



Cisco AI Readiness Index

Intentions Outpacing Abilities

South Africa



Global Executive Summary

The accelerating adoption of Artificial Intelligence (AI) is a once-in-a-generation technology shift that is impacting almost every area of business and daily life. While AI adoption has been slowly progressing for decades, the advancements particularly in Generative AI in the past year, coupled with the public availability of these tools, are driving greater attention to the changes and new possibilities the era of AI will bring.

Out of those Cisco surveyed for our inaugural Cisco AI Readiness Index, 97% say the urgency to deploy AI-powered technologies has increased in their company within the past six months. While this pressure is coming from almost every stakeholder group, the greatest pressure is being felt from the top, with over half saying this urgency is being driven by their CEO and leadership team, followed by their Board of Directors. As a result, 84% believe that AI will have a significant impact on their business operations in the future.

The reality, though, is that intentions of adopting and leveraging AI are far outpacing the abilities to do so. The Index shows that 86% of companies across the globe

are not fully prepared to leverage AI and AI-powered technologies to the fullest potential.

The *Cisco AI Readiness Index* investigates AI readiness across six key pillars – **Strategy, Infrastructure, Data, Governance, Talent, and Culture** and categorizes organizational readiness into four levels – **Pacesetters** (fully prepared), **Chasers** (moderately prepared), **Followers** (limited preparedness), and **Laggards** (unprepared). Using this categorization, the breakdown of respondents for Cisco's inaugural AI Readiness Index is: **Pacesetters** (14%); **Chasers** (34%); **Followers** (48%) and **Laggards** (4%).

The Index is based on a double-blind survey of 8,161 senior business leaders at organizations with 500 or more employees with responsibility for AI integration and deployment within their organizations. A more detailed explanation of the benchmarking methodology is contained in later sections of this Index.

Almost a third of respondents are classified as Pacesetters in **Strategy**, the highest number of Pacesetters of any of the six pillars, suggesting that considerable time and effort is being invested in this area at the present time by management teams and Boards. Pacesetters scored highly



in this area with well-defined AI deployment strategies, clear ownership, processes to measure impact, and a healthy stream of funding – with a strong focus on the immediate term. In fact, organizations have already started to deploy AI across some areas of their business with IT infrastructure and cybersecurity emerging as the top areas where deployments are currently being prioritized. Considerable readiness gaps exist in the other pillars.

For **Infrastructure** readiness, 95% of respondents recognize that AI will increase infrastructure workloads. The demands will surge on almost every aspect of infrastructure needed not just to deploy AI but also leverage its full potential. This includes scalability and allocation of compute resources, adaptability, latency and integration of the network with AI workloads, as well as an increase in power consumption. Despite the awareness that workloads will increase, organizational readiness of respondents resides largely at an average level.

Over half of the respondents say their infrastructure is scalable only to a moderate or limited extent and requires upgrading for more complex AI technology. Among all the factors, preparedness to meet the increased demand for power consumption driven by AI ranked the highest.

However, even the high scores in this area are relatively low, with 55% of respondents stating they are not prepared or only ‘somewhat’ prepared.

Looking at the **Data** pillar, the largest immediate issue is data centralization, with 81% of respondents admitting that their data exists in silos across their organizations. This lack of centralization presents considerable risks for data and AI management. If data is not centralized or pre-processed and ready for use in AI tools, it will limit the ability for organizations to fully leverage AI technologies and for AI tools to deliver their full potential. In addition, unaccounted-for data broadens the attack surface for malicious actors to exploit vulnerabilities and adds another layer of complexity around data accuracy.

It is well acknowledged that AI models are as good as the data they have access to, and model performance is highly dependent on input/output capabilities commonly referred to as I/O. Simply put, I/O capabilities are a measure of how effectively data can be transferred between the source to its destination. As the uptake of AI grows across organizations’ networks, and the volume of data being generated by those AI workloads continues to grow at an exponential rate, so too will the need to provide deterministic performance and latency across and between these AI compute-based environments. Those companies that are able to do so will be considered I/O rich and reap the benefits those workloads can provide their business.

