



THE STATE OF INDUSTRY 4.0

A Survey of Industrial Manufacturing Stakeholders

JULY 2021

 dimensional research

creating connections for life

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INTRODUCTION

Industry 4.0 promises a technology-driven paradigm shift — a restructuring of the manufacturing landscape, and the potential to generate considerable incremental value in additional annual revenue. Although some progress has been made toward this goal, the real promise of Industry 4.0 has yet to be realized. So now the question is, why?

Is there a flaw in the business case for Industry 4.0? Does it just need more time? What are the main barriers to its success? To find out, Molex surveyed 216 qualified participants in various roles working at companies that manufacture robots, devices or controls systems, or complex machines that enable Industry 4.0 benefits for their customers.

Our findings indicate that the technology needed for Industry 4.0 is mostly here (especially connectivity), although more work must be done to secure full value from it — particularly as it relates to software and integration. However, technology in and of itself isn't the end-all, be all — the culture of an organization and its willingness to adapt and change is critical to Industry 4.0 implementation success.

Along these lines there are gaps in maturity, with many organizations not currently set up to take advantage of existing Industry 4.0 investments. There are plenty of believers, however, with big movement expected in the next five years due to the pandemic, which has served as a catalyst. Read on for more compelling insights.

This report is part of a series of Molex industry survey reports conducted in collaboration with independent research firm, Dimensional Research. They are published to provide valuable original research to support customer success.



GOALS AND METHODOLOGY

Our primary research goal was to capture hard data on practical real-life experiences and opinions among stakeholders involved in Industry 4.0 initiatives.

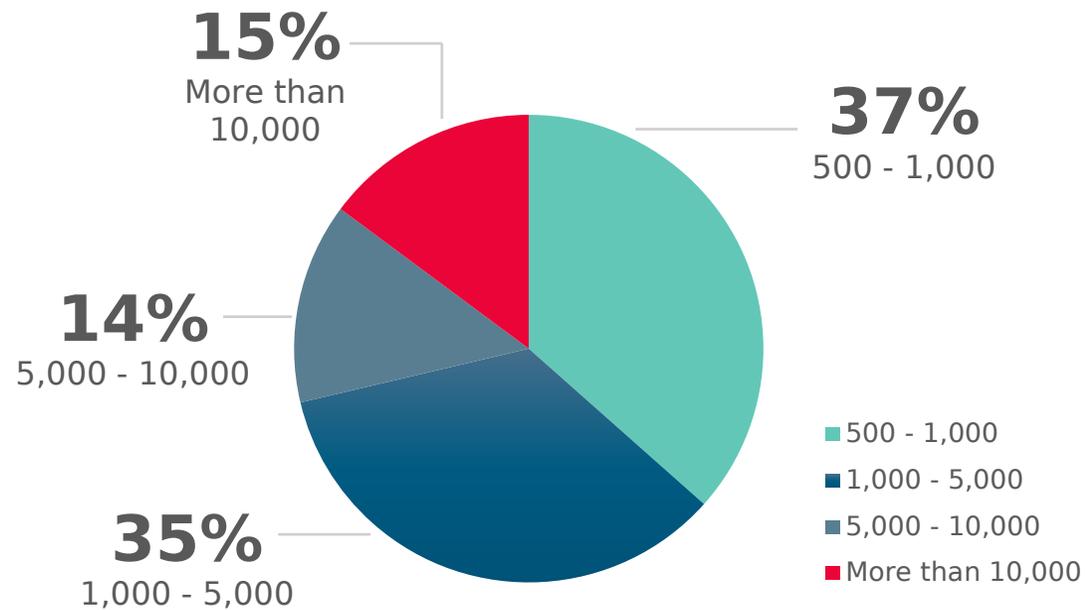
Independent sources of manufacturing professionals were invited to participate in an online survey. A variety of questions were asked on topics around Industry 4.0. The survey was in the field June 9-20, 2021.

A total of **216** qualified participants completed the survey. All worked at a company with at least 500 employees that manufactures robot, device or control systems, or complex machines who deliver Industry 4.0 solutions.

