

Forbes
INSIGHTS

Enterprise 2030: Building The AI-Powered Company Of The Future

4 STEPS TO PREPARE FOR THE AI-DRIVEN DECADE

IN ASSOCIATION WITH

teradata.



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Foreword

Envisioning Enterprise 2030

Teradata has long understood the importance of AI. And after working so closely with the world's largest enterprises, year after year, in some of the most high-stakes environments and industries, we've come to believe a single, powerful truth:

People thrive when empowered with better information.

Every single person at Teradata has devoted their careers to empowering and uplifting people and organizations with data and insights. Because when those elements come together, it creates a truly positive impact on the people our customers serve and the world we all live in.

Now, as generative AI dominates the headlines and makes AI an enterprise priority, we're empowering our customers to use data insights to reach new, unprecedented levels of creativity, productivity and innovation.

The opportunities are limitless. But the big question is this: How and where should enterprises invest in AI for maximum impact?

We wanted enterprises to speak for themselves on this pivotal topic that's redefining our collective future. We partnered with Forbes Insights to survey 1,001 executive leaders around the world—your peers—to answer this very question and understand how they envision an AI- and data-driven future.

This study is called "Enterprise 2030: Building The AI-Powered Company Of The Future."

Your peers have spoken: AI is the inflection point that's changing the gravity of enterprises. Based on the increasing velocity and massive value that AI can unlock, enterprises that don't adopt this technology face a very real risk to their business. The ones that do unleash AI innovation have the opportunity to sprint far ahead of their competitors.

Enterprises cannot wait.

Join us in discovering how your organization can reap the rewards of the AI-driven decade.

Join us in building the AI-driven enterprise of the future.



JACQUELINE WOODS

Chief Marketing Officer, Teradata

Introduction

Data and AI are the foundations of Enterprise 2030

In an era defined by rapid technological advancements and a fast-evolving business landscape, an organization's ability to harness data and AI will set it apart from the competition.

But using data and AI to drive value and transform business is a profound challenge. Enterprises are limited by current capabilities, organizational culture and the need for cost-effective scale.

To learn how organizations can reveal their full potential, Teradata partnered with Forbes Insights to survey 1,001 global business leaders and find out how their organizations are succeeding with data and AI, as well as identify where improvement is needed.

In Enterprise 2030, a not-so-distant future state, the most prepared organizations won't just fully integrate data and AI into their operations—they'll also make it a competitive advantage.

The following report assesses the data, analytics and AI capabilities of organizations and identifies strategies they can implement to better prepare for Enterprise 2030.

Here are four steps business leaders can take today to accelerate their transformations, starting with evaluating their data and AI maturity.

Assess Current Data And AI Capabilities

Fewer than 2 in 10 organizations strongly agree they have full visibility into their data.

Before any organization can map where it's going, it needs to understand where it's been.

Data is the foundation for the AI/ML models that power many of the applications businesses need to meet future customer and market demands. But without assessing their current capabilities, organizations risk falling into the "garbage in, garbage out" trap, where incomplete or low-quality data yields incomplete or incorrect insights.

Our research finds most leaders would characterize their organization's data capabilities as average at best. Only 24% strongly agree their organizations have the data they need to make informed decisions. A stark 17% have full visibility into their data resources and how to use them. And just 11% of organizations strongly agree they have fully integrated, harmonized and visualized data across the enterprise.

FIGURE 1.

Top 5 Data Challenges Facing Organizations Today

32% Ensuring data security, privacy and compliance

26% Integrating data resources across enterprise silos or domains

26% Ensuring data quality

25% Managing and storing large amounts and varieties of data

25% Establishing better data governance

*Respondents selected up to three options.

This isn't surprising, considering the sprawl and volume of data that organizations must grapple with every day. But if business leaders want to make valuable use of their data, they must begin by taking inventory, despite the complexity.

The first step is understanding all data sources within the enterprise. Why are they there? What purpose do they serve? Answering these questions can help executives make sense of what to use to help run their organizations.

When it comes to [AI capabilities](#), our survey also showed a significant gap between where enterprises are today and where they want to be.

The data shows that while there's a diversity of opinion and prioritization, execs believe AI is critical to future growth. And while they may not have the capabilities to fully harness those assets today, they're confident in the progress they'll make over the coming years.

FIGURE 2.

Enterprises That Rate Their Analytic Capabilities As Advanced

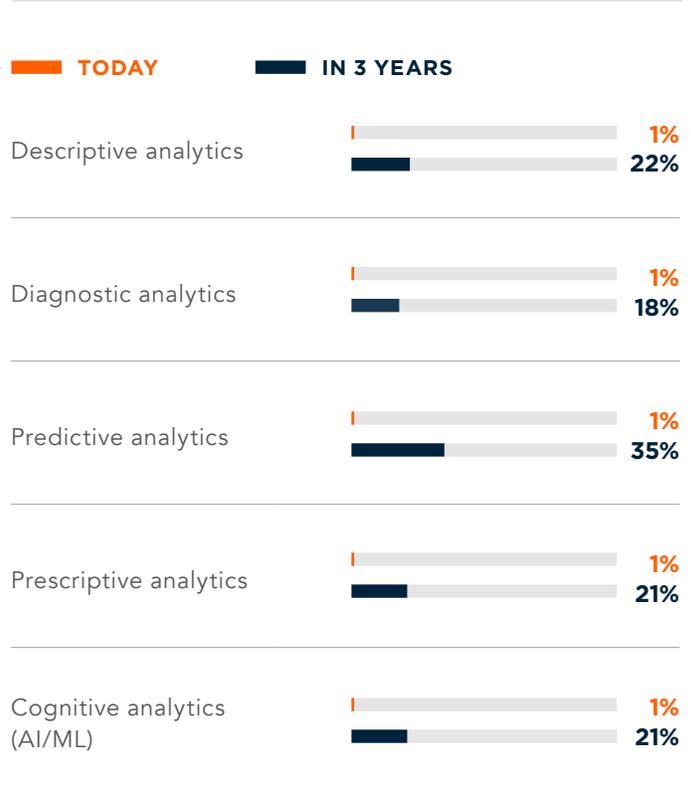
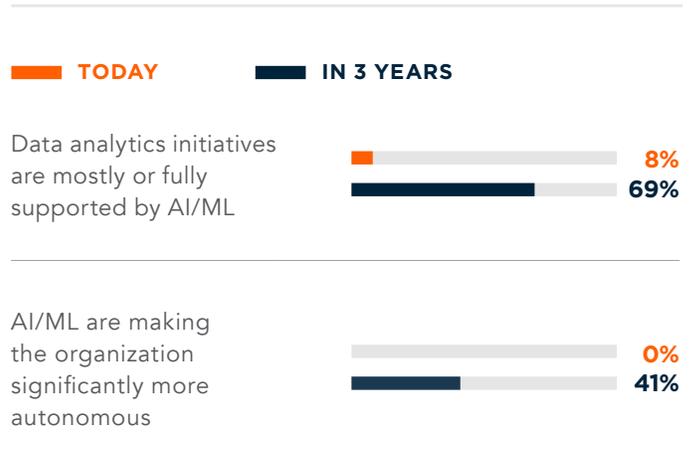


FIGURE 3.

The Impact Of AI On Enterprises



STEP II

Identify Distinctive Competencies & Set Audacious Goals

Why a cautious approach isn't always the best

To create value from data and AI, organizations must first pinpoint the highest and best use of it.

Hillary Ashton, chief product officer at Teradata, says organizations should lean into their strengths. What are their distinctive core competencies? How do they compare with market benchmarks? Leaders can combine these insights with a keen understanding of their business and where it excels to craft a winning data and AI strategy.



Our research indicates organizations are already using AI to create value in several areas, including enriching customer experiences, managing risk and supply chains, improving productivity and innovating new products and services.

Executives believe these core competencies will only be further bolstered by AI in the future. According to 28% of executives, enterprise AI/ML has the most potential to advance their organization’s data intelligence capabilities by 2030. And 21% say AI/ML chatbots, personalized interfaces and virtual assistants will make a significantly positive impact on customer and user experiences by 2030.