Advanced data capabilities are critical to ensure that companies can leverage the full potential of AI and AI-powered technologies. However, our research reveals significant gaps in how organizations are managing data today. As mentioned above, the majority of respondents say their data exists in silos. In addition, a mere 21% of companies say their network has ‘optimal’ latency to support demanding AI workloads. This highlights that most companies are still I/O poor and lack basic data management capabilities.

Governance poses a further myriad of challenges for organizations with a need to navigate the implementation of new AI policies and protocols, as well as evolving legislation in the areas of data and AI. Our Index finds that only three out of 10 respondents currently have comprehensive AI policies and protocols, and just four out of 10 have systematic processes for AI bias and fairness

corrections. Organizations showed greater readiness around regulatory awareness and compliance with three quarters of respondents having a comprehensive understanding and systems for data compliance and managing data sovereignty. While mastering data governance is a daunting challenge for companies, once conquered, it can unlock the true power of AI and ensure the efficacy and reliability of data.

The **Talent** pillar uncovers some contradictions. Most organizations are facing some level of AI resourcing gaps but are at the same time feeling optimistic about the availability of AI talent in the market. The issue seems to be attracting and retaining these sought-after AI professionals. An overwhelming 90% of organizations are investing in training to address some of these skills gaps. Ensuring equitable accessibility to AI technologies for employees with differing abilities is also a priority for almost all organizations, though presently a far lower number have this as a core feature of their AI strategy.

Finally, the lowest percentage of Pacesetters is seen in the **Culture** pillar, suggesting that business leaders are still wrestling with how to best integrate AI across their organizations. There is a sizeable gap in AI receptiveness between those in senior leadership positions and middle management and employees that will need to be addressed. Further complicating the necessary culture shift to achieve AI adoption is the fact that only a quarter of organizations have well-defined change management plans.

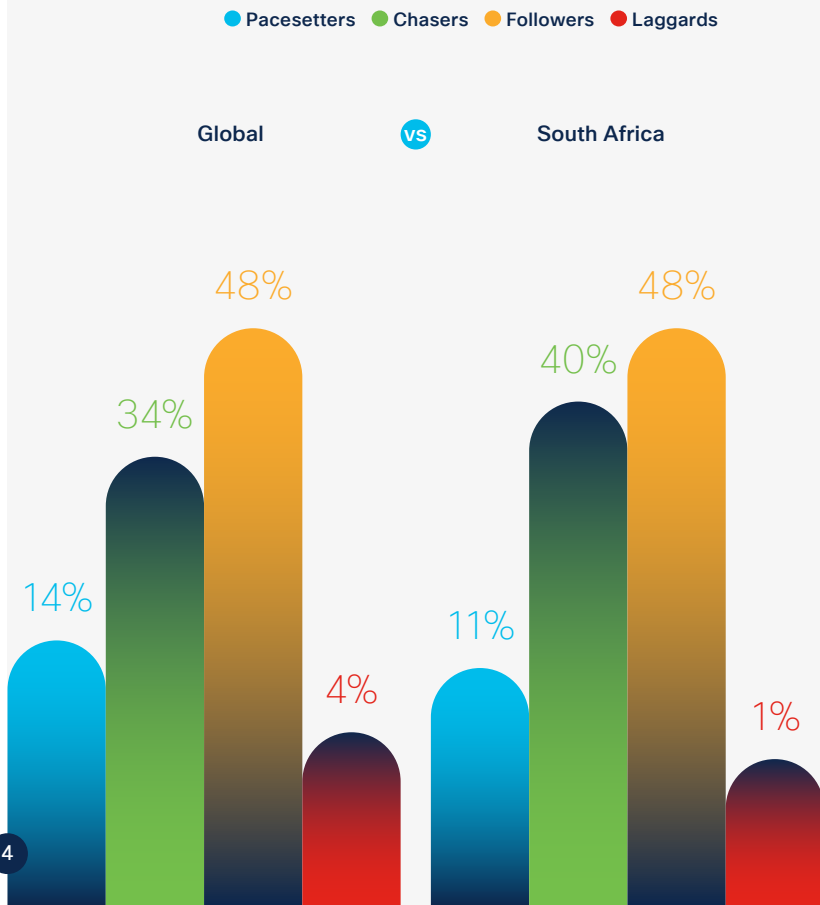
Overall, we see a consistent theme of increasing urgency fueling ambitious AI intentions – which in many places are far outpacing the realistic capabilities of organizations today. However, with the right focus and investment across each of these critical AI readiness pillars, moving from an AI Laggard to a Pacesetter can be achievable for almost any organization.

