

C-Suite Global Al Indicator Report:

Al Is the Ultimate Level-Up

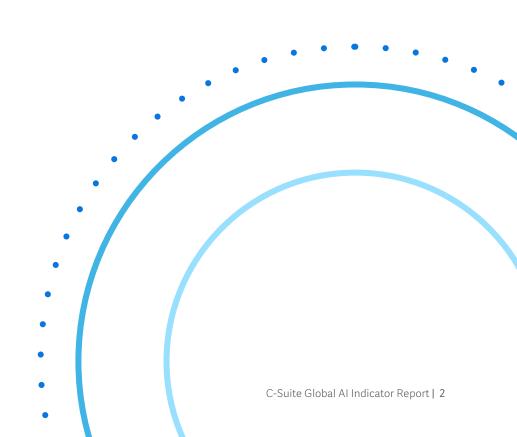
Four Ways to Unleash Your Game-Changing Al and Machine Learning Potential

In collaboration with



Table of Contents

Introduction	3
AI and ML: the Current-State Landscape	4
Four Ways to Unleash the Game-Changing Potential of AI and ML	16
Takeaways: AI and ML Are the Ultimate Power-Up	22
About Our Research	23
Al Pioneers: Al Adoption Index Methodology	25
Definitions of Terms in Our Research	26



Introduction

Remember when they said the internet was a fad?

In May 2023, scientists in the U.S. and Canada heralded the discovery of a new antibiotic capable of killing a deadly superbug.¹ Their secret weapon? Artificial intelligence (AI).

This was just one of a growing number of breakthroughs powered by Al and machine learning (ML). Other notable breakthroughs in generative Al have included the much-discussed natural language processing tools ChatGPT, Bard, and Llama 2.

Thanks largely to these high-profile advances, a lot has been written about how AI might negatively impact employment² But what if it created a workplace in which an employee returns from vacation and this technology sums up what they need to address most urgently? Or what if AI enabled engineers to code much faster, or could be used as a recruitment tool that indicated the skills the team needed for a specific role? What if AI could analyze contracts, company policies, and regulatory statutes to ensure revenue is recognized properly?

Some of these advancements are already happening. But now we need to make sure we understand exactly how to use and expand these technologies and applications responsibly.

Workday has conducted a global survey of 2,355 senior business executives to unpack the impact of this digital revolution across the enterprise—and AI and ML in particular—on finance and procurement, HR, IT, and the office of the CEO. The survey found that 71% of business leaders expect AI and ML to have a global impact in the coming years, but the nature of that impact is still coming into view.

Our research shows that 98% of CEOs^{*} say there would be some immediate business benefit within their organization from implementing AI, and 3 in 5 businesses are adopting AI and ML in some way. However, only 1% would classify their adoption as mature,³ and 1 in 4 want to wait to see how AI and ML affect their organization before deciding on their approach. Roughly half (49%) of CEOs say their organization is unprepared to adopt.

But these technologies are evolving fast, so business leaders can't afford to stand still. The implications could mean that the competition races ahead and leaves these businesses behind. What's more, with CEOs bullish on Al, being too cautious might be hazardous to one's career.

*Our survey defined CEOs as business leaders who define their job role as CEO or managing director (head of company, not including chief of department or head of department). There were 435 CEO respondents out of a total global cohort of 2,355 respondents.

"

Remember what it felt like in the very early days of the internet. It may have felt like it was [just] a technology, and you might have been in a business where you said, well, the internet is not going to affect me. It seems like this will be at least as big, if not significantly bigger than the internet.

Ajay Agrawal

Professor, Rotman School of Management, University of Toronto



More from this speaker

AI and ML: the current-state landscape.

1. Business leaders are optimistic about the impact of AI and ML.

Business leaders are excited about what AI and ML could do for their organizations—especially operational efficiency, better decision-making, and competitive advantage. Among these leaders, **71% expect these technologies to transform both their organization's core functions and the global business landscape.**

2. Business leaders don't feel ready, and are concerned about security and privacy.

Just one-fifth of organizations (20%) have digitized the majority of their internal operations—a sign that they are ready and able to quickly embrace change, while the remaining 80% may find it more challenging. And **nearly half of CEOs (49%) say their organization is unprepared to adopt AI and ML**, with businesses lacking some or all of the tools, skills, and knowledge needed to integrate these technologies. Leaders are also questioning the trustworthiness of AI and ML, and those in HR, finance, and IT are particularly concerned about security and privacy risks.

3. Pioneering businesses embrace AI and ML as catalysts for business change.

When it comes to AI and ML adoption, some businesses are leading the way. However, **increased demands across the enterprise** set the stage for an accelerated need for AI adoption to sustain innovation and growth. 71%

of business leaders believe that AI and ML will have an impact on the global business landscape in the next 3 years.

3 in 5

businesses are adopting Al and ML in some way although only 1% of those surveyed would classify their organization's level of adoption as mature.

98%

of CEOs say there would be some immediate business benefit from the implementation of AI and ML, yet 49% say their organization is unprepared to adopt.

62%

of AI Pioneers agree AI and ML will improve their organization's sustainability outcomes.





Meet the Al Pioneers.