Once organizations identify their distinctive competencies, they’ll need to decide when and at what level to invest in each area.

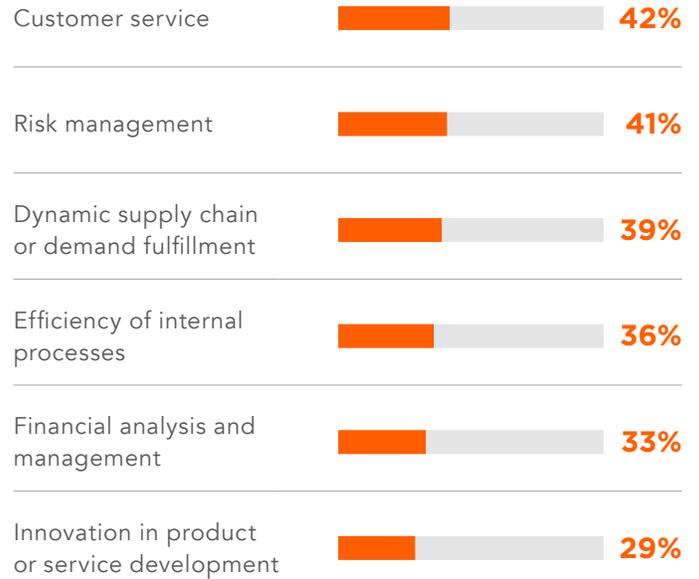
While conventional wisdom says to start small and scale from there, this approach is risky: Proofs of concept fail all the time, stalling innovation efforts and making organizations more risk averse.

Instead, Ashton says, it’s best to prioritize three audacious goals, focus on specific core competencies and commit to scaling them, knowing that you can adjust along the way.

“It’s a different way of thinking about long-term transformation,” she says. “Go big. Set bold, ambitious goals. Because if you don’t, your competition will.”

FIGURE 4.

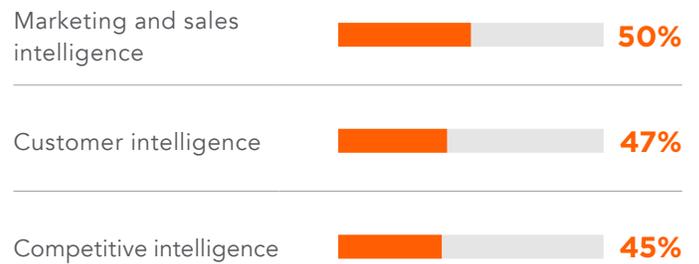
How Enterprises Are Using Data Analytics, Including AI/ML, To Drive Decision Making



*Respondents selected all that applied.

FIGURE 5.

How Enterprises Are Using Data Analytics, Including AI/ML, In Their Competitive Strategy



*Respondents selected all that applied.



“

For most companies, there are 100 things, 1,000 things or even 100,000 things you could do. The question is: What *should* you do?”

HILLARY ASHTON

CHIEF PRODUCT OFFICER, TERADATA

Empower People To Embrace A Data-Driven Culture

Lead by example to cultivate better decision making

Building a future-ready enterprise requires alignment and sponsorship from key stakeholders, typically C-suite and line-of-business leaders. This group must establish, and then clearly and consistently communicate, a strategic vision that will serve as the organization's North Star as it navigates the ups and downs of the transformation process.

However, it's not enough to simply create and communicate a strategic vision. Organizations must empower employees to execute on it, too. Put another way: Transforming into a data- and AI-driven enterprise demands culture change.

"Having a data-driven culture that gets away from what I call elbows and opinions—and into facts—is the first thing to do," Ashton says. "There are lots of ways to promote that within an organization. Perhaps the most important one is giving people access to data, and then having leaders who are asking fact-based questions and making fact-based decisions."

Despite the crucial role of data accessibility, only 1% of businesses give the majority of their workforce direct access to enterprise data through [analytical tools or platforms](#). And only 5% of organizations expect to do so by 2030.

One explanation for this lack of accessibility: Many companies still struggle with creating a "single version of the truth." Ashton suggests that, as a baseline, organizations create reusable data products, or "curated sets of known good data," from which employees can begin to cull insights.

FIGURE 6.

Top 3 Challenges To Becoming An Analytics-Driven Enterprise By 2030

Reskilling your workforce in data analysis

37%

Increasing security of data analytics environments and processes

36%

Creating a data-driven culture that emphasizes AI-based decision making

28%

*Respondents selected all that applied.

These data products are critical for helping organizations gain more control over their data estate, improve data quality and transform existing business intelligence into actionable insights.

Even with a single source of truth, many people can't access data because it requires knowledge of programming languages like Python or SQL. But with the combination of large language models and natural language interfaces, enterprises can create AI chatbots that allow people to ask questions in plain language about their organization's data and get answers immediately.

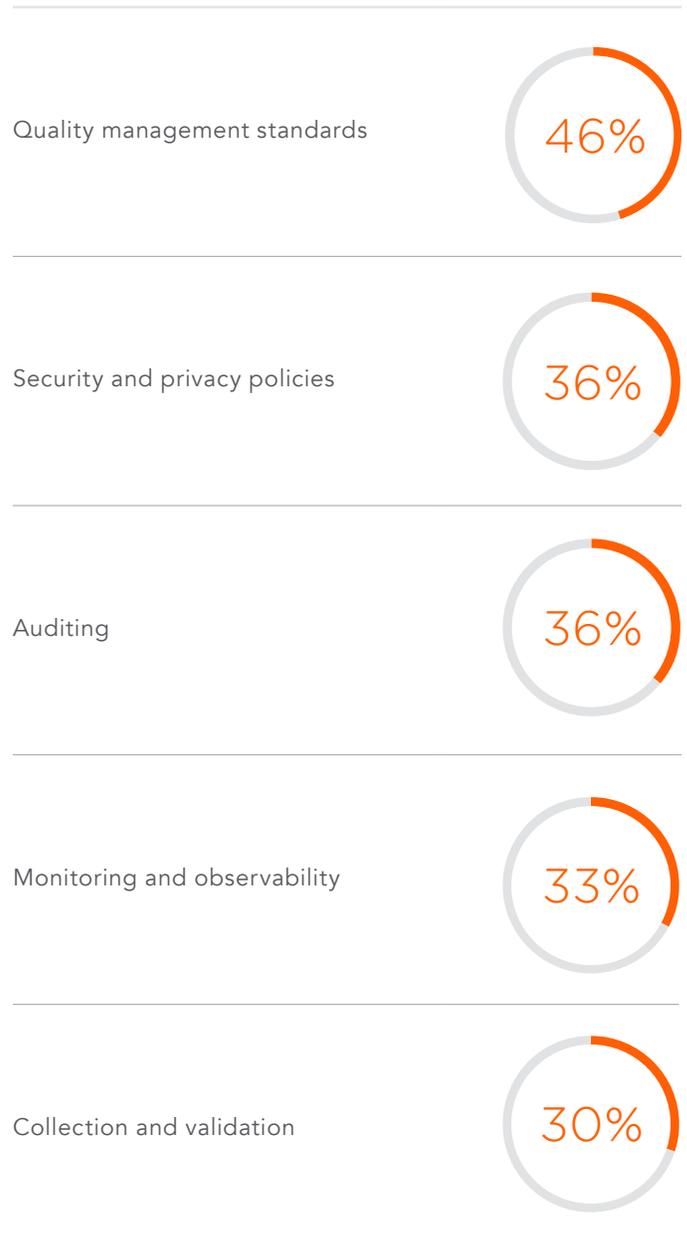
Effective governance of data and data products is just as important as data access, especially in the age of AI. Biased data and the unique perspectives and lived experiences of the technologists and [data scientists](#) who develop and train AI models may lead to unintended, adverse consequences.

Ashton says it's crucial for enterprises to govern their data and technology in ways that reflect the law and their culture, values and competencies.

"Ultimately, you're responsible for the decisions that your machines make on behalf of your business," she notes.

