

# 2024 Industrial Technology Officers Organization Survey



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# A message from the authors

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Welcome to our first annual *Industrial Technology Officers Organization Survey*. For this report, Heidrick & Struggles compiled data from a survey of 57 senior-level executives in industrial technology companies around the world, with respondents primarily in the United States and Germany. We hope to expand the regional scope in future reports.

We hope you enjoy reading the report. As always, suggestions are welcome, so please feel free to contact us—or your Heidrick & Struggles representative—with questions and comments.

With warmest regards,



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## Methodology

In an online survey fielded in the summer of 2024, we asked participants to provide information on their demographics, role, and organization. All data collected was self-reported by the survey respondents and has been aggregated.

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## On confidentiality

The industrial technology officers organization trends survey, 2024, was conducted on an anonymous basis.

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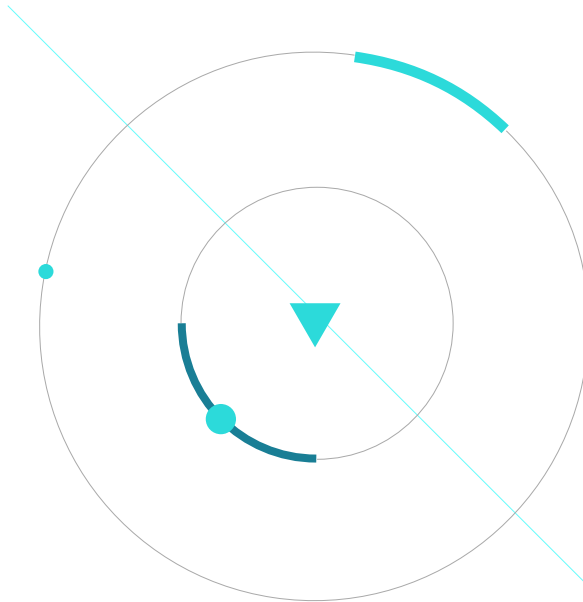
# Introduction

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The next phase of the Fourth Industrial Revolution is well underway at companies around the world: a people-driven, tech-powered transformation of business operations—and growth.

Companies at the forefront of this change are cognizant of the fact that technology alone—even artificial intelligence technology—won't get them to a better state. They must have the right leadership in place, those who understand where operational improvements are needed and who can implement change in a timely fashion.

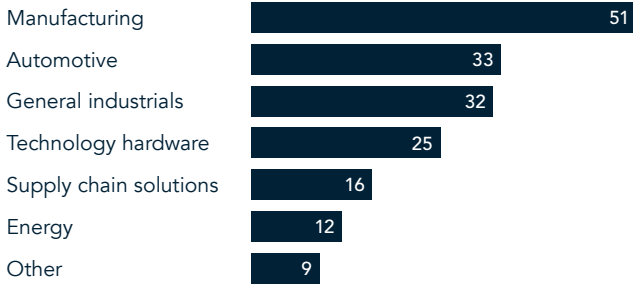
To understand the journey of industrial organizations seeking to make this step change, Heidrick & Struggles recently surveyed leaders from industrial technology companies, primarily in Germany and the United States. The executives who were surveyed do not see their organizations as laggards, for the most part: nearly half say they are about as advanced in their industrial transformation as their peers.



# Respondent role and company information

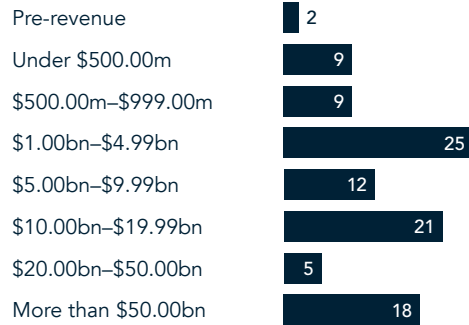
## Company information (%)

### Industrial area



Note: Respondents could choose more than one area.

