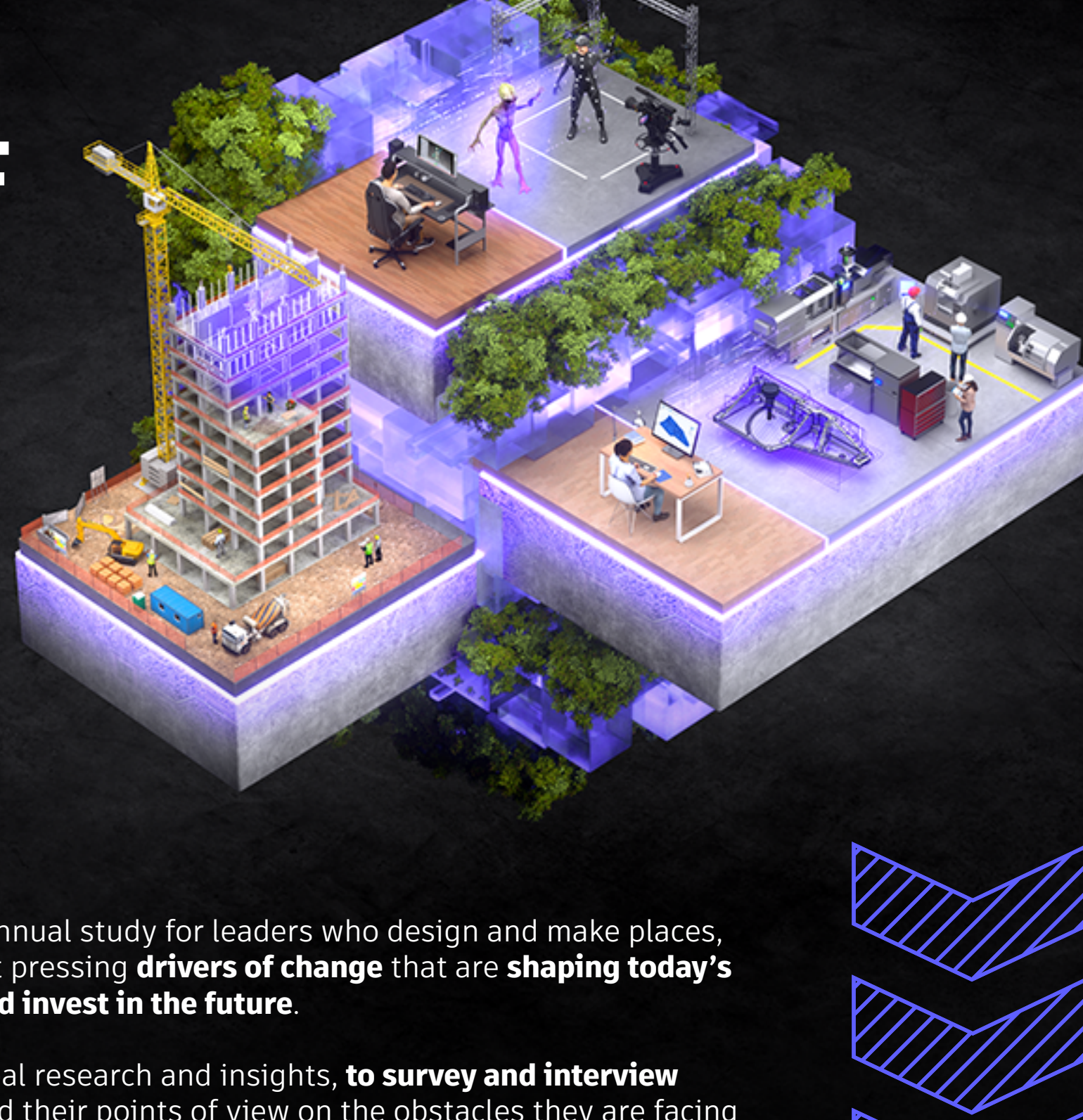


# 2023 STATE OF DESIGN & MAKE

## Design and Manufacturing (D&M) Summary

Leaders in manufacturing industries give us insights into their biggest business challenges and opportunities.



The **State of Design & Make** report is a global, annual study for leaders who design and make places, products, and experiences. It identifies the most pressing **drivers of change** that are **shaping today's business decisions** to help leaders **prioritize and invest in the future**.

**Autodesk partnered with Ipsos**, a leader in global research and insights, to **survey and interview 2,565 leaders, futurists, and experts** who shared their points of view on the obstacles they are facing and opportunities they are identifying.

Read the full **State of Design & Make** report—including all glossary terms and research insights

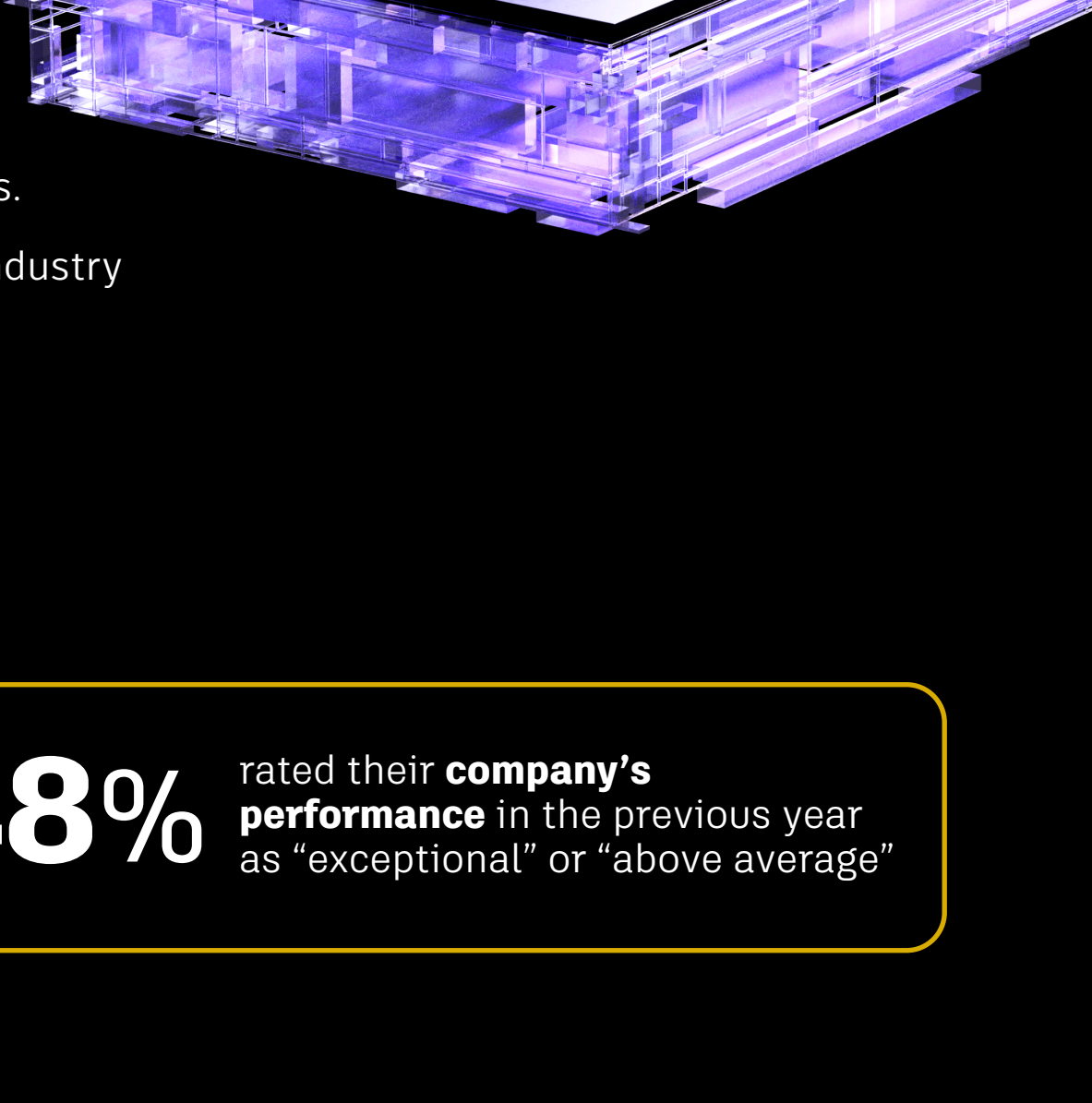
## BUSINESS RESILIENCE EMERGES AMID UNCERTAINTY

