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WHITEPAPER

Defining the Enterprise of the Future

Strategies, tech, and skills to prepare your organization for the next 3 years

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Introduction

As businesses prepare to navigate the next few years, the challenges they face are substantial: high inflation and interest rates continue to dramatically alter markets and make investment decisions more complex. Against a backdrop of frequent data breaches across the globe, and international conflicts, concerns intensify about cybersecurity and data privacy. The swift rise of artificial intelligence (AI), especially generative AI, has already transformed how many organizations operate, and many companies anticipate significant change to come.

In the midst of all this change, what will the enterprise of the future look like?

We decided to explore how organizations expect to address the challenges of the present moment over the next three years. This report looks in depth at what these changes will bring, and what the emergence of generative AI means for our respondents. How do businesses predict they will react? What does it mean for their people, policies, and culture? When enterprises imagine their future, what patterns emerge?

Defining the Enterprise of the Future: What the Data Tells Us

In the enterprise of the future, we see generative AI deeply integrated into the business, even within departments that initially had the most reservations about its use, like legal and research and development (R&D). Businesses and users have accepted the increasing regulation of generative AI, and have ethical AI frameworks have become common business practice.

From the fear and uncertainty of job elimination that colors the current AI landscape, a ray of optimism emerges in these future organizations: there is a new respect and appreciation for the skills seen as distinctly human, like creativity and morality. Employers have shifted from hiring workers deeply skilled in a single skillset to hiring those who can contribute across multiple functional areas.

These organizations foster a positive work culture and prioritize employee well-being, mental health, and work-life balance. Both employees and businesses place a greater emphasis on collaborative work practices and uphold ethical, environmental, and moral values.

These future organizations have a strong interest in recruiting AI experts, yet tech departments have shrunk in size. This, coupled with the increasing accessibility and user-friendliness of generative AI technology, has resulted in an unexpected surplus of talent in technology fields.

Key Findings

89% of business representatives say that regulations and standards should be developed for the use of AI and generative AI within their sector.

82% of respondents say that AI is already impacting what their organization can achieve.

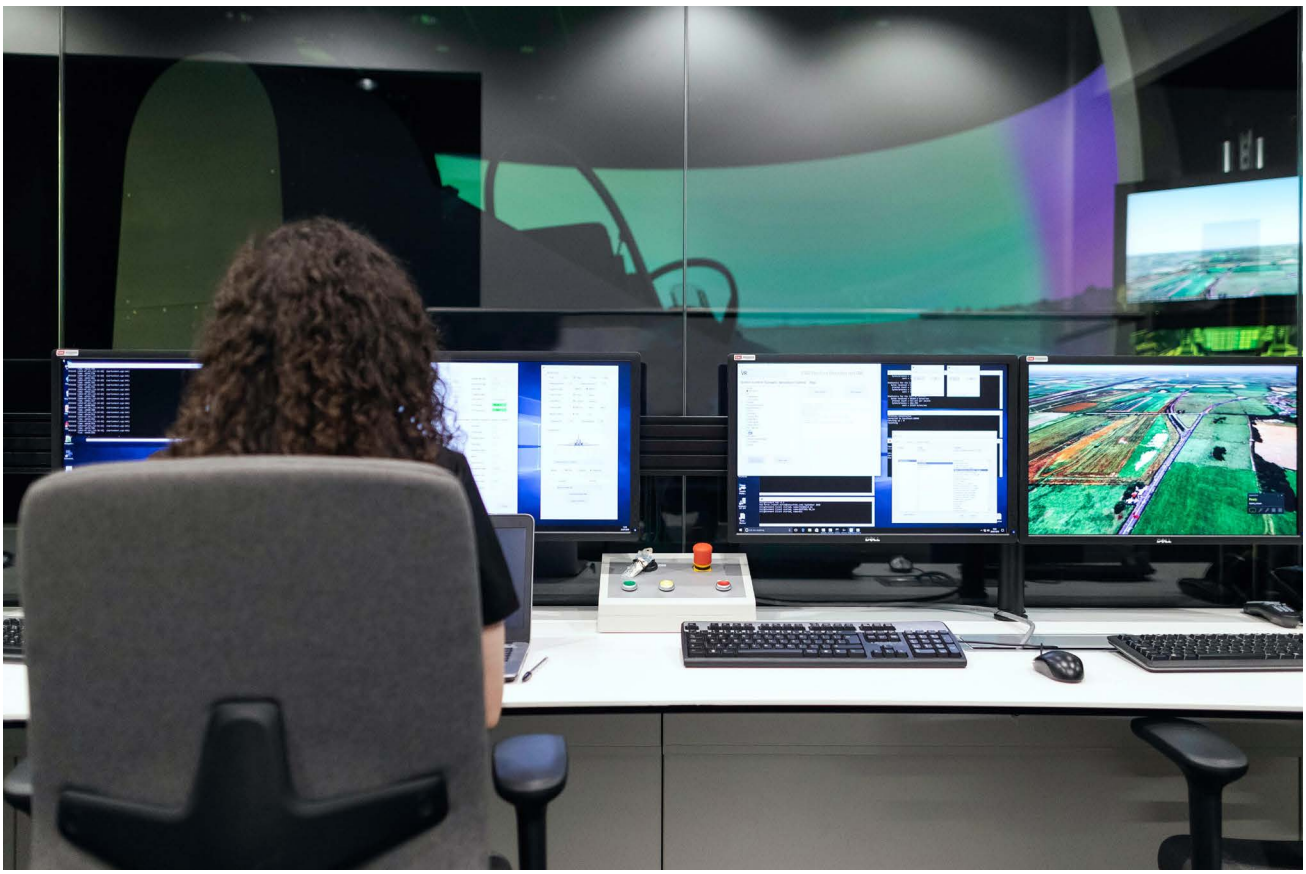
61% name creativity as the skill that humans will contribute in a market environment shaped by AI.

62% of organizations believe that over the next three years, the advanced tech talent landscape will be characterized by a talent surplus.

51% of data leaders predict that in the future, data teams will be decentralized, while 30% think they will be centralized.

72% state that it is more important for their employees to be multi-skilled than to be specialized in a specific area.

Two in five businesses **(41%)** say that over the next three years, they will prioritize a positive work environment—supporting employee well-being, mental health, and work-life balance.



89% think “Regulation” is no longer a dirty word

Results show that organizations have a strong appetite for policies and governance that regulate the use of AI. A clear majority of leaders (89%) believe that regulations and standards around AI usage (including the use of generative AI) should be developed within their sector. Ninety-one percent (91%) say that such policies would help businesses implement AI responsibly. As this powerful technology transforms the business landscape, organizations are responding with unease. Seventy-three (73%) of respondents have concerns regarding the use of AI-produced answers within their organization. To mitigate this anxiety, organizations are busily writing guidelines: 75% currently have a policy on AI security, ethics, and governance in place and only 1% aren’t doing anything to address these issues.

As reliance on AI increases, the leading concern for organizations is data privacy (named by 50%), followed by transparency (41%), data governance (41%), and accountability (36%). They are also worried about the impact of AI on the environment (34%). Businesses believe that the consequences of not having an ethical AI framework in place might significantly affect their ability to operate. They cite the possibility of legal and ethical consequences (49%), damage to brand reputation (42%), damage to workplace desirability (39%), loss of intellectual property and data (36%), and operational downtime (32%). (Figure 1) Enterprises see policy-making around AI as central to their prospects over the next few years. 80% say that AI security, ethics, and governance are key to the success of their organization as they prepare for the future.