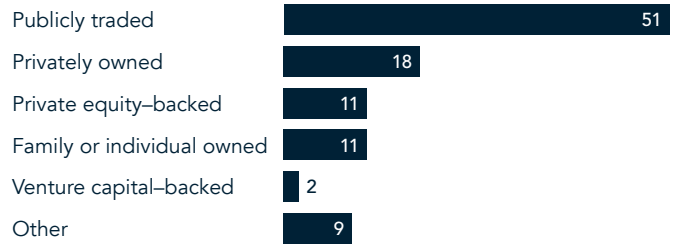
### Annual revenue



### Company headquarters



### Ownership structure



Note: Numbers may not sum to 100%, because of rounding.

Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=57

## Current role information (%)

### In which function is your role?



Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=57

### What is your role in your company's industrial tech transformation?



Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=55

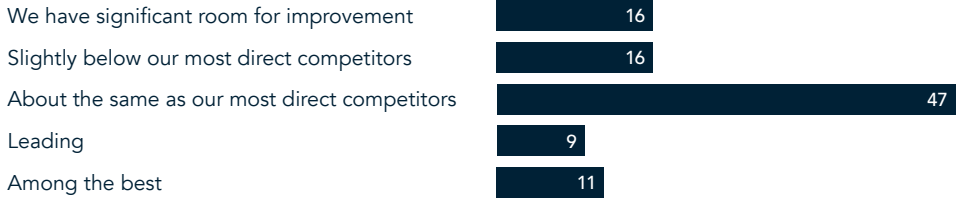
# Putting operational efficiency first

While artificial intelligence (AI) seems to dominate the headlines and conference agendas, integrating AI solutions is not the top current goal for the implementation of industrial tech. Instead, companies are emphasizing using technology to drive operational efficiency and sustainability.

The hard supply chain lessons learned during the Covid-19 pandemic remain top of mind, executives indicate. Companies are keen to use the operational improvements industrial technology can deliver to ensure they are better prepared for any disruption. The concern for sustainability, meanwhile, signals a clear understanding that, while transformation may be framed as a shift toward digital tools and processes, industrial companies remain large consumers of water, power, heating, and cooling, all costs and resource usages that are increasingly under scrutiny.

## Company's current industrial tech transformation (%)

How advanced is your company's industrial tech transformation compared to peers?



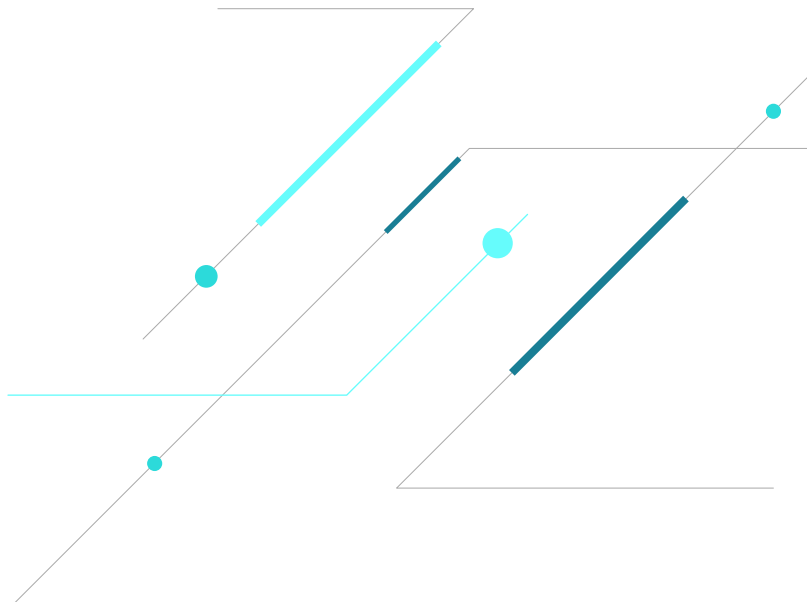
Note: Numbers may not sum to 100%, because of rounding.