Companies must address these gaps promptly as 61% of respondents anticipate having just one year or less to implement their AI strategy before incurring significant negative business impacts from falling behind.

We hope that this Index serves as a useful guide for AI ambitious leaders and professionals looking to accelerate AI adoption, unlock business value, and improve experiences for employees and customers.



Overall readiness





South Africa Results

Improving the efficiency of systems, processes and operations, was ranked among the top outcomes that companies are looking to drive through adoption of AI. Among our respondents, 67% placed this in their top three reasons. This was followed by improving customer experiences at 52% and growing revenue and market share at 49%.

One of the key criteria under the Strategy pillar that differentiates the Pacesetters from the rest under the Strategy pillar is the willingness to invest in AI. With only one-fifth (20%) of respondents in South Africa saying AI deployment has been given the highest priority for budget allocation and incremental budget funding, organizations need to think about how they plan to fund AI deployments over the long run.

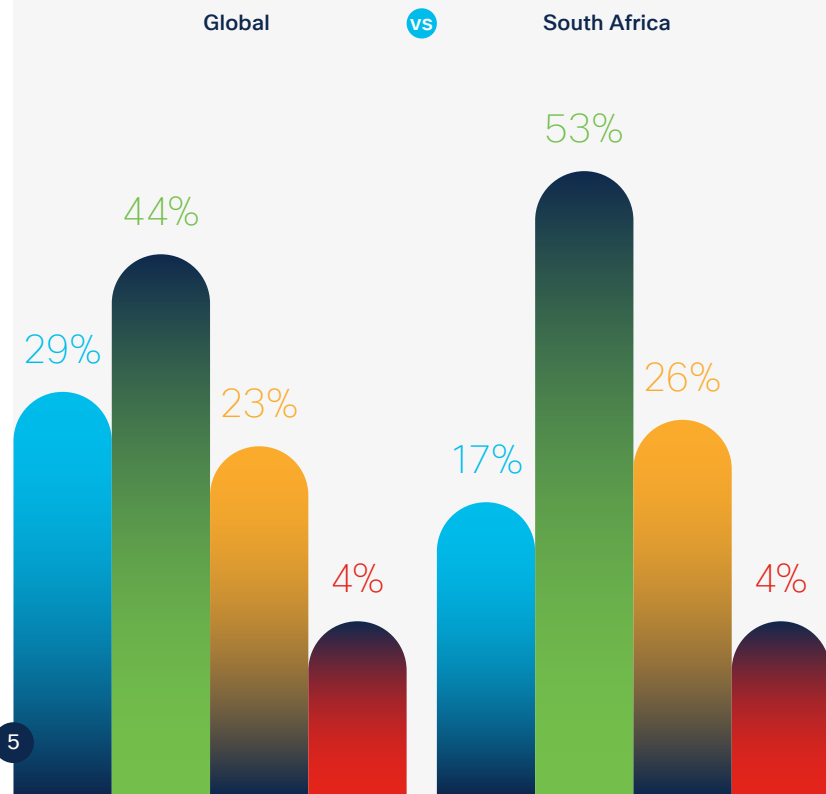
It All Starts with Strategy

Effective deployment of any initiative across an organization, including AI, requires a well-defined strategy.

This principle is widely acknowledged globally, with 95% of organizations already having a robust AI strategy in place or in the process of developing one. Globally, Strategy emerged as the most mature pillar of the AI Readiness Index, with the same holding true in South Africa. 70% of organizations are classified as either Pacesetters or Chasers, with only 4% falling into the category of Laggards.

Strategy readiness

● Pacesetters ● Chasers ● Followers ● Laggards





Infrastructure for the Future

Beyond strategizing, business leaders must consider whether their organization has the infrastructure necessary to leverage AI.

