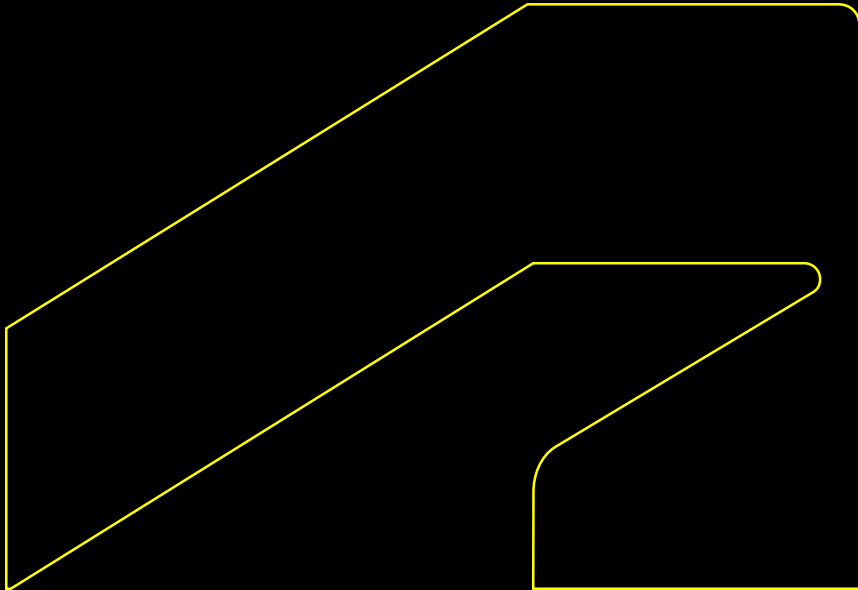


State of Design & Make

 AUTODESK

EXECUTIVE SUMMARY



2024
2025
2026
2027

About the report

The *State of Design & Make* report is a global, annual, longitudinal study for leaders who design and make places, objects, and experiences. It identifies the most pressing issues shaping today's businesses and helps leaders make informed, strategic decisions about how to prioritize and invest for the future.

For the 2025 *State of Design & Make* edition, Autodesk surveyed and interviewed 5,594 industry leaders, futurists, and experts across Design and Make industries: architecture, engineering, construction, and operations (AECO); design and manufacturing (D&M); and media and entertainment (M&E). Survey data has been broken down by global region: Asia-Pacific (APAC); Europe, Middle East, and Africa (EMEA); and the Americas (AMER). This is the third longitudinal year of this report series with data comparisons from the previous two reports.

What is Design and Make?

A convergence of technologies and methodologies in industries that produce digital and built assets over the past 40-plus years has resulted in a distinct category of work: Design and Make. Design and Make shapes the surrounding world, translating complex ideas into powerful experiences, whether it's transforming a sketch into a school, turning a concept into a

car, or making a myth into a movie. Globally, Design and Make employs, conservatively, 295.7 million people.¹

Before digitalization, much of this work took place in discrete, siloed phases, handed off from specialist to specialist. With the advent of digital workspaces and modeling tools, these phases have converged into a centralized way of working informed by data-driven insights. Today, teams collaborating on Design and Make projects see their work as part of a larger, interconnected process. Digital tools and standards make it easier to map interdependencies, refine processes, and democratize solutions.

For the professionals immersed in it every day, Design and Make is more than a way of working—it's a philosophy and a mindset. It represents a deep belief that every challenge and complexity can be overcome with the right tools and the right skill set. Designers and makers are optimists united by a shared drive to make a better world for all.

¹ [World Economic Forum, 2023](#)

Introduction

Leaders in Design and Make industries report that they are confronting daunting headwinds, from increased geopolitical uncertainty and inflation to talent gaps and challenges implementing emerging technologies like artificial intelligence (AI). But for the third year, digital transformation has proven to help Design and Make organizations identify opportunity amid disruption, providing benefits nearly across the board.

2025 State of Design & Make key findings

Leaders were clear on the challenges they are facing.

Cost control remains top of mind for organizations amid continued inflation and increasing supply-chain fragility. Implementation of AI and emerging technologies is the second most-cited challenge, one that is compounded by both cost and labor concerns. Talent remains a perennial problem, with nearly two-thirds of organizations experiencing a skills gap and the majority of companies saying lack of skilled talent is hindering growth.

Optimism about AI is down, and concern about its destabilizing effects is up among leaders in Design and Make as organizations struggle with implementation and finding practical use cases for the new technology. And, finally, global uncertainty is depleting organizational confidence and increasing feelings of unpreparedness.

Despite this uncertainty, business leaders in Design and Make are still feeling bullish in some areas as they identify opportunity amid disruption:

- Although overall investments are down year-over-year, more than two-thirds of leaders say they will increase overall future investments.
- Sustainability is experiencing a surge of optimism, with nearly all leaders saying their organizations are taking steps to be more sustainable. Sustainability also continues to be a key differentiator in talent acquisition.
- This year, AI solidified its place as the top sustainability enabler for Design and Make organizations, with applications from natural-disaster mitigation to project lifecycle management.

One standout finding this year is that most leaders surveyed say digital transformation efforts led to improvements at their organizations. The majority of organizations benefiting from digital transformation are seeing more than 50% improvements in categories such as customer satisfaction, innovation, and productivity. Digitally mature companies tend to invest more heavily in technology, and those investments are now paying outsize dividends during the current period of caution.