### Cross-industry summary

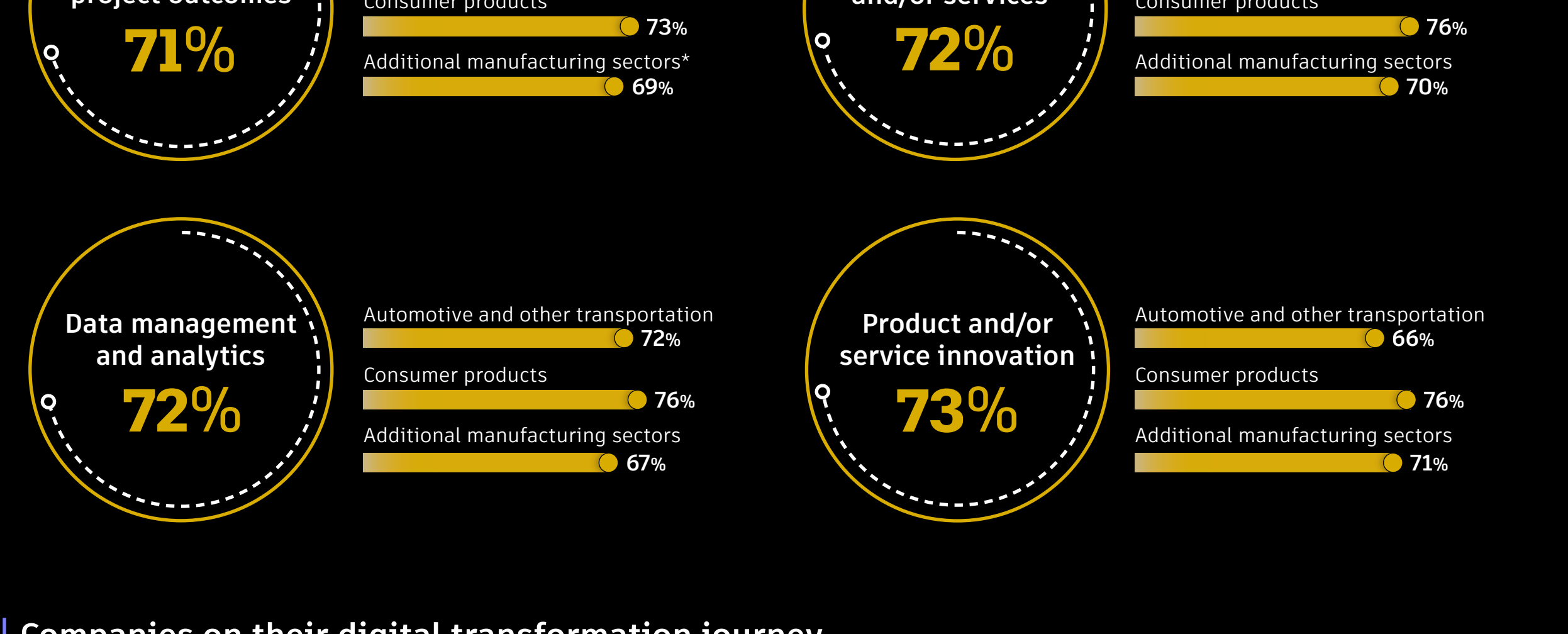
Business leaders and experts across industries reported that the **future global landscape feels more uncertain** than it did three years ago. However, most also said that their **companies are prepared to respond to this uncertainty**.

A company's digital maturity made a big difference in this. Respondents who identified their company as being **more digitally mature** said they are prepared to **handle change at higher rates** than those from less digitally mature companies. More digitally mature companies were also planning on **increasing investments** in the next three years at higher rates.

Those whose companies are keeping up with the pace of change in their industry are more likely to say their organizations have plans to increase existing services, offer new services, and potentially expand into new markets.