Potential risks from not having an ethical AI framework

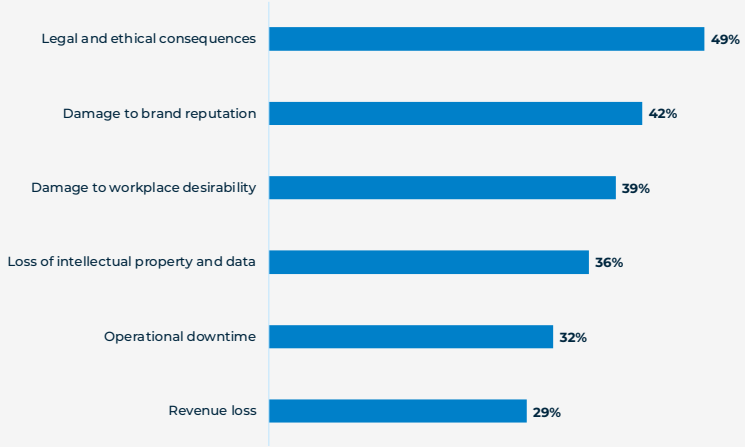


Figure 1 - What are the potential risks to your organization from not having an ethical AI framework in place?

When envisioning the future, AI looms large

Of course, the backdrop for the market's enthusiasm for AI regulation is the technology's unstoppable rise. Across all regions and sectors, organizations are embracing AI, and identifying it as a key potential tool for success. Eighty-two percent (82%) of respondents say that AI is currently impacting what their organization can achieve, and 50% say this impact is significant.

For this reason, when decision-makers are asked to envision the future, AI looms large. Digital transformation surrounding AI and machine learning is the number one characteristic of the enterprise of the future. (Figure 2) AI-driven automation and ethical AI frameworks are named in the top five.

Key characteristics of the "enterprise of the future"

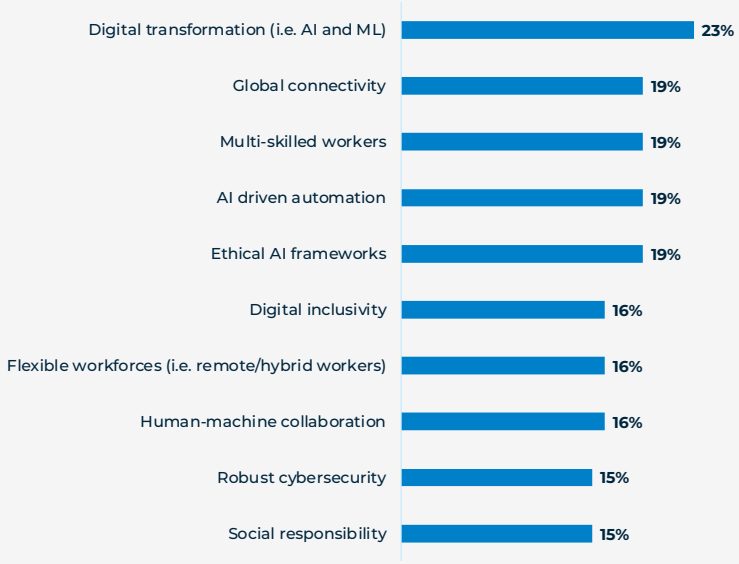


Figure 2 - What do you consider to be the key characteristics of the "enterprise of the future?"

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Whether greeted with excitement or anxiety, it's clear that AI is expected to transform the business landscape over the next three years. Sixty-one percent (61%) agree that organizations' investments in advanced technology will increase, and 57% say that AI uptake will be pervasive across all sectors and business functions. Pervasive AI is named as one of the top five factors in the market environment that respondents feel will have the most impact on their organization in this time period. (Figure 3) Forty-one percent (41%) say that emerging technologies such as AI will have a positive impact on the trajectory of their organization over the next three years, and 35% say the same of collaboration between humans and machines. (Figure 4)

Impact of business landscape on organization

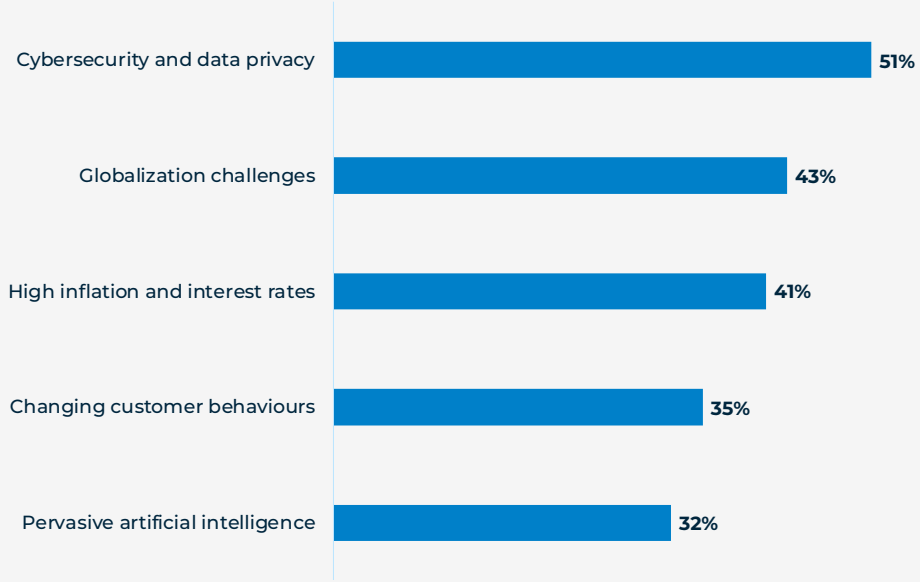

Figure 3 - Thinking about the overall business landscape over the next three years, which of the following do you think will have the most impact (either positive or negative) on your organization?

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Factors impacting organization's trajectory over next 3 years

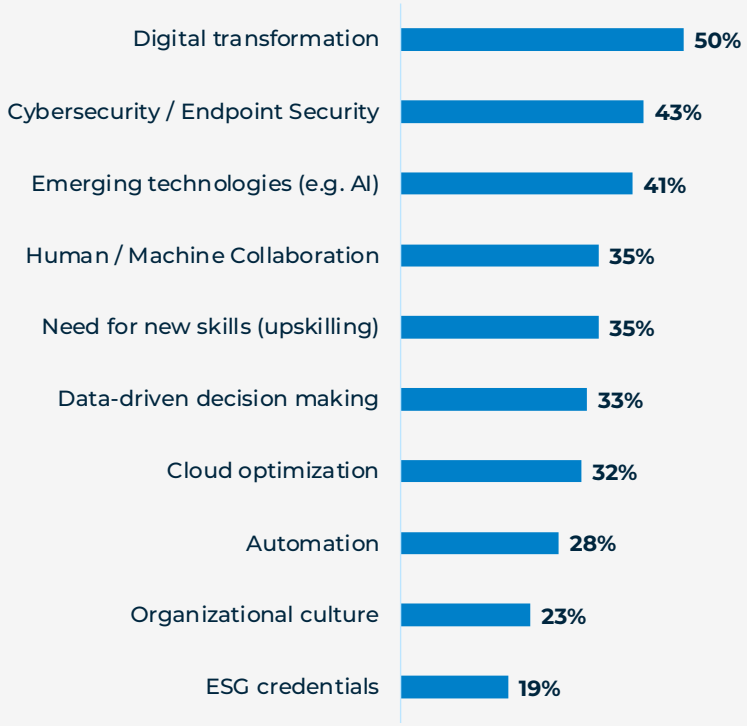
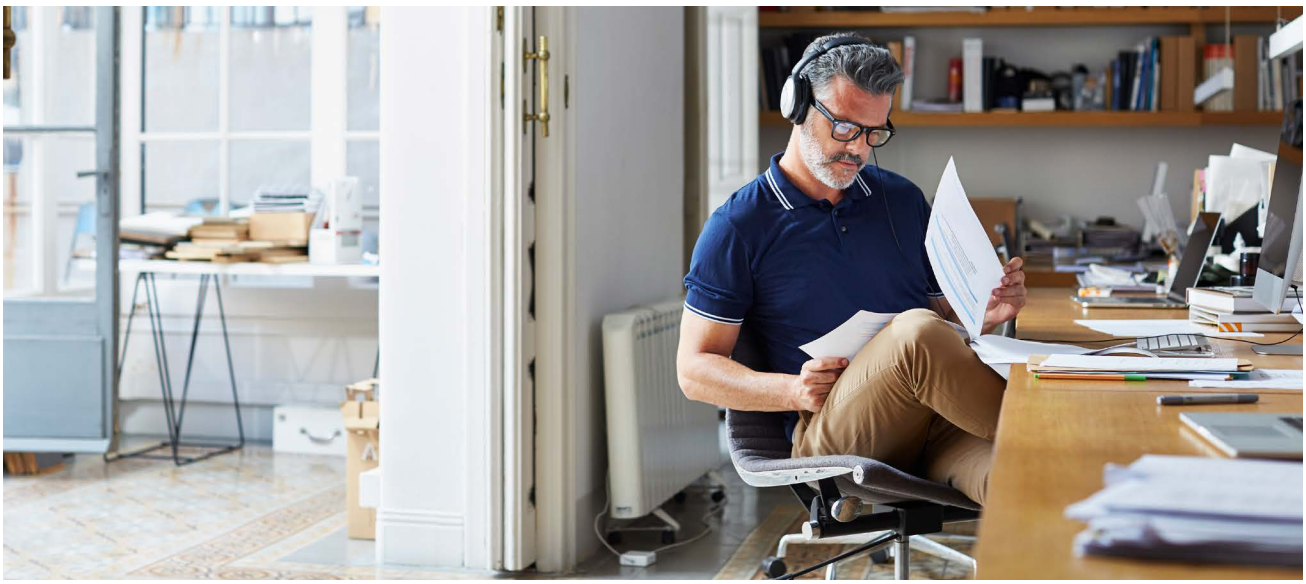