This study finds that in South Africa, infrastructure readiness is still only at an average level, with just 10% of local organizations categorized as Pacesetters, and 46% as Followers or Laggards.

In the current competitive environment, the ability to leverage AI quickly provides a distinct advantage. Scalability and flexibility of an organization's existing IT infrastructure are crucial to seizing this advantage. Scalable architecture can grow to handle increasing demands, while flexible architecture can adapt easily to changes without major disruptions.

Half of respondents (50%) indicate that their infrastructure has only moderate or limited scalability, and requires enhancements or updates to handle complex AI applications. Over a third (37%) consider their infrastructure highly scalable.

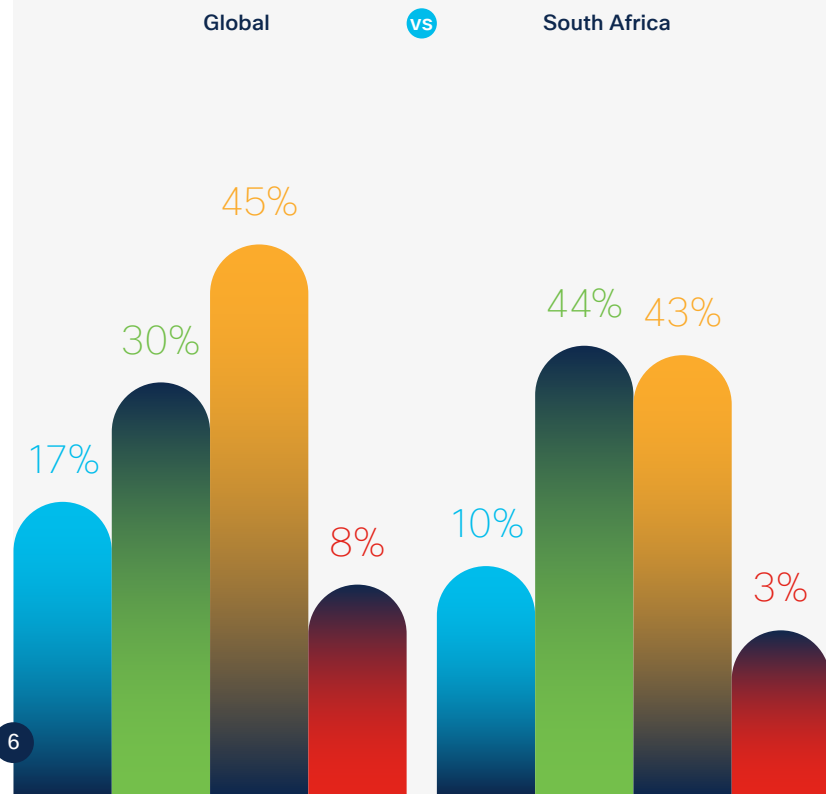
Looking at different components of IT infrastructure, 86% will require further data center graphics processing units (GPUs) to support current and future AI workloads. The lack of Infrastructure preparedness is further accentuated by the fact that most companies are input/output (I/O) poor, which negatively impacts their ability to extract the full potential of AI or AI-powered technologies.

In South Africa, organizations are also not fully prepared to safeguard against cybersecurity threats that come with AI adoption. More than half (54%) of the respondents lack full readiness in detecting and thwarting attacks on AI models. This underscores the need for increased education among organizations and their staff to ensure secure AI utilization.

Since infrastructure very much determines the capability to execute AI, and 95% of respondents globally believe AI will increase the workloads of their IT infrastructure - there is likely still some way to go before we will see the widespread deployment of AI solutions at scale, despite the hype.

Infrastructure readiness

● Pacesetters ● Chasers ● Followers ● Laggards





Data, Data, Data

Despite data serving as the critical backbone and lifeblood necessary for AI operations, in South Africa, Data has the largest number of organizations classified as Laggards (10%) and 40% falling into the Follower group.

With a broad set of data sitting across different domains, applications and workloads, organizations face a real – and increasingly urgent – need to prioritize a strong data strategy to unlock the true potential of AI.