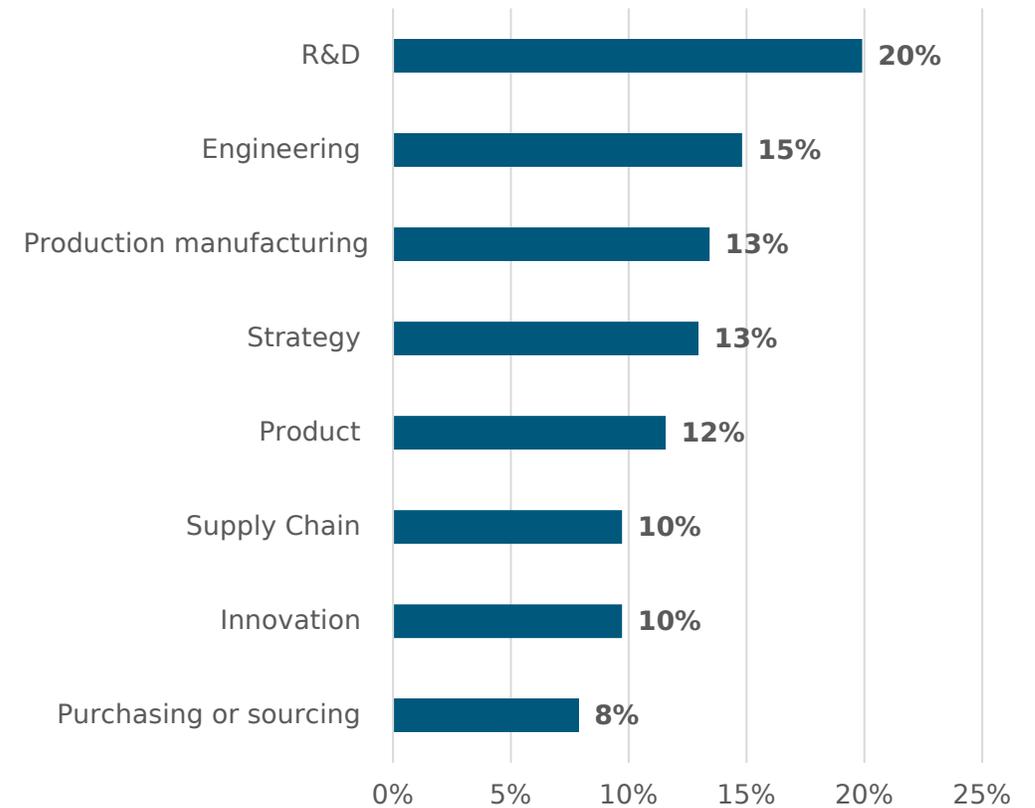
NOTE: The audience was selected to represent the perspective individuals who are involved in manufacturing solutions that ENABLE Industry 4.0, rather than those that work to IMPLEMENT Industry 4.0 solutions.

PARTICIPANT DEMOGRAPHICS

Company Size (# of employees)