Throughout this report, we will define the group of organizations that have gone further with AI as AI Pioneers. Half of AI Pioneers have digitized the majority of their internal operations. And their business functions are further ahead in AI and ML adoption: the proportions that are scaling AI or are at maturity are 47% of HR teams, 31% of finance teams, and 29% of IT teams. This is compared to the overall sample size with 19% of HR teams, 10% of finance teams, and 15% of IT teams who said they are scaling AI or at digital maturity.

Our research finds that AI Pioneers are harnessing AI and ML in the following four areas:

- Data and tools. Al Pioneers are better at making data accessible to everyone within the business who needs it.
- **Employee productivity.** Al Pioneers are using Al and ML more to improve ways of working and enable employees to add more strategic value.
- Human skills and machine capabilities. Al Pioneers say that Al and ML will significantly augment people's skills in parallel with technology.
- **Organizational culture.** Al Pioneers are particularly optimistic about what Al and ML can do for sustainability and diversity, equity, and inclusion.

Find out more about AI Pioneers on page 15.

1. Business leaders are optimistic about the impact of AI and ML.

Digitally transform to benefit from Al.

Al and ML technologies are now capable of so much that they have the potential to revolutionize the way businesses operate and innovate. But companies still have a lot to do, and need to evaluate their "digital maturity readiness" when it comes to using technology to maximize their revenue streams and internal operations.⁴

Half (49%) of the businesses we surveyed now accept that digitally derived revenue streams—using technology to take as much friction out of the buying process as possible—are critical to their future success, which is 10% more than in 2022.

Our 2022 global survey on digital acceleration found that the companies that will succeed with digital transformation are the ones that have digitized their operations as well as their applications.

In the short-term, investments are likely to plateau, because although 33% of organizations plan to spend more on Al and ML within the next six months, 34% plan to spend less. But the long-term looks different: half of organizations say that within five years they will invest more in Al and ML. Business leaders often share one overriding priority: 56% say operational efficiency is the main driver of increased Al and ML adoption and investment.

Even with all of this optimism about the potential benefits of AI and ML, many businesses don't think that they are ready to leverage AI in a meaningful use case.



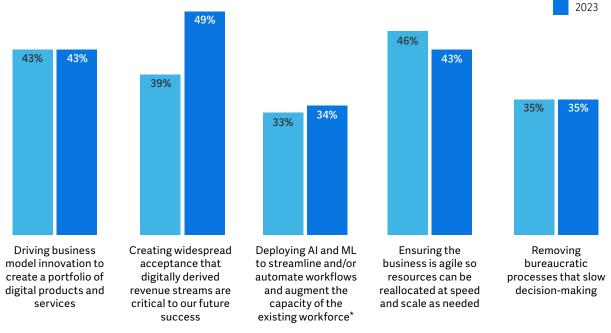
56% of business leaders say operational efficiency is the main driver of increased AI and ML adoption and investment.

Other sources of pressure to accelerate Al adoption include:

- Improved data-driven decision-making
- Competitive market
 landscape
- More engaging employee
 experiences
- Leadership/board pressure



Digital transformation progress within organizations over time.



Survey question: For each of the following, please use the scale to indicate the degree of progress made in your organization. (All respondents; 2023 n=2,355; 2022 n=1,150.) Respondents selected one option per statement on a scale from 1 (no progress made) to 5 (significant progress achieved). Chart represents respondents who selected 4 (above limited progress so far) or 5 (significant progress) on this scale.

*In 2022, this statement was worded as: "Deploying AI, ML, and RPA technologies to streamline workflows and increase capacity of existing workforce."

Areas that respondents believe will sustain anticipated internal and external business impact from AI and ML advancements within the next 3 years.

One or more specific functions within the organization



Survey question: To what extent do you believe that AI and ML will impact the following in the next three years? (All respondents; n=2,355.) Respondents selected one option per statement on a scale from 1 (not at all) to 4 (to a high extent). Chart represents respondents who selected 3 or 4 on this scale.

2022

Where are organizations seeing the benefits and value creation from AI and ML?

	IN NUMBERS	IN ACTION
Augmenting workforce capabilities	Half of CEOs say that AI will significantly amplify human potential, supporting C-suite leaders to get the best out of their teams.	"The most exciting thing about AI is its capacity to remove all of the drudgery that could be automated, giving me time to innovate. I'm excited to see how much AI tools will actually simplify my life."
		—Maria Ingold, Founder and CEO, mireality
Financial forecasting	Among finance and procurement leaders, 1 in 3 say improving forecasts and budget decisions are the areas where they will get the most immediate value from AI, because the datasets are comprehensive and show the entire picture/full range of options.	"Financial forecasting is clearly the low-hanging fruit for many of us. The question is: 'Do I trust what I'm getting from the tool set?' It will come with time in terms of AI learning the assumptions." —Derek Sager, SVP Finance, CAI
Employee experience	Among HR leaders, 1 in 3 say that their teams will get the most immediate value from AI in: 1 Performance management 2 Skills management 3 Employee recruitment and onboarding	PVH Corp., which owns Calvin Klein and Tommy Hilfiger, uses AI and ML to automate the employee experience. For example, when a new employee is onboarded, learning modules within Workday give them tailored recommendations, including reading materials.
Skills-based recruiting	Among IT leaders, 1 in 3 say that AI and ML will immediately help to improve IT talent recruitment, onboarding, and development.	Streamlining recruitment, especially for design and marketing roles, is another focus for PVH Corp. It has been piloting applications to speed up its review of resumes and identify strong candidates. "To say that by pulling all of these data sources we have a list of 100 skills, but these 10 skills matter for the role, and here's how we more objectively rate or identify a proficiency level for this individual against these 10 skills. That's going to be a game changer when it comes to AI and ML for associates."
		—Hari Dorai, SVP, HR Operations, PVH Corp.
		C-Suite Global AI Indicator Repo