FIGURE 7.

Enterprises That Have These Processes To Ensure Teams Can Access The Right Data



*Respondents selected all that applied.

STEP IV

Implement New Technologies For Cost-Effective Scale

Query data fabrics allow organizations to use data from any source

AI requires high-quality data, and lots of it. But as enterprises have layered their tech stacks over the years, they've accumulated a massive tech debt and unmanaged data proliferation. Enterprises today spend millions of dollars to move and replicate data across numerous pipelines and silos on legacy systems.

The result? The majority of all AI/ML project time is spent preparing data instead of creating value.

So, how can enterprises effectively manage data expansion? Using a [query data fabric](#), which is a unified data integration and management layer, is one option. It allows organizations to leverage data from any source without having to move it into their own systems. This accelerates data delivery, reduces

compute costs, automates data management and facilitates self-service.

"We say 'respect data gravity,'" Ashton says. "Use the data, don't move it."

Organizations that fail to respect data gravity unnecessarily increase resource requirements, application and system interdependencies, latency and the cost and complexity of moving data across different computing environments.

Ashton says a query data fabric can address many of these issues while enabling organizations to more easily use data to solve a variety of business problems with rapid time-to-outcomes.



Businesses also struggle to make sure they have the right technology and resources to both operationalize and cost-effectively scale AI. Many AI projects never make it into production. The ones that do require extensive time and resources.

And as AI is deployed across the enterprise, the risk of losing control and oversight of intellectual property increases.

“The scale piece is really important. The only way you get to value from any data or AI initiative is to run them in production and achieve business outcomes. But most companies don’t have the ability to go from rapid experimentation to production at scale,” Ashton observes.

[Automated and scalable data and AI platforms](#) are crucial for cost-effectively enabling innovative data and AI initiatives that unlock value across the enterprise. These platforms also give enterprises the ability to embed accountability, security and trust into all data and AI innovation efforts.

“You need to pick the right solution for the type of return you think you’ll get,” says Ashton. “If you’re going to make an extra hundred dollars every month, you should choose a low-cost solution. If you think you can make a hundred million dollars every year, then you can spend more on the technology, because the ROI will support it.”

FIGURE 8.

Top 3 Opportunities For An Analytics-Driven Organization

Supporting more autonomous decision making



Predicting, sensing and responding to events in real time



Deploying data analytics to enhance cybersecurity



*Respondents selected all that applied.



of executives noted their organization is only somewhat ready to transform into an analytics-driven enterprise by 2030.

Empowering Enterprise 2030

To derive the most value from data and AI, organizations must first decide what to change

By taking these four steps—assessing current data and analytics capabilities; identifying competencies and setting audacious goals; empowering people to embrace a data-driven culture; and implementing technologies for cost-effective scale—leaders will undoubtedly prepare their organizations for the rewards derived from AI in the decade ahead.

To achieve their goals, organizations must gain more control over their data estates so they can empower people across the organization to use AI to solve complex problems. Flexible tools and technologies—like a query data fabric and automated, scalable data and AI platforms—can help organizations obtain greater visibility into their data and deploy it more effectively across the enterprise—regardless of the data’s source or location.

Ashton says the path forward for enterprises requires calculated risks and strategic investments to build the underlying capabilities to create new data products and AI initiatives, scale them and govern them effectively. It’s a tricky balancing act, but one that organizations must master to prepare for Enterprise 2030.

“You need to be innovative and move quickly,” Ashton says. “That’ll be the really exciting opportunity for enterprises today.”

Learn more about how organizations can prepare for the AI-driven decade at [Teradata.com/AI](https://teradata.com/AI).

SATTA SARMAH HIGHTOWER
Report Author

Methodology

Forbes surveyed 1,001 C-suite executives and business leaders from North America, Asia Pacific, Europe, Latin America and the Middle East, across a range of industries.

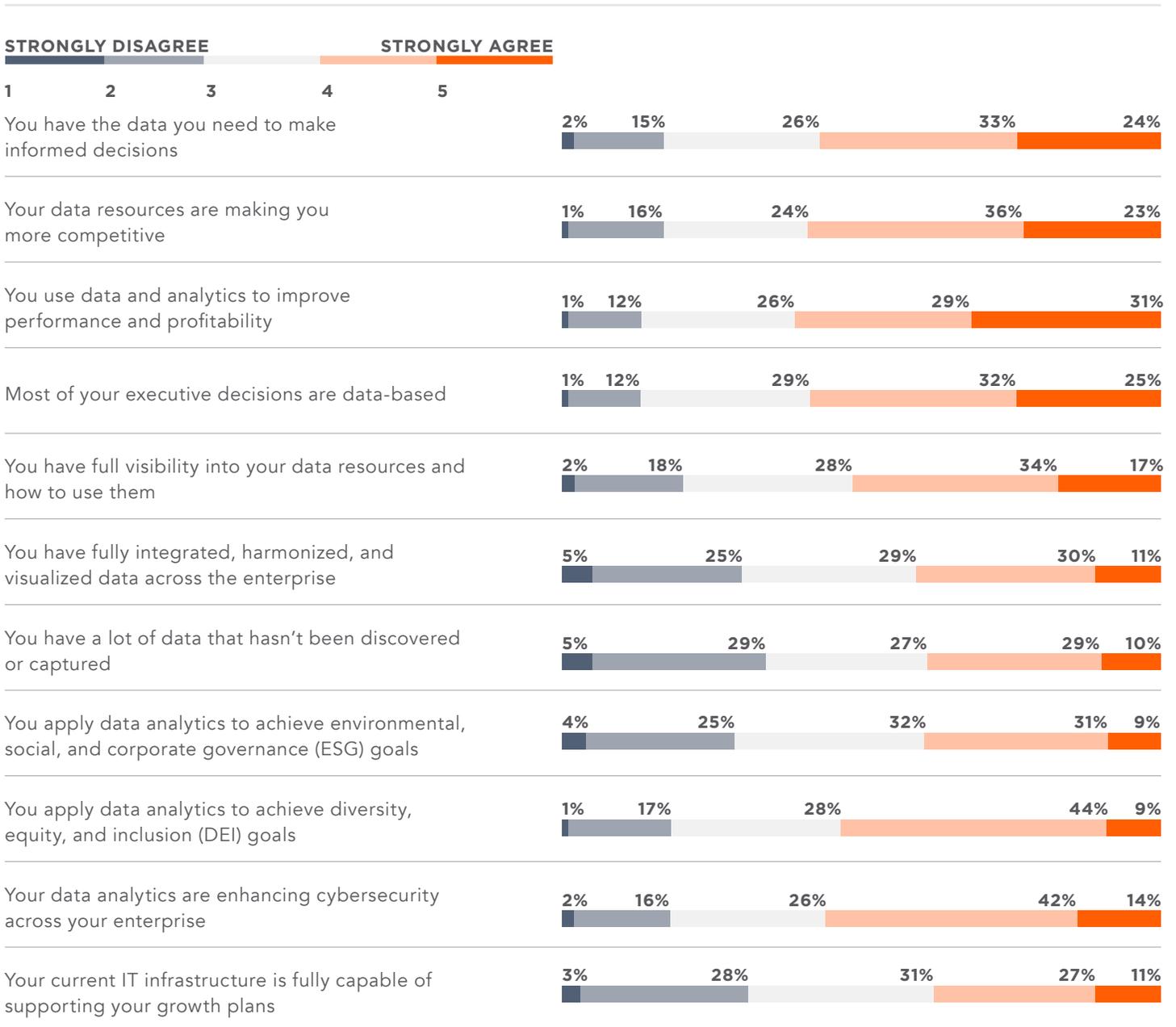
CEOs, customer leaders, management and strategy leaders reporting to the CEO, and technology leaders made up an equal share of survey executives. Seventy-five percent of executives represented organizations with \$1 billion or more in annual revenues in the most recent fiscal year.