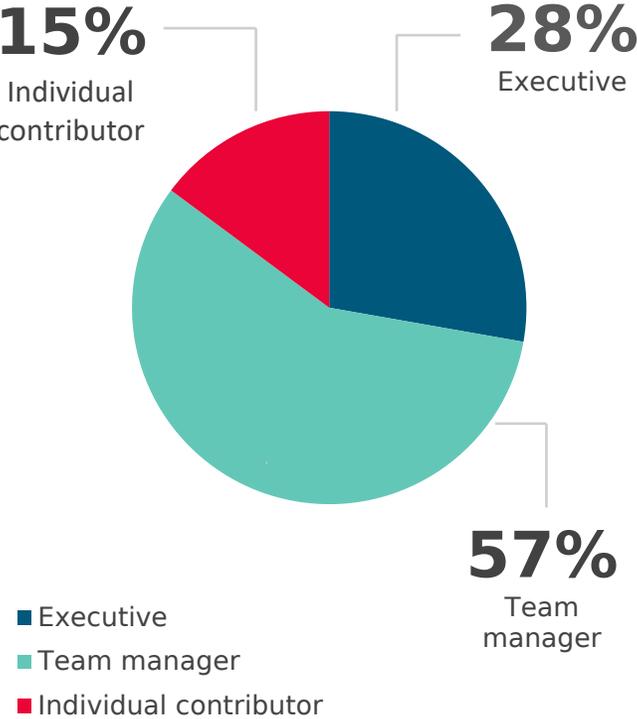


Role

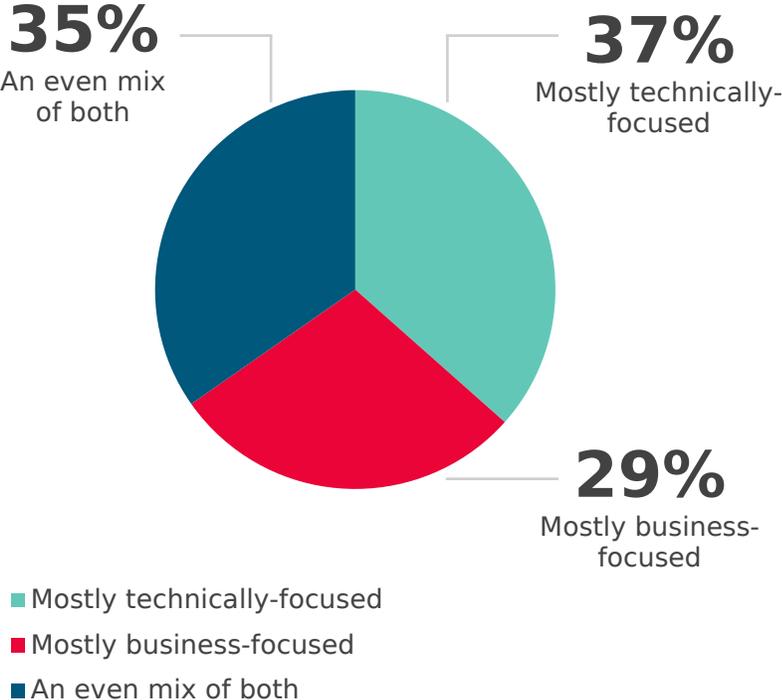


PARTICIPANT DEMOGRAPHICS (CON'T)

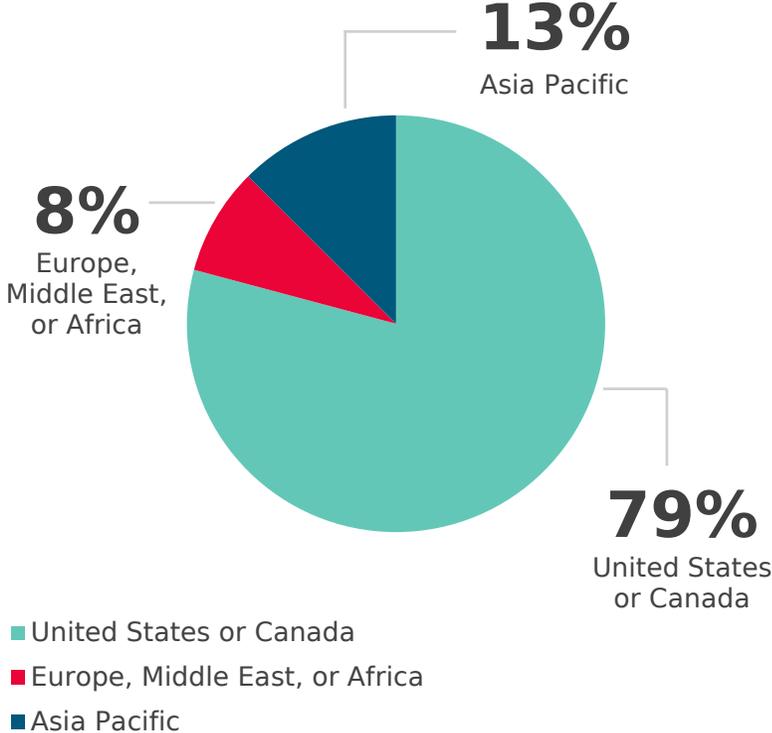
Job Level



Technical Background (Training/Expertise)



