



Cisco AI Readiness Index

Intentions Outpacing Abilities



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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.

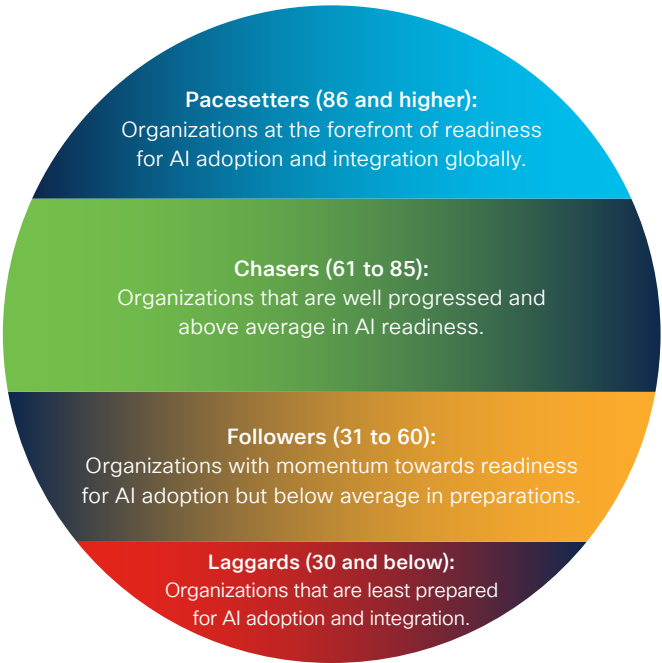
We hope that this Index serves as a useful guide for AI ambitious leaders and professionals looking to accelerate AI adoption, unlock business value, and improve experiences for employees and customers.



Benchmarking Readiness for AI Adoption and Integration

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.

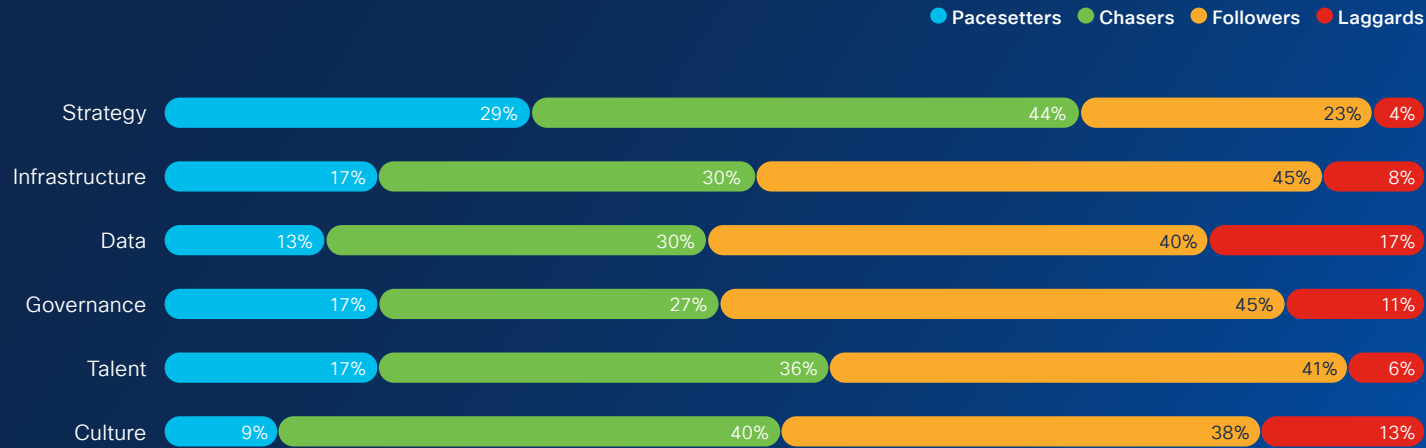


The data was organized and categorized into a level of readiness, with respondents ranked in four groups – Pacesetters, Chasers, Followers, and Laggards. These groups and their corresponding scores are pictured left in descending order.

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.





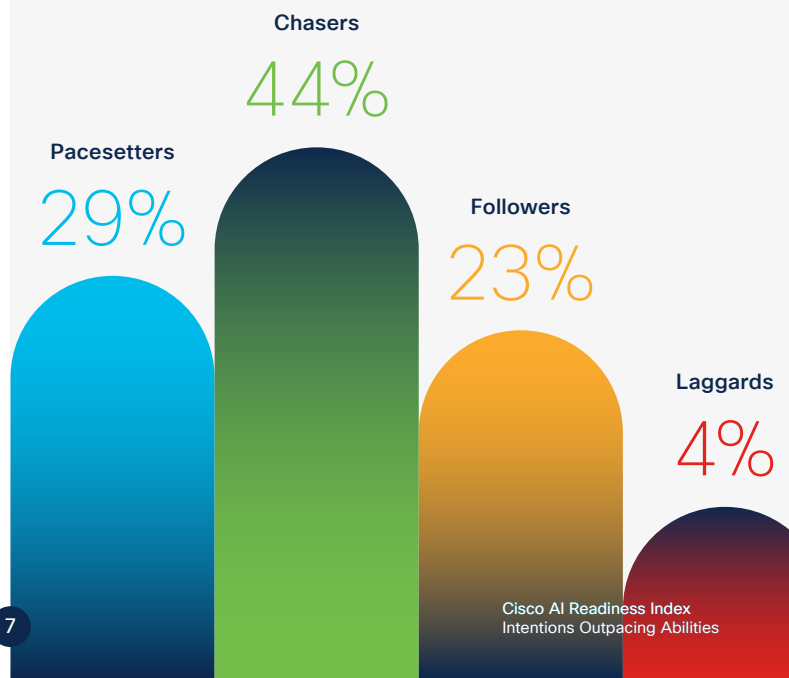
It All Starts with Strategy

Nothing can be deployed effectively in an organization without a clear strategy, and the same is true for AI. This is proven out by respondents' feedback showing 95% of organizations already have a highly defined AI strategy in place or are in the process of developing one. Further to this, 83% of organizations feel they have clear leadership and ownership in place for this strategy.

Across all assessment pillars for this Index, Strategy had the highest level of AI readiness with 73% of organizations benchmarked as either Pacesetters or Chasers, and only 4% considered Laggards.

Looking at how different areas of organizations are being prioritized for AI deployment, IT Infrastructure is leading, with 84% saying they have achieved moderate to advanced deployment of AI in this area. Cybersecurity is a close second at 83%, with customer experience and financial management following at 75% and 72%, respectively. This is not a

Strategy readiness



surprise given that improving the efficiency of systems, processes and operations, was ranked among the top outcome that companies are looking to drive through adoption of AI. Among our respondents, 63% placed this in their top three reasons. This was followed by increasing innovation capabilities at 51% and improving customer experiences at 47%. Interestingly, opening new revenue streams ranks lowest, with only 25% considering this a top priority. This suggests that organizations have yet to fully grasp the potential of AI to open new revenue sources.

Organizations in the technology and business services industries are the most likely to be advanced with AI deployment in their IT infrastructure, with 90% and 86% respectively citing moderate to advanced deployment.

To achieve efficiencies and productivity increases they desire, respondents say they are primarily pinning their hopes on using AI to automate more processes, with 40% ranking this at the top, ahead of assisting (32%) and augmenting current processes (29%).



Top five outcomes organizations are looking to drive by deploying AI/AI-powered solutions
(Percentage ranking outcome among top three)