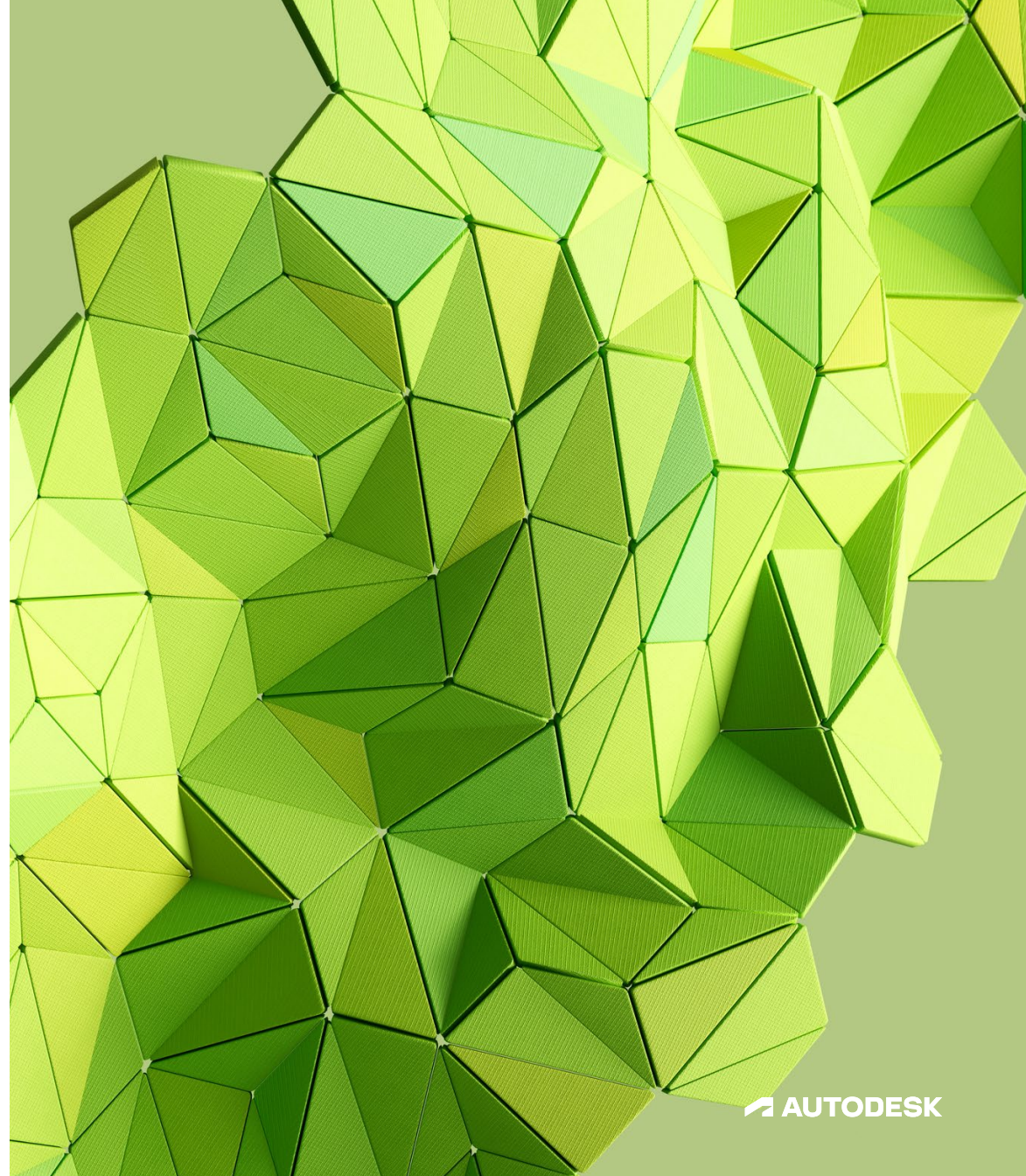
The digital maturity difference

In this report, “digitally mature” companies are defined as those that are approaching or have achieved the goal of their digital transformation journey. “Less digitally mature” companies are defined as those that are in the early stages or right in the middle of their digital transformation journey.

- Digitally mature organizations are 41% more likely to diversify their supply chains, and leaders at these organizations feel more prepared to handle unforeseen changes compared to less digitally mature companies, giving them an advantage when it comes to resilience.
- These organizations are also more likely to leverage internal data to gain a competitive edge, more quickly develop products and services, and complete projects faster than other companies.

- Digital maturity eases talent concerns, with a 22-point improvement in talent acquisition and retention from their technological advancement over less digitally mature organizations.
- Organizations that are digitally mature are more likely to enter new markets and increase investments into acquisitions, allowing them to expand while others are contracting.

There’s no question that leaders in Design and Make industries are confronting a challenging geopolitical and macroeconomic environment. But given the findings of the 2025 *State of Design & Make* survey, a resilience agenda centered on digital transformation can provide strong protection against uncertainty.



Digital transformation
efforts have an
overwhelmingly
positive impact

01

INSIGHT 1

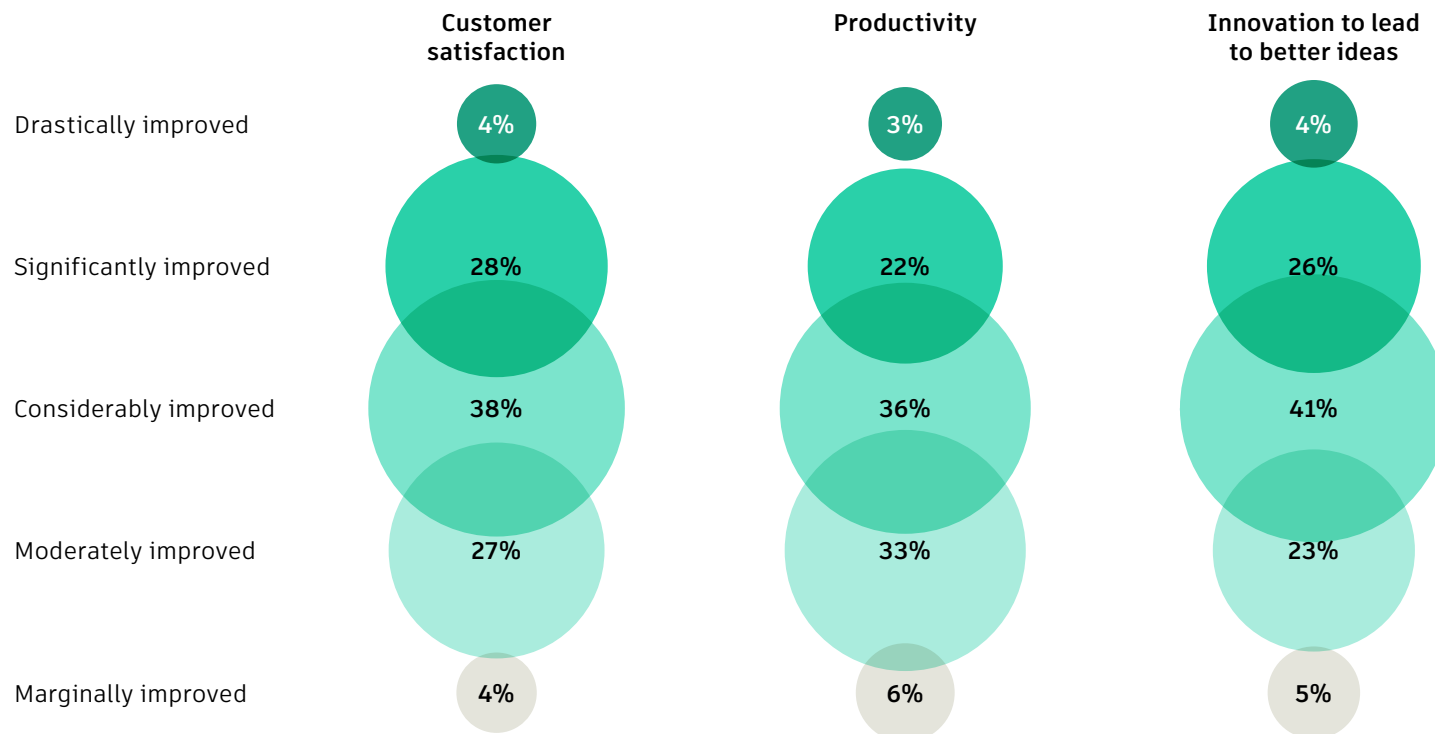
Implementation of new technology is a perennial challenge for leaders in Design and Make industries, but those who tackle the complexities of digital transformation are reaping the rewards of their efforts. In fact, most leaders surveyed for the 2025 *State of Design & Make* report have already realized a 50%-plus return on their digital transformation efforts through increases in innovation, productivity, and other categories.

50%+

return on investment from digital transformation

Digital transformation efforts have an overwhelmingly positive impact

Majority of organizations realize more than 50% ROI from digital transformation



Survey question: Has your company or organization experienced any of the following benefits of digital transformation? Select all that apply.
Followed by survey question: You selected [benefit] as a benefit of digital transformation. How much has digital transformation improved [benefit]?
Response scale: "Marginally," "Moderately, by 25%," "Considerably, by 50%," "Significantly, by 75%," and "Drastically, by 100%."

INSIGHT 1

Implementation of new technology is a perennial challenge for leaders in Design and Make industries, but those who tackle the complexities of digital transformation are reaping the rewards of their efforts. In fact, most leaders surveyed for the 2025 *State of Design & Make* report have already realized a 50%-plus return on their digital transformation efforts through increases in innovation, productivity, and other categories.

“Our digital transformation program today will create huge amounts of efficiency, allowing us to go 50% faster and 30% cheaper.”

NITESH ALAGH

Business Lead – Digital Engineering,
Sustainability & Emerging Tech,
Severn Trent Water, a water and wastewater
utility company headquartered in the UK

Digital maturity benefits the entire organization:

In this report, “digitally mature” companies are defined as those that are approaching the goal or have achieved the goal of their digital transformation journey. “Less digitally mature” companies are defined as those that are in the early stages or right in the middle of their digital transformation journey.

Respondents from digitally mature companies report they are ...