Region



DEFINITION AND INSTRUCTIONS GIVEN SURVEY PARTICIPANTS

INDUSTRY 4.0

DEFINITION:

In this survey, Industry 4.0 describes the adoption of digital and connected solutions across the industrial automation ecosystem. This includes, but is not limited to, intelligent automation, connectivity, and analytics that add efficiency and intelligence throughout the manufacturing lifecycle.

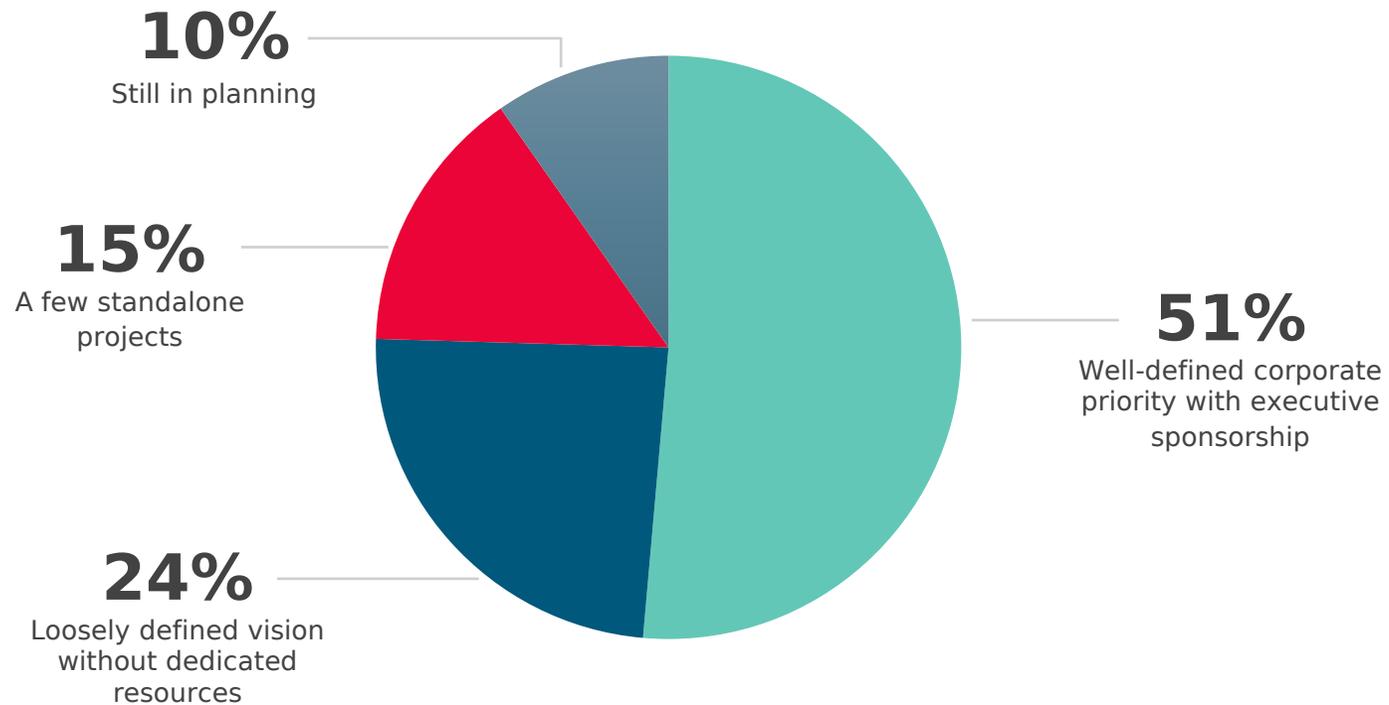
DIRECTION:

Survey participants were asked to focus on how to **ENABLE** Industry 4.0 among their customers. They were asked to consider, when responding to questions, the Industry 4.0 solutions they are delivering to their customers rather than responding based on their internal adoption of these technologies.