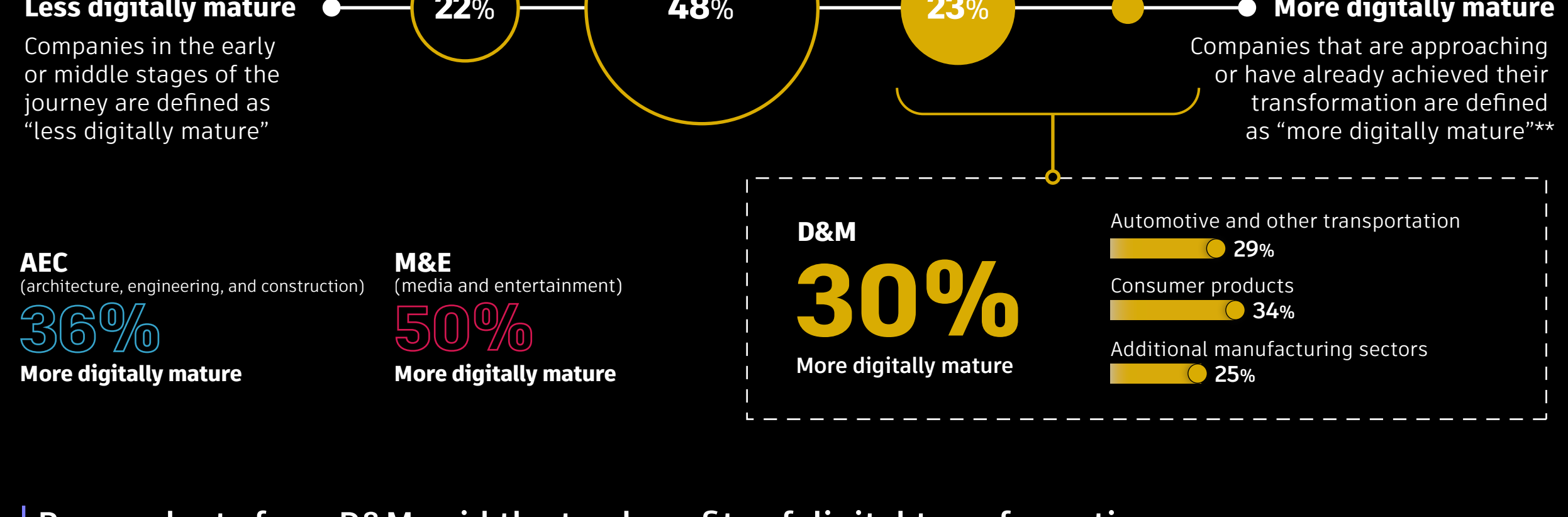


Over the next three years, respondents in D&M industries said the **top areas** for increased investment are:

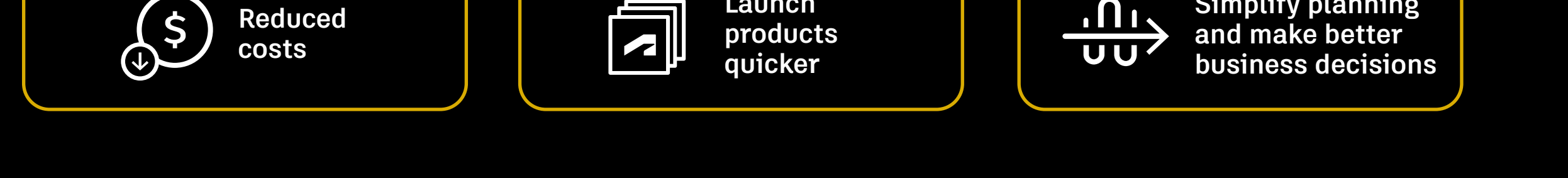


### Companies on their digital transformation journey

Digital transformation is defined as "the digital conversion between data and processes." Companies were asked where they see themselves on this journey. **Respondents in D&M were less likely, compared to other industries, to say their organizations are "more digitally mature."**



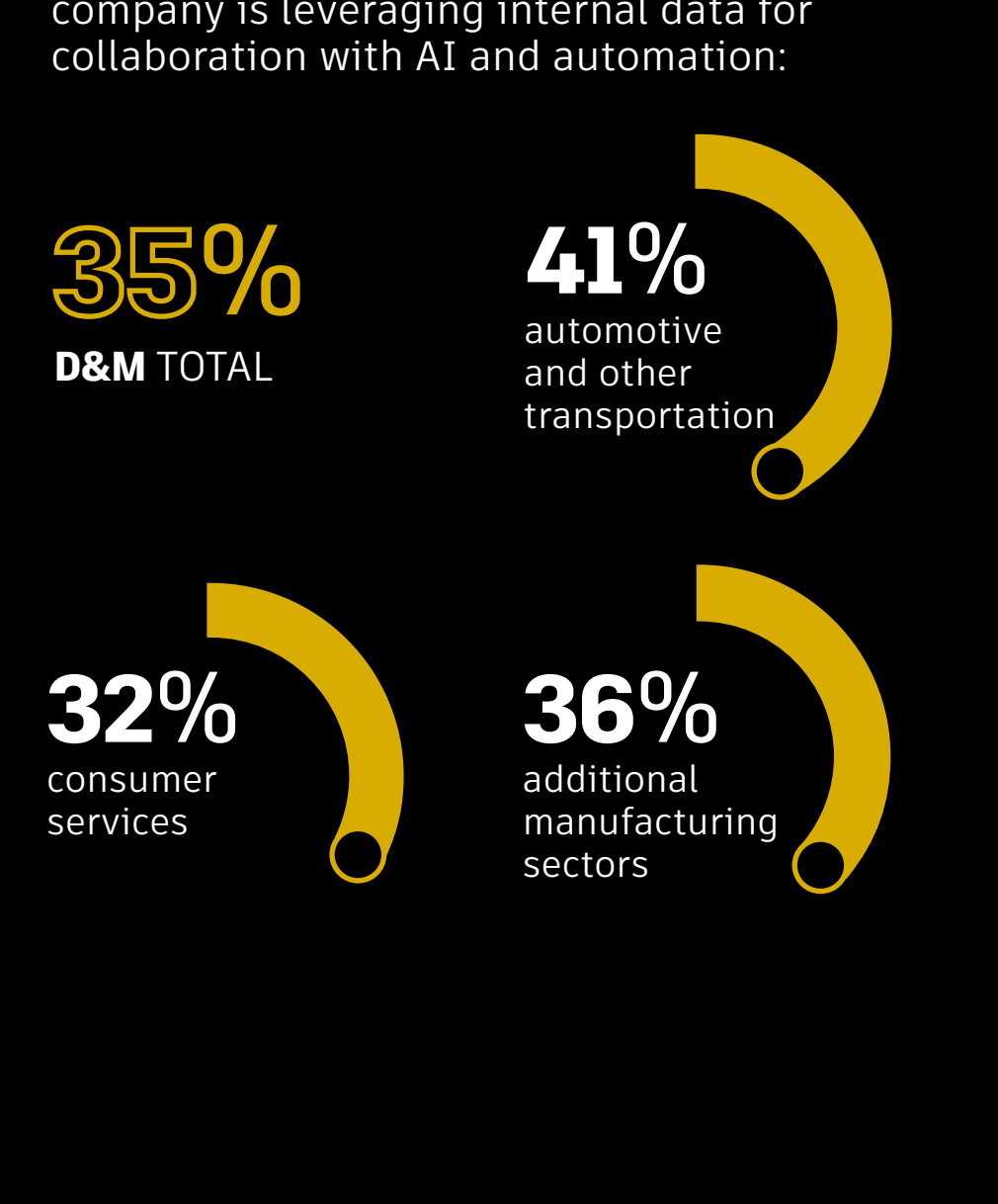
### Respondents from D&M said the top benefits of digital transformation are:



### In response to the pandemic:



### Leveraging data:



Over the next three years, the manufacturing industry needs to **prioritize trade skill development and supply chain diversification**. Widening the supply chain by supporting more raw materials suppliers and regional hubs that fabricate critical components will create more competition in the market, business opportunities, and jobs. It will also ensure that the industry will still be functional if there are supply chain disruptions."