Survey Questions And Results

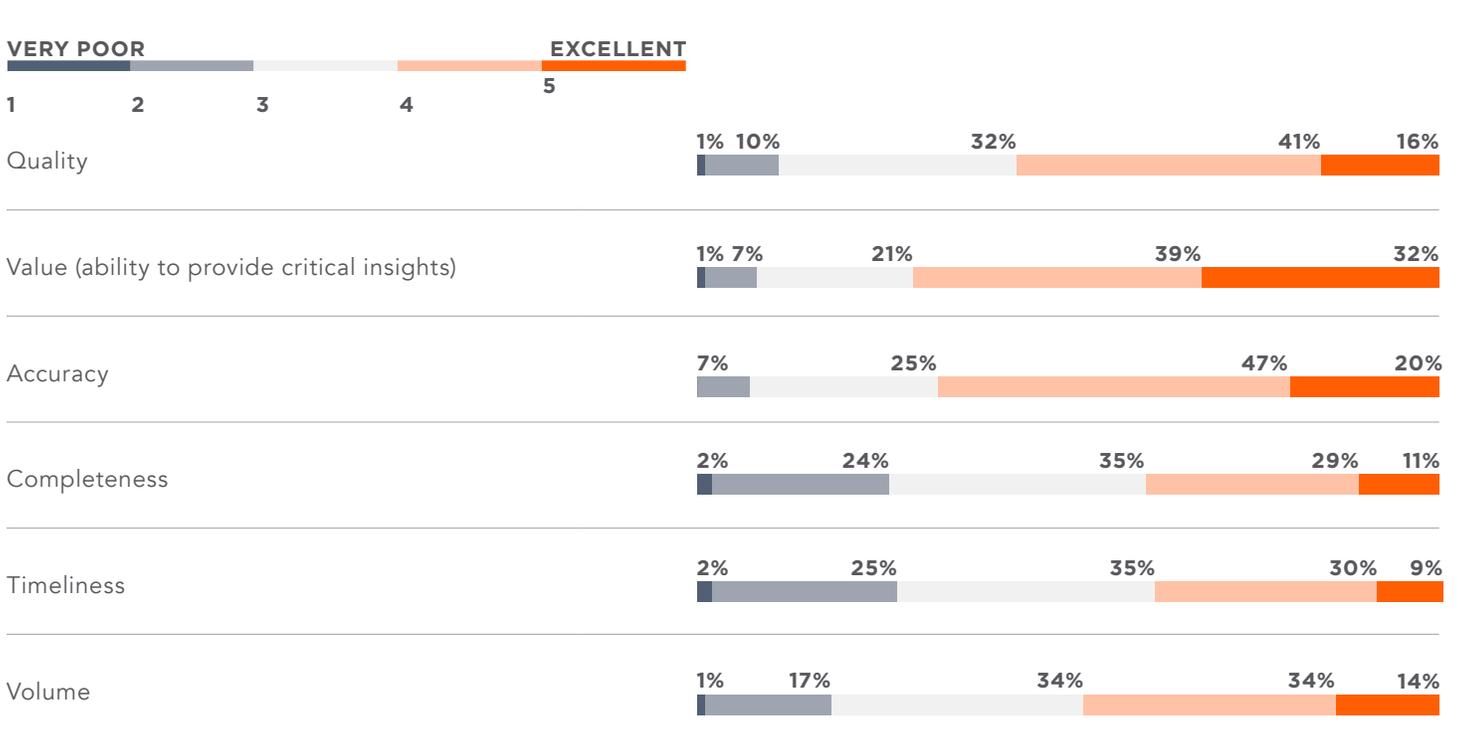
A1.

Please rate your level of agreement with the state of your company’s data-driven readiness across the following measures: (Select one for each row)



A2.

How would you rate your organization's data across the following dimensions? (Select one for each row)



A3.

What are the most urgent data-related issues facing your organization today? (Select up to 3)

32% Ensuring data security, privacy and compliance

19% Ensuring the ethical use of data

26% Ensuring data quality

19% Monetizing data to generate revenue

26% Integrating data resources across enterprise silos or domains

18% Leveraging real-time streaming data

25% Establishing better data governance

16% Integrating data resources from edge environments or connected sensors

25% Managing and storing large amounts and varieties of data

16% Implementing artificial intelligence and machine learning (AI/ML) to drive efficiency

21% Leveraging unstructured data

15% Understanding how to apply data and analytics output to improve business performance

19% Enabling data visualization and comprehension for decision makers

0% Other

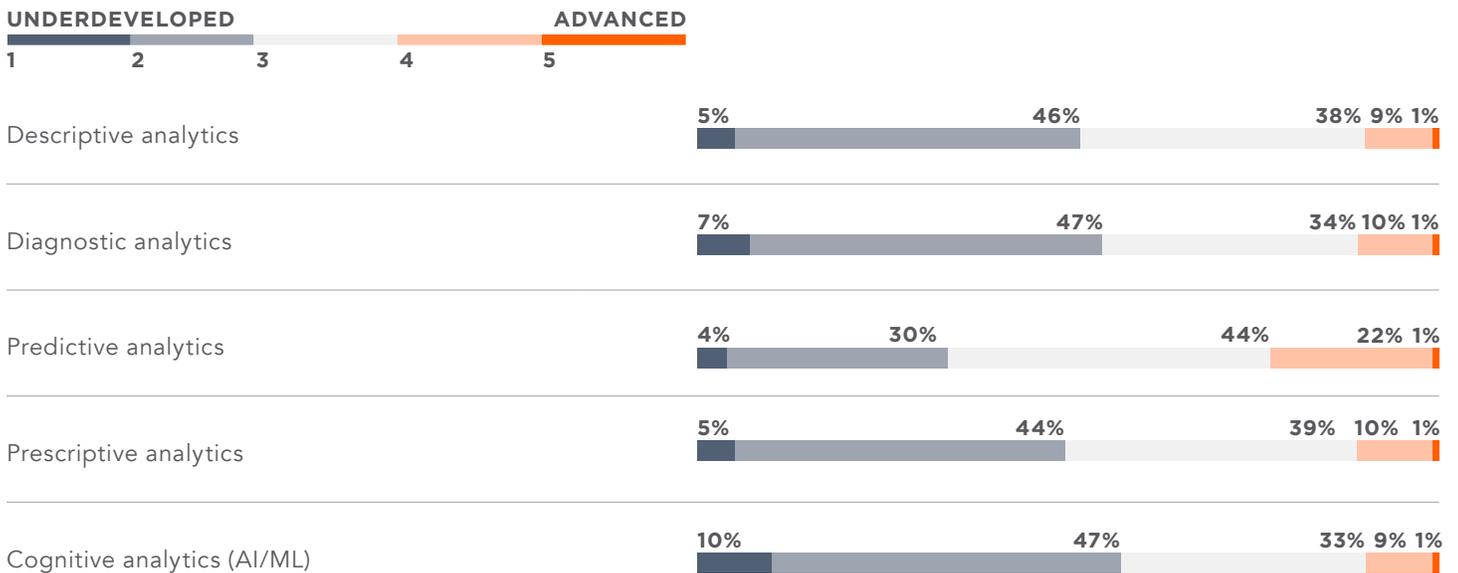
A4.