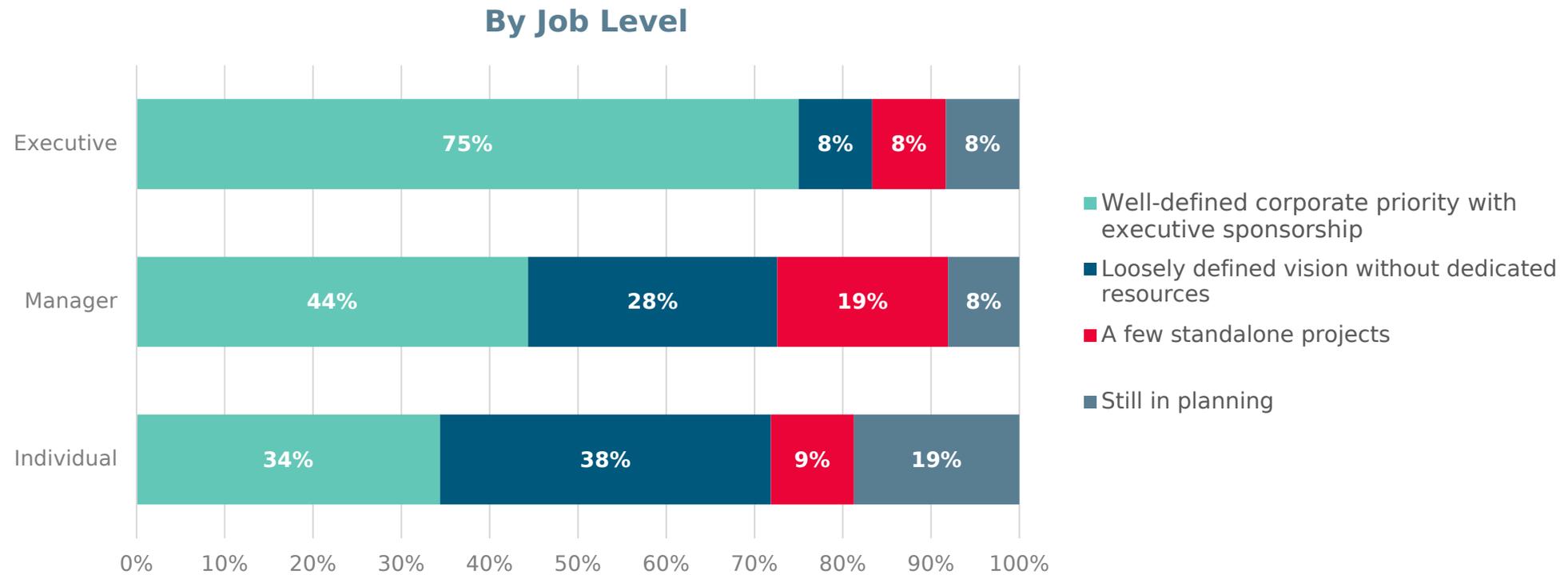
Detailed findings
PROGRESS OF INDUSTRY 4.0