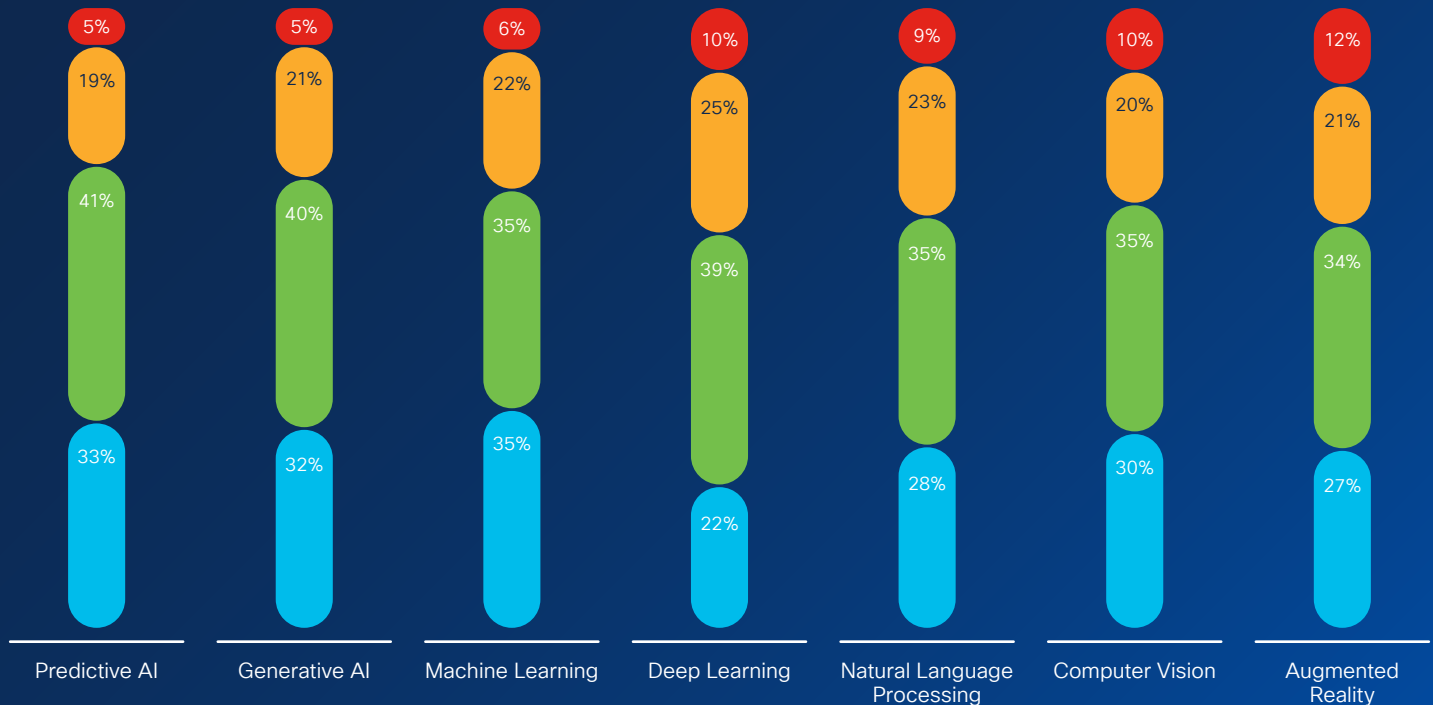
From a cybersecurity perspective, organizations are dealing with an increased volume and sophistication of threats. Given the scale of the challenge, companies realize that cybersecurity needs to be tackled at machine scale, not human scale, and the Index showed an increased adoption of AI-powered solutions among organizations for such purpose. The kinds of AI being deployed are reflective of the evolution of the tools available and the most prominent trends in the industry.

Currently, Machine Learning has the highest rate of deployment at 35%. However, Predictive and Generative AI have the highest rates of in-progress deployment at 41% and 40% respectively. Looking ahead to deployment in the next 12 months, Deep Learning (25%) and Natural Language Processing (23%) rank highest, while Computer Vision and Augmented Reality rank lower.



Stage of deployment for AI or AI-powered technologies

● Already deployed ● Currently in progress with deploying ● Plan to deploy in next 12 months ● No plans to deploy in next 12 months



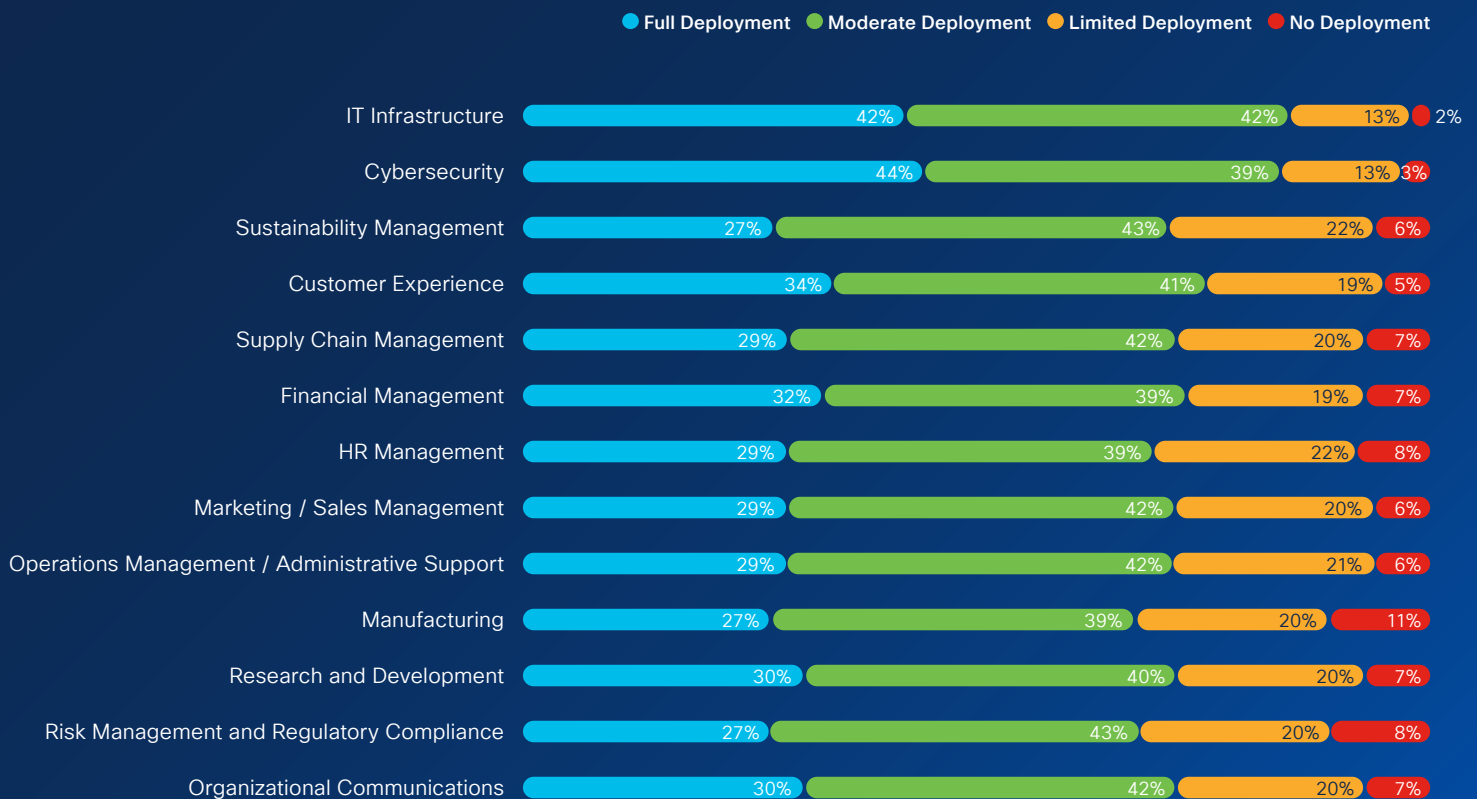
When it comes to measurement, while an impressive 87% of respondents say their organization has a process in place to measure AI's impact, only 41% have defined metrics for doing so. Similar numbers are seen with financial preparedness with 84% having a financial strategy to support AI deployment in place, but only 45% saying they have a long-term financial plan.

One of the key criteria under the Strategy pillar that differentiates the Pacesetters from the rest is a willingness to invest in AI. Only 27% of respondents say AI deployment has been given the highest priority for budget allocation and incremental budget funding, compared to other technological deployments.

Based on the Index data, companies across the world have made strides when it comes to having an overall strategy, a clear understanding of what type of AI they want to adopt and deploy, and what outcomes they want to drive.

Yet the question remains, are they ready on other fronts that are critical to leverage the full potential of AI?

Stage of deployment for AI or AI-powered technologies





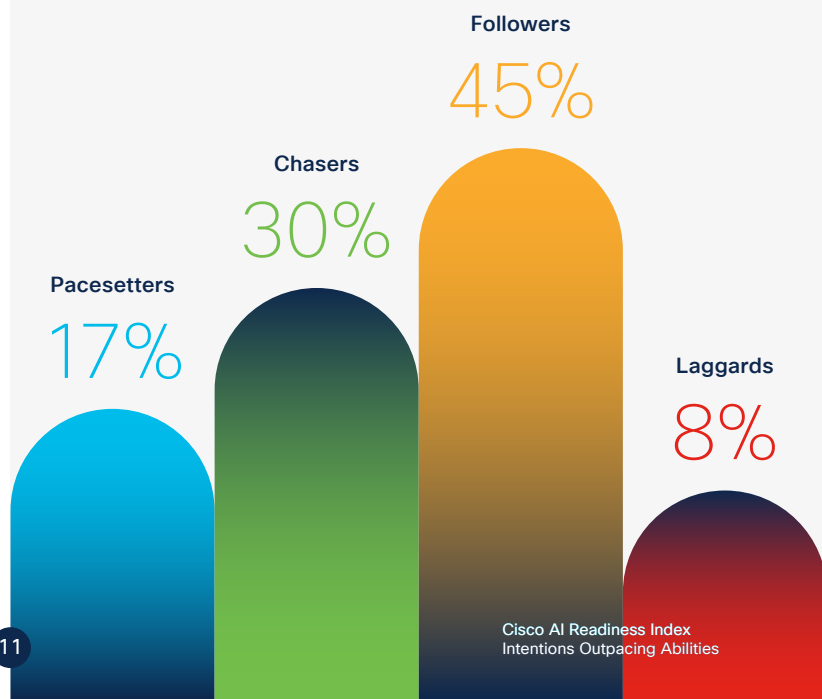
Infrastructure for the Future

Beyond strategizing, business leaders must consider whether their organization has the infrastructure necessary to leverage AI. Infrastructure encompasses many aspects including the compute power to process complex AI models, network performance within the organization and its data centers, cybersecurity capabilities to detect and prevent attacks, and readiness to support the increased power consumption that comes with AI deployment.