High-quality, diverse, and accessible data is indispensable for AI algorithms. Understanding patterns, recognizing anomalies, and providing personalized experiences is critical, making businesses more efficient and competitive. A lot of work needs to be done on this front as 77% of respondents admitted that their data exists in silos across the organization.

Effective data analytics tools go hand in hand with AI applications and overall data strategy, and it's clear that business leaders recognize this. Three-quarter (75%) of South Africa respondents positively rated the ability of their analytics tools to handle complex AI-related data sets. However, organizations are facing a challenge in the fact that 73% of respondents say that their analytics tools are not fully integrated with data sources and AI platforms being used. In fact, 27% of respondents say their tools were not integrated (5%) or somewhat integrated (22%) at best.

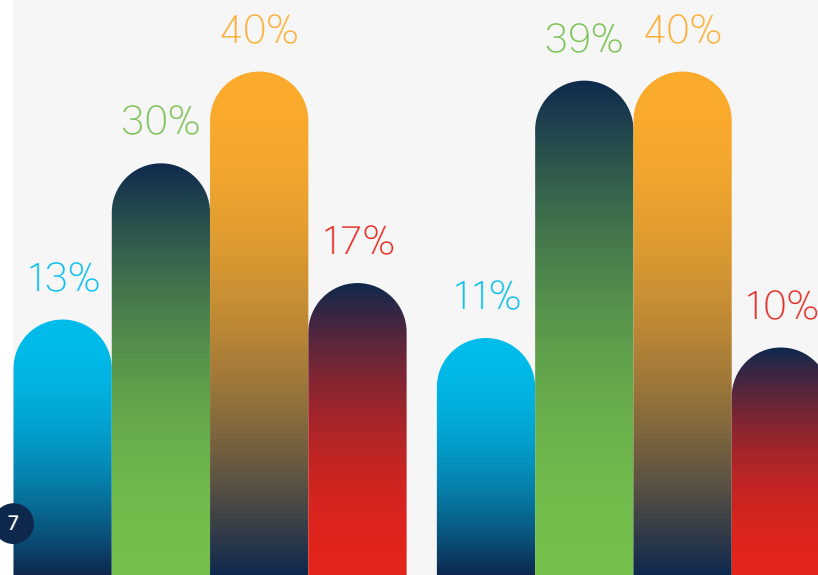
Data readiness

● Pacesetters ● Chasers ● Followers ● Laggards

Global

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South Africa





have systematic mechanisms to detect data biases. This is further compounded by 17% of respondents recognizing that even if biases and lack of fairness are detected in data, they lack systematic correction mechanisms or have no formal processes for rectification.

Data privacy is yet another key risk facing organizations. In South Africa, 80% of respondents state that their organizations have strict or sophisticated procedures to ensure data storage and utilization comply with local data sovereignty demands. However, when it comes to AI governance readiness, it's crucial to consider an organization's ability to address and rectify situations in the case of a data breach or privacy violation. In this aspect, there remains cause for concern, as 13% of organizations have either untested, basic protocols, or none at all for responding to such incidents.

Governing Real Risk

AI promises transformative benefits, but navigating its adoption is fraught with risks that demand organizations have a strong framework of policies and protocols in place to guide the ethical and responsible management of data and AI systems.

While the majority of respondents in South Africa recognize this, there's room for improvement. Governance readiness, on the whole, remains relatively low, with nearly half (49%) of organizations classified as Followers or Laggards. Pacesetters account for just 16%, while Chasers make up 35%.

42% of respondents say they have highly comprehensive AI policies and protocols in place, while 45% say they had only moderate policies and protocols in place.