HALF (51%) HAVE A WELL-DEFINED INDUSTRY 4.0 INITIATIVE



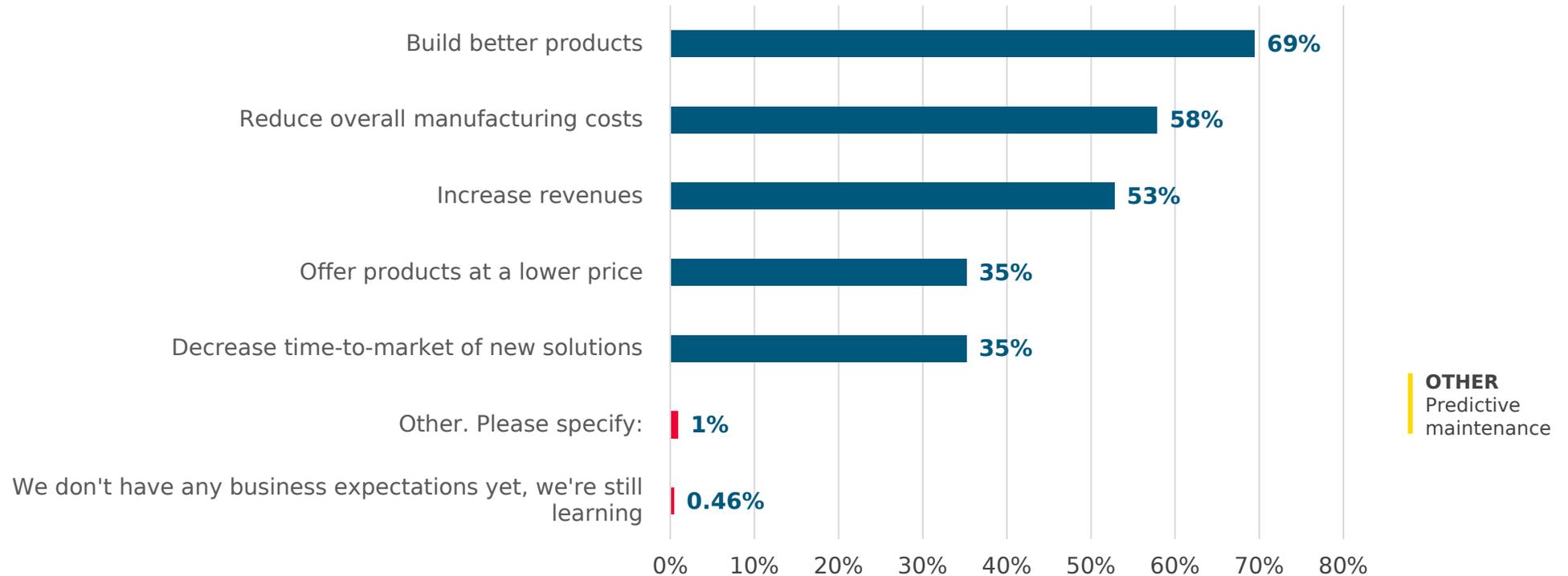
Which of these best describes your company's approach to delivering solutions to enable Industry 4.0?

EXECUTIVES FAR MORE LIKELY TO DESCRIBE INDUSTRY 4.0 INITIATIVES AS WELL-DEFINED



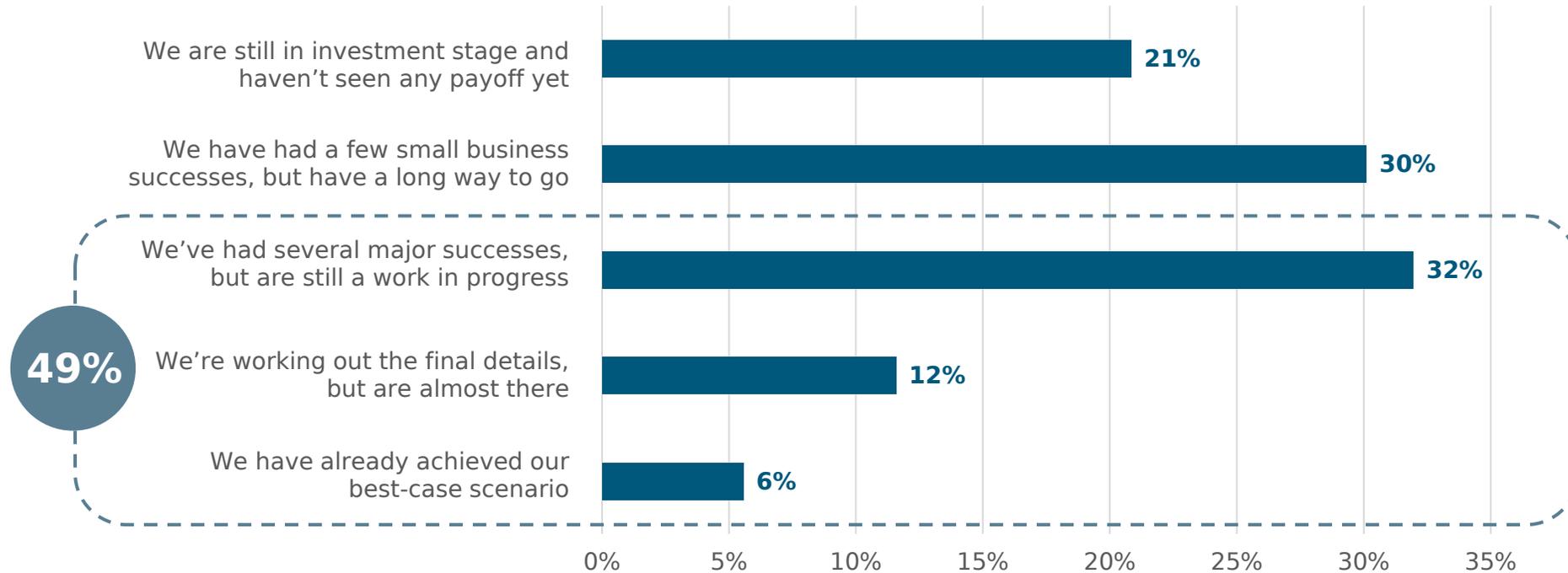
Which of these best describes your company's approach to delivering solutions to enable Industry 4.0?