Figure 4 - Which of the below do you expect to positively impact the trajectory of your organization over the next 3 years?

Businesses are already preparing for this shift. When asked how they anticipate their organization will respond to the changing market environment, half (52%) state they will invest in advanced technologies such as AI. (Figure 5) The shift in priorities is reflected in tech stacks, as businesses currently already use AI/ML platforms (47%) and generative AI (32%) — while in three years, the prediction is that generative AI use will increase by 21%. The focus on AI is shaping the workforce, too: respondents say that as they prepare for the future, expertise in emerging technologies is the most desirable hard skill for employees.



Responding to the changing business landscape

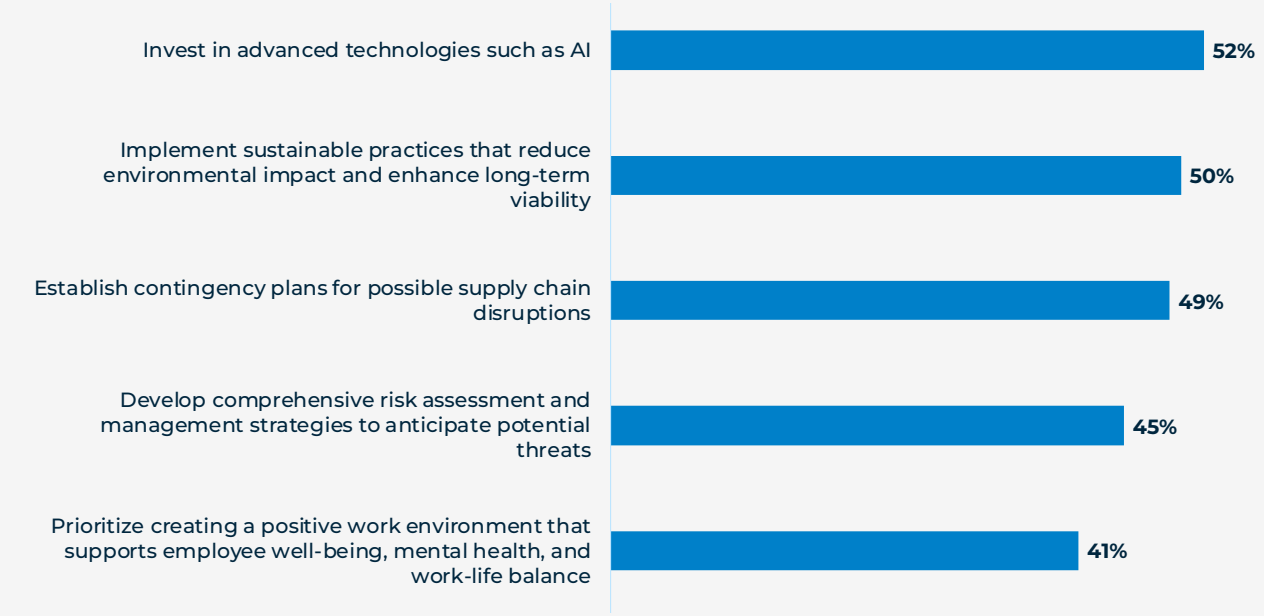


Figure 5 - How do you anticipate your organization will respond to this changing business landscape/market environment over the next 3 years?

AI is expected by 60% to have a positive effect on productivity; 35% say that the impact will be transformational. At present, this impact is concentrated on some business functions over others. Half (50%) say that in their organization, AI is most impacting data analysis to set initial goals, 43% say that AI most impacts customer service; 41% say collaboration, 41% name line of business (LOB) processes such as marketing and software development, and 36% say predicting outcomes. (Figure 6)

Areas most impacted by AI in organization

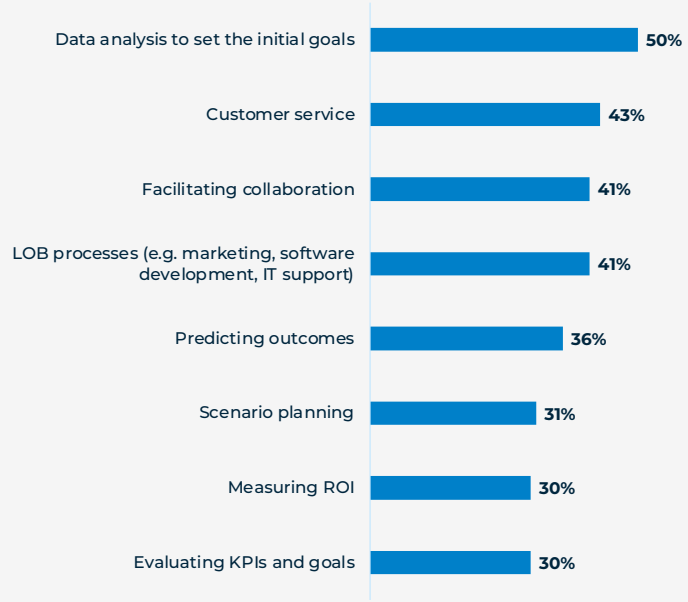


Figure 6 - Which of the below areas are being most impacted by AI in your organization?

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The importance of humanity increases in an AI world

Business decision-makers say that where AI is concerned, an important consideration is how to build human capacity and prepare for a labor market transition (29%). But what will this new workforce look like, and how will it behave? The consensus is: humans will do what AI cannot. Respondents named creativity (61%) as the top skill that humans will supply in a working world shaped by AI. They also listed emotion (43%), critical thinking (38%), morality (38%) and intuition (30%). (Figure 7)

As for the robots, respondents predicted tasks will be focused on complex problem-solving (42%), accuracy (40%), speed (36%), and precision (34%). (Figure 7) This may be surprising, considering that press coverage of AI has uncovered inaccuracy and bias in even the most up-to-date models. Perhaps this is where human critical thinking will be best applied.