## What are the top goals for your company's industrial tech transformation?



Note: Respondents could select up to two goals.

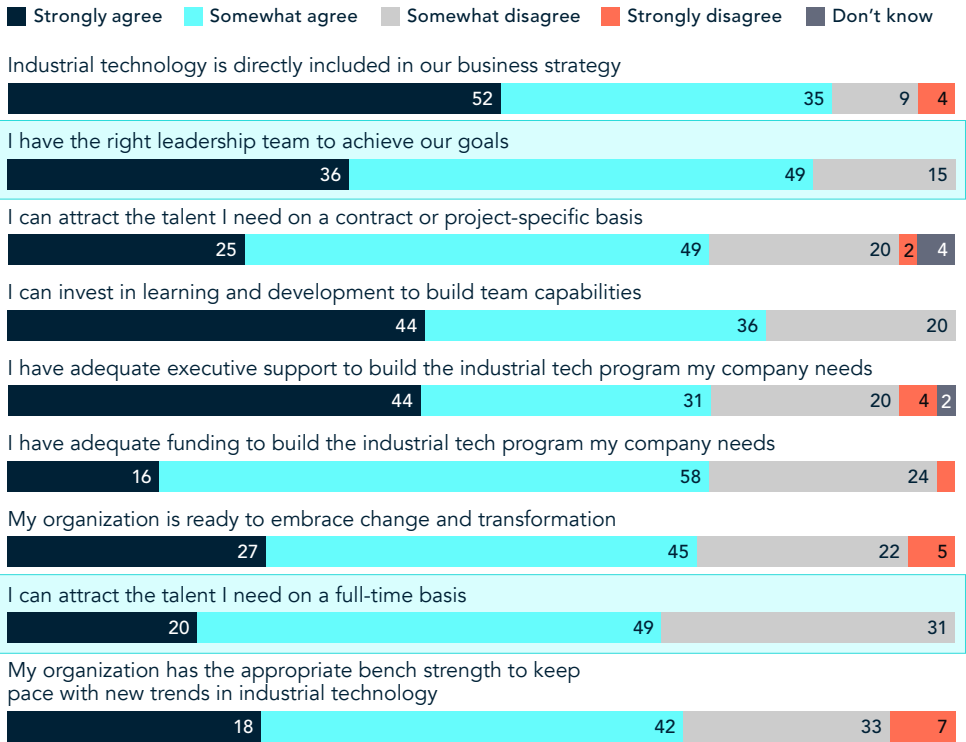
Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=55



# Evolving talent needs

A majority of the executives we surveyed felt that they had a strong team around them to drive transformation and that they can now attract the talent they need on a contract, project, or full-time basis.

## General attitudes regarding industrial tech transformation (%)

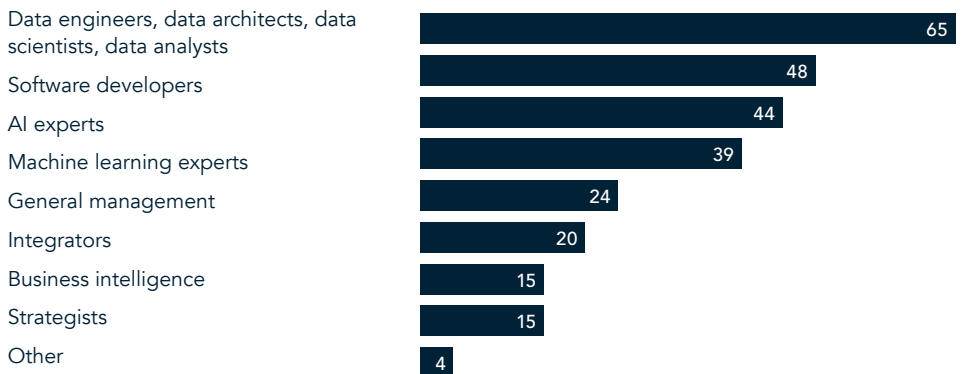


Note: Numbers may not sum to 100%, because of rounding.  
 Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=55

When survey respondents were asked to identify the roles that they are prioritizing, they pointed to data engineers, software developers, machine learning experts, and AI experts. Sixty-five percent are prioritizing the hiring of people from across the data field: engineers, architects, scientists, and analysts. Business intelligence experts and strategists have fallen to the bottom of the needs.