An overwhelming 95% of respondents believe AI will increase the workloads of their IT infrastructure.

This Index finds that overall, infrastructure readiness is low, with just 17% of organizations globally categorized as Pacesetters, and more than half (53%) as Followers or Laggards. Since infrastructure very much determines the capability to execute AI, there is likely still some way to go before widespread deployment of AI solutions at scale, despite the hype.

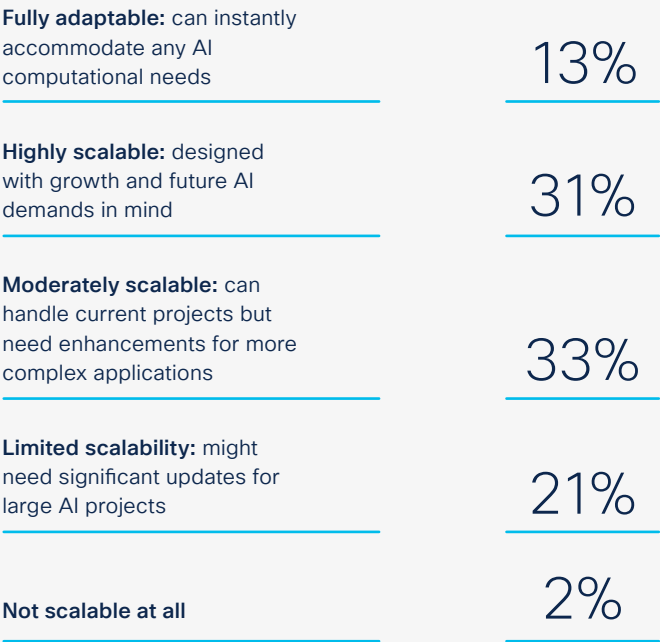
Infrastructure readiness



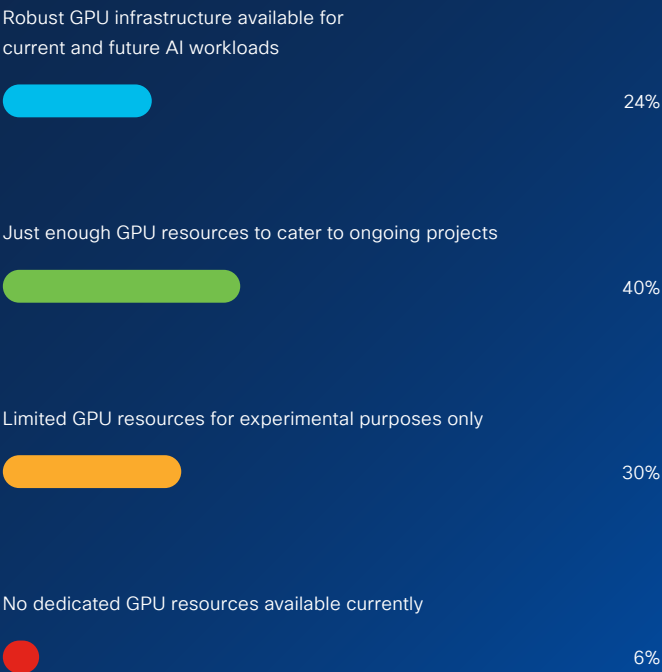
In the current competitive environment, the ability to leverage AI quickly provides a distinct advantage. Scalability and flexibility of an organization's existing IT infrastructure are crucial to seizing this advantage. Scalable architecture can grow to handle increasing demands, while flexible architecture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

However, the majority of respondents (54%) indicate that their infrastructure has only moderate or limited scalability and requires enhancements or updates to handle complex AI applications. Less than a third (31%) consider their infrastructure highly scalable.

The state of organizations' current IT infrastructure



The availability of GPU resources for processing of AI workloads among organizations



Looking at different components of IT infrastructure, more than three quarters (76%) will require further data center graphics processing units (GPUs) to support future AI workloads. The lack of Infrastructure preparedness is further accentuated by the fact that most companies are I/O poor, which negatively impacts their ability to extract the full potential of AI or AI-powered technologies.

Respondents are relatively more confident in the availability of computing resources for AI workloads, their efficiency to allocate such resources on demand, and the latency and throughput performance of their data center networks, with about one in five (21%) saying these resources or capabilities are at optimal levels. In contrast, organizations' in-house network capabilities are not as scalable or adaptable to handle complex AI projects and high data volume.

Power consumption is the area of IT infrastructure where the greatest confidence is seen. However, even the highest scores here are relatively low, as 55% of respondents say they are not prepared or ‘somewhat’ prepared. Less than half (44%) of respondents say they are highly prepared with infrastructure dedicated to optimizing power for AI deployments.

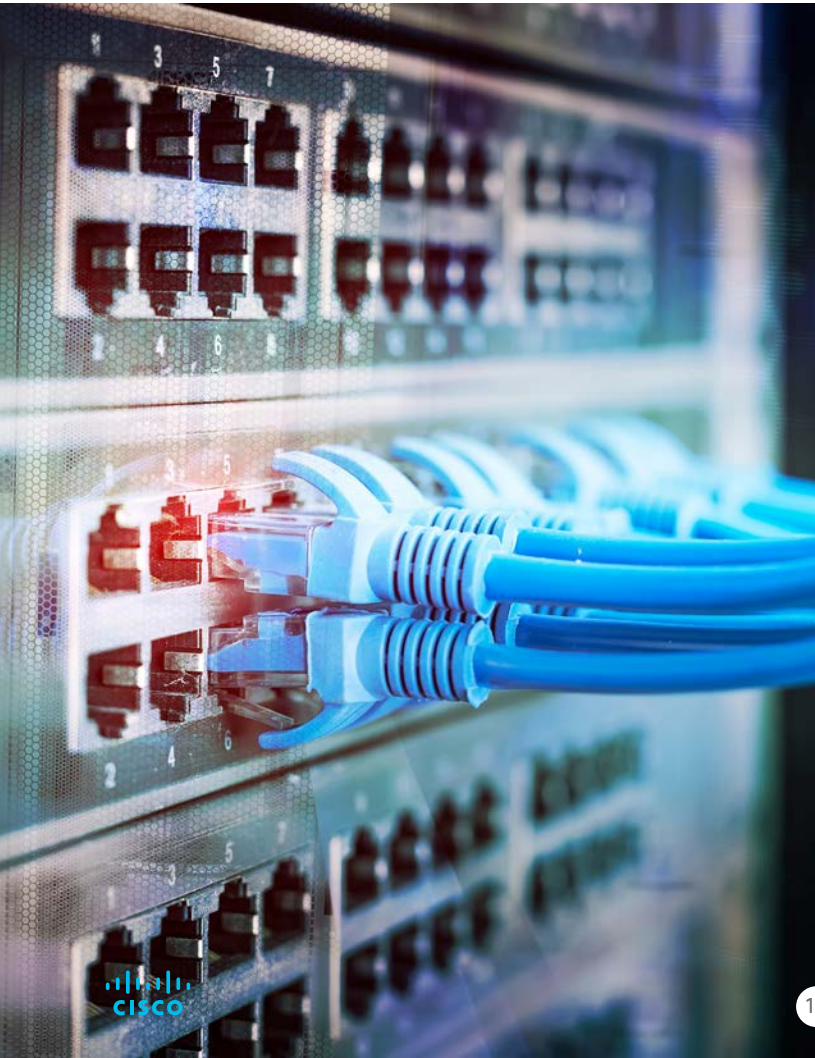
Organizations will need to find the balance between meeting increased power consumption needs and delivering on their sustainability commitments. This is where their adoption of technologies that help deliver more output while consuming less power will become a competitive differentiator as adoption of AI increases.