Skills and traits humans and machines will each provide

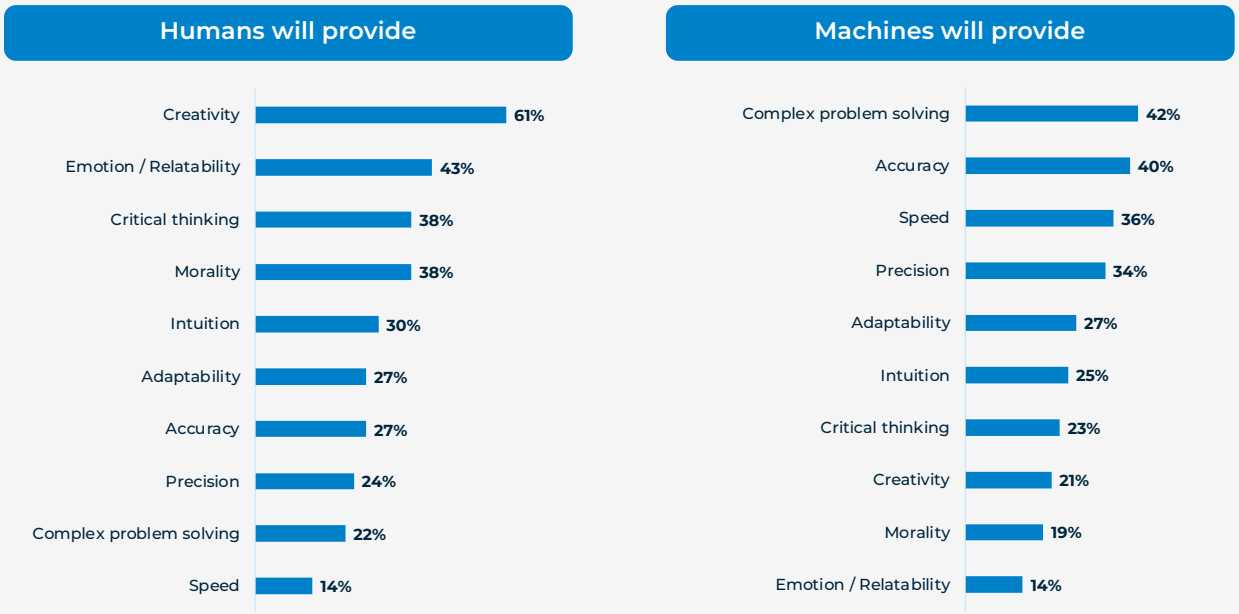

Figure 7 - What skills and traits do you believe humans and machines will each provide in this interaction?

It's clear that as organizations prepare for the future, the list of skills they value is shaped by the rise in AI. The hard skills that employers think their workforce needs are expertise in emerging technologies such as AI (28%), computer software knowledge (24%), and data analysis and data mining (23%). (Figure 8)

Creativity (24%) is at the head of the list of soft skills considered essential by employers, followed by digital literacy (22%), innovation (22%), strategic thinking (20%), and team leadership (20%). (Figure 8)

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Skills most essential for the future

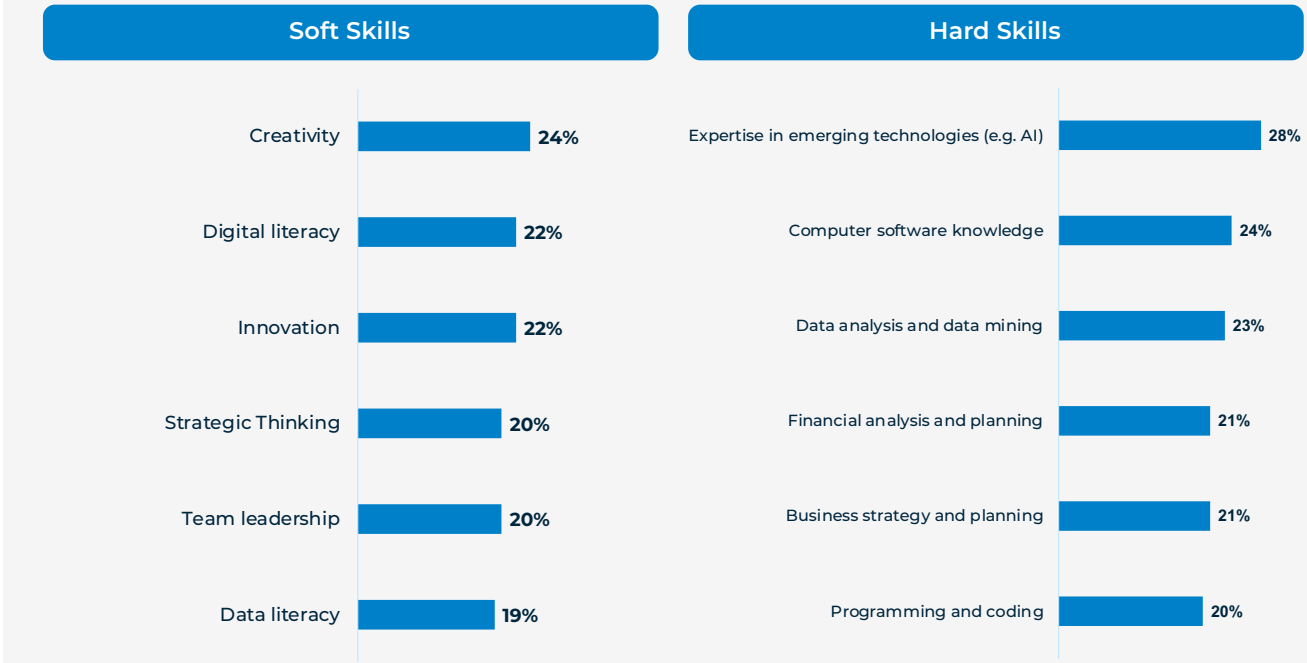
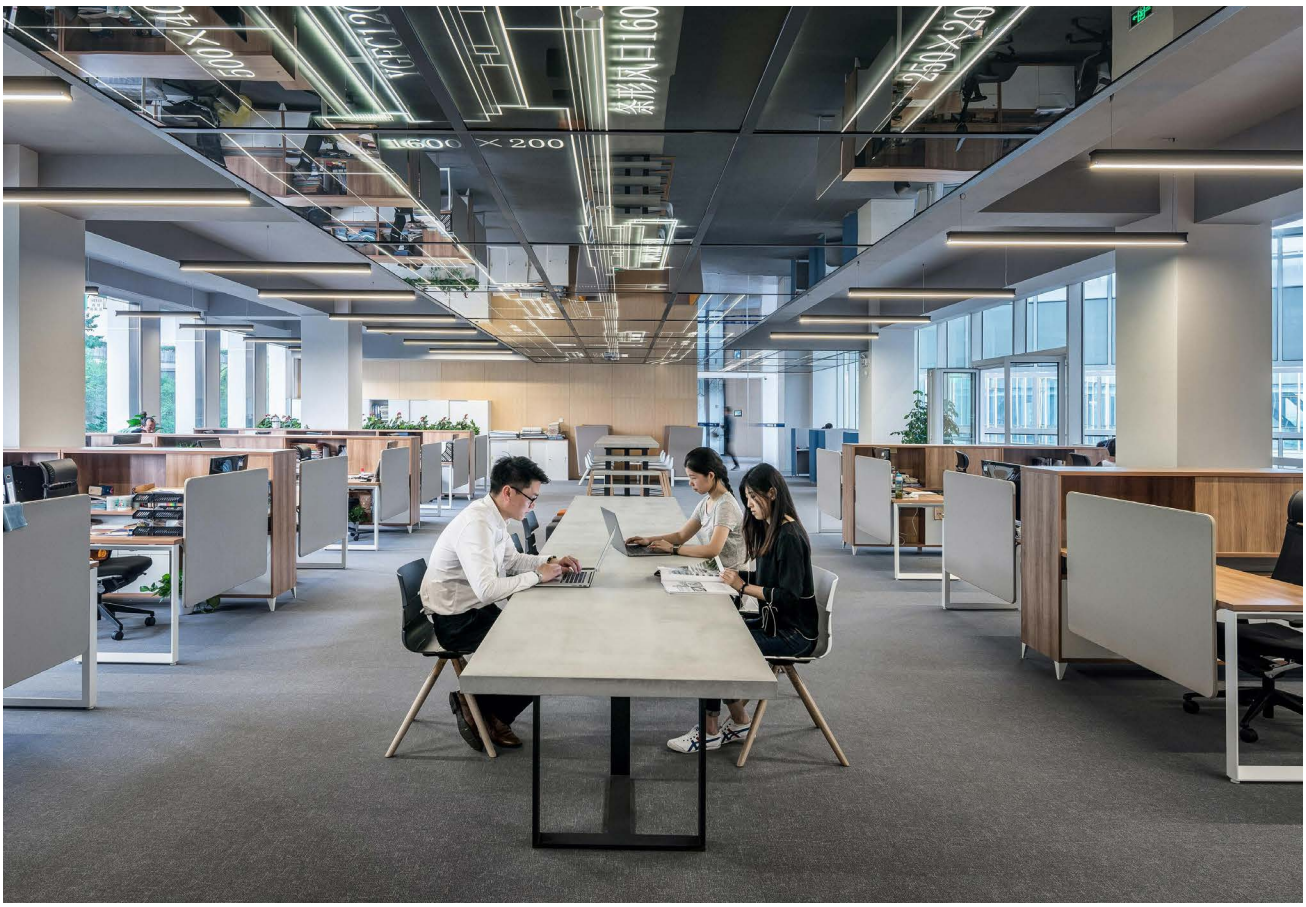