What underlying enterprise data platforms currently support your organization’s data analytics strategies, and which ones will be critical between now and 2030? (Select all that apply in each column)

	Currently supporting	Critical between now and 2030
Data warehouse on-premises	24%	34%
Data warehouse cloud-based	29%	36%
Data lake on-premises	26%	37%
Data lake cloud-based	30%	38%
Data lakehouse on-premises	23%	34%
Data lakehouse cloud-based	26%	34%
Data mesh or data fabric cloud-based	23%	28%
Data mesh or data fabric on-premises	19%	27%
Platform as a Service	39%	49%
Blockchain or other distributed ledger technologies	16%	22%

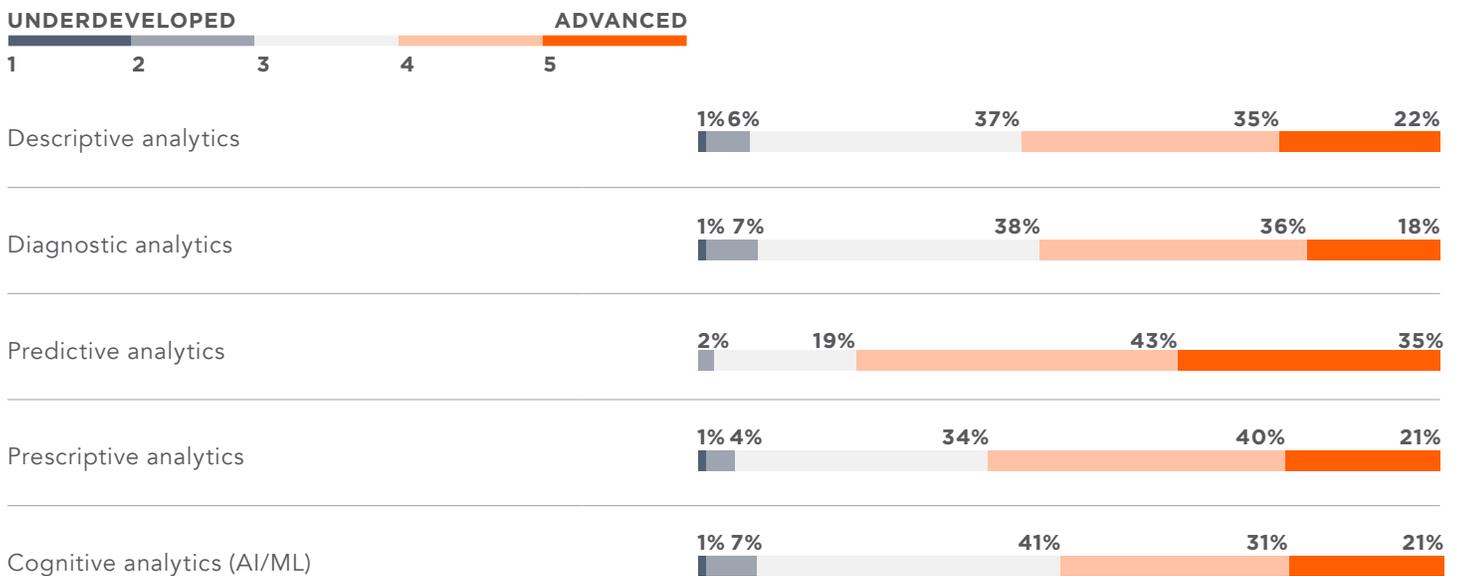
A5-1.

How mature are the following analytic capabilities across your enterprise today?



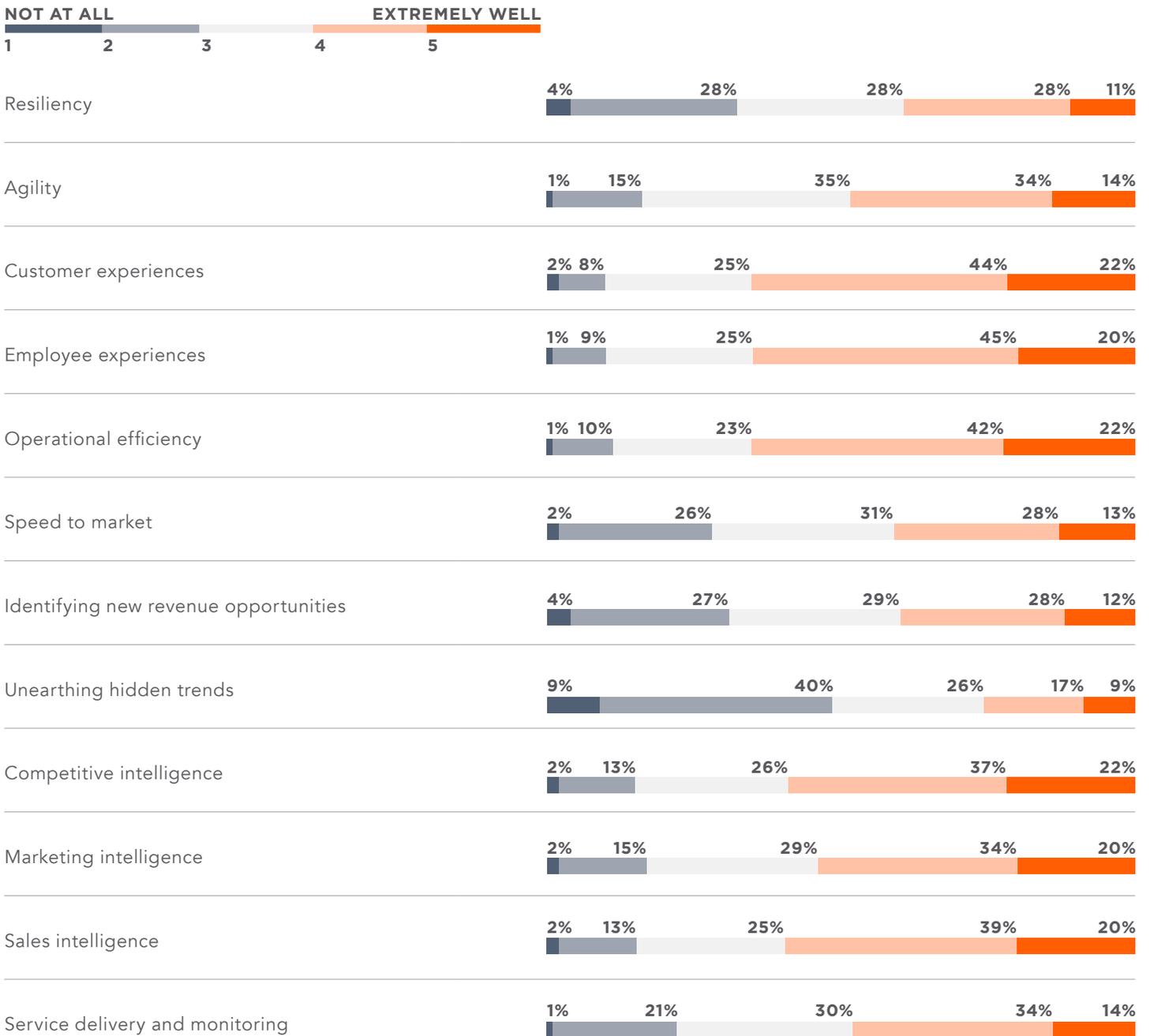
A5-2.

How mature will the following analytic capabilities be in 3 years?



A6.

How well are your data analytics delivering on the following business outcomes? (Select one for each row)