## Talent considerations: Target roles and functions (%)

### Prioritized roles/functions

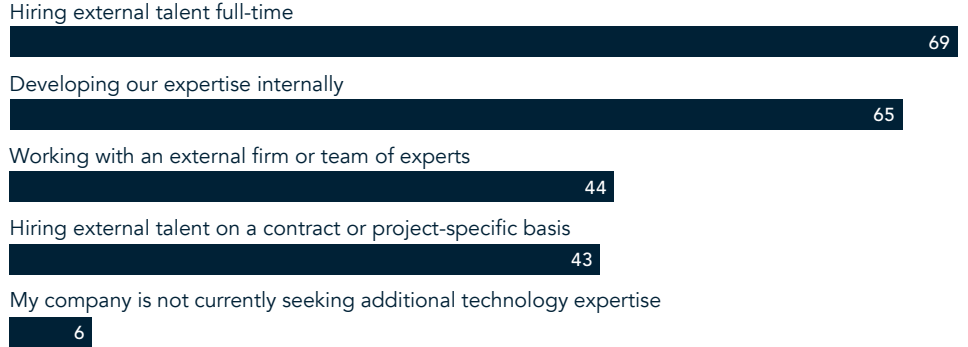


Note: Respondents could choose more than one role/function.  
 Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

Respondents to the survey most often said that their companies are finding additional expertise by hiring external talent full-time, followed by developing expertise internally.

**Talent considerations: Additional expertise (%)**

**How is your company seeking additional expertise?**



Note: Respondents could choose more than one answer.  
 Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

Respondents are concerned about future talent. Forty percent expressed concern about their bench strength, and a notable 83% are concerned with their current level of recruitment and retention, pointing to a lack of preparation for the future.

**Talent considerations: Recruitment and retention (%)**

**How big a risk is your company's current level of recruitment/retention?**



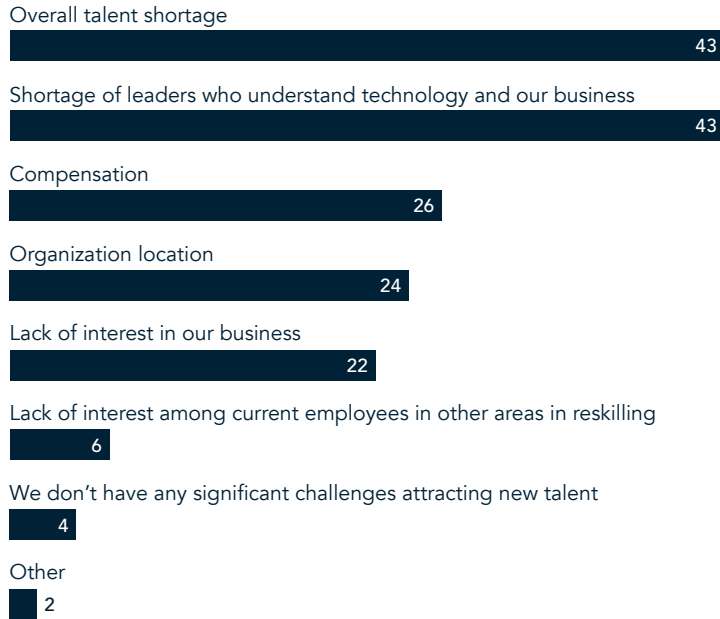
Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54



Asked for the greatest challenge in attracting new talent, 43% said there is a shortage of leaders who understand both technology and business.<sup>1</sup> Top executives in industrial tech companies today must have a balance of hardware and software experience. They must understand the impact of these two types of technologies on the bottom line, communicate the benefits to others, and influence them to adopt these technologies in their areas of responsibility.