Figure 8 - Which of the below hard/soft skills would you consider to be the three most essential for your employees now to prepare your organization for the future?



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AI has already transformed the workplace

If organizations are hiring with an eye to AI, which roles are they recruiting? Our survey shows that businesses consider three jobs their most urgent hiring priority when preparing for the future: engineers. Two-fifths are seeking AI application engineers (40%), and around a third want to hire software engineers (34%) and AI/ML engineers (32%). (Figure 9) However, when decision-makers are asked which roles they see an emerging need for, other job titles come to the fore: Chief AI Officer (62%) and prompt engineer / AI whisperer (58%). (Figure 10)

AI roles most urgent priorities to prepare for the future

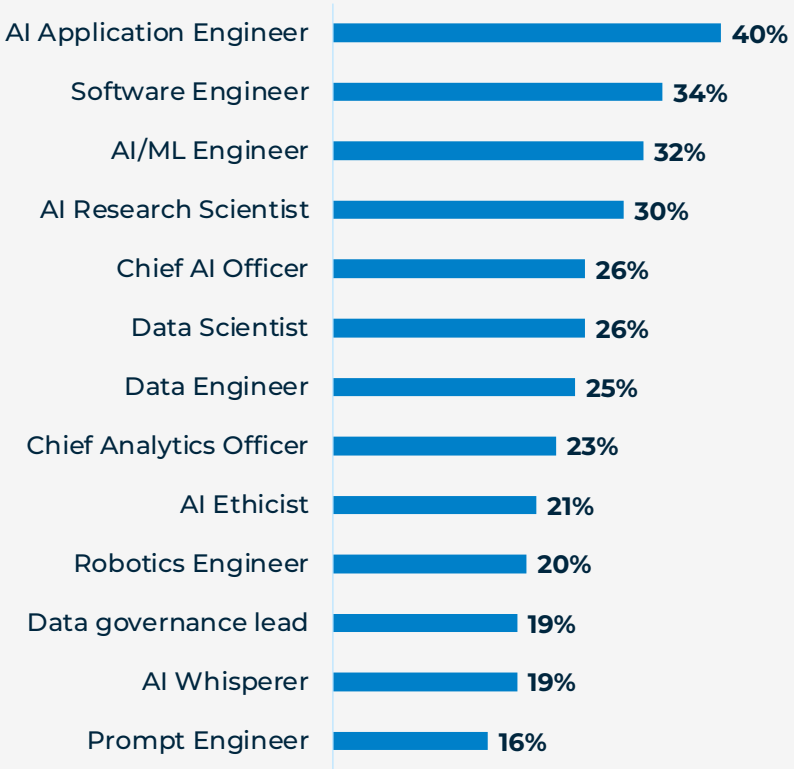

Figure 9 - Which of the below AI roles are the most urgent priorities for your organization to hire to prepare for the future?

Perhaps unexpectedly, the prompt engineer came in lowest (16%) when businesses were asked about who they urgently want to hire. (Figure 9) It may be that organizations feel prompt engineers can be recruited easily, or that with wider adoption of generative AI tools, these roles will soon outlive their usefulness.

Prompt engineers are more similar to being a product tester, which is valuable in the early stages of testing, but less valuable when you have many more users sending you real-time product feedback.

Emerging roles as organization prepares for the future

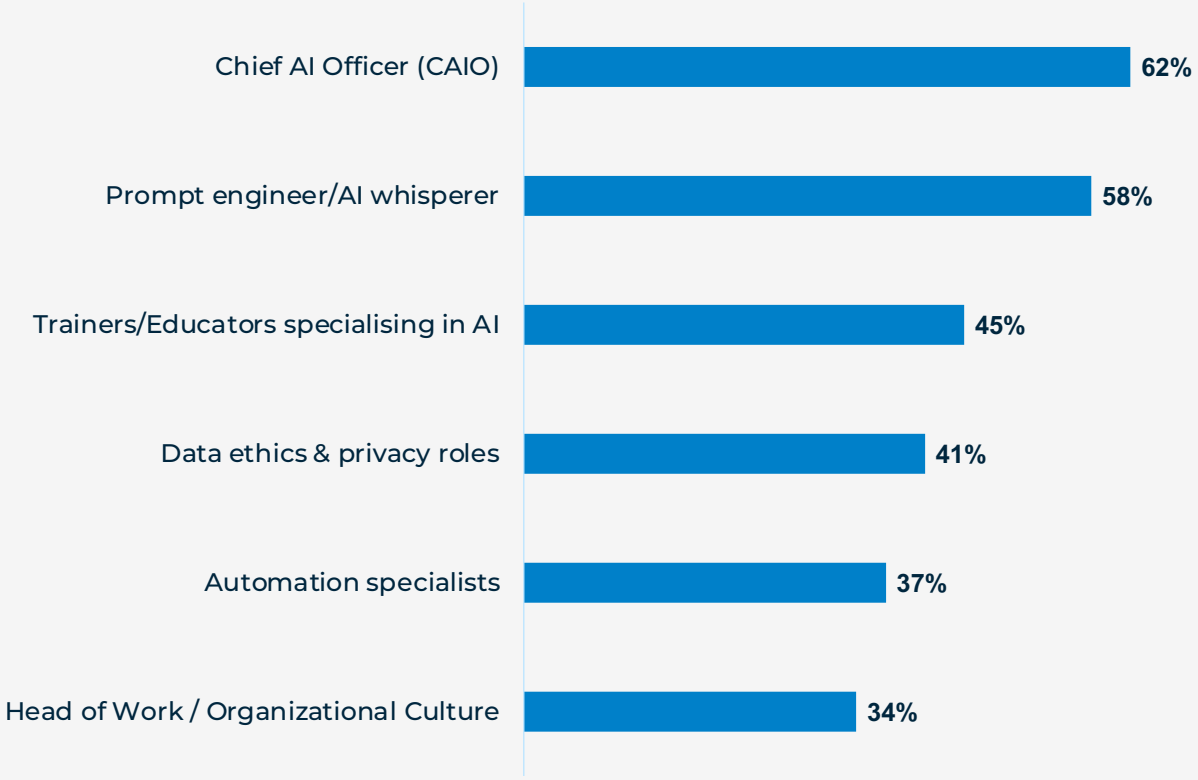

Figure 10 - Which of the below roles is there an emerging need for as your organization prepares for the future?