Samantha Snabes, Co-founder, re:3D Inc

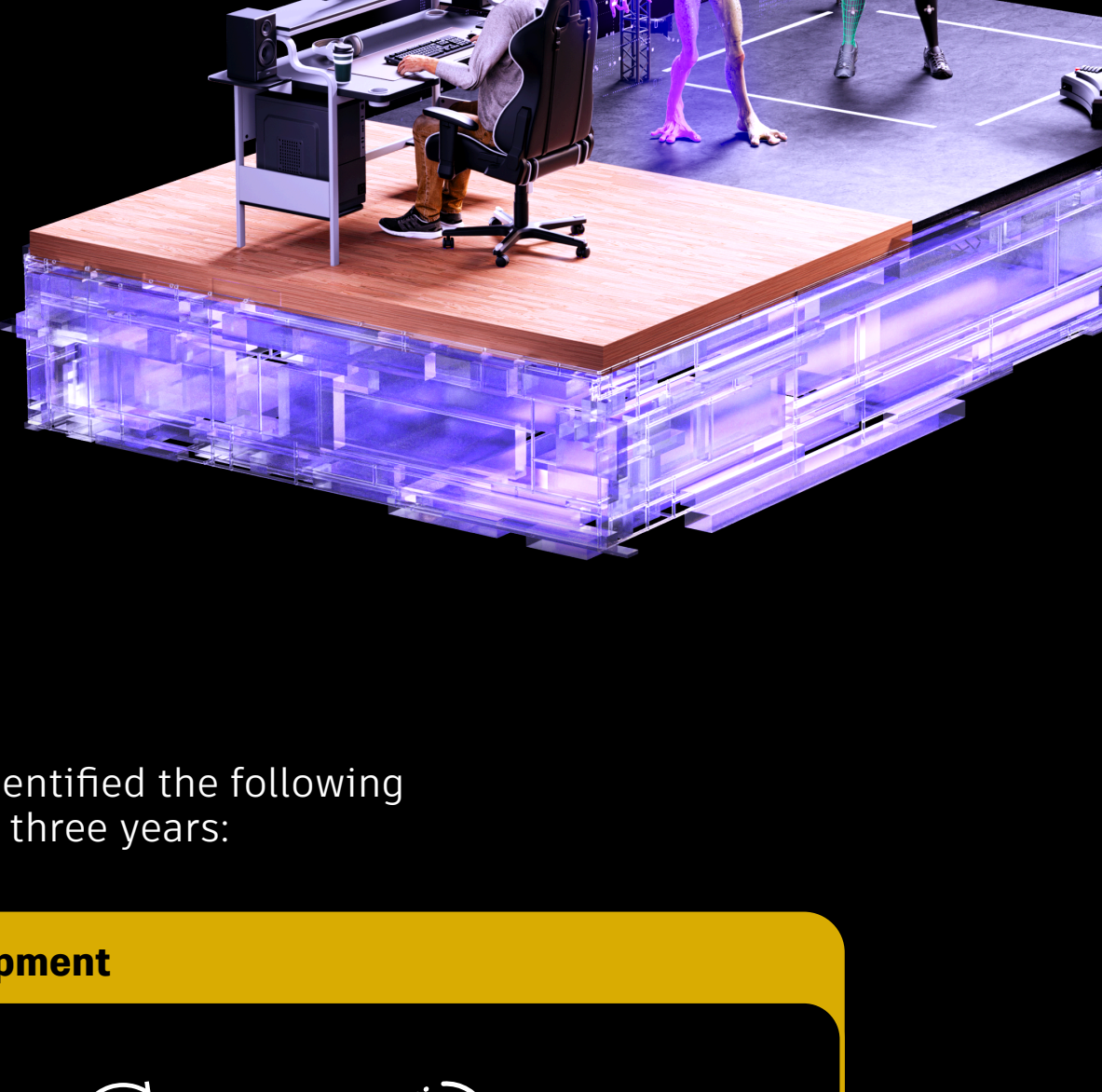
## THE COMPETITION FOR TALENT HEATS UP

### Cross-industry summary

Seventy-two percent of respondents industry-wide said that the workforce has **evolved more in the past three years than it had in the previous 25 years**.

**Remote work** and a reputation for **sustainability** are important tools for companies looking to fill talent gaps.

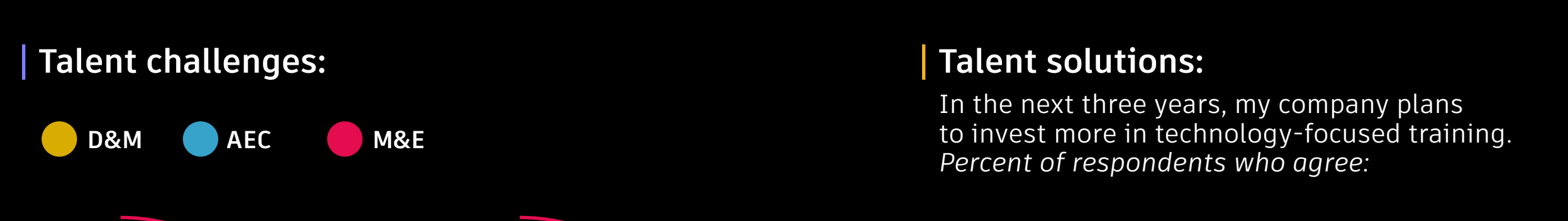
Leaders from more digitally mature companies are **investing in technology, hiring from a broader geographical area, and implementing new training programs**.