Organizations are also not fully prepared to guard against the cybersecurity threats that come with AI adoption. As higher volumes of data, including confidential and sensitive data, is processed by AI, the incentive for malicious actors to launch attacks against these systems becomes greater and the stakes for organizations get higher.

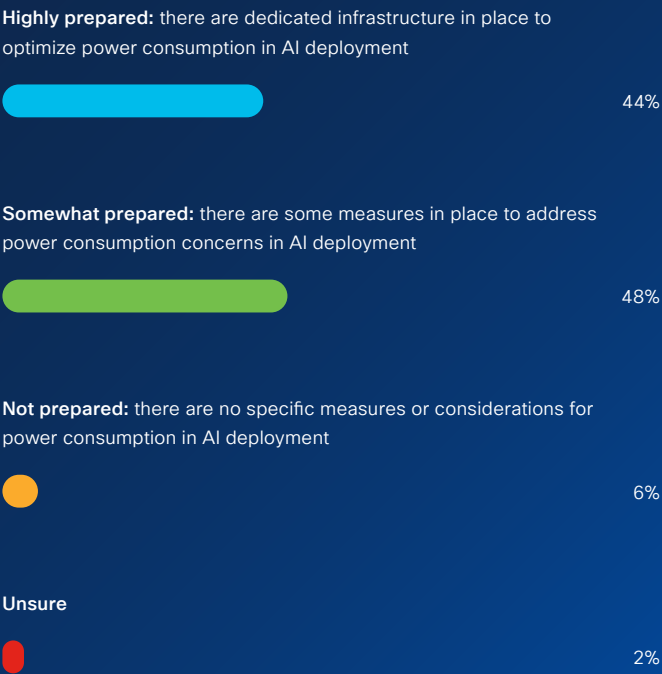
The encouraging part is that more than three-quarters (77%) of organizations are at least implementing advanced encryption or end-to-end encryption to protect the data utilized in AI models.

However, 68% of respondents fall short of being ‘fully equipped’ to detect and prevent adversarial attacks on AI models, with nearly four in 10 (39%) considering themselves as only moderately equipped.

Further, one quarter of leaders globally say their organizations have limited awareness or are unaware of security threats specific to AI workloads. More education is needed for organizations and their employees to work with AI securely.



Organizations’ readiness in deploying AI from a power consumption perspective





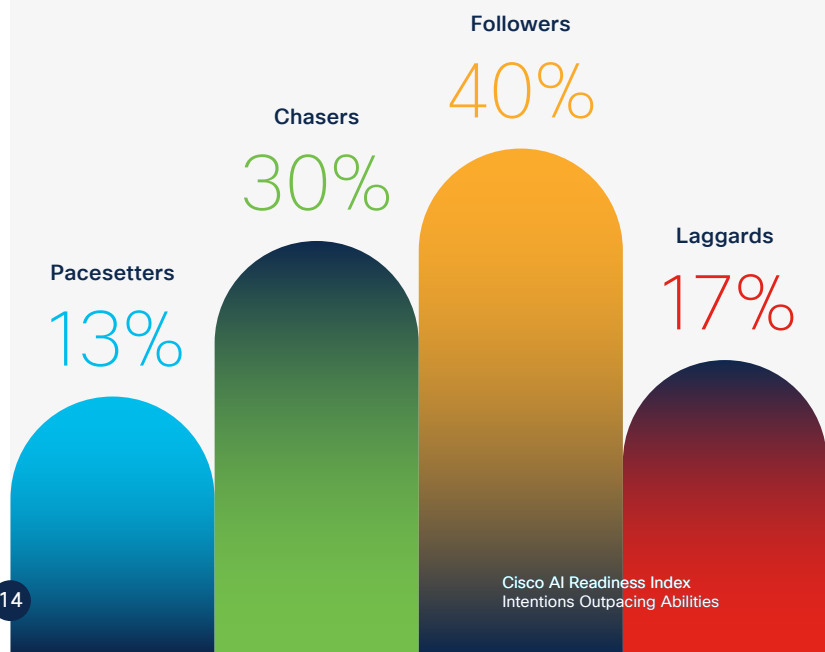
Data, Data, Data

Despite data serving as the critical backbone and lifeblood necessary for AI operations, the Index showed the largest number of organizations classify as Laggards (17%) and Followers (40%) for the data pillar.

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. Such a foundation encapsulates a multi-fold approach. Beyond ensuring the security and protection of data, organizations must ensure a centrally managed database, integrated AI systems, data hygiene practices, and the proficiency of current analytics tools and their employees. This challenge is only growing to become bigger as International Data Corporation (IDC) forecasted that data creation and replication will grow at a CAGR of 23% from 2020 to 2025*.

* The IDC report, Worldwide Global DataSphere Forecast, 2021–2025: The World Keeps Creating More Data – Now, What Do We Do with It All?

Data readiness



High-quality, diverse, and accessible data is indispensable for AI algorithms. It is critical to understand patterns, recognize anomalies, and provide personalized experiences, making businesses more efficient and competitive. There is a lot of work that needs to be done on this front as 81% of respondents admitted that their data exists in silos across the organization. The complexity of integrating data residing in various sources and making it available for AI applications can impact the ability to leverage the full potential of these applications. the full potential of these applications.

The state of data centralization among organizations

Fully centralized: data is consistently managed and readily accessible organization-wide



Moderately centralized: majority of data is in unified databases, but some silos remain



Partially fragmented: some centralized databases, but many department-specific silos exist

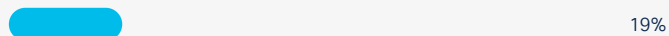


Highly fragmented: data is scattered across different silos

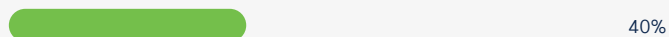


State of data pre-processing and cleaning among organizations

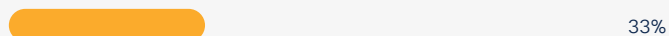
Consistently pre-processed: our data strategy ensures data is always AI-ready



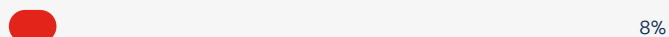
Mostly pre-processed: most of our data is primed for AI use



Occasionally pre-processed: some datasets are AI-ready, but many require additional work



Rarely pre-processed: significant time is needed to clean and organize data for AI



Organizations also cannot neglect the importance of having data 'AI-ready'. This includes consistently preprocessing and cleaning data to eliminate structural errors and maintain its quality for AI applications. In good news, almost six out of 10 respondents currently incorporate this practice as part of their data strategy. However, more education is needed to equip others with the necessary knowledge and skills for data processing. More than four out of 10 respondents admit that they rarely or only occasionally pre-process their data, indicating a gap in understanding or implementation.



Effective data analytics tools go hand in hand with AI applications and overall data strategy, and it's clear that business leaders recognize this. More than two-thirds of global respondents (67%) 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 74% of respondents said that their analytics tools are not fully integrated with data sources and AI platforms being used. In fact, almost one-third (31%) of respondents said their tools were not integrated (4%) or somewhat integrated (27%) at best.

Level of integration of organizations' analytics tools with data sources and AI platforms used



Sophistication of organizations' analytics tools in handling complex AI-related data sets



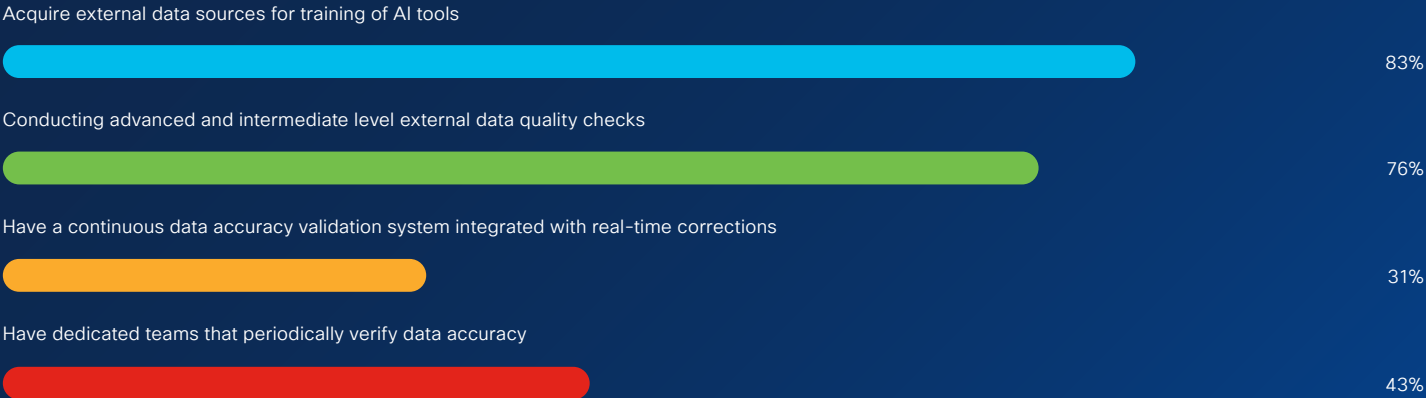
Adaptability and scalability of organizations' analytics tools in catering to evolving needs of AI projects



While AI will transform the business landscape, it also raises new issues around quality of data as many organizations are using external data to train their AI models. Positively, companies are translating this new challenge into action. Around three quarters (76%) of global respondents are conducting advanced and intermediate level external data quality checks, to ensure the reliability of it for AI training. While the vast majority (97%) are tracking the origins and lineage of data used in AI models, true effectiveness still varies. Only four out of 10 respondents have a structured system for tracking data origins and those systems are not integrated with all AI projects. Meanwhile, 17% of global respondents have basic tracking in place but lack comprehensive lineage details.