While businesses are keen to hire AI experts, in general, they expect tech departments to shrink, even those dedicated to pioneering solutions. Sixty-two percent (62%) believe that over the next three years, the advanced tech talent landscape will be characterized by a talent surplus, and 69% say that there will be a surplus of general tech talent too. This reflects a tough market for tech employees; over 239,000[1] tech employees have been laid off in 2023 alone.

Decision-makers predict that in the next few years, the demand for AI skills will fall across many departments of their organization. 45% say that their IT department currently has a demand for AI talent — but when respondents are asked to imagine their business three years from now, this falls to 40%. 35% say that AI talent is needed in their data science / advanced analytics department, but this falls to 30% in 2026. Customer service falls from 31% to 25%. (Figure 11).

[1] layoffs.fyi

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Areas expressing the most demand for AI talent

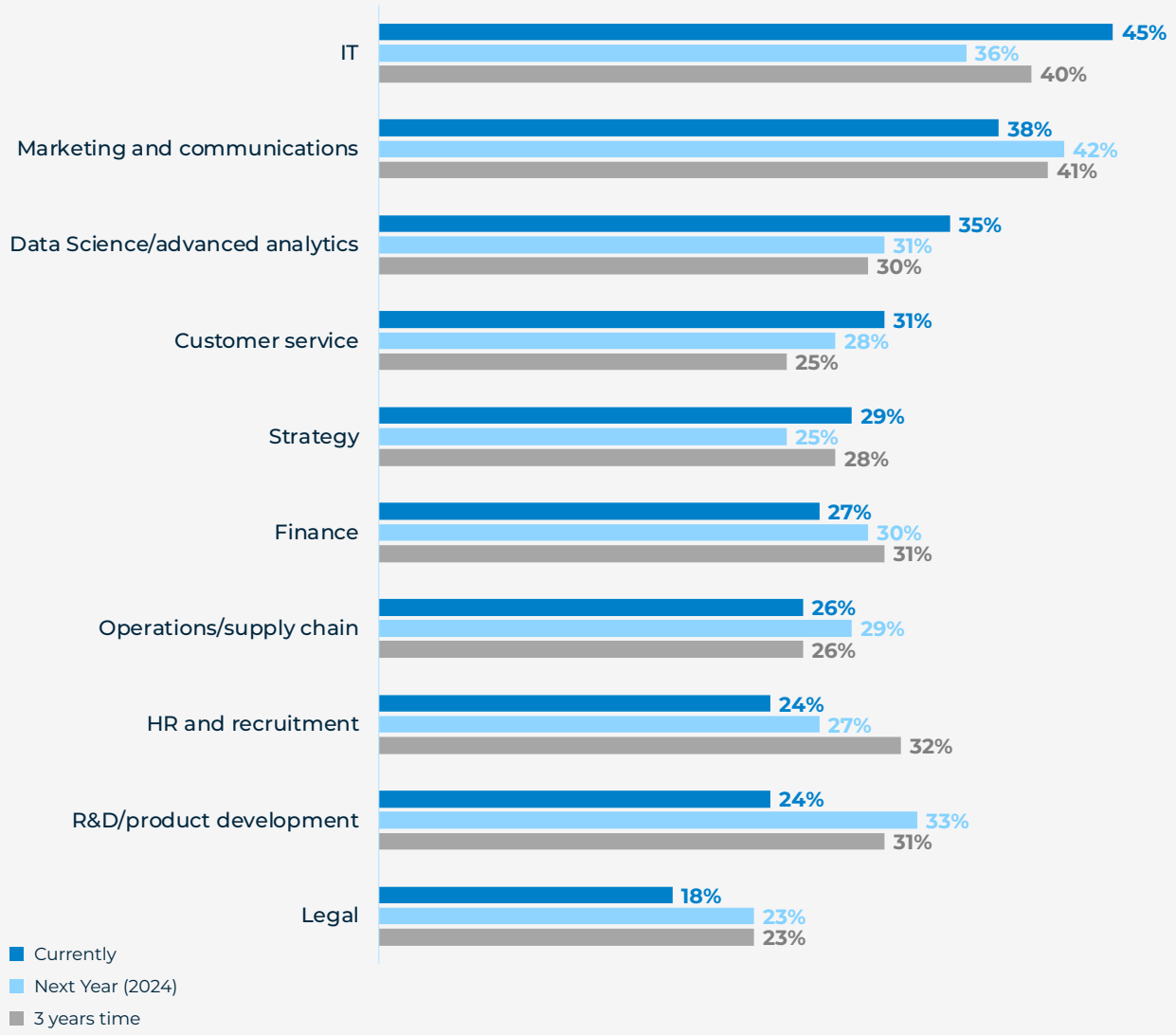

Figure 11 - In your opinion, which of the following areas have currently expressed the most demand for AI talent in your organization, and which areas do you expect to have the most demand in the future?

The case of customer service may be an especially interesting one. When asked what's holding their business back from becoming an enterprise of the future, around four in ten businesses (42%) state that they need to invest more in understanding customer needs and preferences to deliver personalized and relevant offerings (Figure 15). Yet, when it comes to customer service departments, they feel the demand for AI skills has already peaked. (Figure 11) In fact, 43% say that customer service is one of the areas of their organization that is already most impacted by AI.

The use of AI in customer service is already on an advanced trajectory; in this area, generative AI is here to stay.

In 2026, businesses think they'll be applying AI expertise to HR and recruitment (rising from 24% to 32%), research and development (rising from 24% to 31%) and legal (rising from 18% to 23%). (Figure 11) Currently, organizations may not be making use of AI tools within departments dealing in sensitive data or complex regulation; but as the tools become more accurate, responses predict an increased appetite.

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The future brings a new look to data teams

Businesses are excited about the potential use of AI for data analysis, but as the teams working with that data look to the future, key questions remain unanswered, while one long unanswered question seems to be resolved.

Centralized or decentralized?

Decision-makers can't decide how their data team should slot into the structure of their organization. Two common structures of data teams have their advocates: centralized and decentralized.

In a centralized model, all data workers, resources, and technology are owned by a data team to which other departments submit requests. In the decentralized model, data analysts are typically embedded within other business functions, such as marketing or finance. The biggest advantage of this model is speed, and an analyst can also develop helpful expertise in a single business function.

However, the downside to this model is that it doesn't facilitate collaboration or career growth of data analysts, which can promote best practices, mentoring, and a stronger data culture. While half of our respondents (51%) report that data is available to teams who need it across the business, 55% say that their organization operates in a very siloed way; for example, experiencing operational delays caused when software licenses are not shared across different teams.

Research shows that 51% of organizations believe that in the future, data teams will be decentralized, while 30% think they will be centralized, and 19% don't know what to think. (Figure 12) Furthermore, 49% think that access to data will be available across all departments of the business, while 35% think it will be restricted to data teams and IT teams only. (Figure 12) It seems that despite the disruptive impact of AI, long-running debates about data management and access won't be solved any time soon.