+30%

... more likely to have experienced “above average” or “exceptional” **performance**

+29%

... more likely to “agree” they **are prepared** for the future

+35%

... more likely to have “increased” or “strongly increased” **investment** in the past 3 years

+26%

... more likely to have kept up “very well” with **change in the industry**

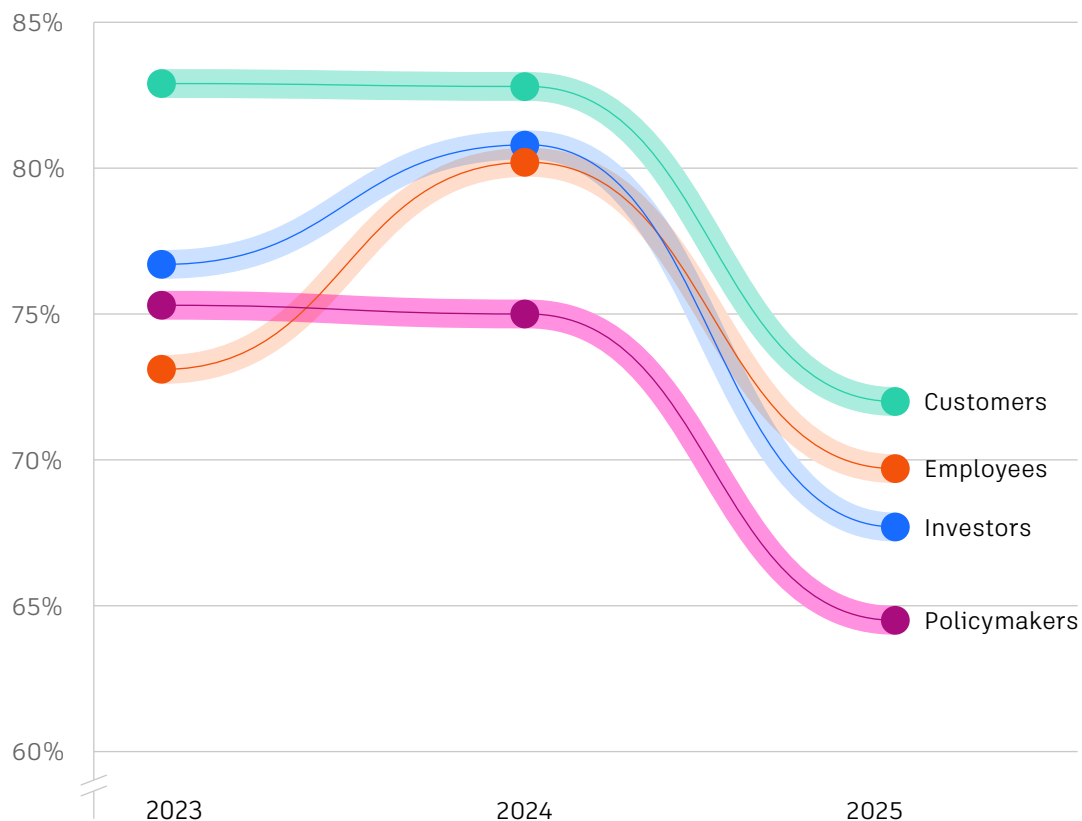
With results like these, less digitally mature organizations thinking about reducing their digital transformation investments in the next few years should reconsider. The benefits of digitalization are clear, and the longer organizations take to get up to speed, the greater the drag on their performance could be. While sometimes challenging, the long-term benefits of digital transformation far outweigh short-term struggles.

Sustainability transitions from pressure to profitability

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03

Stakeholder influence is in decline

Leaders have other reasons for sustainability initiatives



Survey question: How influential are the following groups in motivating your company or organization to create and meet sustainability goals? 5-point scale. Top two = influential.

The decline in stakeholder influence is universal across all groups, including customers, employees, investors, and policymakers. New to the survey this year as possible influencers are partners (70%), who rank the same as employees, and suppliers (65%), which are just above policymakers in the 2025 results.

Although the influence of stakeholder groups is down, sustainability efforts remain steady, with 95% of leaders reporting their organizations are making changes to be more sustainable. This suggests that organizations are starting to take the reins on sustainability initiatives by incorporating them into long-term strategy rather than allowing external influences to guide decisions.

Increasing awareness of the business value of sustainability has many leaders changing their perspective, seeing sustainability initiatives less as an obligation and more as an opportunity for greater performance. The number of executives globally who understand the business case for sustainability tripled between 2022 and 2023,² and the majority of 2025 State of Design & Make survey respondents say that sustainability is crucial for future business growth in the next three years.

This signals a shift in sentiment and priorities, driven by both the short- and long-term opportunities that sustainability can provide.

72%

of business leaders believe that sustainability measures can generate in excess of 5% of their annual revenue

² World Economic Forum, 2023



INSIGHT 2

At the heart of this perspective shift is the growing understanding that, while historically seen as a long-term revenue play, improving sustainability is also a good near-term strategy. This year, the gap between leaders who see sustainability as a short-term versus long-term strategy has narrowed to just 12%, signaling that sustainability is seen as good for business overall.

Digitally mature companies appear to be at an advantage when it comes to reaping sustainability benefits. Eighty-five percent of digitally mature organizations see long-term benefits from sustainability and 74% see short-term benefits, compared to just 67% and 53%, respectively, at less digitally mature organizations.

Sustainability efforts are also easing talent struggles at digitally mature companies, with 75% of leaders reporting their sustainability efforts help attract and retain talent, compared to 54% at less digitally mature companies. Industry interviews reinforce these findings, with leaders saying younger skilled workers want to join organizations that are both technologically advanced and committed to building a better future.

Leaders at digitally mature companies appear to be seeing the transformational potential of sustainability across their organizations—and are likely increasing their budgets to match. **Seventy-four percent of leaders say they will increase their investments in environmental sustainability,** compared to just 52% at less digitally mature companies.

AI solidifies its place as the top sustainability enabler

01
02
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04

INSIGHT 3

For the second year running, AI is the top sustainability enabler for Design and Make industries, with 39% of leaders saying they use AI to be more sustainable, more than any other action; this is up from 34% in 2024 and 26% in 2023.

With nearly all organizations taking steps to be more sustainable, many are turning to AI technology to help enable sustainable outcomes. For instance, in the design and manufacturing industries, where 80% of a product's environmental impact is influenced by decisions made at the design stage,³ AI is helping leaders think about sustainability from conception through production.

39%

of businesses have used AI
to be more sustainable

³ [Ellen MacArthur Foundation](#)