**Talent considerations: Challenges in attracting and retaining talent (%)**

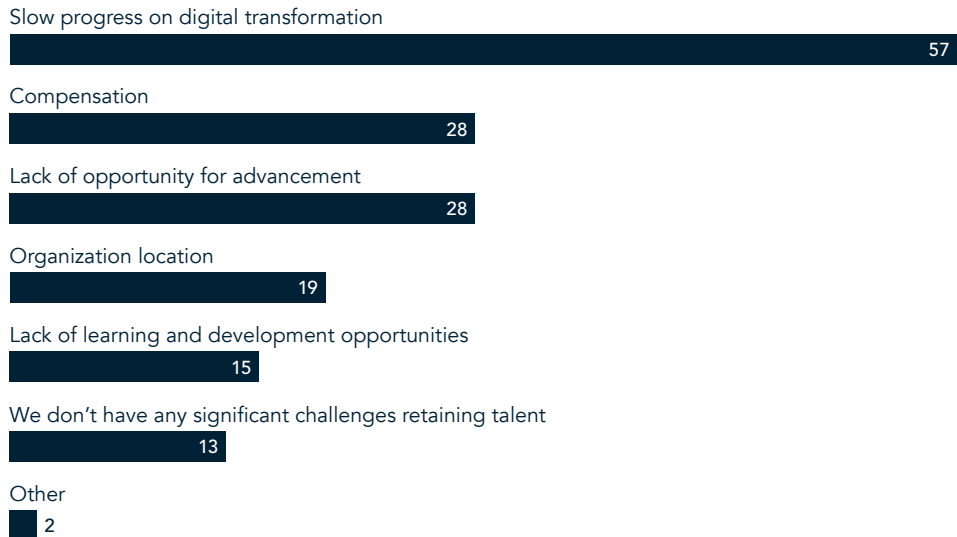
**Attracting new talent**



Note: Respondents could select up to two answers.

The rate of transformation is also a factor in retaining talent. Fifty-seven percent of respondents said that slow progress on digital transformation is affecting their ability to hold on to good people, compared to 28% who said that compensation was an issue. There is clearly a demand for talent, and organizations are finding that employees want to be associated with leading-edge organizations.

**Retaining current talent**



Note: Respondents could select up to two answers.

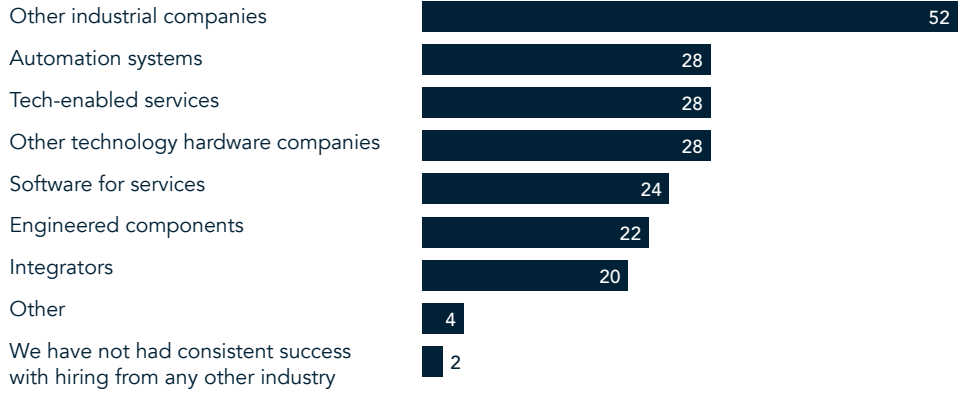
Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

<sup>1</sup> This is similar to concerns we have seen in the results of our surveys of leaders across functions regarding the use of AI—across functions, a top-five challenge leaders cited in building AI expertise was limited availability of leaders who can combine AI and business expertise. For more, see "How functional leaders are using AI—and barriers to progress," Heidrick & Struggles, heidrick.com.

