, then estimated the increase in the expectation from increasing each item respectively.

4. Oxford Reference. Overview: Artificial Intelligence. Retrieved August 14, 2023, from Artificial intelligence - Oxford Reference.

5. Accenture, “Commercial Banking Top Trends for 2024: Bridging Today’s Challenges and Tomorrow’s Possibilities,” 2024, https://www.accenture.com/content/dam/accenture/final/accenture-com/document-2/Accenture-Commercial-Banking-Trends-2024.pdf.

Disclosures

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