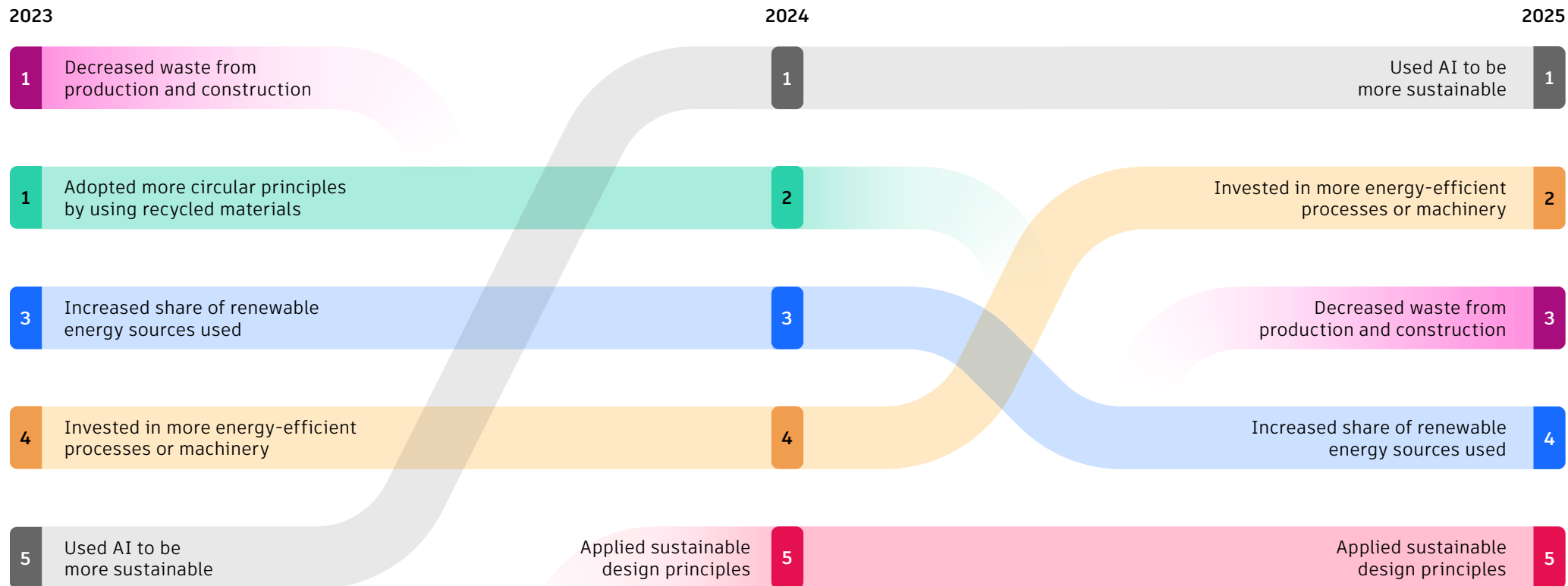
"AI holds incredible potential to transform how we predict and respond to challenges. While we, as an industry, are still on that journey, I am confident that our predictive capabilities will continue to evolve, enabling us to anticipate and address issues with greater precision. As climate-change mitigation efforts advance, they will bring a degree of much-needed certainty to the future. It's equally important that these advancements are reflected in regulator-set objectives, aligning innovation with actionable goals to drive tangible progress."

NITESH ALAGH

Business Lead – Digital Engineering, Sustainability & Emerging Tech, Severn Trent Water,
a water and wastewater utility company headquartered in the UK

The continuing integration of AI and sustainability

AI is the top sustainability enabler for the second year in a row



Survey question: What changes has your company or organization already made to be more sustainable?
Select all that apply. 12 response options.

The AI hype cycle meets reality

04

“We prefer technology that evolves with the industry—tools with AI features tend to offer smarter, more adaptive solutions, making them our go-to choice.”

AMARNATH PATNAM

Head – Design Technology, Sobha Realty,
a real estate developer headquartered in the UAE

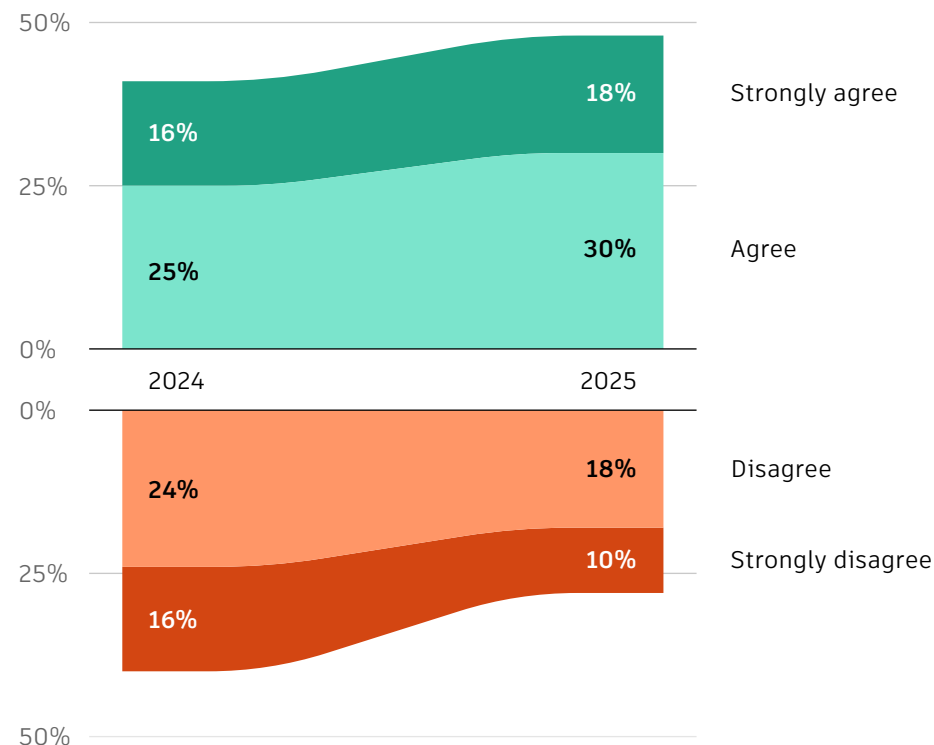
Nearly half (48%) of leaders and experts agree AI will destabilize their industry, up from 41% in 2024 and representing a 20% year-over-year increase. This indicates leaders are becoming more concerned about AI and emerging technologies as their implementation in their industry, and at their organizations, grows.

From the standpoint of digital maturity, there is a stark difference

in perceptions of disruption. Digitally mature companies are far more likely to say that AI will destabilize their industry (56%) compared to less digitally mature companies (40%). This makes sense when considering that digitally mature organizations would likely have more processes, systems, and workers impacted by AI implementation.

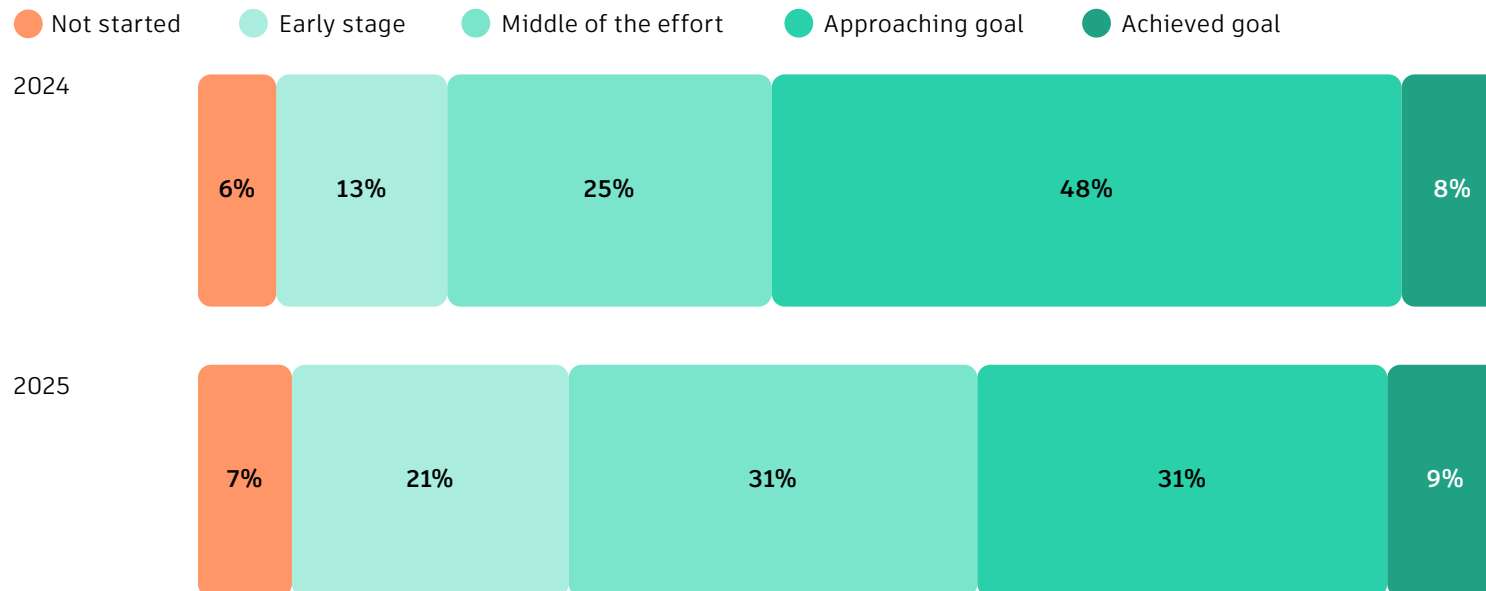
Concern about AI-related industry disruption is up

Nearly half of business leaders agree AI will be destabilizing



Survey question: When you think about artificial intelligence (AI) in your industry and company, to what extent do you agree or disagree with the following? AI will destabilize my industry. 5-point scale.