So where are companies finding the industrial tech leaders they're hiring? Companies are mostly looking in other industrial companies—that is, among their counterparts. Only 28% are looking beyond their sector to industries such as automation systems, tech-enabled services, or technology hardware companies. Fewer still are looking to software companies or engineered components and integrators. This kind of self-imposed constraint is not limited to industrial technology companies; many economic sectors stay resolutely within their own worlds and do not look to see what talent could be redirected from other quarters.

**Talent considerations: Target industries (%)**

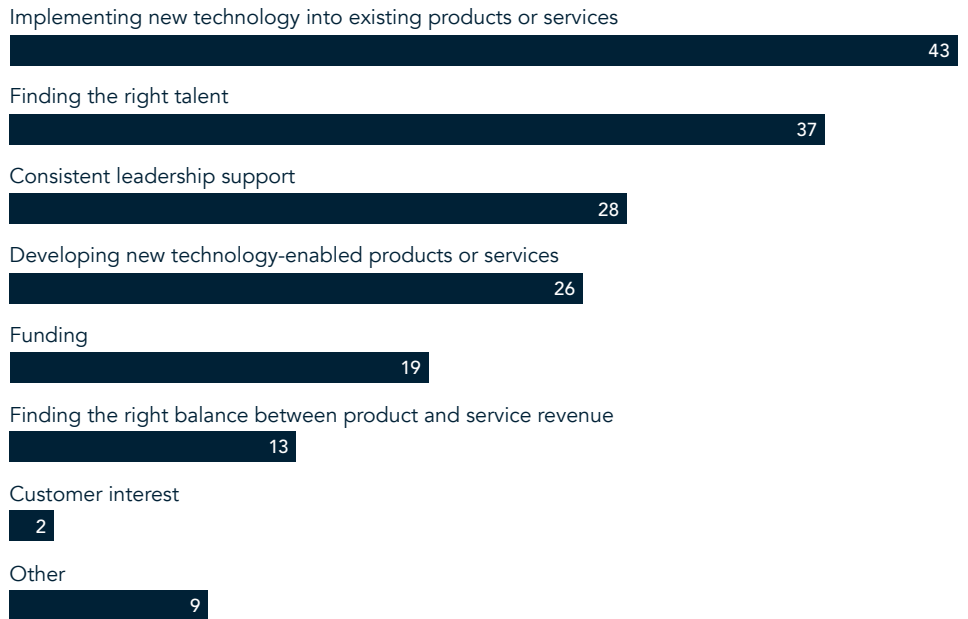
**Industries where talent is typically found**



Note: Respondents could choose more than one industry.  
Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

However, some respondents suggest that branching out to find the right technical talent could help them address the challenges they face in their transformations. Forty-three percent said incorporating new technology into existing products or services is a barrier to transformation, while 26% pointed to the difficulty of developing new technology-enabled products or services.

**What have been the biggest barriers in the transformation process? (%)**



Note: Respondents could select up to two answers.  
Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