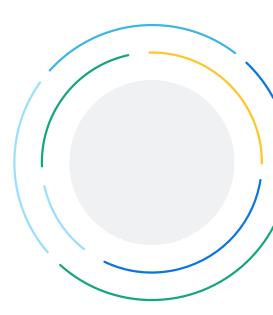
•

2. Business leaders don't feel ready, and are concerned about security and privacy.

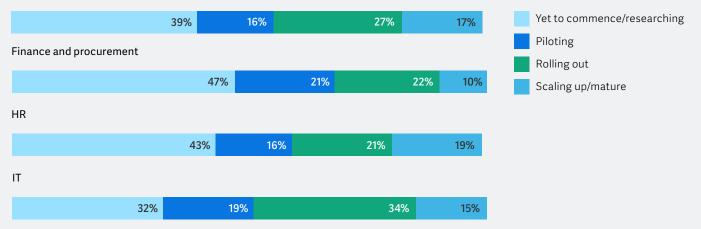
Different functions have varying levels of AI and ML readiness and adoption across the enterprise.

Even organizations that want to adopt Al and ML are struggling to embrace it: just 16% of businesses are currently piloting the technology, while 39% are still in the initial research stages or have yet to commence their journey at all.

Our research shows that finance and HR trail IT in adopting AI and ML. While CEOs are optimistic about AI's overall business impact, they are skeptical about the immediate returns on decision-making: only 2 in 5 (43%) believe that the application of AI and ML has the power to immediately improve data-driven decision-making for leaders across the organization.



Current levels of AI and ML adoption by organization and business function.



Organization*

*Survey question: Which of the following best describes your organization's current level of AI and ML adoption? (All respondents; n=2,355.) Respondents selected one response option.

Survey question: Which of the following best describes the current level of AI and ML adoption in your team? (All respondents; finance and procurement n=640; HR n=640; IT n=640.) Respondents selected one response option to reflect AI and ML adoption within their own team.

Business areas that respondents feel are the least prepared to leverage AI and ML adoption:

- 36% technology infrastructure and business applications
- 35% planning models and operational analytics
- 34% workforce skills and talent development

AI and ML adoption readiness: perspectives from around the globe.

When it comes to how businesses in each region are approaching Al and ML, our research paints a revealing picture of varying adoption curves.

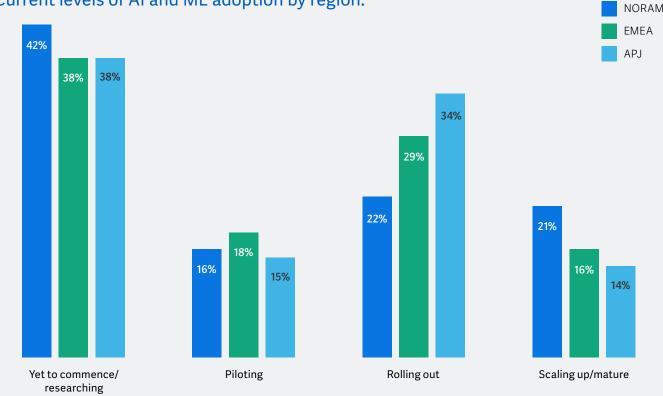
Businesses in **North America (NORAM)** are either leading or lagging behind: 42% of businesses within the region have yet to commence their AI and ML adoption or are in the process of researching—showing they are lagging behind. And, 1 in 5 businesses are scaling up or at maturity—also the highest figure among all regions.

By contrast, organizations in **Europe, the Middle East, and Africa (EMEA)** have more momentum in their uptake of AI and ML, characterized by a high number of businesses in both the rolling out and scaling up/at maturity phases. In addition, our qualitative research shows that EMEA is widely revered as a global leader in AI and ML policy and regulation, which could explain the faster adoption curve within this region.

In **Asia-Pacific and Japan (APJ)**, organizations are taking a far more measured approach to AI and ML adoption, with the smallest number of businesses scaling up or at maturity among the three regions. Despite this, half of APJ businesses anticipate they will be investing more in AI and ML within five years than they are now.

49%

of CEOs describe their organization as unprepared for AI and ML adoption, meaning they lack some or all of the tools, skills, and knowledge needed to embrace these technologies.



Survey question: Which of the following best describes your organization's current level of AI and ML adoption? (All respondents; n=2,355.) Respondents selected one response option.

Current levels of AI and ML adoption by region.

The quest for trust and transparency continues.

When they think about leveraging AI and ML, the business leaders in our survey are most concerned about security and privacy, errors in the data, and bias. And 2 in 5 (43%) say they are concerned about the trustworthiness of AI and ML.