A key governance risk that is emerging is bias. This is a significant challenge with 23% of organizations acknowledging that they have limited to no awareness regarding potential biases and fairness in data sets used for AI, and one quarter (25%) saying they do not

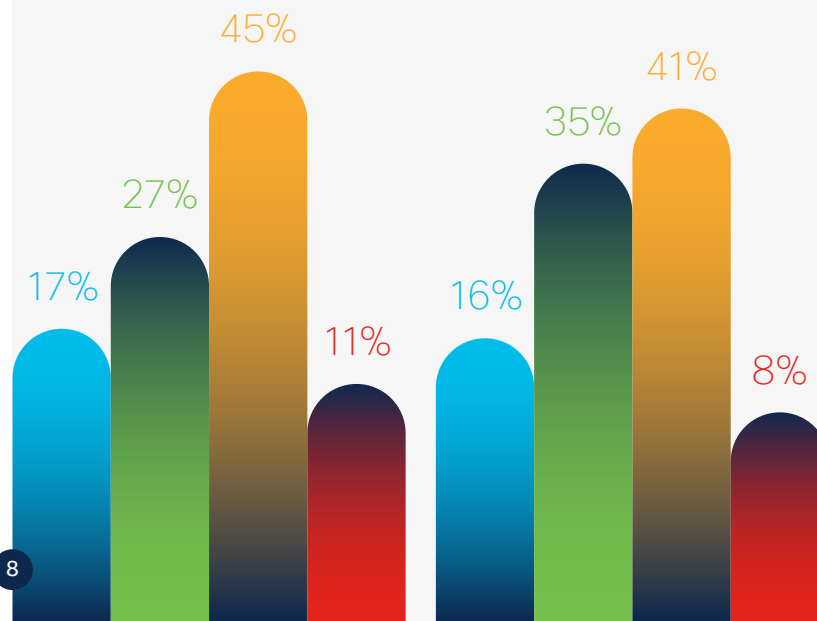
Governance readiness

● Pacesetters ● Chasers ● Followers ● Laggards

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Talent for the Tech

AI at its best represents an effective partnership between people and technology, which makes having the right talent for AI integration and deployment a crucial piece of the readiness puzzle.

Nearly half of respondents say that their organizations are moderately well resourced (46%), with an almost even split between those feeling very well resourced (25%) and those who are under resourced or unsure (29%). Those at larger companies (more than 1,500 employees) are slightly more likely to feel under resourced, and Media and Communications, Education and Natural Resources are the industries with the largest talent readiness issues.

When asked to highlight what specific skills were lacking among the employees in their organization, 19% of respondents ranked comprehension and proficiency of AI tools and technologies as the primary skill gap.

The good news is that organizations are taking steps to address the skills gap. Among the organizations surveyed in South Africa, 94% say they are investing in training for employees in this area, highlighting in addition to hiring new talent, companies are upskilling their existing workforce to leverage the full potential of AI technologies they deploy.

A focus on reskilling talent will also be critical to maintaining a high morale among the employees as deployment of AI technologies will likely see a change in the scope of some jobs in areas where it is deployed.

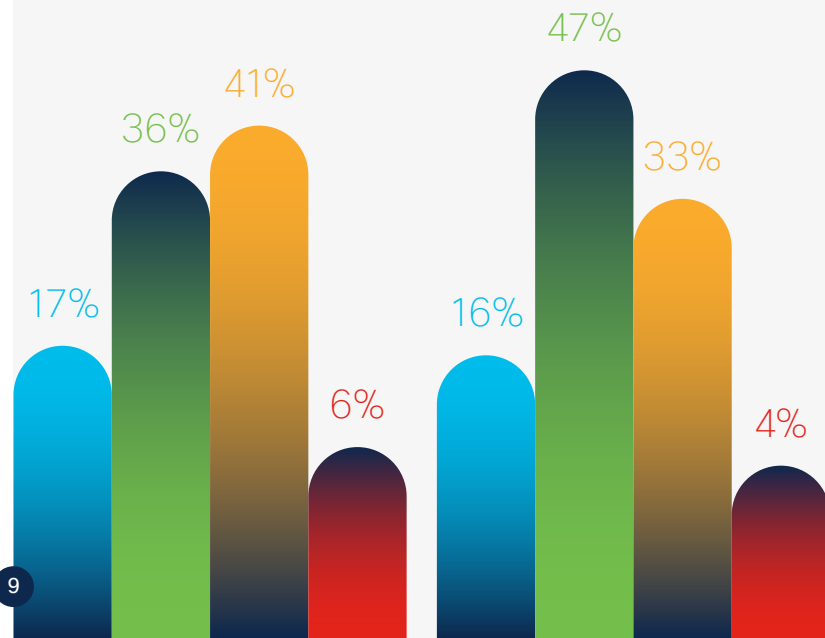
Talent readiness

● Pacesetters ● Chasers ● Followers ● Laggards

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Culture is Crucial

The growing adoption of AI is poised to bring about large and fundamental culture changes requiring stakeholder support and receptivity for success.