AI journeys adjust to reflect implementation realities



“AI is a subset of technology. It’s an enabler, not an end result. AI is there to help us drive our business forward and have tangible results. AI is not the end state. I think lots of people get excited about buzzwords. Some time ago, it was digital. Before that, it was cloud. Before that, maybe talking about BIM. To me, it is an all-encompassing improvement of efficiency for our delivery, especially in the engineering sector. I think the challenge is, as we become more used to it, the technology moves from a buzzword to business as usual.”

DR. MAX CLARK

Senior Vice President, EMEA
CTO & Sector Manager, Parsons,
a global engineering firm
headquartered in the United States

Survey question: Where is your company or organization in incorporating artificial intelligence (AI) technology?
5-point scale.

Cost, tech, and talent are top concerns

05

"I think our biggest issues now are cost and the new processes that we are trying to implement at the company."

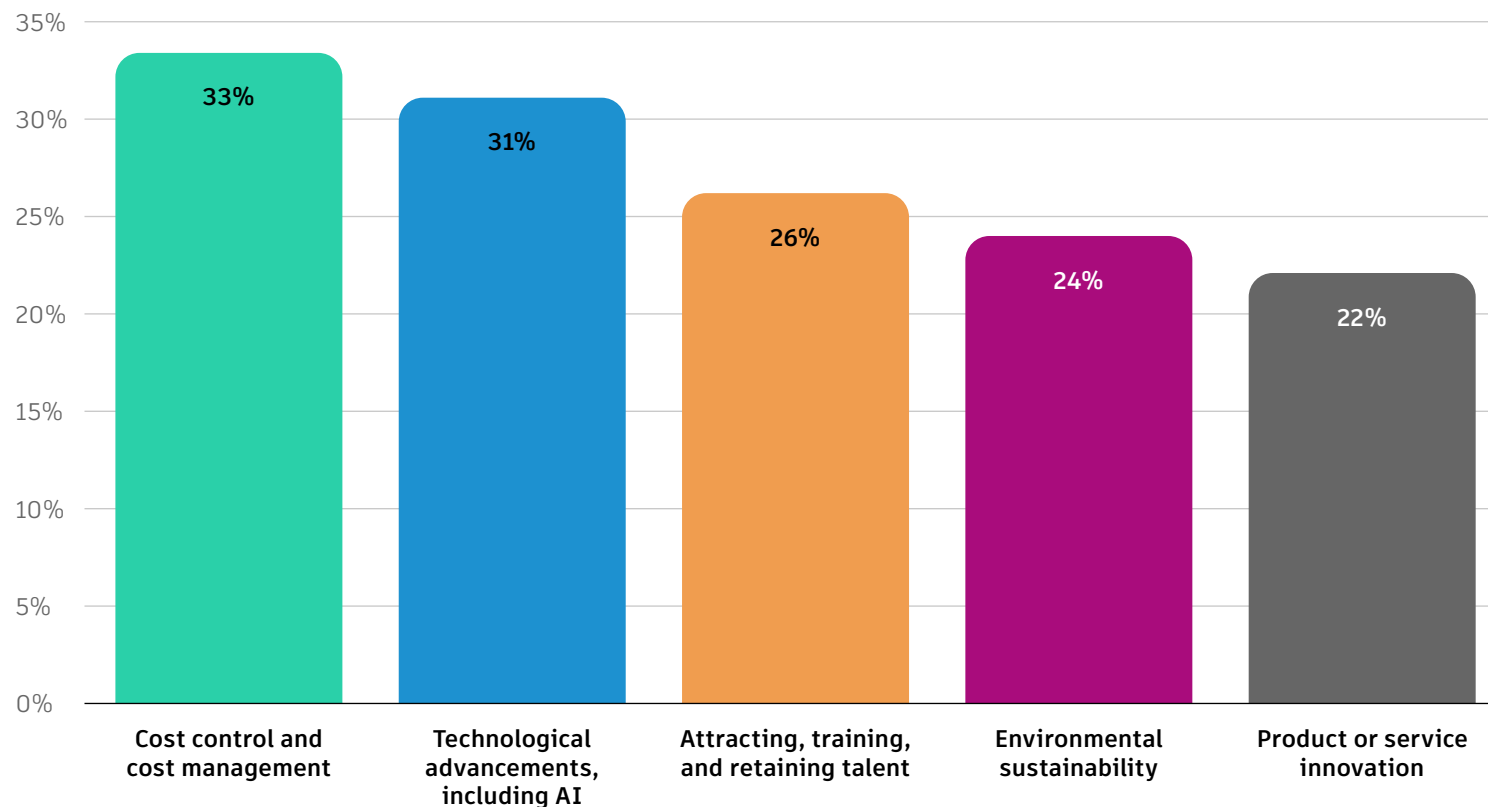
VINICIUS PRATA
Leader of the Power Generation
BIM Committee, Eletrobras,
an electric power generation
and transmission company
headquartered in Brazil

In the wake of a year of geopolitical and economic turmoil, continued inflation, and supply-chain fragility, it's not surprising that cost control is top of mind for leaders in Design and Make industries, with 33% citing it as their main business challenge.

Spending is down in nearly all categories, from technology to talent, as leaders hope to mitigate the continued challenges of a post-pandemic economy. This dip in future investments could compound both talent and technology troubles, as organizations will struggle to do more with less.

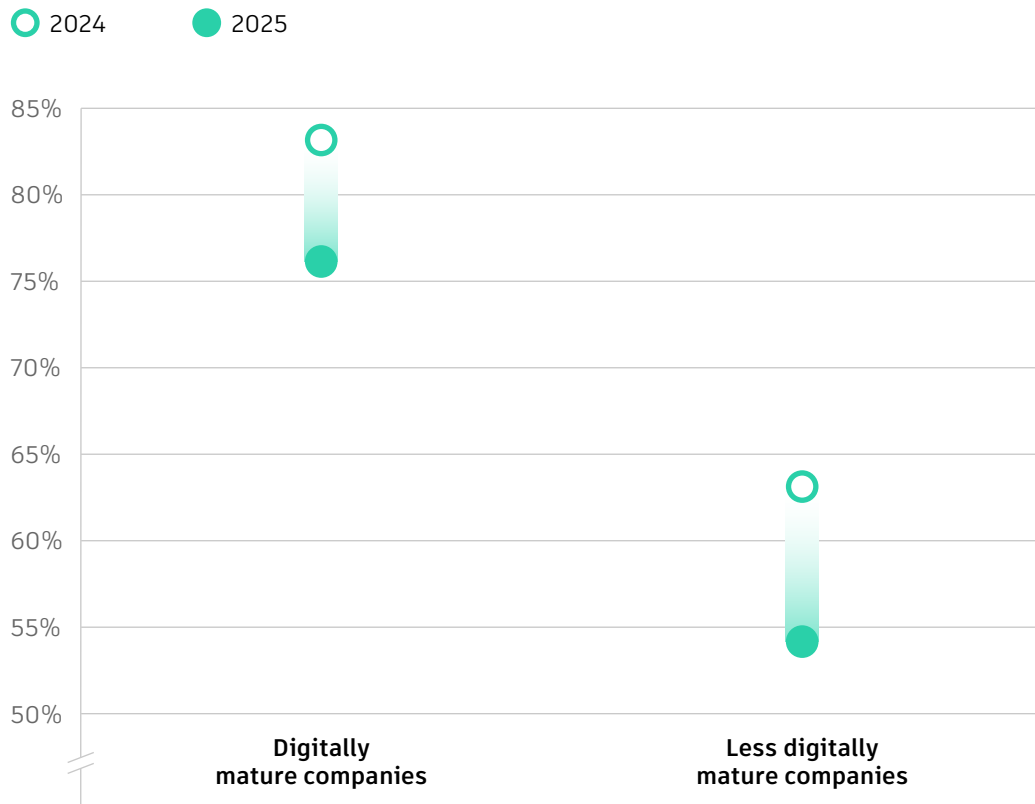
Cost control is the top global challenge

AI and other emerging technologies a close second



Survey question: What are the top three challenges your company or organization faces today?
Select up to three. 13 response options.