INDUSTRY 4.0 INITIATIVES HAVE CLEAR EXPECTATIONS FOR BUSINESS OUTCOMES



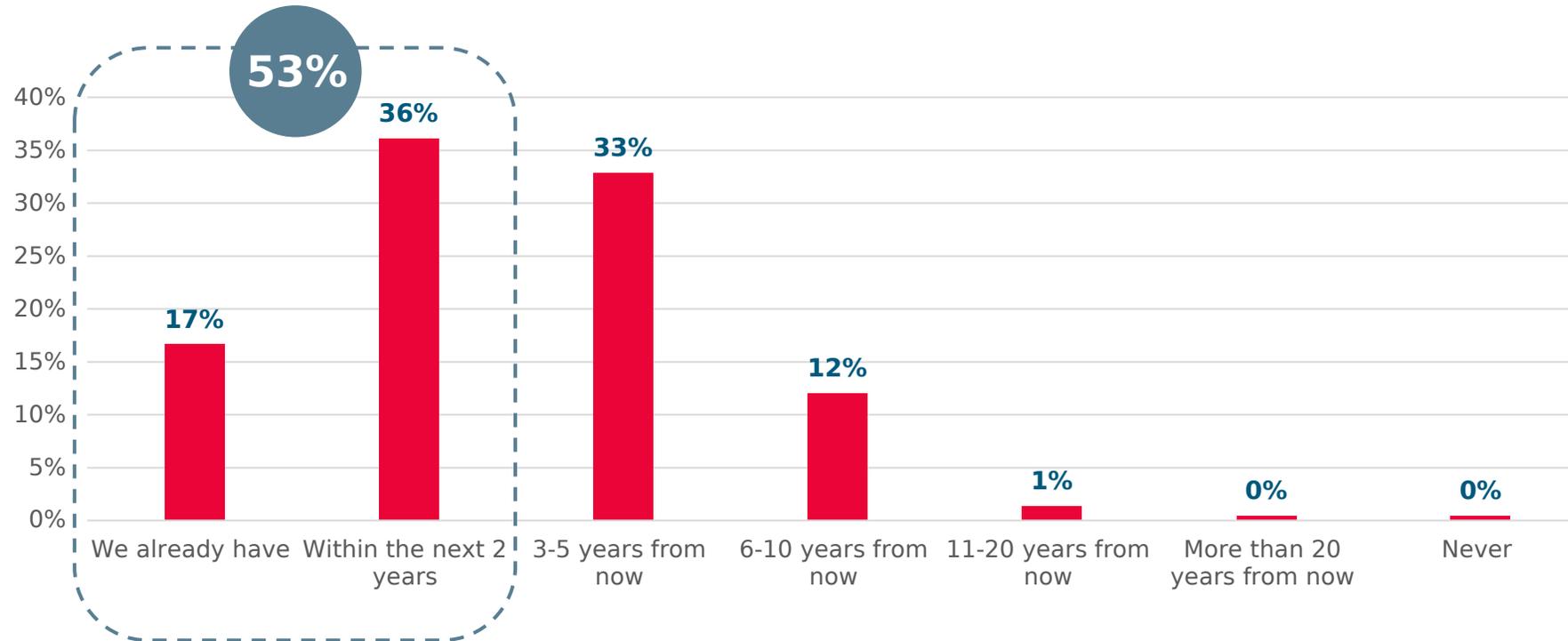
What business outcomes do you expect your customers will achieve from deploying your company's solutions to enable Industry 4.0? Choose all that apply.