Another recent Workday study on AI found that only 29% of respondents said they are very confident that AI and ML are currently being applied ethically in business.

"We believe in the power of AI to unlock human potential," says Chandler Morse, vice president, corporate affairs, at Workday. "We know how these technologies can benefit economic opportunities for people—that's our business. But people won't use technologies they don't trust. Skills are the way [forward]—and not only skills, but also skills backed by a thoughtful, ethical, and responsible implementation of AI with regulatory safeguards that help facilitate trust. It's incredibly exciting."

"

We know how these technologies can benefit economic opportunities for people—that's our business. But people won't use technologies they don't trust.

Chandler Morse

Vice President, Corporate Affairs, Workday



More from this speaker

Business leaders say that the greatest risks to leveraging AI and ML are:

Security and privacy
62%
Errors
61%
Bias
56%
Lack of transparency
51%
Survey question: What are the greatest risks to integrating AI and ML into your organization?

(All respondents; n=2,355.) Respondents stack-ranked their top 3 choices in order of priority.

Garbage in, garbage out: leaders talk about data integrity.

Data integrity depends on the data sources that feed AI and ML tools, and it's a worry for CEOs specifically: 67% say that "potential errors" are a top risk of AI and ML integration, and this percentage rises to 71% of the CEO cohort that are AI Pioneers.

"In the majority of organizations that I deal with, there are always a few pockets of very good, clean data," says Michael Schrage, research fellow at the Massachusetts Institute of Technology Sloan School of Management (MIT Sloan). "But very few organizations have the quality of labeling, lineage, and governance that allows them to immediately take their data to reliably train machine learning algorithms—or to fine-tune a ChatGPT or a Llama."

Dan Cohen, chief information officer and director of operations at U.S. lifestyle services and hospitality company, The Amenity Collective, says the biggest block to unleashing the full power of AI is uncertainty about the integrity of the datasets it uses. "Our internal data and adherence to process is really where our focus is," says Cohen. "And we don't necessarily want to leap ahead until we feel like we have a stable footing on all of those pieces."

Data integrity is also important to technical professional services firm CAI. "A big part of it is, 'Do you have good-quality data that you trust?,' because that machine is going to learn based upon the integrity of that data," says CAI's Sager. "And that's the challenge we're trying to work through right now: making sure we have a trusted data source that feeds all of the tools."



67%

of CEOs say that "potential errors" are a top risk of AI and ML integration.

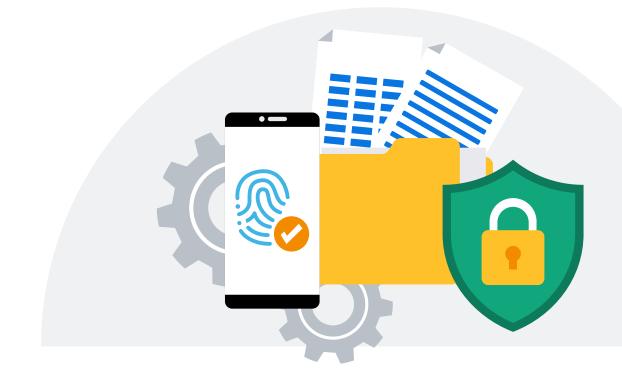
Privacy and security are the top concerns.

Using AI within the enterprise in any form risks confidentiality, privacy, and even corporate espionage. Although a flurry of regulatory activity is under way—and more governmental oversight is surely coming many companies are already self-regulating and working to help create the future of responsible AI. In this context, it comes as no surprise that 62% of business leaders rank both security and privacy as a top concern for AI and ML adoption.

For example, CAI is governed by the audit requirements of all of its customers, so it has to adhere to numerous models and standards. If it launches an AI solution, that solution also has to meet those obligations.

Al tools also come with the potential for data breaches and issues of consent. "Something I think about every day is, how do we safeguard our associates' information and data from falling into different hands?" says Nathalie Carruthers, EVP and CHRO at supply chain management organization Blue Yonder.

Blue Yonder is trying to limit the risk from a public domain perspective by hosting its own version of ChatGPT. "Building governance is important, and having clear guidelines around how we use AI and ML means you have to make some investments," explains Carruthers. "If we aren't looking at how to best utilize it and incorporate it into our work, we risk falling behind as an organization and not offering our associates the tools they need to also stay relevant." 622% of business leaders rank both security and privacy as the top concern for AI and ML adoption risks.



Case study: addressing bias and transparency concerns.

CAI is a U.S.-based technical professional services firm that offers a range of services to clients in both the commercial and public sectors. "We provide professional services and consulting around IT management and implementation of automation solutions, along with more unique focus areas, such as providing managed services to state governments and an organizational commitment to leveraging neurodiverse talent in many of our solutions," says CAI's CTO Matt Peters.



Matt Peters Chief Technology Officer, CAI



Challenge

Peters says that the lack of transparency behind AI algorithms could be a problem for organizations, and one that will place added pressure on technology teams when it comes to determining where AI fits in and how to deploy it safely. "There are many models and standards that our AI solutions have to be able to adhere to," says Peters. "So if, for example, the AI is making a decision and can't tell you why, we can't deploy it because that has to be a defensible decision."