# Reserving space for AI

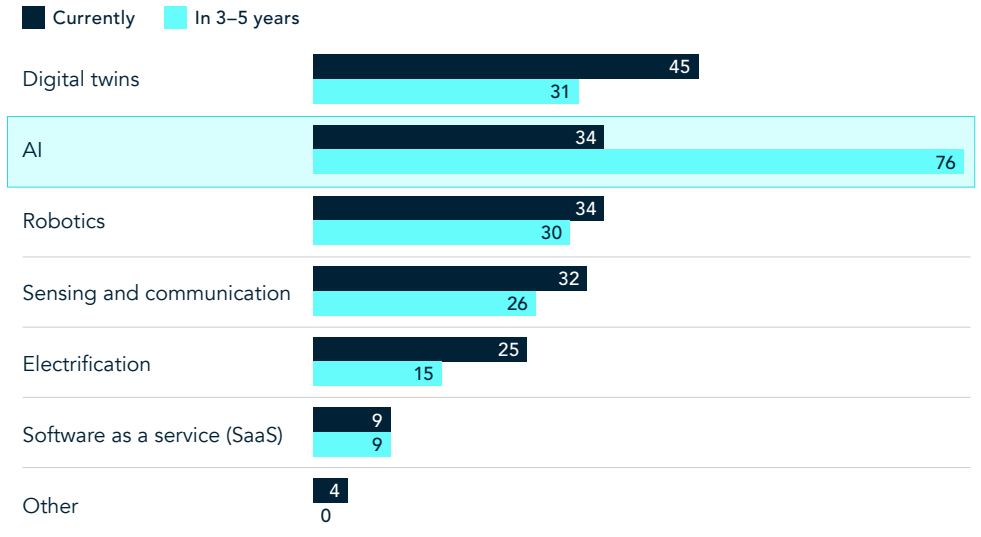
Integrating artificial intelligence may not be the top goal for industrial transformation now, but AI is very much on the minds of the leaders we surveyed. While 34% said their companies are already working with AI, 76% expect it to have a significant impact on their business in the next three to five years.

No other technology is expected to have that prominence, and some that are in high usage now, such as digital twins,<sup>2</sup> are seen as likely to decline. Forty-five percent of respondents said their companies now use digital twins; in the next three to five years, only 31% expect the technology to have a significant impact on business.

By reserving space for AI in their operations in three to five years' time, leaders suggest they may have learned from earlier waves of investment in what seemed to be promising technologies but which ultimately didn't deliver. With AI, leaders may be giving the technology time to shake off some of its early bugs and missteps—and better quantify its benefits.

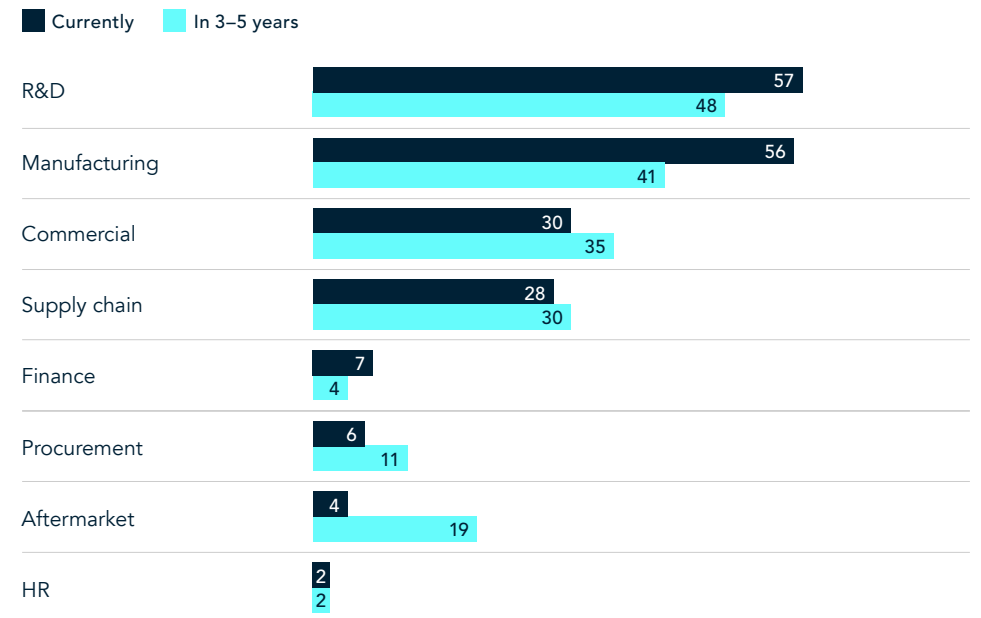
It is also worth noting another rising priority uncovered by our survey: the aftermarket. Currently, just 4% of respondents said that industrial technology has an impact on the aftermarket. But in three to five years' time, they see that rising to 19%. It is likely that, once companies have identified their most successful new products, they will also see ways to gain additional revenue from aftermarket sales and service.