In a rapidly evolving landscape, ensuring the accuracy and reliability of data is critical. Just under one-third (31%) of businesses today boast a continuous data accuracy validation system integrated with real-time corrections, indicating that more can be done by other organizations. Maintaining data accuracy not only prioritizes data security, but it also enables companies to leverage up-to-date data to make accurate decisions.

Companies are taking care of their data



But more can be done





Governing Real Risk

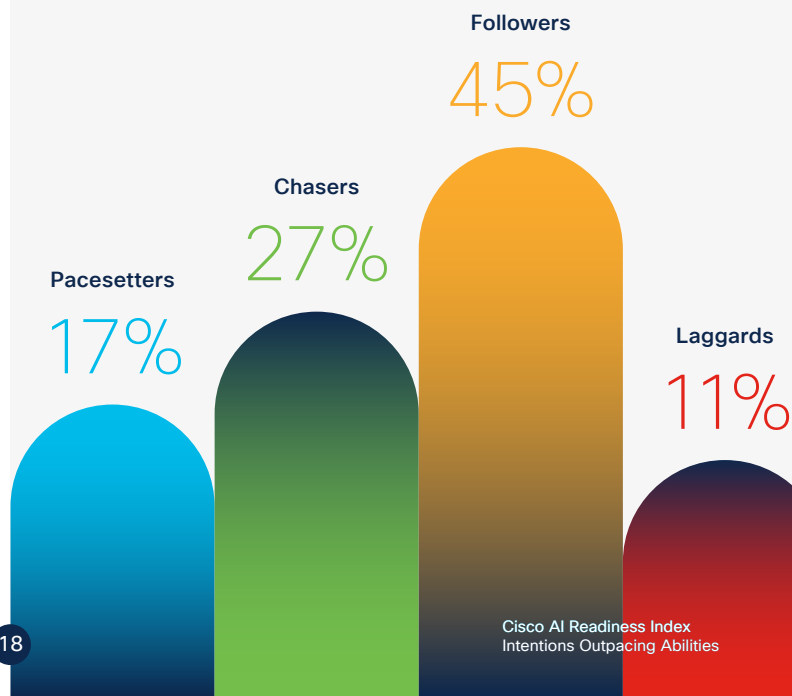
The potential of AI to bring about transformative benefits to governments, economies and society is undeniable. However, navigating AI adoption is fraught with risks that demand organizations have a strong framework of policies and protocols in place to guide the ethical and responsible management of data and AI systems.

The speed and force of AI's entry into an enterprise should not come at the expense of these policies and protocols. Unchecked, AI presents critical risks including bias, data privacy, unanticipated output, false content, uninformed decision making, and reputational liability.

Effective governance is now the inflection point in successful AI implementation, and the new challenge keeping CEOs up at night.

While the majority of the respondents in our study recognize this, more needs to be done on this front. Only a third (34%) of respondents said they have highly comprehensive AI policies and protocols in place, while half (47%) said they have only moderate policies and protocols in place.

Governance readiness



Further, despite efforts to install comprehensive AI policies and protocols, overall governance readiness still ranks low, with over half of the organizations only qualifying as Followers and Laggards. Just 17% can call themselves Pacesetters while 27% are classified as Chasers.

If we are to develop trustworthy AI systems, we must also consider and govern all the factors that present a risk to eroding the public's trust in AI.

One of these is AI transparency, or the ability to trace decision-making back to specific factors in the AI algorithm. Our respondents rank high on AI transparency, with seven in 10 able to trace most decisions back to either specific or essential decision factors. The level of AI transparency varies across different industries, though, with technology services leading, and Travel Services scoring lowest. Of concern are the admissions by Restaurant Services (10%) and Travel Services respondents (18%), who flag that AI decision-making in their organizations is a complete black box, and there is no understanding of AI mechanisms for decision-making. Given AI is used in these industries for everyday tasks such as security checks, customer experience, airfare pricing, food safety, and supply chain traceability, more can be done to ensure accountable, fair, and trustworthy use of AI systems.

Another key governance risk that is emerging is bias. AI bias can occur for a variety of reasons, including the data itself being biased because it hasn't been checked and pre-processed, or because humans, often unwittingly influenced by inherent and often subconscious biases, choose the data, define the algorithm, and decide how the outcomes of the algorithms are used.

This is a significant challenge with three in 10 organizations acknowledging that they have limited to no awareness regarding potential biases and fairness in data sets used for AI, and more than a quarter saying they do not have systematic mechanisms to detect data biases. This is further compounded by 25% 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.

If AI is going to reach its full potential, then identifying and



addressing bias in data and AI algorithms must be a top priority.

Data privacy is yet another key risk facing organizations. The good news is that respondents reported being generally well placed around the issue of data privacy management, with more than three quarters (76%) indicating high or moderate organizational understanding and adherence to global data privacy standards. This number is higher in respondents from the Americas (80%) and Asia Pacific (79%), as compared to respondents from Europe (68%), and Africa and the Middle East (68%).

When asked about their understanding and adherence to data sovereignty laws, 76% of respondents said they had detailed or good understanding of data laws across different jurisdictions, and 73% of respondents said they had stringent or advanced protocols in place to align data storage and use with local data sovereignty requirements.

Despite good efforts in data and privacy management, there are no guarantees of complete protection. AI readiness goes beyond understanding and compliance with data privacy regulations. It also looks at the preparedness of companies to address and rectify situations in the case of a data breach or privacy violation. The Index demonstrates cause for concern, with nearly a quarter (22%) of organizations having untested, basic protocols, or no protocols in place for data incident response. Again, the Travel Services industry stands out with one in 10 organizations saying they have no protocols in place to respond to a data incident.



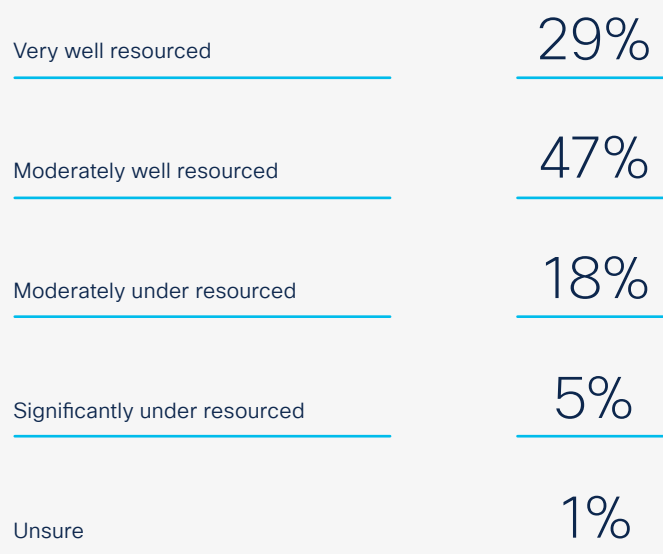
Talent for the Tech

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.

Close to half of respondents say that their organizations are moderately well resourced (47%), with an almost even split between those feeling very well resourced (29%) and those who are under resourced or unsure (24%). 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, 37% of respondents ranked comprehension and proficiency of AI tools and technologies as the primary skill gap.