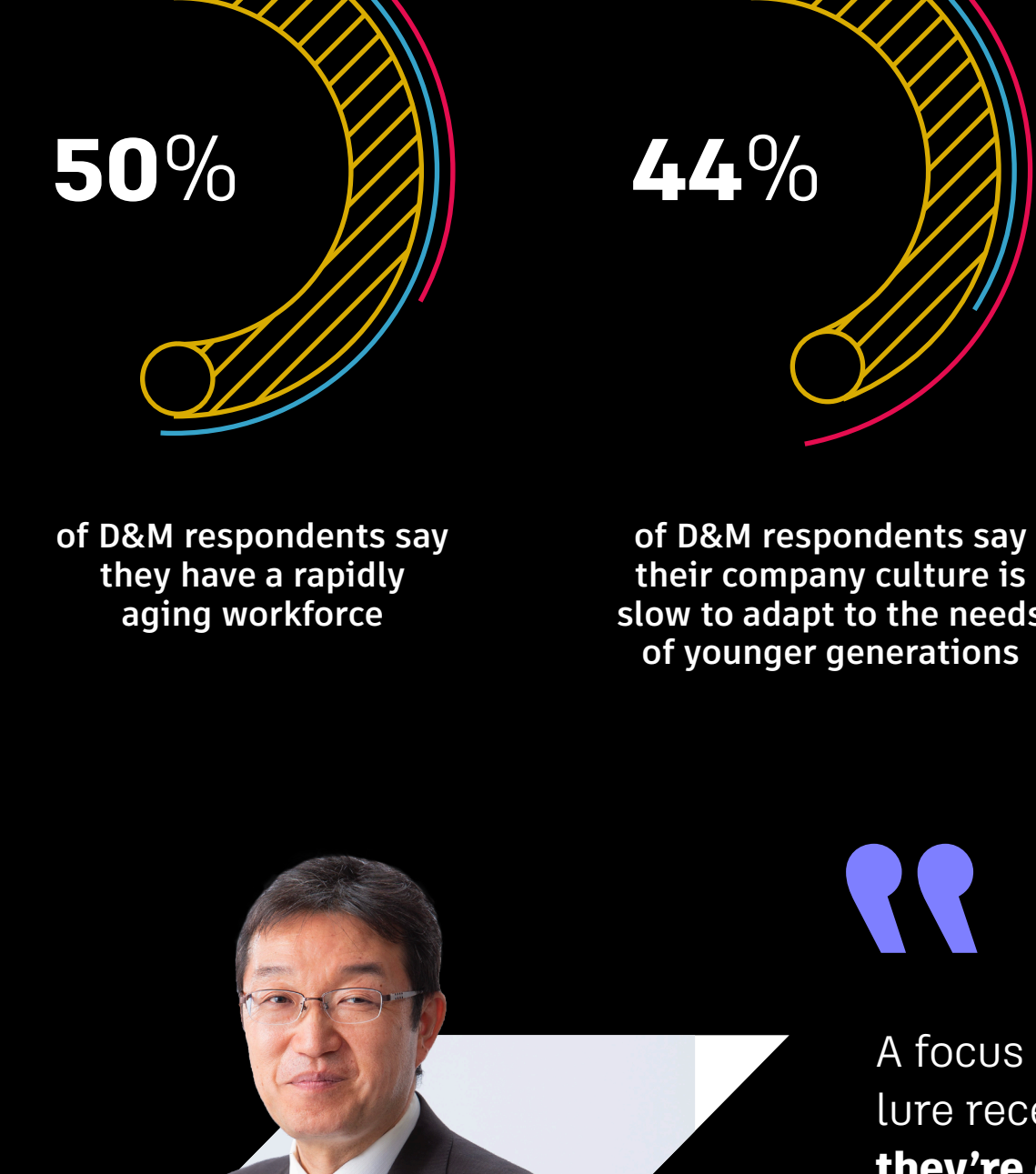
### Design and manufacturing insights

#### Skills of the future

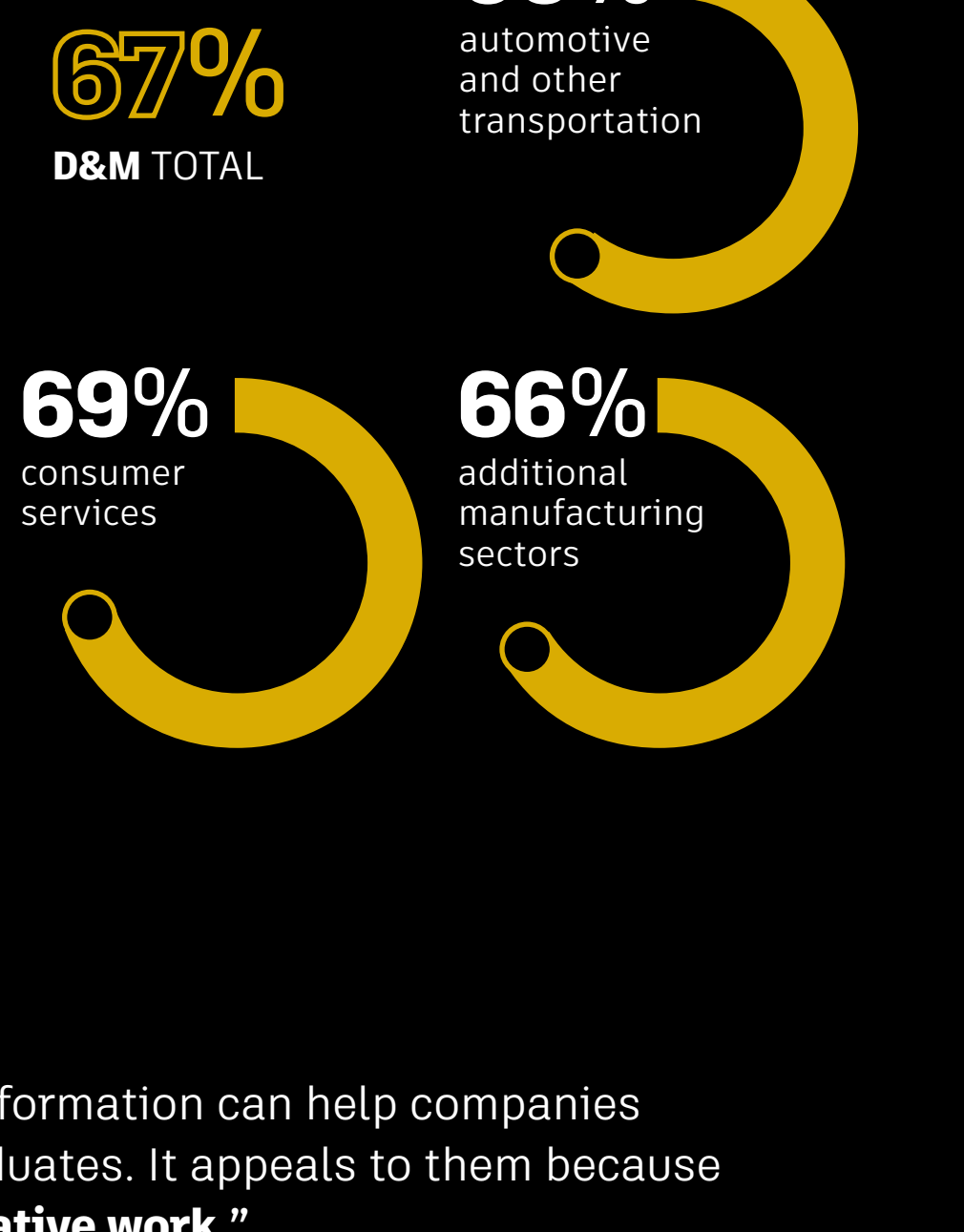
Respondents in the **automotive and other transportation** industries identified the following as the most important skills for the company's workforce over the next three years:



#### Talent challenges:



#### Talent solutions:



A focus on digital transformation can help companies lure recent college graduates. It appeals to them because **they're doing new, creative work.**

Tomoaki Furukawa, Vice President, Chief Digital Executive, Toshiba Elevator and Building Systems Corporation

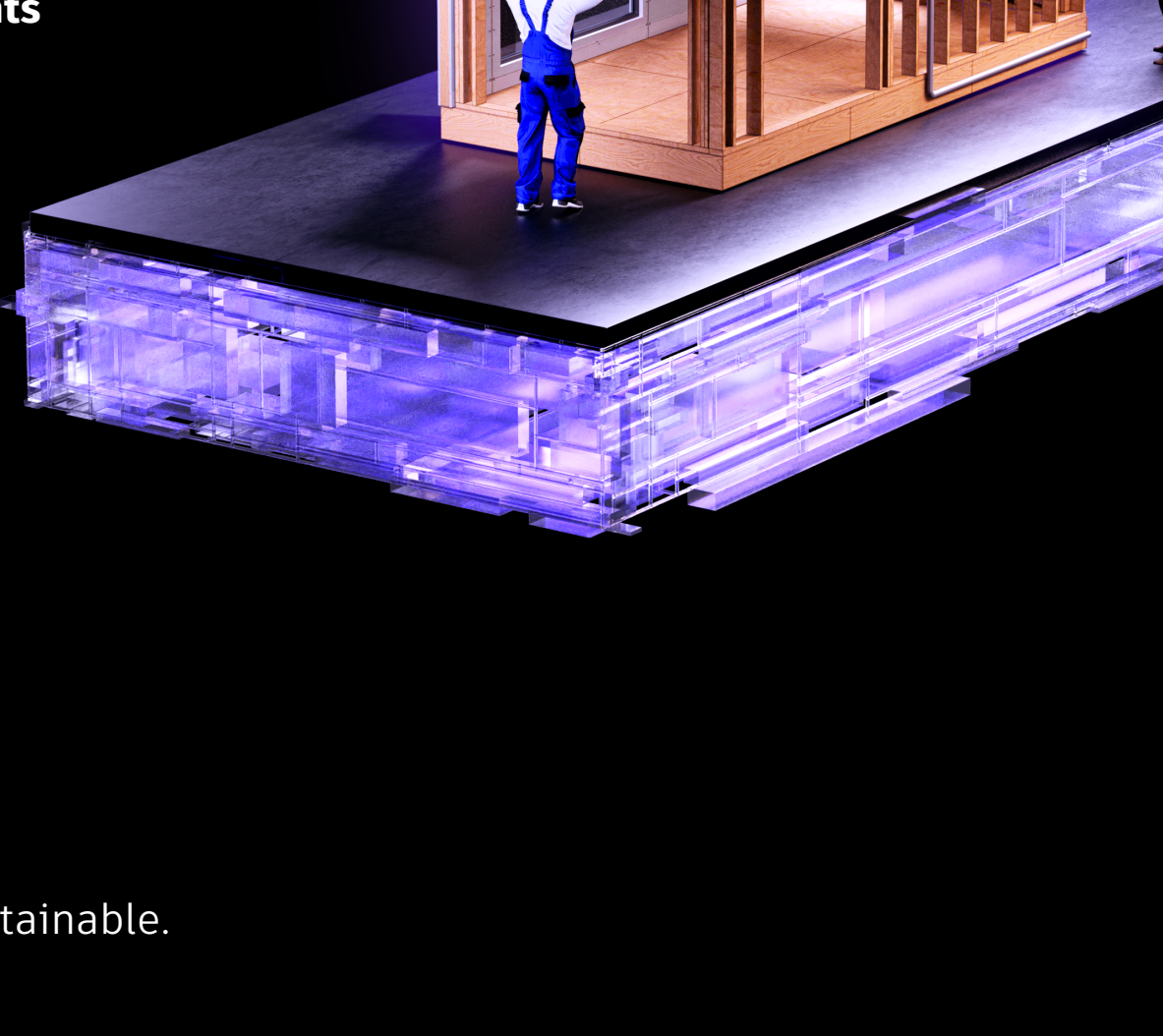
## SUSTAINABILITY DRIVES BUSINESS VALUE

### Cross-industry summary

The majority of business leaders and experts said it is important for their companies to achieve their sustainability goals. **Nearly 90% of respondents said that their industry/organization has made changes to improve sustainability.** However, only 17% strongly agree that they are proud of their company's sustainability initiatives.

**Eighty percent of respondents said that improving sustainability practices is a good long-term business decision.** More than half also said it is a good short-term decision.

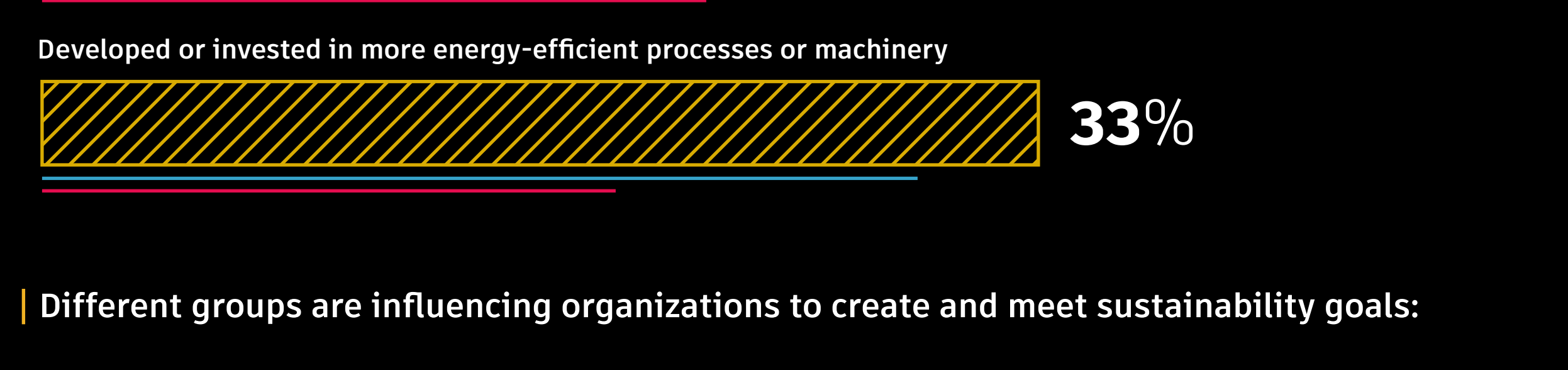
Furthermore, nearly 20% of respondents said **sustainability measures will eventually account for a substantial portion of revenues.**