Impacts of organizational structure and access to data in the next three years

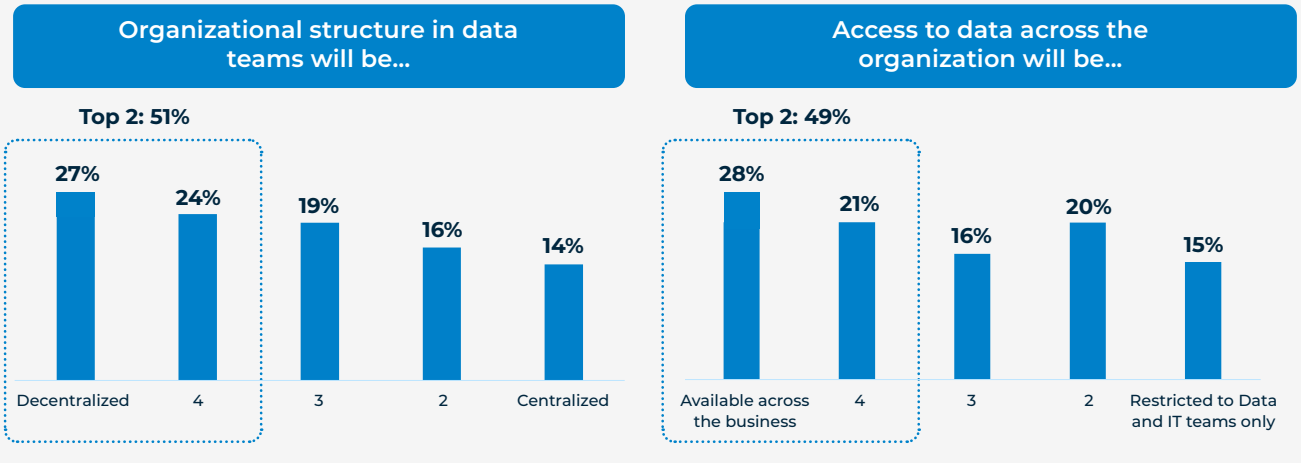

Figure 12 - Thinking about the next three years, what impact do you expect the following forces to have on the global business landscape?

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A long-held question, answered? Horizontal vs vertical skills

Another question that has long puzzled hiring managers is the choice between 'vertical' and 'horizontal' skilled employees. An employee with a vertical skillset has deep knowledge of a single area of specialization. An employee with a horizontal skillset is a generalist, working with different tools and languages and perhaps developing a range of leadership and soft skills along the way.

In the age of generative AI, a preference seems to be emerging for one type of employee: horizontal. If an engineer can ask a generative AI interface to write code in any language, the need for an expert in a niche language goes out of the window.

Seventy-two percent (72%) of respondents say that it is more important for their employees to be multi-skilled than to have a specialization in a specific area. When they are asked which skills are becoming obsolete across their workforce, repetitive coding (24%) and single-language software development (19%) are high up on the list. (Figure 13).

Skills becoming obsolete

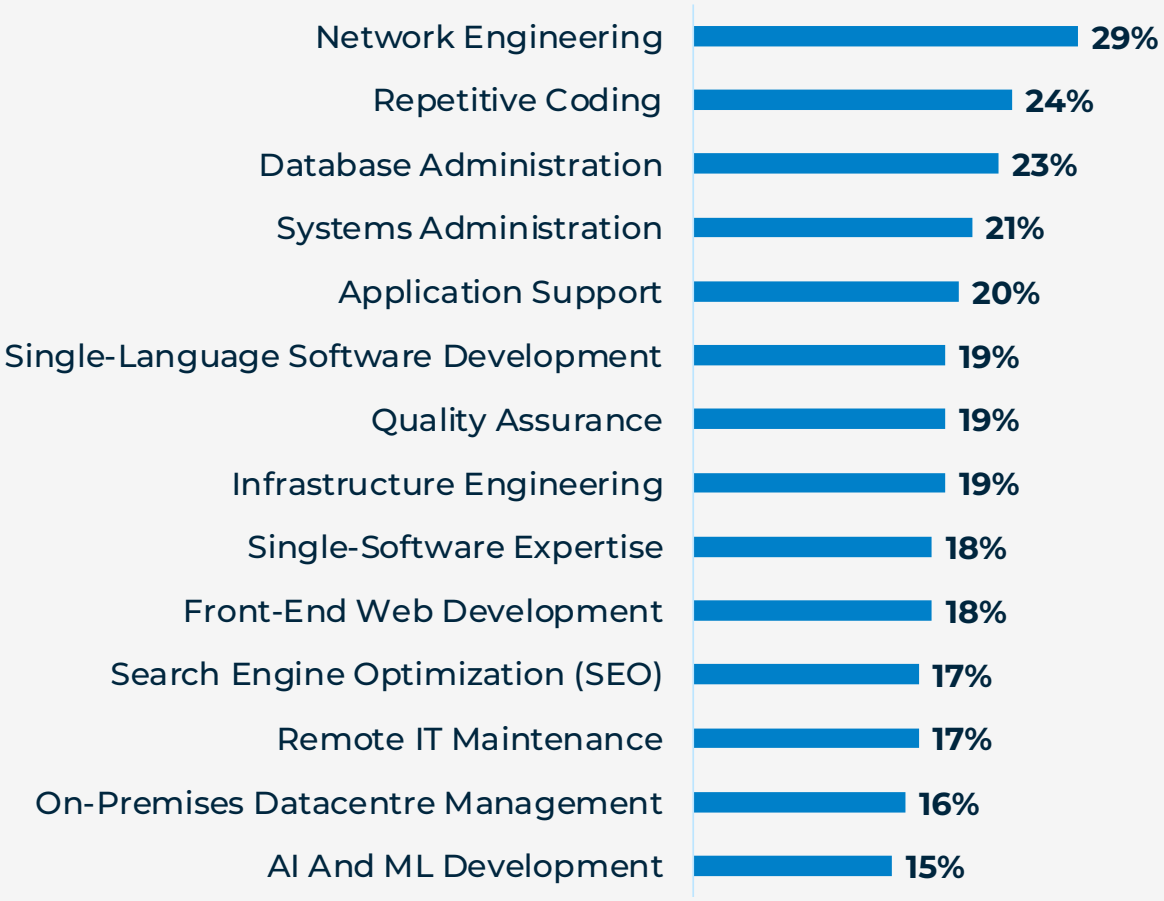

Figure 13 - Looking at the future of your organization, which skills do you think may become obsolete?

Elevating the human factor

When contemplating their readiness for the future, the businesses we surveyed are generally optimistic. 63% state that their organization can quickly make decisions to keep up with a rapidly changing business landscape. 55% say that they are able to pivot business strategies and operations to respond to external market factors. 53% say they have the people, processes, and technology necessary to model and predict their future. (Figure 14) However, one area that needs a little more work may be organizational culture.

Current Business Organizational Efficiency

Figure 14 - To what extent do you agree with the following statements?

Two in five decision-makers (41%) predict that their organization will respond to changes in the business landscape over the next three years by prioritizing the creation of a positive work environment — supporting employee well-being, mental health, and work-life balance. When asked what barriers prevent their organization from becoming an enterprise fit for the future, almost a third of respondents (30%) say resistance to change and difficulties adapting to new processes and ways of working. (Figure 15) This suggests a feeling that current work environments may be lacking in some way — perhaps in a way that is actually holding businesses back.

A third of businesses (34%) say that as their organization prepares for the future, they see an emerging need to employ a head of work / organizational culture, suggesting that culture may currently be a pain point for many. (Figure 10)

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What is holding organizations back