Within the Culture pillar, just 10% of respondents qualify as Pacesetters against the determined criteria, with Chasers comprising the largest grouping at 50%.

The good news is that motivation is high. Over eight out of 10 (84%) say their organization is embracing AI with a moderate to high level of urgency. Only 2% said they were resistant to change. Coupled with 98% of respondents saying that the urgency to deploy AI-powered technologies has increased in their company within the past six months, we can expect this upward trend to continue.

To drive meaningful change, it must be initiated from the top. The study found that Boards and leadership teams are highly receptive to embracing the transformative power of AI, with 84% and 89% respectively being highly or moderately receptive.

However, there is more work to be done to engage middle management where 19% have either limited or no receptiveness to AI. This challenge is even greater amongst employees, where a third (33%) of organizations report employees are limited in their willingness to adopt AI or are outright resistant.

A change management plan is an essential tool for navigating the complexity of AI integration, especially in the face of differing stakeholder views. Reflecting the perhaps still relatively nascent stage of more widespread AI adoption, one-fifth (21%) of organizations currently have a comprehensive change management plan for this, but all of those remaining either have one in progress (70%) or in draft form (9%).

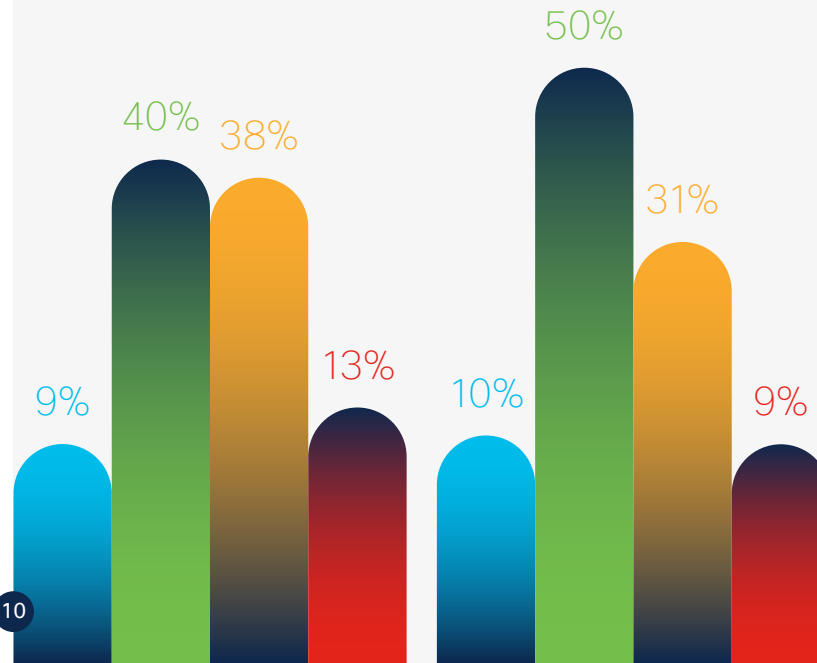
Culture readiness

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What Can Organizations Do To Boost AI Readiness?

While most companies are not fully ready, globally, 61% of companies feel that they have at most one year to implement their AI strategy before facing significant negative impacts on their business. It is therefore crucial for businesses to take action now and become ready to fully leverage AI technology.