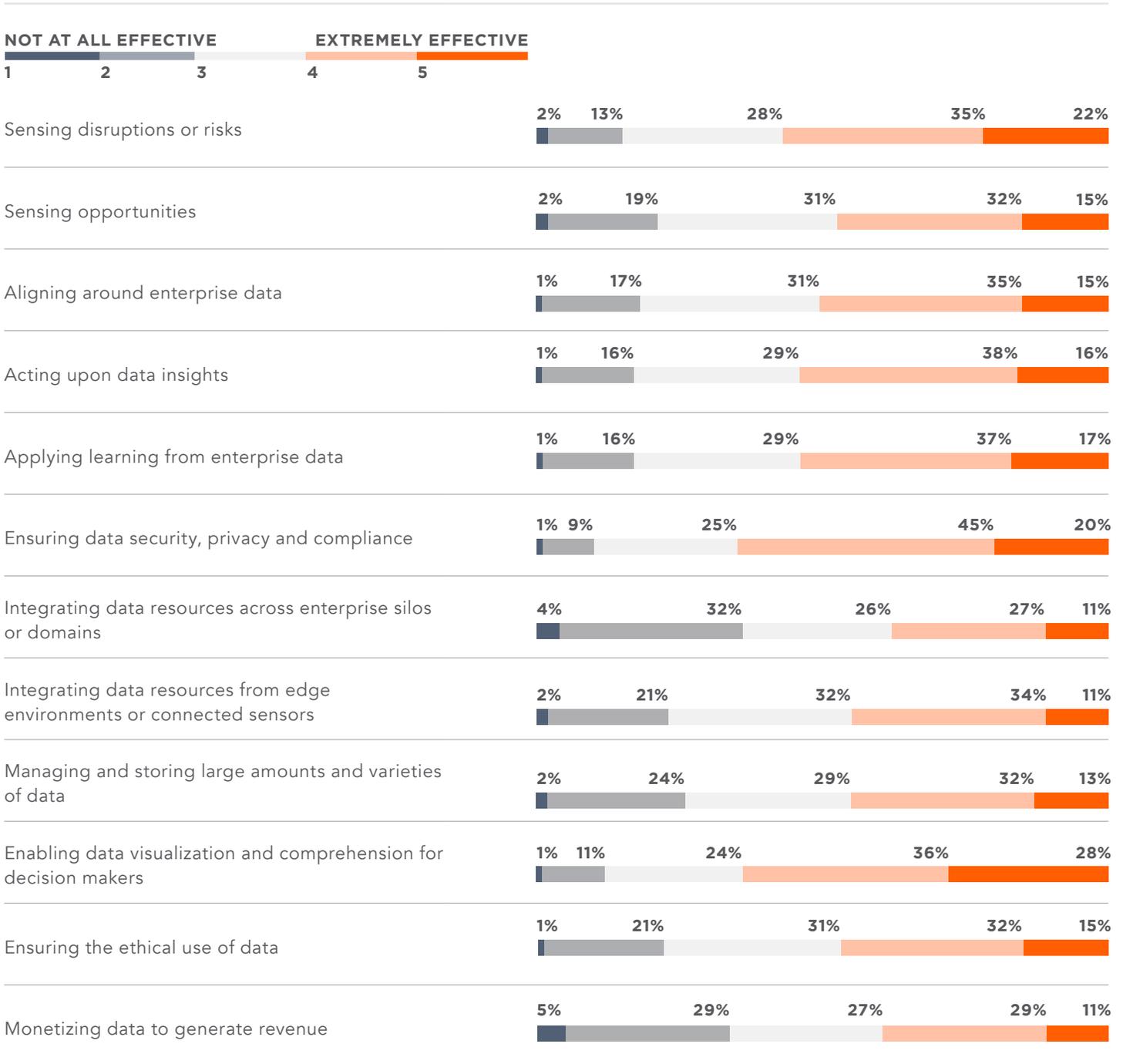
B1.

What percentage of your workforce has direct access to analytical tools or platforms that access enterprise data to help make decisions today? What will it be by 2030? (Select one for each column)

	0%-4%	5%-9%	10%-14%	15%-19%	20%-24%	25%-50%	50%+
Currently	12%	30%	39%	14%	2%	2%	1%
By 2030	0%	10%	26%	33%	17%	8%	5%

B2.

How effective is your organization at the following analytics tasks? (Select one for each row)



B3.

What processes does your organization have in place to ensure that teams have access to the right data? (Select all that apply)

46%	Quality management standards	27%	Requirements defined through business metrics
36%	Security and privacy policies	27%	Governance policies
36%	Auditing	27%	Access controls
33%	Monitoring and observability	24%	Cleansing and processing
30%	Collection and validation	0%	Other

B4.

In what areas of your business are data analytics (including AI/ML) being used the most to drive decision making? (Select the top 3)

42%	Customer service	29%	Innovation in product or service development
41%	Risk management	26%	Production or product manufacturing
39%	Dynamic supply chain or demand fulfillment	23%	Fraud detection and prevention
36%	Efficiency of internal processes	16%	Human capital management
33%	Financial analysis and management	15%	Labor or skills augmentation

B5.

In what areas of your competitive strategy are data analytics (including AI/ML) being used? (Select the top 3)

50%	Marketing and sales intelligence	43%	Making data-driven decisions at a strategic level
47%	Customer intelligence - using CRM to gain greater understanding of customers	37%	Personalization to boost customer experience
45%	Competitive intelligence	32%	Service delivery and monitoring
45%	Exploring business trends, customer behavior and market conditions	0%	Other

B6.

To what extent are your data analytics initiatives or platforms supported by AI/ML today, and how will this evolve between now and 2030? (Select one for each column)

	Not at all	Barely supported	Somewhat supported	Mostly supported	Fully supported
Today	1%	40%	49%	8%	0%
By 2030	0%	0%	30%	48%	21%

B7.

How confident are you that your organization has the following? (Select one for each row)

	Not at all	Slightly confident	Somewhat confident	Very confident	Completely confident
The right technologies and tools in place to properly analyze your data	0%	18%	32%	34%	15%
Data analytics accessible to all employees who need it	0%	8%	27%	43%	21%
Data that is timely and relevant to most business requirements	1%	12%	29%	42%	17%

C1.

Which emerging technologies have the most potential to advance your organization’s data intelligence capabilities between now and 2030? (Select all that apply)

40%	Autonomous operations (AO)	25%	Quantum computing
37%	Real-time data streaming	22%	Digital twins
36%	Edge computing and connected devices	18%	Blockchain and distributed ledger technologies
28%	Enterprise AI/ML	17%	Generative AI (e.g., ChatGPT)
28%	Next-generation data platforms (NoSQL, graph)	14%	Metaverse
28%	Data fabric and data mesh	0%	Other

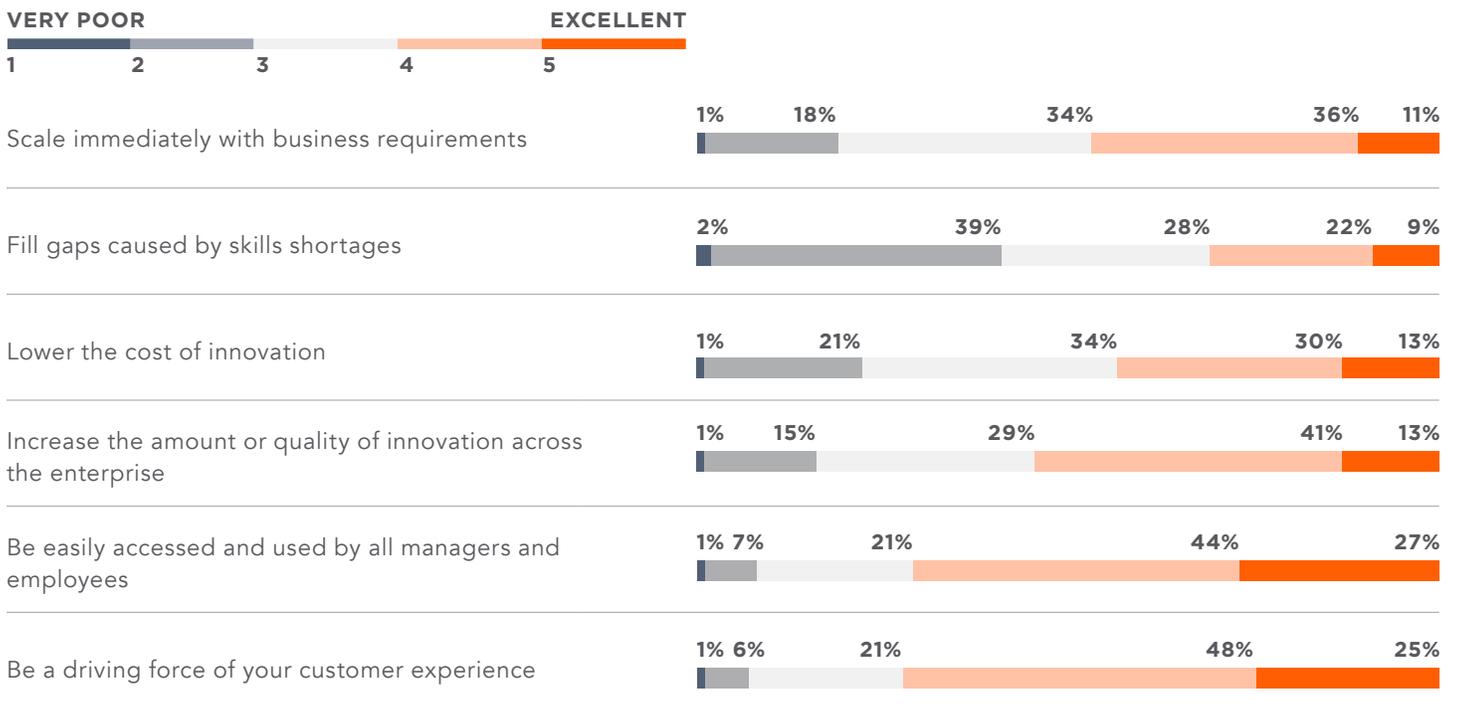
C2.