Solution

By collaborating closely with their peers across the organization (such as finance and HR), IT teams will be better placed to understand the needs of the business and replicate them within safe, fit-for-purpose AI solutions. "We'll deploy an alternative AI technology that will get teams to where they want to be, and we'll tell you exactly how it came to the conclusion that it did," says Peters.



Recommendation

Organizations must ensure a human-in-the-loop approach to their Al and ML to ensure explainable algorithms, as well as threat assessment and detection. Doing so up front, says Peters, will help to overcome transparency issues before they arise: "Understanding the inner workings of how you came up with an insight is going to be harder and harder to do because these algorithms are a lot more sophisticated now than they were a few years ago."



3. Pioneering businesses embrace AI and ML as catalysts for business change.

Meet the Al Pioneers.

To track levels of AI adoption maturity and understand how organizations are benefiting from AI and ML, we divided survey respondents into three groups based on their adoption score:

Top 33%: 811 respondents with an average adoption score* of 89

Middle 33%: 834 respondents with an average adoption score of 54

Bottom 33%: 710 respondents with an average adoption score of 12

The top 33% are AI Pioneers.

*The adoption score is a reflection of an organization's level of investment in AI and ML technologies, its progress using AI and ML to improve workforce capacity, and its level of AI and ML adoption maturity. For more information and a breakdown of the index, please see About Our Research on page 23.

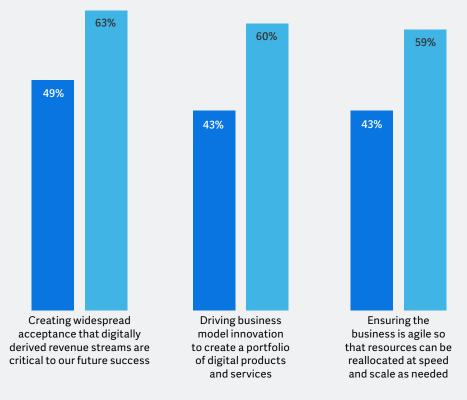
Al Pioneers' digital transformation investments help their organizations lead the way to deeper business value.



Al Pioneers are investing 30% of their annual budget on Al and ML projects. The global average is 18%.







Survey question: For each of the following, please use the scale to indicate the degree of progress made in your organization. (All respondents; n=2,355.) Respondents selected one option per statement on a scale from 1 (no progress made) to 5 (significant progress achieved). Chart represents respondents that selected 4 or 5 on this scale.

Based on our research of the Al Pioneers, here are four ways to unleash the game-changing potential of AI and ML:

1. Data and tools: preparing for mission success.

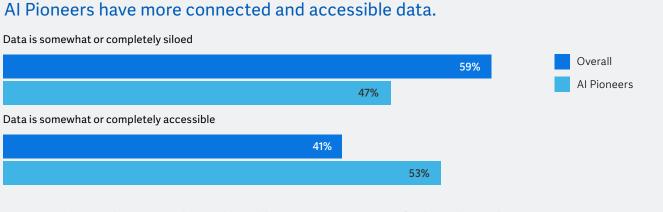
Al Pioneers are acting now—but with some caution—to help business functions add more strategic value to the organization.

In AI, speed is of the essence, according to Ajay Agrawal, professor at Rotman School of Management at the University of Toronto. "The people who sit on the sidelines are missing all that learning time that those who are building their AIs now are benefiting from," says Agrawal. "The faster you get in, the faster your Al starts to learn."

But AI is only as powerful as the data and the humans that power its design and application. And data that is siloed, poor quality, and not uniformly structured is limiting Al's potential. In fact, overall only 4% of respondents say their data is fully accessible. This figure rises to 7% for AI Pioneers, but there is still clearly a lot of work to do.

of respondents say their data is fully accessible.

of Al Pioneers say their data is fully accessible.



Survey question: To what extent is data readily usable across your organization for those who need it? (All respondents; n=2,355.) Respondents selected one response option.

AI and ML are competitive differentiators for first movers.

More than 1 in 3 IT leaders want to wait to see how AI and ML will affect their organization before they decide what to do. But this could set them back. These technologies are becoming omni-present, and as they become more sophisticated, "the probability is that AI and ML is going to become an outside advisor that is with you all the time," predicts Ajay Sabhlok, chief information officer and chief data officer at data security firm Rubrik. "As the interfaces improve and we figure out a way to plug into them in a safe way, then it's just a matter of asking questions and getting answers."

[[

Unlike any tool our human civilization has used before, Al learns. So it gets better with use.

Ajay Agrawal

Professor, Rotman School of Management, University of Toronto

2. Employee productivity: human in the loop, supercharged.

Al Pioneers are cultivating an Al- and ML-friendly culture to boost productivity and collaboration. "This is really the future of knowledge workers: human intuition, generative AI, and some domain expertise," says Dave Mackenzie, managing principal of digital at engineering consultancy Aurecon. "That confluence of understanding is where the magic and the real opportunity are."