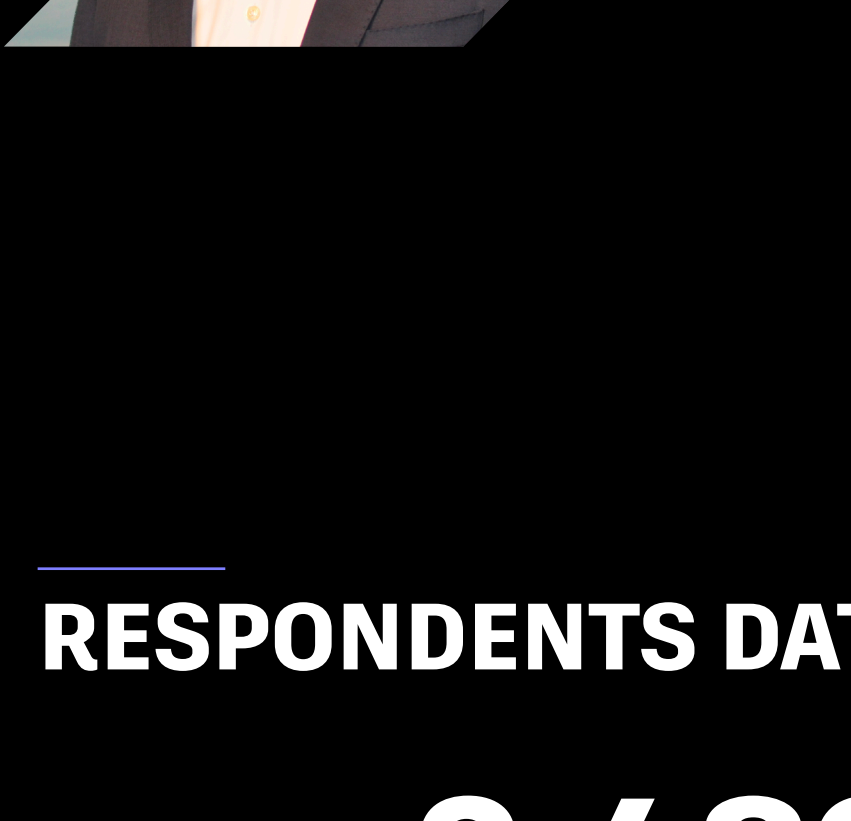
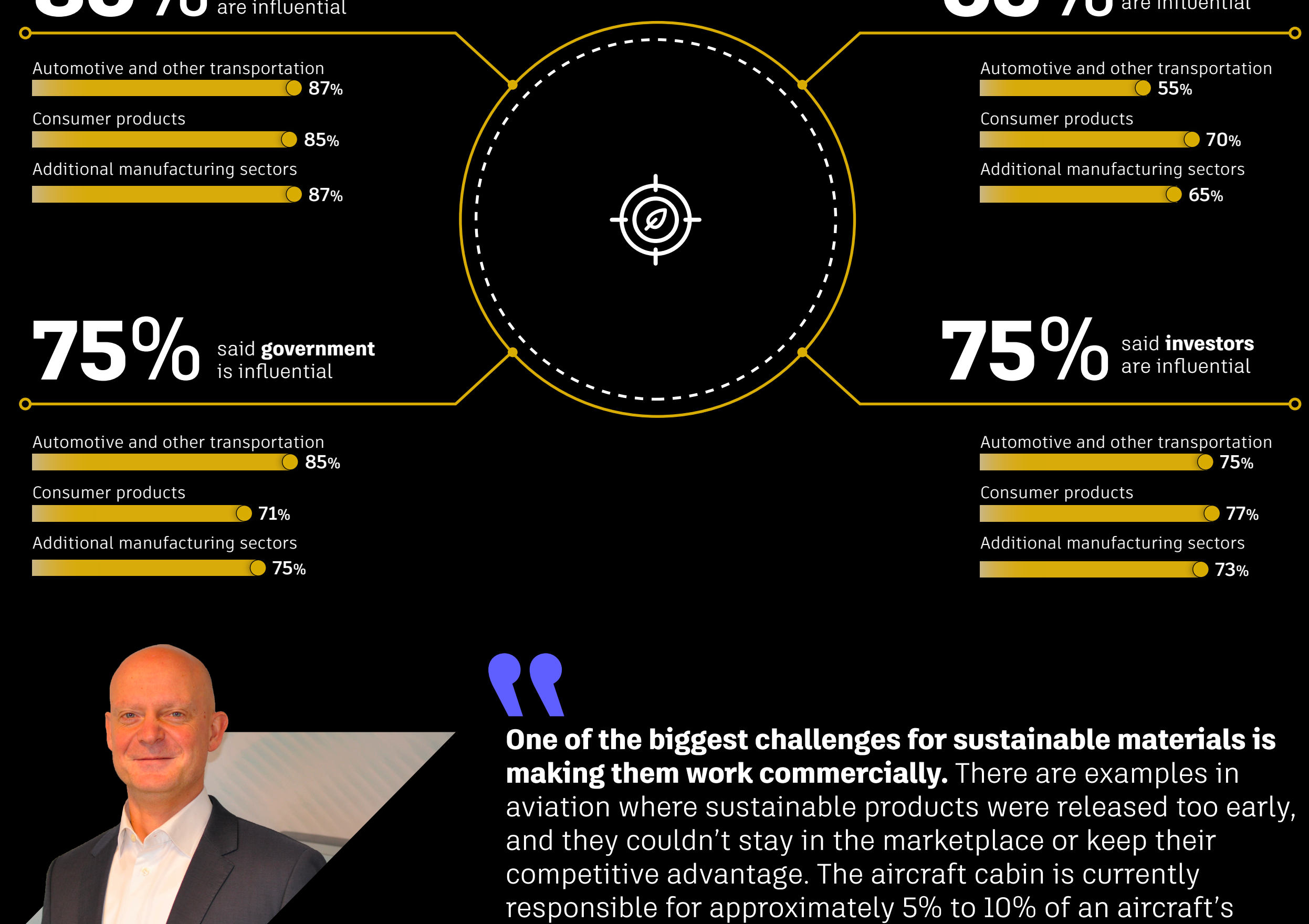
### Design and manufacturing insights