The current level of in-house talent for successful AI deployment among organizations

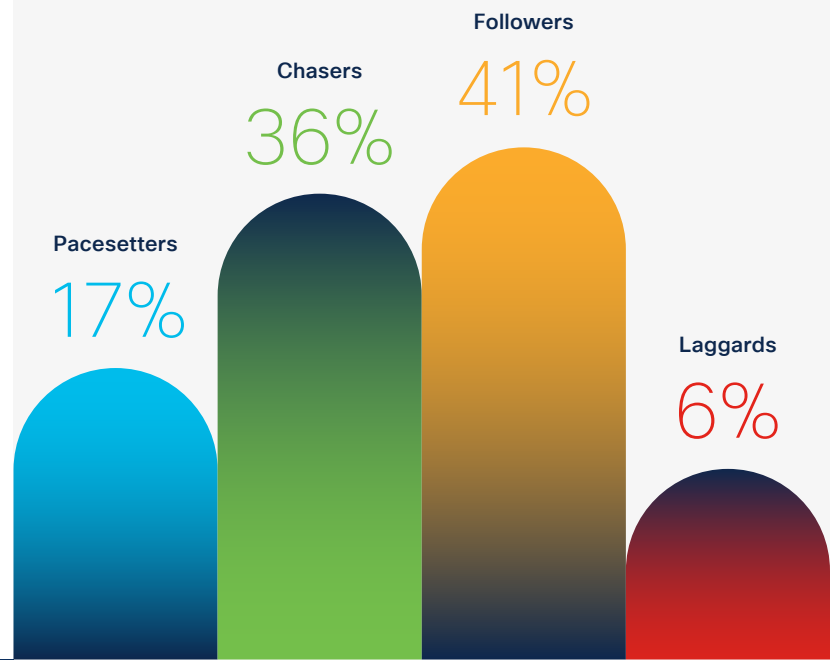


The primary reason cited for under resourcing is the difficulty in finding qualified AI professionals in the market. However, 71% also feel that sufficient talent does exist – suggesting that the challenge may be with effective recruitment or retention processes.

In addition to resourcing capacity, the other talent aspects assessed in the Talent pillar of the Index are employee proficiency, training, and accessibility. Against these measures, 17% are assessed to be Pacesetters, 36% Chasers and 41% Followers.

The theme of ‘good but not great’ continues across these areas, with 72% saying their employees have sufficient skills to use AI tools competently in their day-to-day roles but not to leverage the full potential of these through more advanced practices. As such, 90% are investing in training for employees in this area.

Talent readiness



Perception of the accessibility of AI technologies for employees with differing abilities

Accessibility is a core part of the organization's AI strategy and planning



The organization has thought about accessibility, but there are no clear answers



The organization is aware of accessibility, but it does not build these AI tools so it can't control this aspect



Accessibility is not a consideration at this time



This is a positive sign as it shows that companies realize that not only do they need to hire new talent, but it is also equally important for them to upskill their existing workforce if they are 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 employees as deployment of AI technologies is likely to result in a change in the scope of some jobs in areas where it is deployed. Organizations need to think about this factor as part of their overall planning on AI, rather than as an afterthought.

When looking at accessibility, on the positive side, 96% said their organization had started to think about the accessibility of AI technologies for employees with differing abilities, but only 39% say it is a core part of their AI strategy and talent planning. This could be a warning sign – for AI technologies to be successful, they must be truly inclusive.



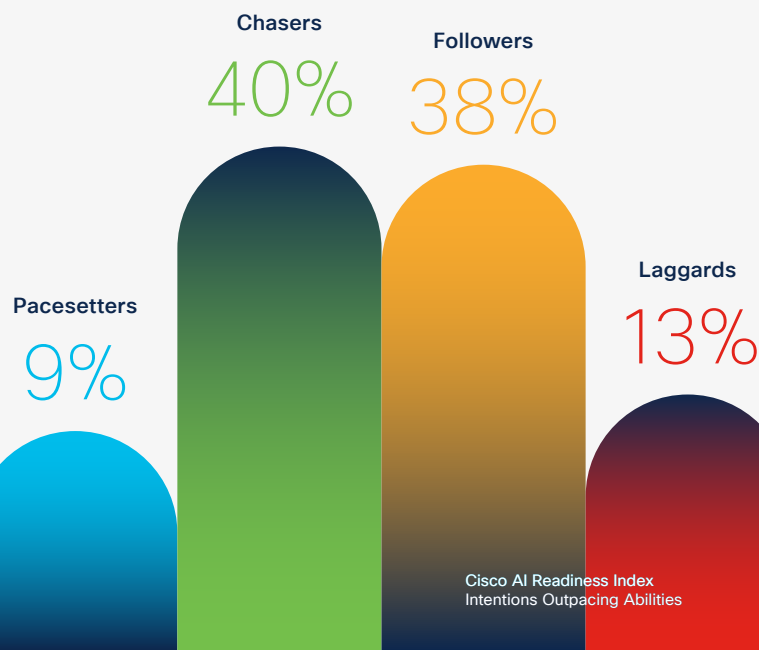
Culture is Crucial

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 9% of respondents qualify as Pacesetters against the determined criteria, with Chasers comprising the largest grouping at 40%.

The good news is that motivation is high. Nearly eight out of 10 (79%) say their organization is embracing AI with a moderate to high level of urgency. Only 2% said they were resistant to change. Coupled with 97% 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.

Culture readiness

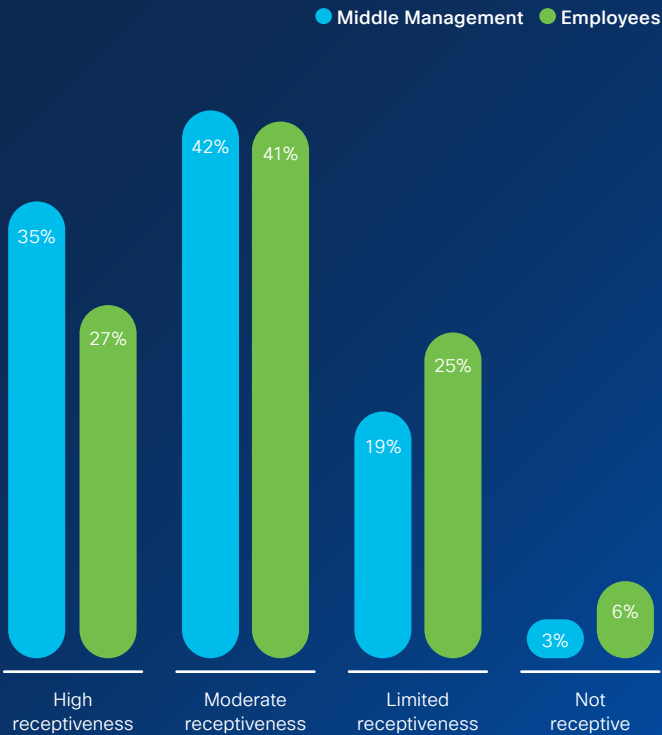


To drive meaningful change, it must be initiated from the top. The study found that Boards and leadership teams are highly receptive to embracing the transformative power of AI, with 82% of both groups being highly or moderately receptive.

However, there is more work to be done to engage middle management where 22% have either limited or no receptiveness to AI. This challenge is even greater amongst employees where close to a third (31%) 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. The Index highlighted that while 79% of organizations have one in place, only 26% of these said their plan is a comprehensive one, while 62% said they have one in progress and 12% highlighted that is in draft form. This perhaps reflects the still relatively nascent stage of more widespread AI adoption.

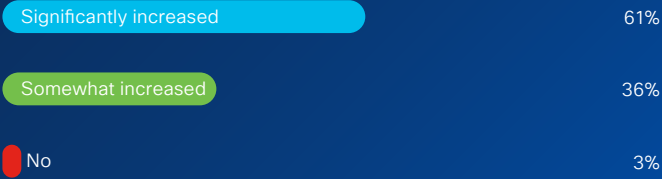
Receptiveness to changes brought about by AI, by Middle Management vs Employees



Overall urgency of organizations to embrace AI



Urgency to deploy AI / AI-powered technologies in the past six months



Differing industries show a varied response when it comes to a culture of readiness to adopt AI. Almost 50% of respondents in Retail are in the Pacesetters and Chasers category– showing an activeness in pursuing AI initiatives. Retail organizations have identified productivity and improving customer experience as the key desired outcomes driven by AI deployment. This highlights the potential for AI solutions to improve margins, which is crucial in a fast-paced sector like Retail. Areas of opportunity include cutting operational costs by using chatbots instead of call centre employees or implementing cashier-free stores. Conversely, the Education sector shows more of a reluctance to embrace AI. 72% of respondents are in the Followers or Laggards category which supports the hypothesis that highly regulated industries with larger resource and budget constraints, and greater compliance concerns, may be slower to adopt the technology.