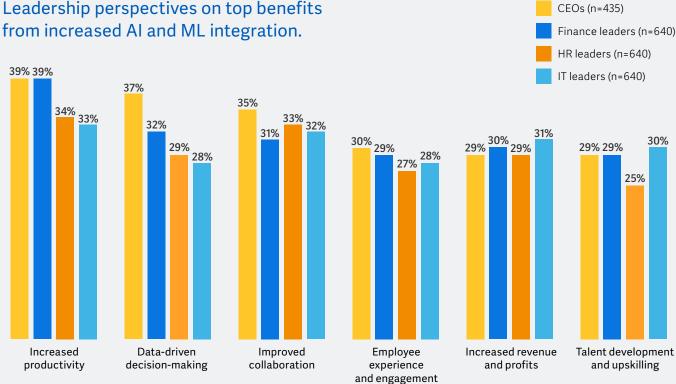
Nearly half of business leaders (47%) believe AI and ML will significantly amplify human potential, and this rises to 59% among Al Pioneers. But though the organizational benefits of AI and ML are undeniable, often the best results can be found when humans work together with machines to perform tasks. For CAI, an immediate priority is security operations. In this domain, a human in the loop is critical.

"Given the nature of the work that CAI does and who our clients are, we are in the blast radius of many cyberattacks," explains CAI's Peters. "We're looking at Al models to do a lot of the threat assessment and detection, and to identify immediate next steps for response. We never want to take the human out of the loop."

47%

of business leaders believe AI and ML will significantly amplify human potential.

> This rises to 59% among Al Pioneers.



Survey question: As AI and ML become more integrated with your organization, what do you believe the biggest benefits will be? (All respondents; n=2,355.) Respondents stack-ranked their top 3 choices in order of priority.

Leadership perspectives on top benefits

AI and ML boost employee productivity.

It's not just about working faster—it's also about working smarter: 80% of Al Pioneers have made progress using Al and ML to streamline and/or automate workflows and augment the capacity of the existing workforce, compared with 34% of businesses overall.

"There's a large school of organizations—I would say up to 40% or 50% that are looking to these tools to automate what their knowledge workers are doing," says MIT Sloan's Schrage.

According to The Amenity Collective's Cohen, one of the hardest things about this process is the cultural shift. "We're giving people new tools and processes, and there's some natural cynicism about whether we're trying to take their jobs away," says Cohen. "In reality, we're trying to empower them and put tools in their hands so they can focus on the service delivery and the customer experience, and also have a much better employee experience."

"

It's a new way of thinking, it's a new way of working, and we've all got to lean into it.

Dave Mackenzie

Managing Principal, Digital, Aurecon

Leaders who have made progress using AI and ML to streamline and/or automate workflows and augment the capacity of the existing workforce:

80% Al Pioneers

34% Businesses overall



3. Human skills and machine capabilities: the ultimate "power couple."

Al Pioneers are recalibrating their talent and coaching, and are reskilling some business functions to make the most of Al tools and level up human potential.

The advancement of AI and ML shows little sign of slowing down and organizations must act now to ensure their people's skills advance in parallel with the technology. That means asking critical questions such as, "How do we adapt?" and "How do we complement our people using tech?"

"Many people said when we gave our kids computers, they would never learn to write," says Blue Yonder's Carruthers. "As humans, we need human interactions, so there is a role for us to play when it comes to this technology. It's an exciting time."

Our research found that 32% of HR leaders and 30% of finance leaders stated they are worried that their teams will not have the technical skills they need to work effectively with Al and ML. And 30% of CEOs are concerned that employees will struggle to keep up with rapid changes as Al and ML become more integrated into their organization.

Al and ML specialists are the fastest-growing job roles, according to the World Economic Forum's "The Future of Jobs Report 2023."⁵ As these skills become more valuable, many businesses are focusing on talent development.

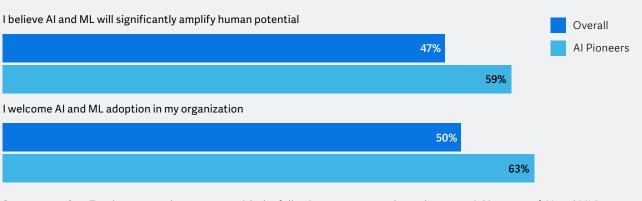
Prashant Nema, EVP, global CIO at financial services firm Arch Capital Services Inc., expects talent development to be an ongoing focus for the next five years. "A lot of new roles are going to emerge in the next couple of years as some of the existing roles become less important," says Nema. "There has to be an ongoing focus on making sure that your talent is continuously learning and developing."



30%

of CEOs are concerned that employees will struggle to keep up with rapid changes as AI and ML become more integrated into their organization.

Al Pioneers have a more positive sentiment around Al and ML adoption in their business.



Survey question: To what extent do you agree with the following statements about the potential impacts of AI and ML? (All respondents; n=2,355.) Respondents selected one option per statement on a scale from 1 (strongly disagree) to 5 (strongly agree). Chart represents respondents who selected 4 or 5 on this scale.

Al and ML will continue to enhance human potential.

Used in the right areas of the business, AI can benefit organizations immediately: almost half of IT leaders (48%) say that AI and ML will enable their function to deliver more strategic value, and nearly the same number (46%) of finance leaders are excited about using AI and ML within their function.

"

My hope is that AI allows humans to do what we're really good at, and machines to do some of the things that are more tedious and time-consuming.

Hari Dorai SVP, HR Operations, PVH Corp.