#### Sustainable actions

Respondents identified what their companies are doing to be more sustainable. D&M led the way in some actions:



#### Different groups are influencing organizations to create and meet sustainability goals:

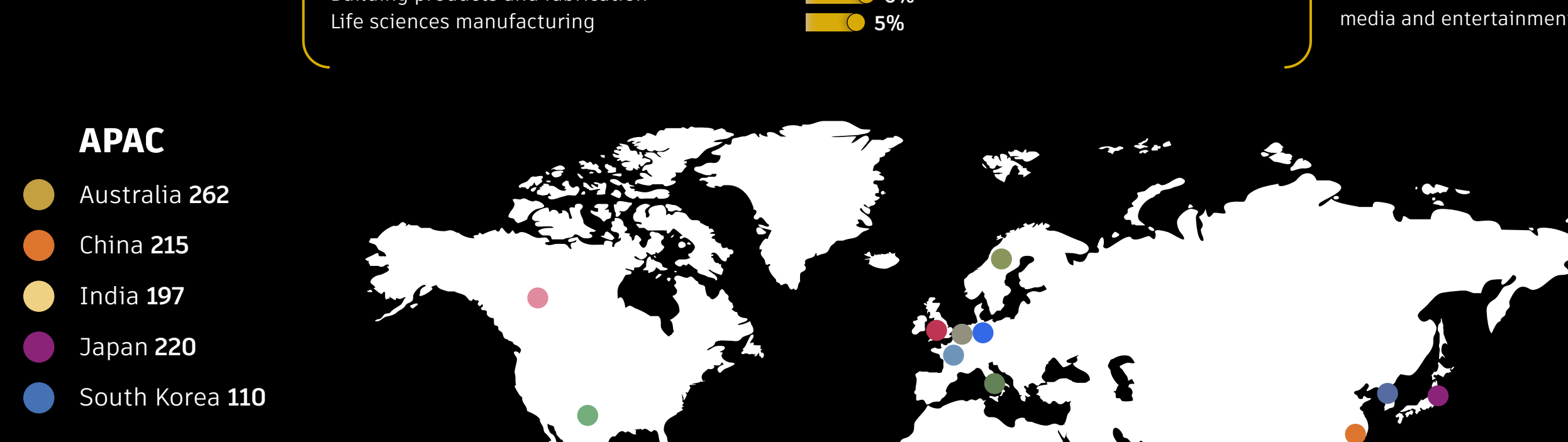


**One of the biggest challenges for sustainable materials is making them work commercially.** There are examples in aviation where sustainable products were released too early, and they couldn't stay in the marketplace or keep their competitive advantage. The aircraft cabin is currently responsible for approximately 5% to 10% of an aircraft's CO2 emissions. However, the latest research and technology developments and cabin innovations we are currently working on will contribute to reducing these figures, for example, by weight reduction or circular materials."

Stefan List, Head of Cabin Market Insights, Airbus

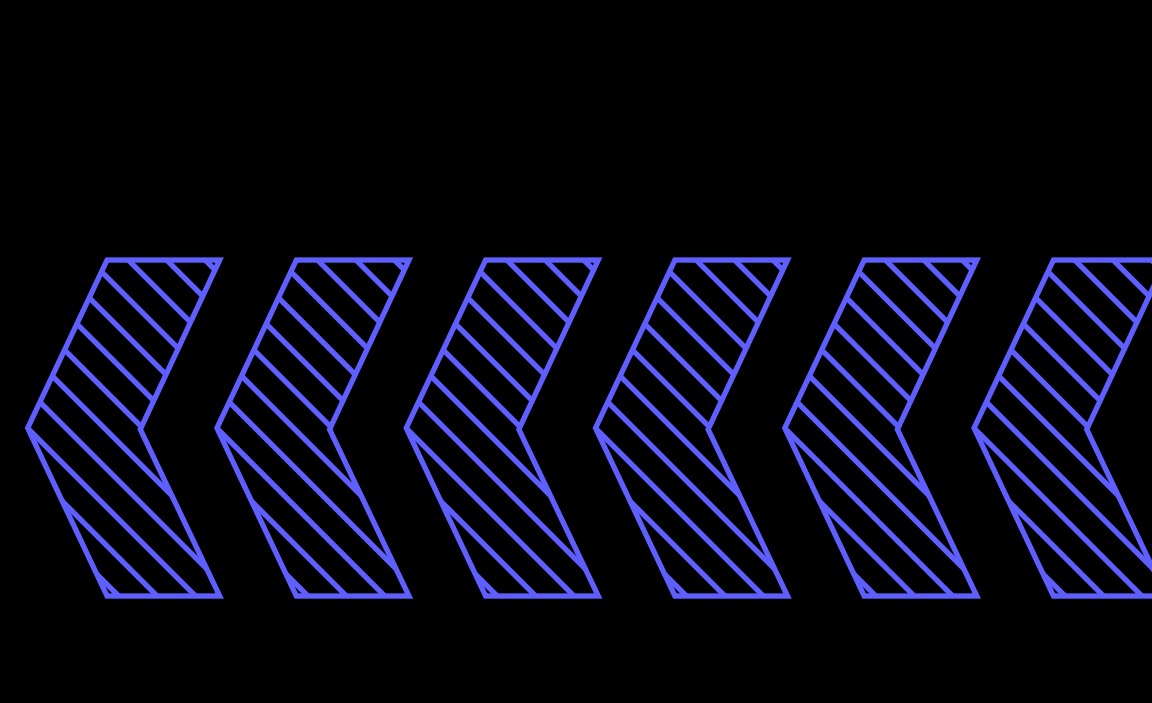
## RESPONDENTS DATA

**2,489** quantitative survey respondents + **76** interview participants



Access the full **State of Design & Make** report—including all glossary terms and research insights

[Read full report](#)



\* Includes Building Products and Fabrication, Industrial Machinery, Life Sciences Manufacturing, Process Manufacturing, and Manufacturing Other.  
 \*\* Values do not add up to 100% due to rounding.  
 Source: Autodesk, 2023 State of Design & Make report and study data