Digitally mature companies 41% more likely to diversify their supply chains



Percentage of respondents who agree to the statements: ...to be more resilient... My company is diversifying its supply chain. 5-point scale. Top two = agree. For the definition of digital maturity, see glossary.

“Over the past 30 years, China’s supply chain has become relatively mature and internationally well-identified. The current challenge lies in the fragility of overseas supply chains. For example, our factory in Malaysia faces significant challenges if it solely relies on non-Chinese supply chains. We are actively expanding new overseas supply chains to address these vulnerabilities.”

WEI FENG LU

Senior Vice President, Morimatsu International Holdings Company Ltd.,
a global manufacturing and solutions company headquartered in China

Supply-chain reliability continues to be a concern worldwide, with 49% of business leaders saying their supply chain is fragile due to geopolitical tensions, up from 45% in 2024.

Despite this increased fragility, there is a global, industry-wide decline in the percentage of leaders who say their organizations are diversifying their supply chains. This year saw an 11-point drop (to 65%) in the number of leaders saying their companies are diversifying their supply chains.

During interviews, leaders cited the cost of diversification, competing

demands within the organization, and the lack of alternative options to their current supply chain as ongoing struggles with supply-chain resilience.

But one additional and critical factor companies need to consider when it comes to supply-chain stability is digital maturity. Survey results this year revealed that digitally mature organizations were 41% more likely to diversify their supply chains—giving them a significant edge when it comes to resilience.

Leaders are cautious in the near term

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INSIGHT 6

This year saw a general cooling of sentiment across Design and Make industries, with the majority of business leaders feeling both more uncertain about the future and less prepared to handle unforeseen changes.

Sixty-five percent of leaders surveyed for this year's report agree that the global landscape is now more uncertain, a 10-point jump that represents a 19% increase year-over-year. Leaders are also less confident in their organization's ability to weather unforeseen obstacles, with just 61% saying they are well prepared, down from 73% in 2024.

This conflation of uncertainty and unpreparedness is having far-reaching impact across Design and Make industries. From a general reduction in spending to a decreased enthusiasm for new technologies, leaders are experiencing a lack of organizational confidence.

Leaders feel the future global landscape is more uncertain

+10 points
from 2024

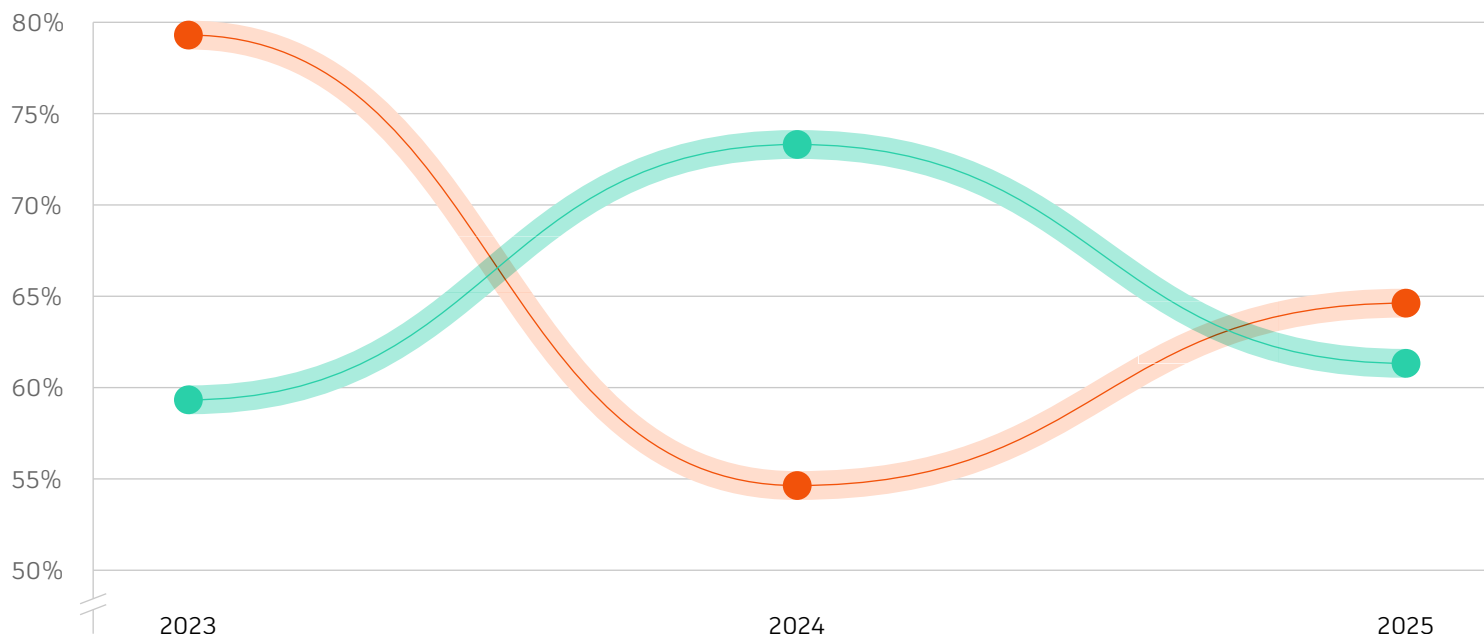
Leaders feel less prepared to handle unforeseen future changes

-12 points
from 2024

Leaders feel more uncertain about the future and less prepared to face it

Global uncertainty is affecting organizational confidence

- My company is well prepared to handle unforeseen future change
- The future global landscape feels more uncertain now than 3 years ago



Percentage of respondents who agree to statements: 1. My company is well prepared to handle unforeseen future macroeconomic and geopolitical changes.
2. The future global landscape feels more uncertain now than 3 years ago. 5-point scale. Top two = agree.

“We’re obviously concerned about the state of the world we’re in today, with multiple wars, geopolitical stresses, environmental issues, and how all this affects our region. There’s a lot of tension in the world right now, and as humans, of course, we do worry about this—this will affect us today as society and individuals—but also how this can potentially affect business and, more importantly, how this may affect the future of our children and future generations and so on.”