4. Improving organizational culture and driving increased sustainability.

Al Pioneers understand that Al and ML can do more than improve how individual business functions operate—they can also deliver organization-wide outcomes: 47% of HR leaders that are Al Pioneers expect Al and ML to make their workplace more meritocratic.

More than half of all CEOs surveyed (53%) believe AI and ML will increase the sustainability of their organization in conjunction with and supporting environmental, social, and governance (ESG) initiatives.

This could be from a procurement perspective, such as helping an organization evaluate the carbon footprint and sustainability of its supply chain. Al could help to create low-emissions infrastructure and model climate change predictions.⁶ Or it could be from a workforce perspective, such as helping an organization recommend policies to minimize employees' environmental impact.

"

Culture change will drive business change. And everything we do in culture change is really about three things: changing behavior, changing systems, changing symbols.

Maryjo Charbonnier CHRO, Kyndryl

45%

of all CEOs believe AI and ML will create a more equitable and diverse workforce.

38%

of all HR leaders believe AI and ML will make their workplace more meritocratic.

29%

of all IT leaders say diversity, equity, and inclusion will be one of the biggest benefits of AI and ML.



Al and ML can help businesses remove barriers to become more equitable and inclusive.

Al and ML developments could address imbalances in the workplace by giving a broader user base access to information to interpret recommendations and make more insightful decisions. The University of Toronto's Agrawal describes this as the technologies' potential to "level the playing field." Indeed, 29% of all IT leaders say diversity, equity, and inclusion will be one of the biggest benefits of Al and ML, and 45% of all CEOs believe the technologies will create a more equitable and diverse workforce.

Using the example of taxi drivers, Agrawal explains that navigational AI has taken away the need for new drivers to attend a long learning program to get to know their area: "So that's made driving a lot more accessible. Let's imagine that you thought there was any kind of systematic bias of who got into those driving schools to learn, for example, the Knowledge in London—those barriers have, to a large extent, been removed. And so all you have to know is that as long as you can safely drive a car, the AI upskills you to be able to navigate."

Takeaways: AI and ML are the ultimate power-up.



Al and ML have immense potential—provided that people have the skills to use them responsibly.

"There's near-limitless potential if this technology is channeled and used appropriately and correctly," says Dr. Rumman Chowdhury, responsible AI fellow at Harvard's Berkman Klein Center for Internet and Society. "That last part is what we're trying to figure out. Good governance, responsible use, trustworthiness. These are all at the core of good innovation."



A quality data foundation is critical to AI and ML success.

If businesses can ensure they have quality data that is used responsibly, AI and ML could help unlock so many possibilities. Organizations must act fast to seize the opportunity with a trusted technology provider that has a proven track record of addressing real business needs through AI capabilities.



Governance and transparency are key to progress in this ever-changing landscape.

The opportunities and challenges of today's AI and ML will look very different tomorrow. Staying on top of these will require a collective effort, along with investment in shared models of responsible governance and transparency.

"We see a lot of benefit from these technologies," says Morse from Workday. "Our goal is to develop a level of comfort, and we think that the way we get to that level of comfort is meaningful regulation."

"

Al and ML technologies—including generative AI—will completely transform the future of work, and organizations that take a 'wait and see' approach will be left behind. Trust is paramount to embracing the benefits of AI and ML, and building trust requires the right data foundation and commitment to governance. At Workday, we build trustworthy solutions that prioritize data quality and transparency, giving customers the peace of mind they need to implement AI and ML that augments their workforce and drives efficiency across the organization."

Jim Stratton Chief Technology Officer, Workday "

There's near-limitless potential if this technology is channeled and used appropriately and correctly.

Dr. Rumman Chowdhury Responsible Al Fellow, Berkman

Klein Center for Internet and Society, Harvard University



More from this speaker

About our research.

The data in this report comes from a global survey commissioned by Workday and conducted by FT Longitude in May and June 2023. The survey captured insights from 2,355 cross-functional senior business executives across three core regions: 895 respondents in North America, 860 respondents in Europe, the Middle East, and Africa (EMEA), and 600 respondents in Asia-Pacific and Japan (APJ). All of the respondents have oversight of or ultimate responsibility for the execution of their organization's digital strategy.

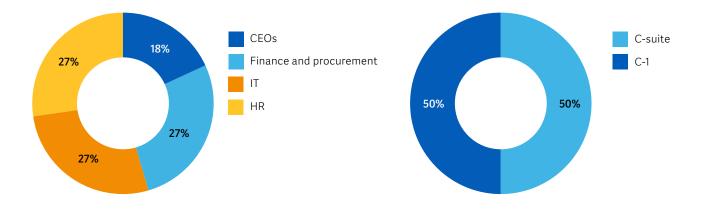
In conjunction with the global survey, two additional regional surveys were conducted to better understand the extent of AI and ML adoption and investment in two core regions: 550 respondents across EMEA, and 250 respondents across APJ. The findings from these research studies will be released in the coming months.

In addition to the quantitative research, we interviewed 16 global experts in AI and ML and senior business leaders from finance and procurement, IT, and HR to get their insights into the research findings.