## Which of the following technologies are you currently working with most? Which do you expect to have the most significant impact on your business 3–5 years from now? (%)



Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

## In which of the following functions at your company does industrial technology currently have the greatest impact? In which do you expect industrial technology to have the greatest impact in 3–5 years?



Source: Heidrick & Struggles' industrial technology officers organization trends survey, 2024, n=54

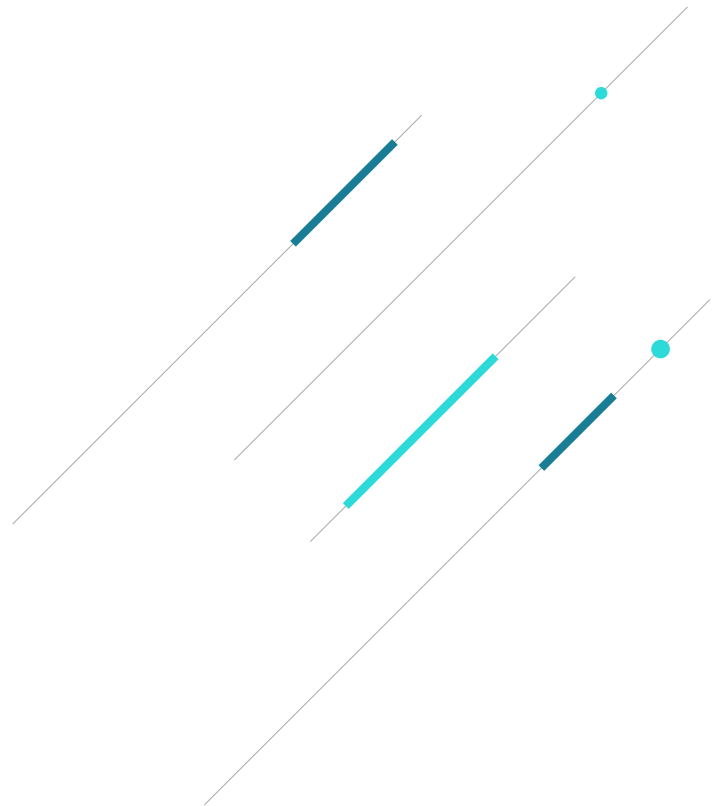
<sup>2</sup> Computer-simulated models of products and systems that can make it easier to monitor and maintain the real versions of these things.

# Steeling themselves for the future

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No matter how advanced they consider their companies to be in their transformation, the leaders we surveyed know their companies must do even more to remain competitive in the future. That will take technology, to be sure, and that technology will have to prove its worth.

But, as with previous industrial revolutions, there is a human element to consider, and that could be challenging. Companies need people who are comfortable working with industrial technology to a greater extent than ever before, and that includes both first-line managers and C-suite executives. To be leaders in the industrial technology transformation ahead, companies will need to focus their efforts to find and grow the right talent.



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# Industrial Practice

**Heidrick & Struggles' Industrial Practice helps industrial companies identify and recruit the leaders they need to succeed in this diverse sector.**

Leading industrial companies need innovative global leaders who possess the strategic, operating, and financial skills required to win in this complex environment. They need commercially focused leaders who can develop distinctive value-added solutions. And, above all, they need leaders who have the ability to make both an immediate impact and a long-term contribution.

Our Industrial Practice experts combine unparalleled search resources with a deeply consultative approach, developing the ideal candidate profile based on each client's unique competitive challenges, business objectives, and leadership culture.

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