To what degree are your AI and ML technologies making your organization more autonomous, and how will this change by 2030? (Select one for each column)

	No appreciable growth	Somewhat more autonomous	Moderately more autonomous	Significantly more autonomous	Don't know
Today	3%	76%	21%	0%	0%
By 2030	0%	1%	57%	41%	0%

C3.

How would you rate your current technology in terms of the following abilities? (Select one for each row)



D1.

What data management and analytics skills are most needed at your organization today, and what will you require by 2030? (Select all that apply in each column)

	Critical now	Critical by 2030
Data science (AI/ML skills)	25%	33%
Data engineering	25%	31%
Database administration	33%	38%
Cloud resource management	24%	36%
Cloud data management	29%	40%
Data security	41%	46%
Programming	28%	30%
Enterprise data architecture	23%	33%
UX and UI design	36%	40%
Ability to consult with lines of business	26%	31%

D2.

Which strategies are being employed at your organization to attract and retain data and analytical talent through 2030? (Select all that apply)

49% Promoting and encouraging employees

38% Designing competitive compensation and benefits

42% Supporting training, education and professional development

31% Working closely with schools and universities

40% Focusing on diversity and inclusion

25% Partnering with third-party service providers

38% Developing your brand as an attractive place to work

0% Other

D3.

How is your organization developing or reskilling talent to meet AI/ML objectives between now and 2030? (Select all that apply)

55% In-house training

35% Training through outside providers (i.e., certifications)

49% In-house mentoring

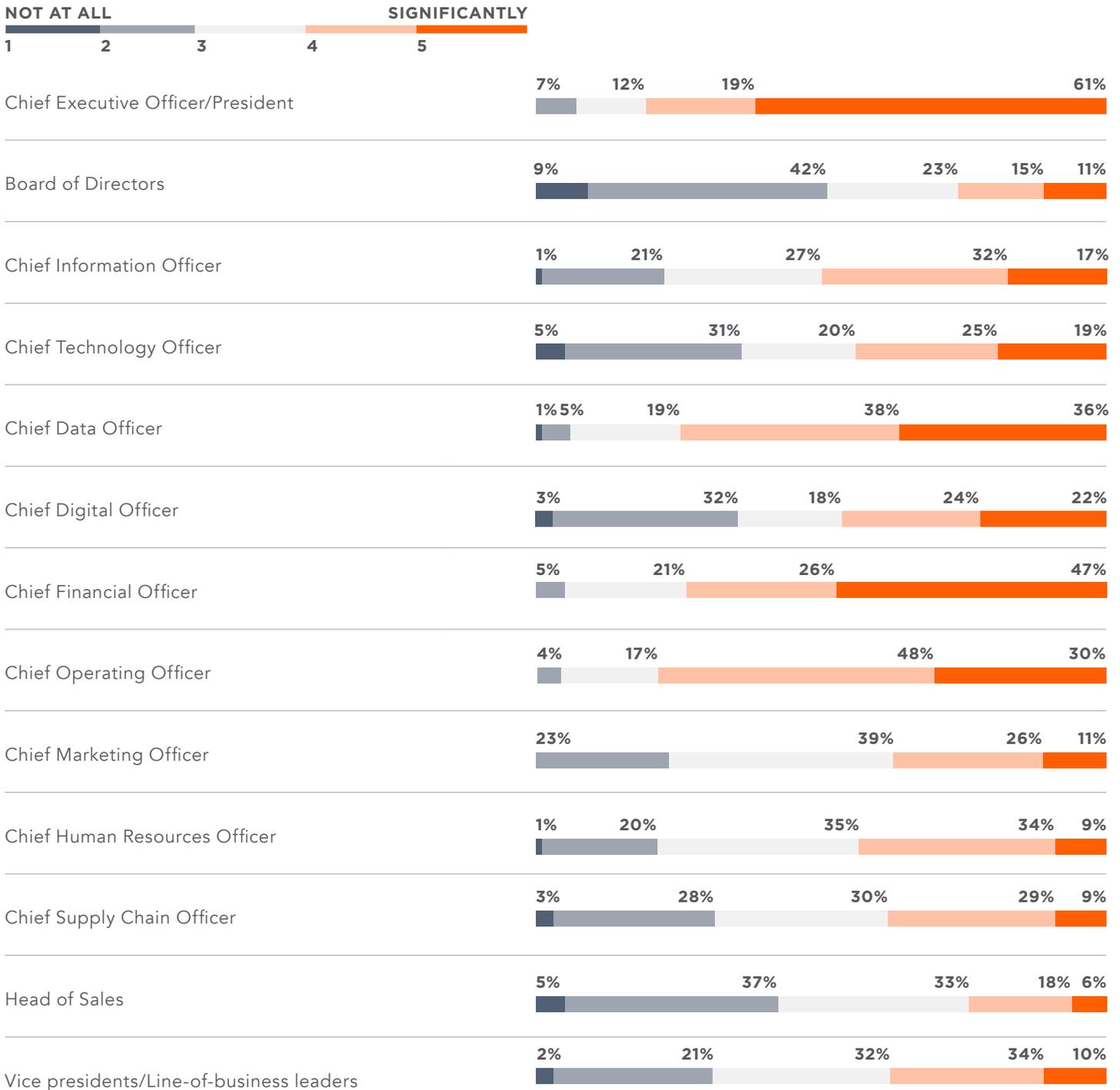
32% Support for education with outside educational institutions

39% Training provided by vendors or partners

0% Other

E1.

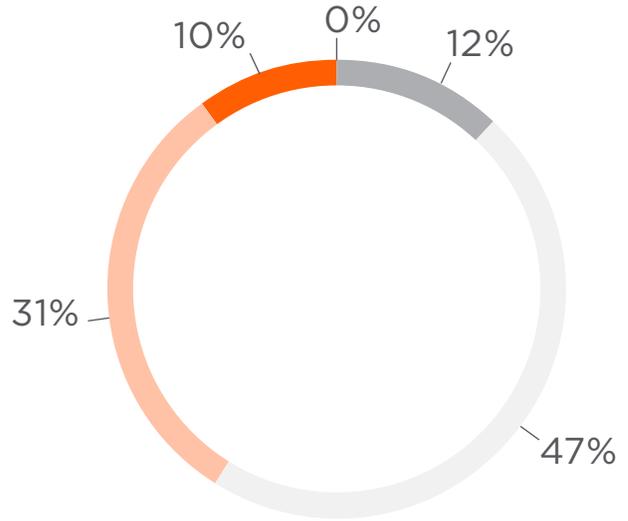
To what extent will the following business leaders drive data and analytics initiatives within your enterprise between now and 2030? (Select one for each row)



E2.

How collaborative are the CxOs in your organization on data decisioning? (Select one)

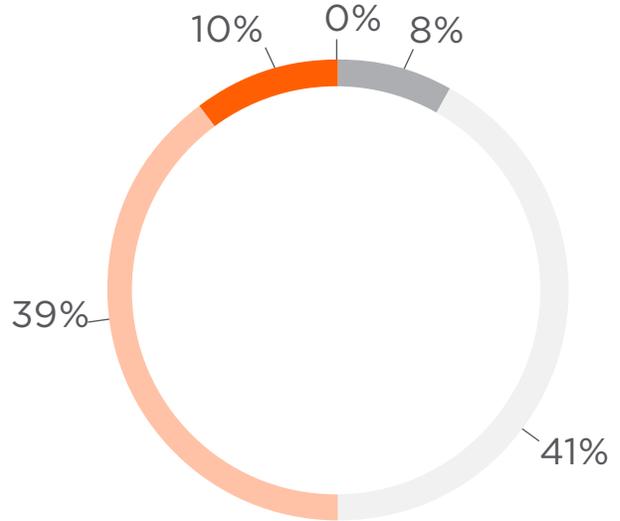
- Not at all collaborative
- Slightly collaborative
- Somewhat collaborative
- Very collaborative
- Completely collaborative



E3.