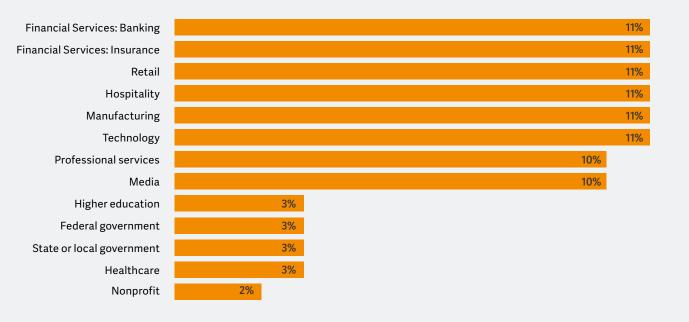
Respondents by business function.

Respondents by seniority.



Survey question: Which of the following best describes your department? Which of the following best describes your job role? (All respondents; n=2,355.) Respondents selected one response per question.

Respondents by industry.



Survey question: In which sector does your company primarily operate? (All respondents; n=2,355.) Respondents selected one response.

Al Pioneers: Al adoption index methodology.

To arrive at the adoption score, three core questions were analyzed from the survey and assigned a weighting to each response option as follows:

Q2_1: Please use the scale to indicate the degree of progress made in your organization. Respondents were asked to select one response option on a scale from 1 (no progress made) to 5 (significant progress made). Responses were then assigned a weighting from 0.001302 (no progress made) to -0.00117 (significant progress made).

Q4_1: Which of the following best describes your organization's current level of AI and ML adoption? Respondents were asked to select one response option on a scale from "yet to commence" to "mature." Responses were then assigned a weighting from 0.001598 ("yet to commence") to -0.00137 ("mature").

Q5_1: What percentage of your organization's annual budget is currently invested in AI and ML? Respondents were asked to select one response option on a scale from "0%" to "more than 50%." Responses were then assigned a weighting from 0.001422 ("0%") to -0.00127 ("40% or more").

Based on the above responses, the average adoption score across the complete cohort of 2,355 respondents was 54. Among the top 33% of respondents (Al Pioneers), the average adoption score is 89. Among the bottom 33% of respondents, the average adoption score is 12.

This is standard for index methodology.



Definitions of terms in our research.

Artificial intelligence (AI): The ability of machines to perform tasks that have traditionally required human intelligence, such as problem-solving, decision-making, and understanding language. AI systems analyze and learn from data, recognize patterns, and make predictions to support the automation of processes and more intelligent decision-making.

ChatGPT: This Al-powered language model can respond to questions and compose written content, including articles, social media posts, essays, code, and emails.

Digital maturity: The alignment of "an organization's people, culture, structure, and tasks to compete effectively by taking advantage of opportunities enabled by technological infrastructure, both inside and outside of the organization."⁷

Digital transformation: Continuously deploying technology at scale with the goal of creating value. Usually a long-term effort to rewire how an organization changes and evolves.⁸

Generative AI: Artificial intelligence that learns to identify patterns and structures from existing data in order to generate new and original content.

Human in the loop: Al or ML systems in which human and machine performance jointly contributes to improving the overall results and accelerates the learning process, achieving what neither human nor machine would be able to achieve on their own. Other advantages include data quality assurance and training and testing algorithms.

Machine learning (ML): A subdiscipline of AI that uses data and mathematical methods to learn and make predictions based on outcomes on which the model has already been trained. It allows digital systems to automatically process data and analyze it for insights without being programmed explicitly.





Sources:

¹ BBC News, "New superbug-killing antibiotic discovered using AI"; James Gallagher; 2023.

² Technological Forecasting and Social Change, "The future of employment: How susceptible are jobs to computerisation?"; Carl Benedikt Frey and Michael A. Osborne; 2017.

³ Digital maturity can be defined as the "alignment of an organization's people, culture, structure, and tasks to compete effectively by taking advantage of opportunities enabled by technological infrastructure, both inside and outside of the organization." MIT Press, "The Technology Fallacy: How People Are the Real Key to Digital Transformation"; Garth R. Andrus, Jonathan R. Copulsky, Gerald C. Kane, and Anh Nguyen Phillips; 2022.

 * "Executive leaders must assess the maturity of their digital business initiatives to understand where they stand in their industry's competitive landscape, and to address shortcomings." Gartner, Digital Business Maturity Model:
 9 Essential Competencies to Assess Digital Business Maturity, Apoorva Chhabra, Partha lyengar, and Irving Tyler,
 9 April 2020. https://www.gartner.com/en/documents/3983264

⁵ World Economic Forum, "The Future of Jobs Report 2023."

⁶ Nature Machine Intelligence, "The carbon impact of artificial intelligence"; Payal Dhar; 2020.

⁷ MIT Press, "The Technology Fallacy: How People Are the Real Key to Digital Transformation"; Garth R. Andrus, Jonathan R. Copulsky, Gerald C. Kane, and Anh Nguyen Phillips; 2022.

⁸ McKinsey & Company, "What is digital transformation?"; 2023.



+1-925-951-9000 +1-877-WORKDAY (+1-877-967-5329) Fax: +1-925-951-9001 workday.com

© 2023 Workday, Inc. All rights reserved. WORKDAY and the Workday logos are trademarks of Workday, Inc. registered in the United States and elsewhere. All other brand and product names are trademarks of their respective holders. 20230920-cxo-ai-ml-indicator-cross-persona-report-enus