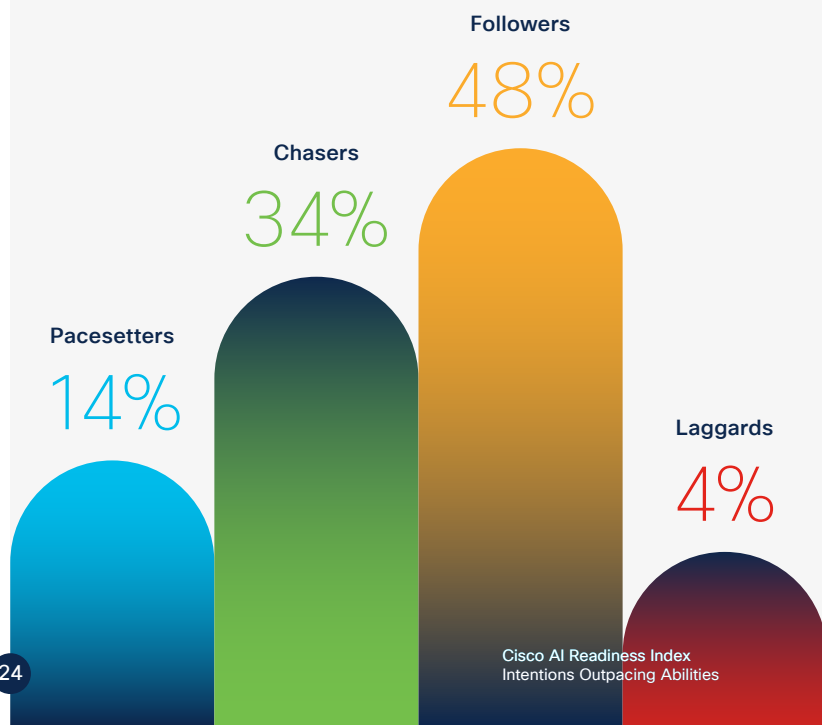


One Size Does Not Fit All

Despite the widespread sense of urgency around adopting AI, the Index showed that sector type and organizational scale have a significant influence in determining which organizations are best poised to seize the opportunities presented by AI.

When analyzing the 17 different sectors covered in the Index there is a leading group of organizations that consistently outperform others in terms of AI readiness, both overall and across the six pillars. This group includes (in order) Technology Services, Retail, Financial Services, and Business Services – all sectors with high levels of technology dependence and complexity. On the other hand, sectors that heavily rely on the delivery of personalized care or services lag behind in AI readiness. These sectors include Media and Communications, Education, Healthcare, Restaurant Services, Travel Services and Transportation.

Overall readiness



In terms of overall AI readiness, Technology Services emerges as the leader with 23% of respondents in this sector classified as Pacesetters, significantly higher than the 14% number for all respondents combined. The Retail sector also emerged as a leader with more one in five (21%) businesses considered Pacesetters. However, it is worth noting that half (51%) of the Retail sector respondents are also Followers or Laggards, demonstrating that even within an industry, different organizations vary in their ability to seize the opportunities afforded by AI.

Taking the Retail sector as an example, there appears to be a minimum organizational threshold size required to properly support AI adoption – only 15% of smaller Retail organizations (fewer than 1,000 employees) are Pacesetters, whereas among mid-sized Retail organisations (between 1,000 and 1,500 employees) the proportion of Pacesetters is over twice as high (33%). However, once this organizational threshold is reached, further size does not correlate with greater readiness. Indeed, the largest Retail organizations (more than 1,500 employees) seem to lack the agility required to quickly execute and deploy AI capabilities as only 13% of these largest Retailers are Pacesetters.

This pattern seems to hold true across industries, with many smaller businesses (between 500 and 1,000 employees) lacking the necessary resources to achieve AI Pacesetter status. Only 11% of these smaller organizations were classified as Pacesetters, compared with 16% of midsized organizations (between 1,000 and 1,500 employees). However, beyond a certain point, greater size and resources are not correlated with increasing AI readiness – the largest employers in our study had the same proportion of Pacesetters (16%) as the mid-sized organizations.

Indeed, when further disaggregating the large employer group, AI readiness peaks in organizations with annual revenues between USD 500 million and USD 1 billion, in which one quarter (24%) of this group are considered Pacesetters. These organizations appear to exist in the sweet spot, having sufficient scale and resources to execute their AI strategy while avoiding the potential challenges that come with size, including slowed AI deployment or negative impacts on agile decision making. Beyond this size range, AI readiness actually declines with only one in six organisations (16%) with revenue over USD 1 billion considered Pacesetters.



Returning to our sectoral analysis, the Index showed that organizations that have a significant technology dependency tend to be relatively well placed in terms of AI readiness – with the Financial Services sector having a higher-than-average proportion of Pacesetters (17%), joined by Business Services (e.g. Accounting, Consulting, Advertising, Business or Market Research) with 15% Pacesetters.

Apart from these four leading sectors mentioned above (Technology, Retail, Finance and Business Services) – the other 13 industries all have a lower-than-average proportion of Pacesetters based on the classification criteria of the Index, highlighting a significant discrepancy in sectoral readiness.

Perhaps unsurprisingly, those industries that have a significant reliance on high quality creative and customized services tend to be lagging in overall AI readiness. For example, only one in 10 businesses (10%) in the Design, Architecture and Engineering services sector are Pacesetters, and only one in 20 (5%) in the Media and Communications industry – the lowest proportion of any industry sector. In the latter two-thirds of all businesses are Followers or Laggards.

Recommendations

1. Look long term and think big

A number of converging forces, including the hype around generative AI this year, have clearly raised the urgency to act around AI. When creating a strategic plan for AI adoption, organizations need to prioritize short-term actions like infrastructure development, talent training, and pilot projects, while planning for long-term goals such as scalability, continuous learning, and robust governance. As AI technologies rapidly evolve, it's essential to remain strategically adaptable. Regular evaluation of AI initiatives, integration with other technologies, and staying abreast of advancements should be part of a periodic strategic review of AI deployment and maturity to ensure the organization reaps maximum benefits while addressing potential risks.

Throughout this report, too much focus on short-term thinking fueled a situation where aspirations are outpacing abilities for many.

A strategic plan that looks at the adoption realities and possibilities from all sides can help to mitigate this risk and ensure opportunities for competitive gain are not missed. While 95% say they already have a highly-defined AI strategy, this could be challenged when comparing this with a number of other findings, including that just 41% have defined metrics for measuring impact, and only 45% have a long-term funding plan for their AI strategy.

Looking to the future, we encourage organizations to plan for the long term as much as possible, and to think bigger and beyond just operational efficiencies when considering how AI may reshape their business.

2. Build Infrastructure for the future

An organization adopting AI requires a robust digital infrastructure encompassing specialized hardware (like GPUs), the right level of latency and throughput, software platforms, data storage and management solutions, and enhanced cybersecurity measures.

With 95% of respondents forecasting that AI will increase IT infrastructure workloads, organizations must act now to determine the infrastructure needs of their future AI-ready state. This IT infrastructure must be highly scalable and flexible and able to handle increasingly complex AI applications. Strong compute capabilities, network infrastructure, and automation are critical for an AI-ready infrastructure.

First, the latest generation compute platforms with fast CPUs and GPUs are crucial for efficient processing of AI workloads. These components ensure timely execution, resulting in faster and improved performance.

Second, a high-bandwidth Ethernet infrastructure is essential to facilitate quick data transfer between AI workloads. Implementing software controls like Priority Flow Control (PFC) and Explicit Congestion Notification (ECN) in the Ethernet network guarantees uninterrupted data delivery, especially for latency-sensitive AI workloads.

And finally, incorporating automation tools for network configuration is recommended. This enables the network to automatically set up and configure necessary parameters, optimizing data transfer between AI workloads. Automation reduces manual intervention, improves efficiency, and allows the infrastructure to dynamically adapt to the demands of AI workloads.

The combination of these measures will determine whether a company is I/O rich or I/O poor, and that in turn will be a differentiator between those who succeed in fully leveraging AI and those who don't.

In addition, AI deployment in an organization increases power consumption. Complex computations and data processing tasks inherent to AI models demand more energy from the underlying hardware, especially GPUs and data centers. Organizations should consider deploying tools and technologies that can provide higher network

bandwidth, better performance and scale, and consume less power. This can help enable organizations to leverage the power of AI tools and deliver on their sustainability goals.

Deploying AI also increases cybersecurity vulnerabilities for an organization by introducing new attack surfaces and potential exploitation points in AI models and related data infrastructure. As a result, cybersecurity resilience must be considered carefully when building the AI infrastructure. While the deployment of AI may increase cybersecurity vulnerabilities, AI may also help with the detection and resolution of the vulnerabilities at scale. We must recognize the potential of AI-powered solutions in helping to secure and protect at machine-scale.

3. Breakdown data silos

Data is the fundamental building block of AI. Data silos – isolated data islands or data repositories within an organization – hinder holistic data analysis and limit the potential synergies between different AI projects. This fragmentation can lead to redundant efforts, inefficient resource utilization, and inconsistencies in data-driven decision-making. Additionally, the lack of centralized oversight can pose challenges in maintaining uniform data quality, security, and governance standards.