How effective are the key performance indicators (KPIs) and other metrics your organization uses to track progress against data-driven goals? (Select one)

- Not at all effective
- Slightly effective
- Somewhat effective
- Very effective
- Completely effective



E4.

How are CxOs in your organization encouraging the workforce to use analytics-centric thinking and approaches? (Select all that apply)

46% Providing tools, technology and resources

41% Regularly communicating an analytics vision

42% Setting clear goals and expectations

37% Tying analytical insight and output to strategy and measuring accordingly

42% Investing in training, education and development

34% Tying analytics adoption and performance to compensation and rewards

F1.

Which of the following characteristics represent how you envision your business in 2030? (Select all that apply)

48% Mainly cloud-based

30% Mainly automated and AI-driven customer experience

43% Expanded market footprint

30% Expanded into adjacent markets

38% A sustainability-focused enterprise

27% Mainly automated and AI-driven operations

34% Expanded into entirely new markets

10% A full participant in the metaverse

F2.

Looking toward 2030, what are the greatest data and analytics opportunities for your organization? (Select all that apply)

37% Supporting more autonomous decision making

22% Employing generative AI to engage customers and increase employee productivity

33% Predicting, sensing and responding to events in real time

20% Implementing conversational or empathic AI to engage with customers

32% Deploying data analytics to enhance cybersecurity

18% Applying data analytics to achieve DEI goals

26% Employing data analytics capabilities to enter new markets

17% Employing new data approaches, such as blockchain or distributed ledger technologies

23% Evolving as a service provider through edge sensors or devices

17% Augmenting labor or skills to compensate for staffing shortages

23% Adopting digital twins to increase predictability and innovation in operations

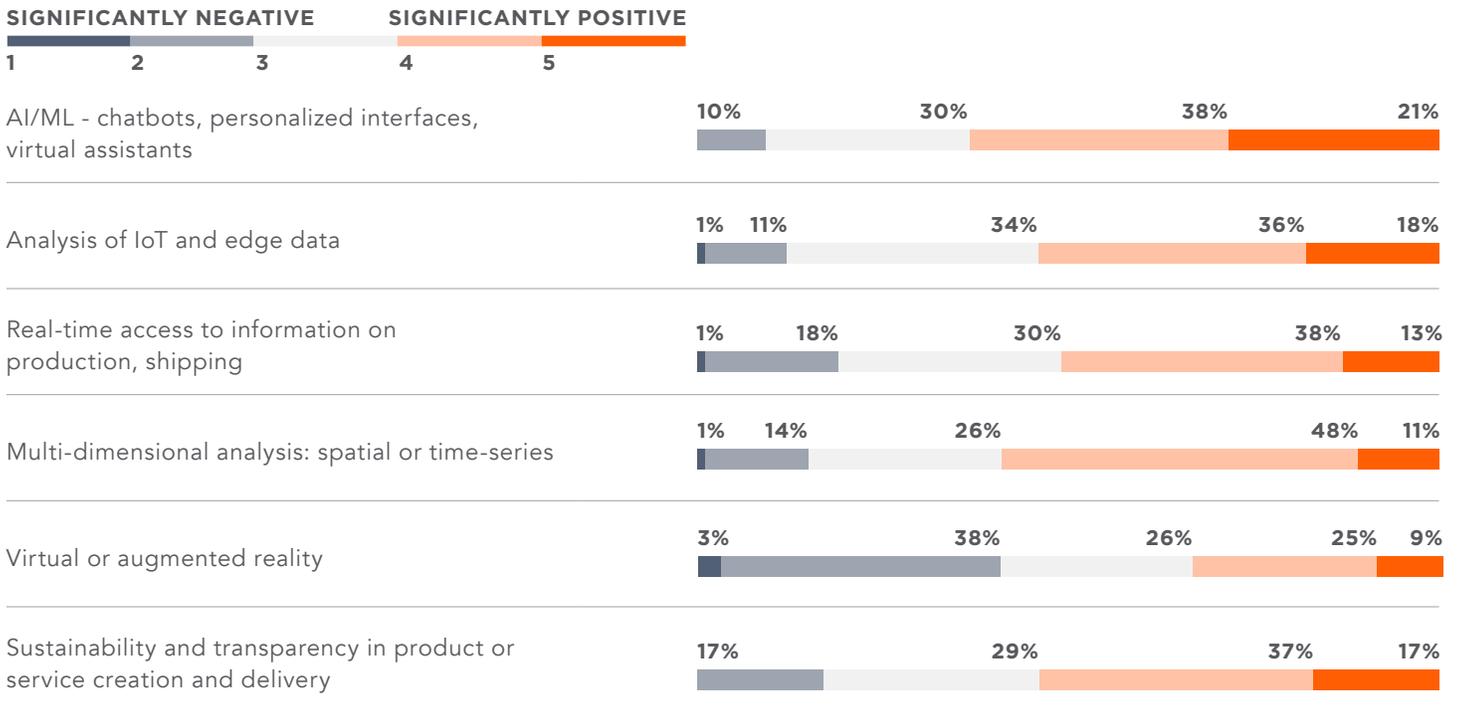
16% Using virtual or augmented reality to supplement skills and enterprise knowledge

23% Applying data analytics to achieve ESG goals

15% Positioning your company as a tech-savvy disruptor in your industry

F3.

To what extent will the following analytics-driven capabilities shape your delivery of customer and user experiences between now and 2030? (Select one for each row)



F4.

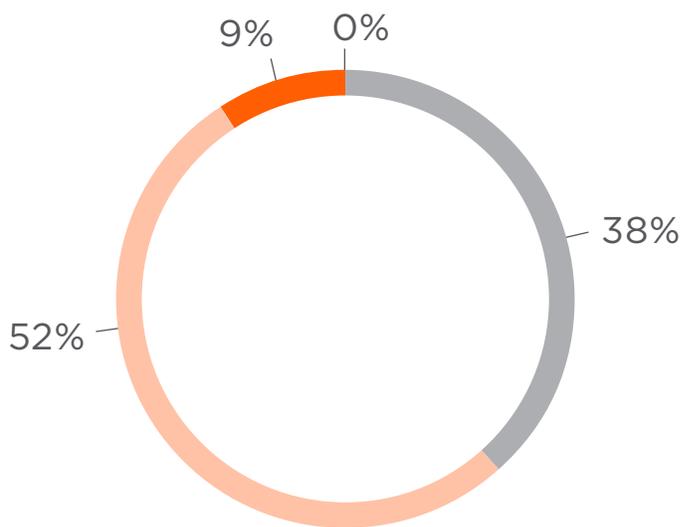
What are the biggest challenges your organization will face in striving to become an analytics-driven enterprise between now and 2030? (Select all that apply)



F5.

What is your organization’s current readiness to transform into a data analytics-driven enterprise by 2030? (Select one)

- Not at all ready - you lack appropriate data, resources or skills
- Somewhat ready - data analytics applied in targeted use cases
- Mostly ready - data analytics applied on an enterprise scale
- Completely ready - you are already employing real-time analytics, supported by AI-driven automation, across the enterprise



F6.

To what extent do you agree with the following statements about the enterprise of 2030?
(Select one for each row)



To be a truly successful company in 2030, you need to strike the right balance between a relentless growth mindset and responsible use of AI/ML and data analytics



To be a truly successful company in 2030, organizations are obligated to use data analytics to operate with greater purpose and serve not only shareholders, but all stakeholders



Data analytics will be a critical factor in solving some of the greatest challenges of our time, such as stopping climate change and curing cancer