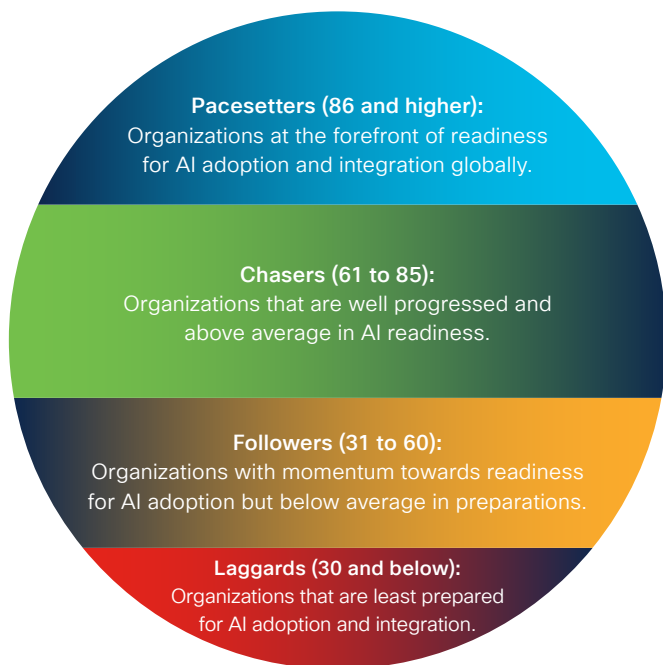
To boost their AI readiness, companies can take the following five actions:

- 1** Look long-term and think big
- 2** Build infrastructure for the future
- 3** Breakdown data silos
- 4** Keep people at the core
- 5** Deploy timely internal policies and protocols to keep pace with the industry

About the Research

The **Cisco AI Readiness Index** is based on a double-blind survey of 8,161 business leaders with responsibility for AI integration and deployment at organizations with 500 or more employees based across 30 markets globally. The Index uses six pillars, each with an individual weightage, to benchmark

AI readiness – **Strategy** (15%), **Infrastructure** (25%), **Data** (20%), **Governance** (15%), **Talent** (15%), and **Culture** (10%). Within these pillars, levels of readiness are assessed using a combined total of 49 indicators to determine a readiness score for each pillar, as well as an overall readiness score for the respondent’s organization.



The data was organized and categorized into a level of readiness, with respondents ranked in four groups – Pacesetters, Chasers, Followers, and Laggards. These groups and their corresponding scores are pictured left in descending order.

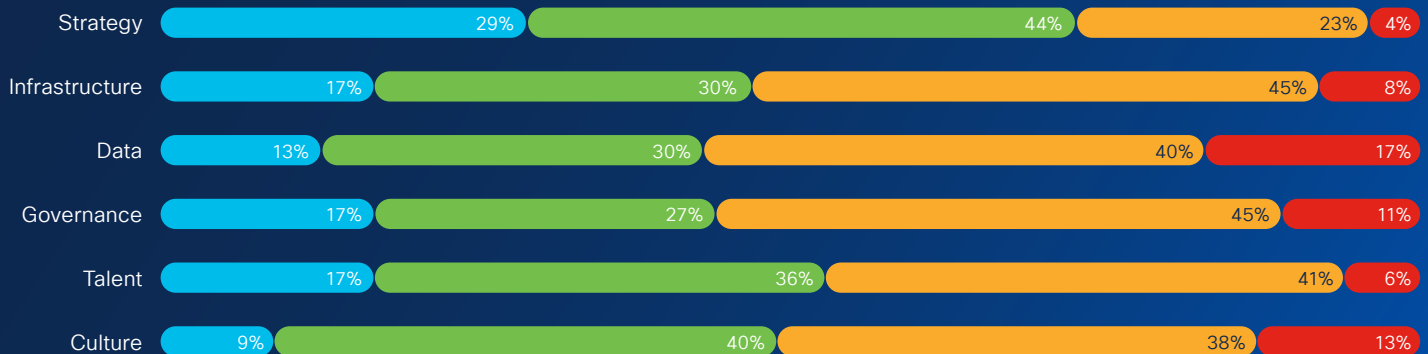
Based on this scoring system, 14% of respondents globally met the criteria for Pacesetters, with Chasers at 34%. Followers are the largest group at 48%, and Laggards the smallest group at 4%.

Highlighting the vast divergence in levels of readiness, the average scores recorded for each group are **Pacesetters** – 93, **Chasers** – 72, **Followers** – 48, and **Laggards** – 24.

The **Cisco AI Readiness Index** provides a comprehensive assessment tool for organizational leaders.

Global AI readiness across all pillars

● Pacesetters ● Chasers ● Followers ● Laggards



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