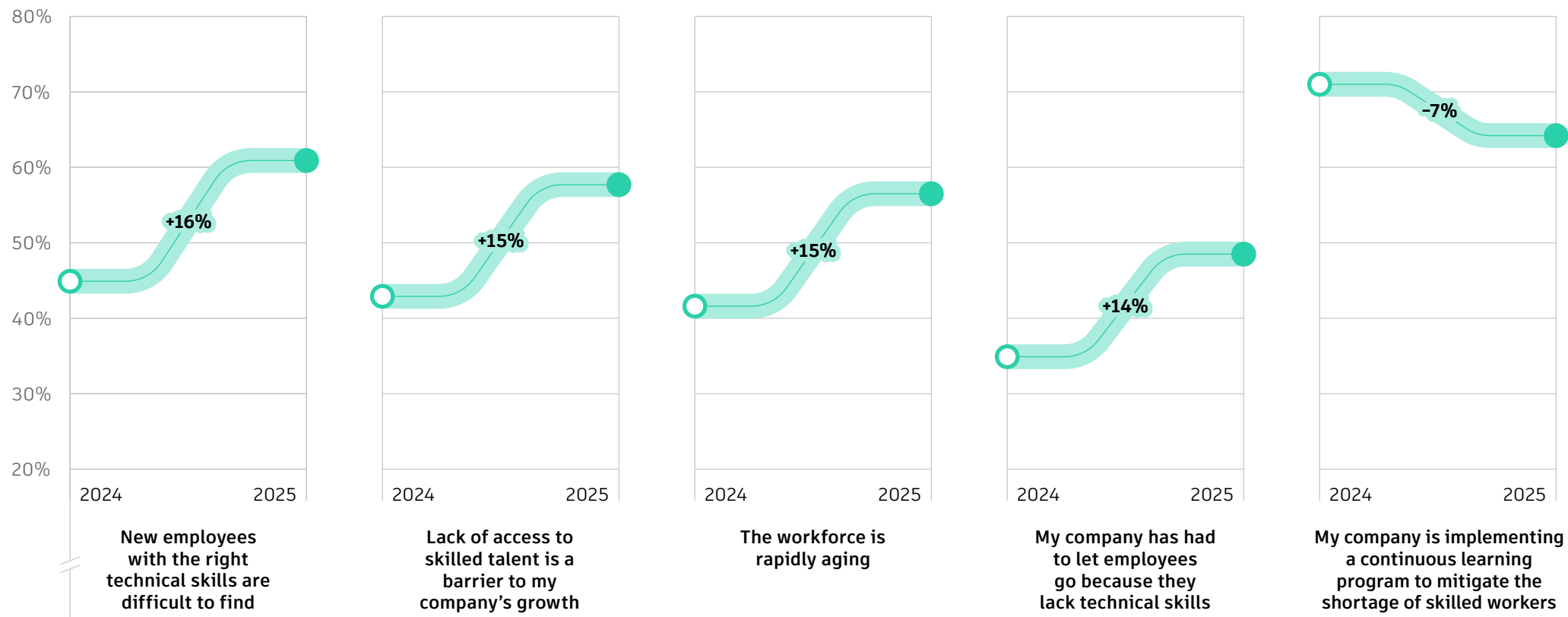
AMMAR AL ASSAM
CEO, Dewan Architects,
an architecture firm
headquartered in the UAE

The search for talent intensifies, with a focus on AI skills

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Nearly two-thirds of organizations are confronting a skills gap

36% year-over-year increase in leaders who say they struggle to find candidates with technical skills



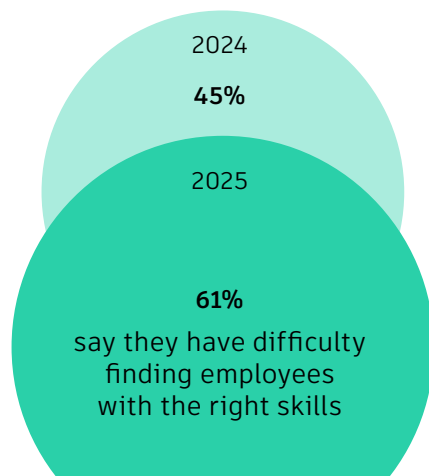
Percentage of respondents who agree to statements: 1. New employees with the right technical skills are difficult to find. 2. My company has had to let employees go because they lack technical skills. 3. Lack of access to skilled talent is a barrier to my company's growth. 4. The workforce is rapidly aging. 5. My company is implementing a continuous learning program to mitigate the shortage of skilled workers. 5-point scale. Top two = agree.

INSIGHT 7

Design and Make industries have struggled in recent years to find skilled talent, and this year, that struggle has become acute enough to hinder growth. Fifty-eight percent of business leaders say that lack of access to skilled talent is a barrier to their company's growth, up from 43% in 2024.

The skilled talent gap increased in nearly every country surveyed—in some cases, quite significantly. Germany, for example, saw an increase from 28% to 61% in the number of organizations saying skilled talent is difficult to find. In the Nordics, this number jumped from 18% to 51%, representing a 183% year-over-year increase.

When it comes to bridging and filling the skills gap, digitally mature companies are at a distinct advantage. Seventy-seven percent of digitally mature companies will invest more in digital training, compared to 59% of less digitally mature companies. They are also more



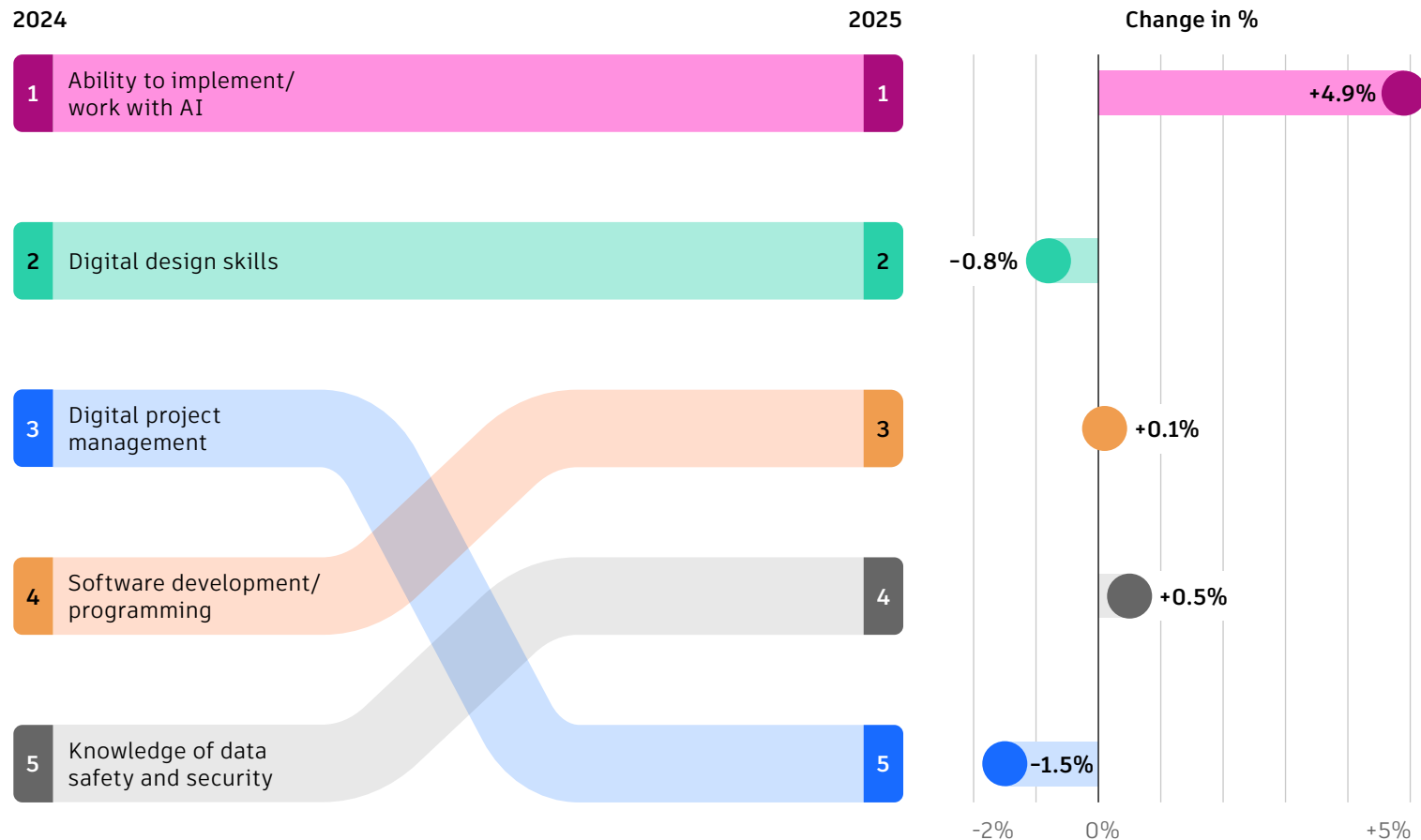
likely to implement continuous learning programs than less digitally mature companies, at 74% and 55%, respectively. Digitally mature companies also see a boost when it comes to talent. Twenty-seven percent of digitally mature companies report improved talent acquisition and retention as a benefit of digital transformation, compared to only 18% of less digitally mature companies.