To fully leverage AI, a centralized approach to data management is critical. This study found that 81% of respondents currently have data silos within their organizations. Addressing this issue is critical for the effective operation of AI, alongside other areas including data cleaning, quality checks, security, regulatory compliance, and processing skills.

To remove data silos in an organization implementing AI, it's essential first to conduct a comprehensive audit of existing data repositories to understand their structure and interconnections. Next, organizations need to implement a centralized data management system or platform that promotes data integration, uniformity, and accessibility across departments. Lastly, organizations need to foster a collaborative culture, supported by clear policies and continuous training, to ensure consistent data practices and encourage cross-departmental data sharing and usage.

4. People at the core

To ensure effective AI deployment, IT and HR teams will need to work increasingly closer together in a number of key areas. HR leaders need to fully understand the changes that will be coming as a result of AI deployment, and when, and how these will impact everything from hiring strategies to training and culture. The Index suggests that IT teams are struggling to recruit and retain talent with the right AI skills and knowledge, despite feeling that this talent exists in the market.

The Index highlights the need for additional training to increase the skills of team members across organizations, and it is encouraging to see that action is being taken based on respondent feedback. It is important to note that AI training should not be limited to specialists or directed towards development of IT professionals. Organizations should train everyone to understand the power of AI to use it to their advantage and augment their workflows. Doing so can help foster acceptance of AI as an enabler rather than a





threat to job security and help integrate AI seamlessly into the fabric of an organization.

Of course, training is only half the job. The organization's leaders need to ensure that new AI deployments are inclusive and can be used by employees with differing abilities across teams, and that all levels of the organization are prepared for and highly engaged with the changes AI adoption will bring.

Remember, AI deployment is a revolutionary change, not an evolutionary one. Thus, a comprehensive change management plan is critical. Our Index finds that as much as 22% of middle management and 31% of employees have limited willingness to adopt AI or are outright resistant to it. Hence, when implementing AI at scale, change management must have a people focus, ensuring open dialogue to address apprehensions and illustrate how AI can complement human roles rather than replace them. Second, the change management plan demands comprehensive upskilling and continuous education programs to empower employees to work synergistically with advanced AI systems. Lastly, fostering an equitable, accessible, and inclusive environment where feedback is actively sought can help adapt strategies to employees' evolving needs and will be critical to promoting a smooth transition and sustained adoption of AI technologies.

5. Internal policies and protocols must keep pace

Governments worldwide are recognizing that to unlock the

benefits of AI, they must balance encouraging innovation with advancing equity and safety. The European Union has proposed a risk based regulatory framework aimed at addressing risks to fundamental rights and safety. In the US, the White House issued an Executive Order to serve as a foundation for governmental agencies to develop principles and best practices to mitigate the wide-ranging impacts of AI while maximizing its benefits. Other countries, from Canada to Singapore and the UK, are actively considering regulatory frameworks in this space as well.

As AI's impact grows, regulatory frameworks will continue to evolve, making it imperative for companies to stay updated on relevant local and international regulations. Organizations need to keep pace with this complex and constantly changing environment if they want to continue to leverage AI and climb the AI maturity curve. With time, a continued flow of new AI regulations and compliance requirements is anticipated, and falling behind in this area could expose organizations to risks or competitive limitations.

Companies deploying AI may need internal policies that address data privacy and security and ethical use of AI technology. They should also implement robust cybersecurity measures considering the potential vulnerabilities introduced by AI systems. Furthermore, guidelines on continuous training and upskilling can ensure that employees remain competent and confident in an AI-augmented environment.

About the Research

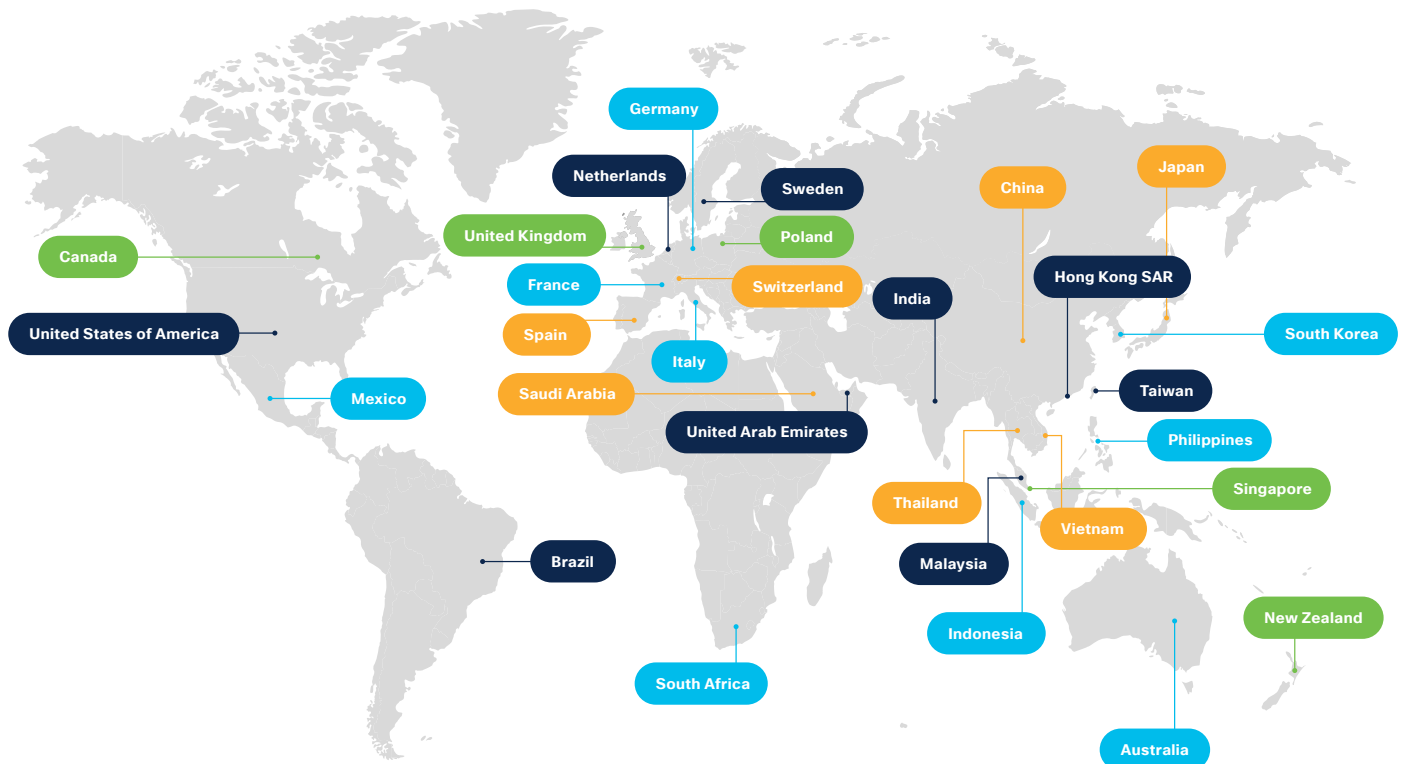
For this study Cisco interviewed 8,161 senior business leaders at organizations with 500 or more employees with responsibility for AI integration and deployment within their organizations. The organizations cover 30 markets in **North America, Latin America, EMEA and Asia Pacific**, including Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Indonesia, Italy, Japan, Malaysia, Mexico, the Netherlands, New Zealand, the Philippines, Poland, Singapore, Saudi Arabia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, the United Arab Emirates, the UK, USA, and Vietnam.

The Index is based on six pillars of AI readiness: Strategy, Infrastructure, Data, Governance, Talent, and Culture. Across these pillars, Cisco examined 49 different corresponding indicators to determine a readiness score for each pillar, as well as an overall readiness score for the respondents' organizations. Each indicator was assigned an individual weightage based on its relative importance to achieving readiness for the applicable pillar.

The scores for each organization were then derived based on the stage of progression or deployment of solutions under each of the six pillars, with partially achieved or deployed aspects or solutions assigned a 25% or 50% weighting and those fully achieved or deployed weighted at 100%. The scores for each pillar were then combined and weighted to arrive at an overall AI readiness score for each respondent's organization. The importance of each pillar to the overall readiness score was weighted as follows: **Strategy** (15%); **Infrastructure** (25%); **Data** (20%); **Governance** (15%); **Talent** (15%) and **Culture** (10%).

The respondents were drawn from 18 industries: Business Services; Construction; Education; Engineering, Design, Architecture; Financial Services; Healthcare; Manufacturing; Media & Communications; Natural Resources; Personal Care & Services; Real Estate; Restaurant Services; Retail; Technology Services; Transportation; Travel Services; Wholesale; and 'Others'.

The research was carried out between September and October 2023 using double-blind online and telephone interviews.



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