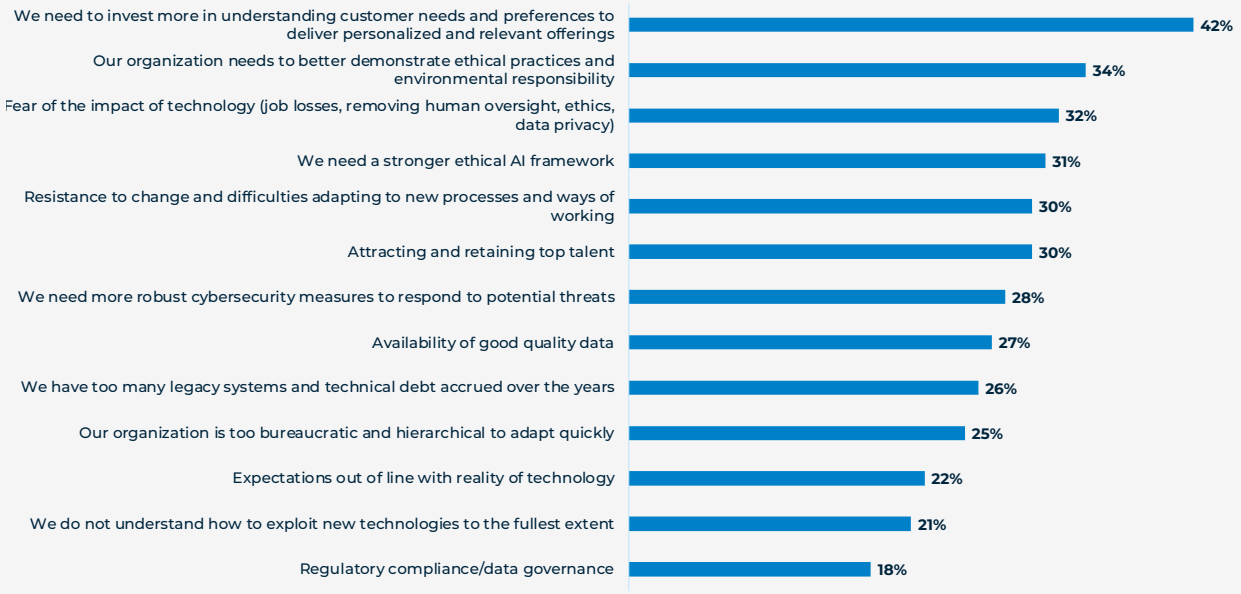

Figure 15 - Which of the following, if any, will hold back your organization from becoming an enterprise of the future?

In fact, when organizations name the barriers they face as they strive to prepare for the future, four of the top five concerns relate to culture, morality, and ethics. Anxieties about the workforce's ability to adapt to new ways of working, the company's ethical responsibilities, the impact of technology on humans, and the need for a stronger ethical AI framework all come out ahead of the need for good quality data. The top concern (understanding customer needs) is also, depending on how you look at it, a question of how people can be well served by an enterprise.

It seems that, even as companies explore the extraordinary potential of AI, decision-makers are zeroing in on the human factor. When organizations imagine the future, they consider whether the key to success might be cultural: the right people, the right policies, the right way of doing things.

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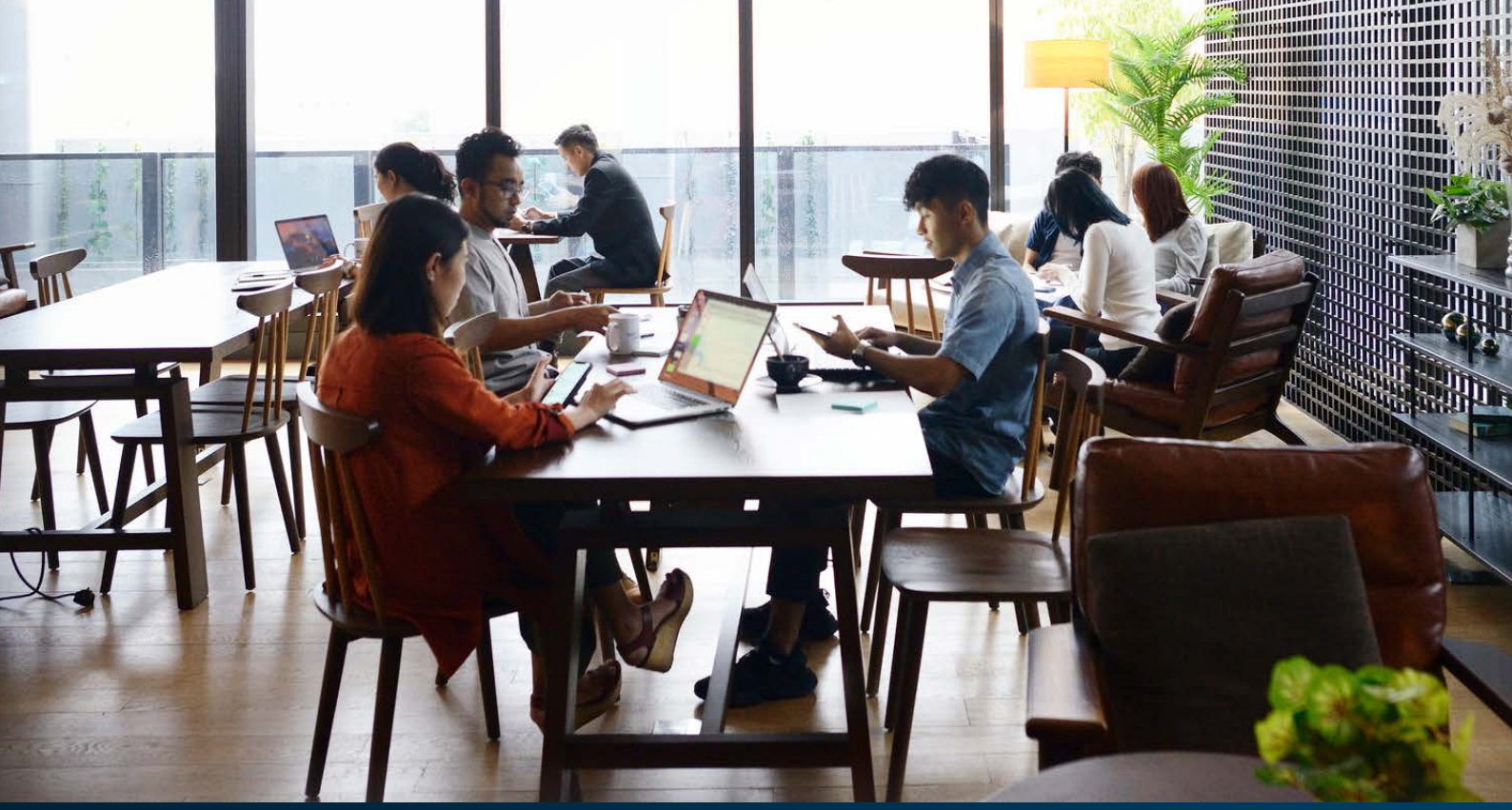

Conclusion

As AI transforms the market, our survey uncovered a renewed focus on the human: on how people can work alongside sophisticated generative technology, and on the skills and talents that only they can contribute, including creativity and a moral perspective.

It might be surprising to many to see businesses so overwhelmingly vote for the regulation of AI. This sentiment seems to be the product of widespread uptake of the technology and the legal and ethical consequences that emerge as companies explore its possibilities.

The demand for tech workers continues to shrink, and some companies appear to perceive deficiencies in their workplace culture. However, as they fit themselves for the future, many demonstrate an ambition to support employee well-being as they navigate the ongoing technological transition. Perhaps the key to future success in this brave new world is to fully engage with the perspectives and concerns that are unique to humans.

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About the research

Methodology

The survey was conducted by Coleman Parkes in September and October 2023, and targeted 2,800 IT decision-makers, data analysts, and line of business leaders about the enterprise of the future. Respondents were based in North and South America, Europe, Asia, Australia, and the UK. There was equal representation of the public sector, manufacturing (including supply chain), financial services and banking, and technology. Companies ranged in size from fewer than 500 employees to more than 10,000. 60% had an average revenue of more than $1 billion.

About Coleman Parkes

Coleman Parkes is a full-service B2B market research agency specializing in IT technology studies, targeting senior decision makers in SMB to large enterprises across multiple sectors globally. For more information, contact IanBeston@coleman-parkes.co.uk

About Alteryx

Alteryx powers analytics for all by providing the leading Analytics Automation Cloud Platform. Alteryx delivers easy end-to-end automation of data engineering, analytics, reporting, machine learning, and data science processes, enabling enterprises everywhere to democratize data analytics across their organizations for a broad range of use cases. More than 8,000 customers globally rely on Alteryx to deliver high-impact business outcomes. To learn more, visit www.alteryx.com.