"Finding the right talent is challenging. They have to know how to work with the software and have a technical understanding of the product we are designing. It can be very hard and very expensive to find people."

CHRISTIAN AHLERS

CAD Systems Administrator, Lindner Group, an interior construction specialist headquartered in Germany

AI skills top the list of future hiring priorities



Survey question: What technical or digital skills do you believe your company or organization will be prioritizing when hiring over the next 3 years?
Select all that apply. 12 response options.

Forty-six percent of leaders say the ability to work with AI will be their top priority when hiring in the next few years, up from 41% in 2024. This indicates that, despite a more cautious approach to the technology this year, leaders are still dedicated to integrating AI into their organizations.

At the industry level, utilities and telecom see the most need for AI skills, with 58% of leaders saying they are a priority. Considering this industry also sees AI and technology as its top challenge, it makes sense that leaders are prioritizing the tech skills that will ease implementation concerns.

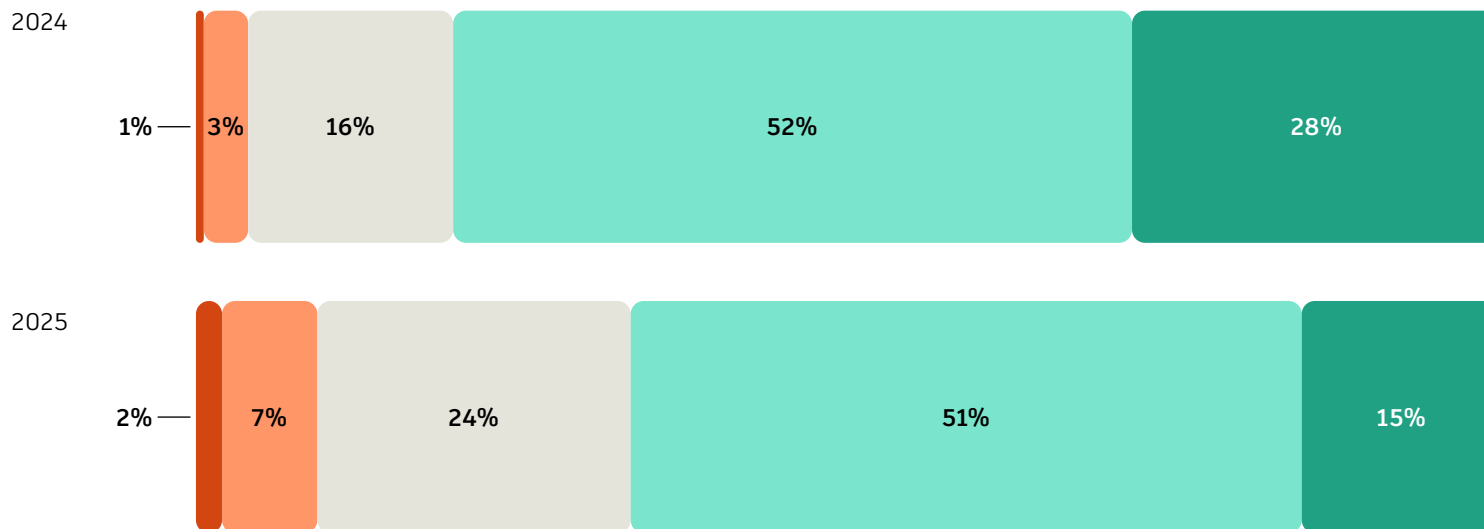
**Investments remain
strong but reflect
uncertainty**

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Future investments still robust

Two-thirds of organizations will increase their investments, down from 2024

● Strongly decrease ● Decrease ● Stay roughly the same ● Increase ● Strongly increase



"I think reduction in spending is due to the uncertainty of the economy. We want to focus on the things that we know we do well and not increase or introduce any new risk."

BLAINE BUENGER
Technology Director,
Infrastructure Solutions, Foth,
a science, engineering,
and technology company
headquartered in the United States

Survey question: How do you think your company or organization's level of investment will shift over the next 3 years?
5-point scale.

INSIGHT 8

“Companies are all preparing for tougher times ahead and are thus avoiding blind expansion. Resources are limited, and there is increased uncertainty, so it is common for businesses to scale back operations to maintain security. Additionally, market opportunities have decreased, leading to a lower success rate, which also causes investments to diminish. This is part of entering a cyclical downturn, and such reactions are normal.”

WEI FENG LU

Senior Vice President, Morimatsu International Holdings Company Ltd.,
a global manufacturing and solutions company headquartered in China

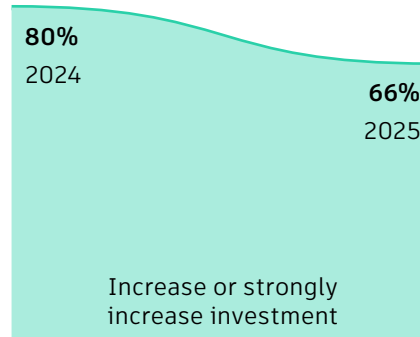
Future investment projections have fallen this year but are still robust: 66% of business leaders say their organizations will increase or strongly increase their investments over the next three years. While this reflects confidence in the future, this number is down from 80% in 2024, indicating that leaders are being more conservative in an uncertain geopolitical and macroeconomic environment.

However, digitally mature organizations are significantly more bullish on the future, with 80% of

leaders planning to increase future investments, compared to 53% at less digitally mature companies.

Further, future investments are higher at data-effective companies, where 86% of leaders say they will increase future investments. This indicates that organizations are seeing outsize benefits from their investments and that digital transformation efforts may have eased implementation challenges, resulting in long-term cost savings and productivity gains.

Businesses scale back investment plans



Conclusion

Regardless of recent headwinds, leaders in Design and Make industries are focused on solving today's problems with an eye toward future opportunity. While cautious in the near term, leaders who want to gain a competitive edge need to think about the long-term benefits of investing in digital transformation now—and the implications that falling behind could have across the organization.

Methodology

For the 2025 report, Autodesk surveyed and interviewed 5,594 industry leaders, futurists, and experts in the architecture, engineering, construction, and operations; product design and manufacturing; and media and entertainment industries from countries around the globe. This report contains key findings from this research, including details at the sector and regional level.

The quantitative data (n=5,560) was collected between May and August 2024 through a 20-minute online survey.⁴ Autodesk partnered with Qualtrics for the collection of this data. In addition, 34 qualitative interviews with business leaders and futurists were conducted in October and November 2024.

68%

of survey participants are decision-makers in their companies

11 years

is the average time of experience in their industry

34%

of respondents said that they primarily use Autodesk Design and Make software

⁴ 2025 State of Design & Make questionnaire

About Autodesk

Autodesk is changing how the world is designed and made. Its technology spans architecture, engineering, construction, product design, manufacturing, and media and entertainment, empowering innovators everywhere to solve challenges big and small. From greener buildings to smarter products to more mesmerizing blockbusters, Autodesk software helps customers design and make a better world for all. For more information, visit autodesk.com or follow @autodesk on social media.

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