HALF (49%) HAVE ALREADY ACHIEVED MAJOR SUCCESSES WITH THEIR INDUSTRY 4.0 INITIATIVE



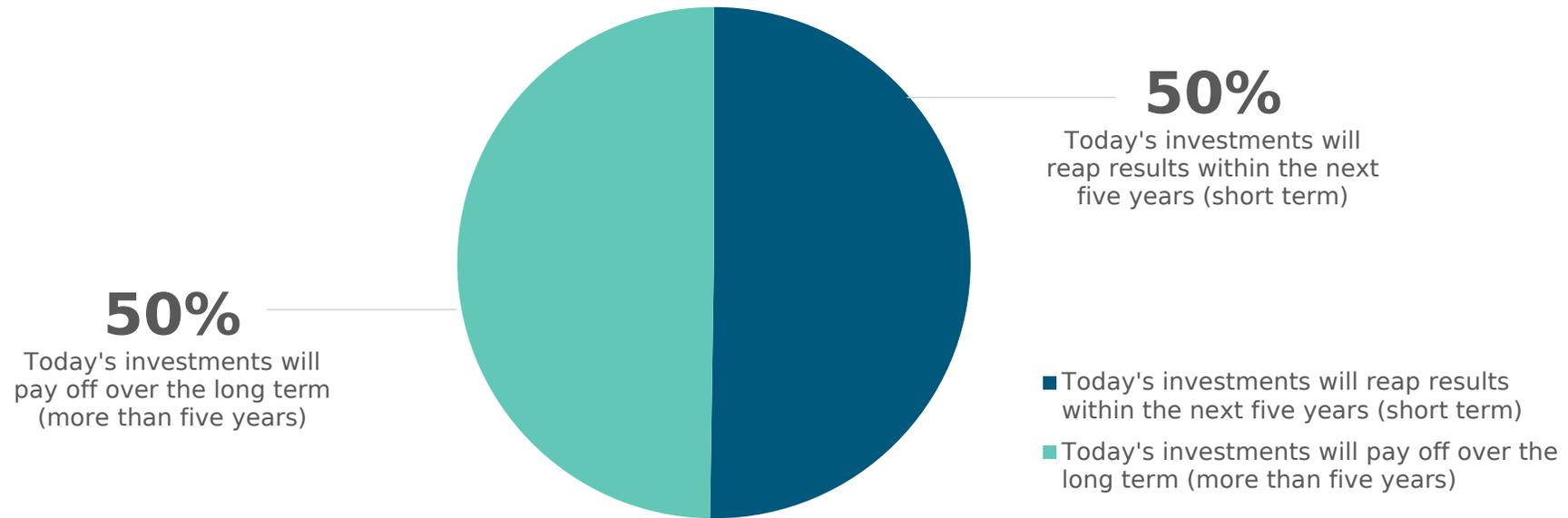
Take a moment to think of the eventual best-case scenario for your company's Industry 4.0 solutions. How would you characterize your progress TODAY towards that eventual goal?

HALF (53%) BELIEVE THEY WILL MEET THEIR INDUSTRY 4.0 GOALS WITHIN TWO YEARS



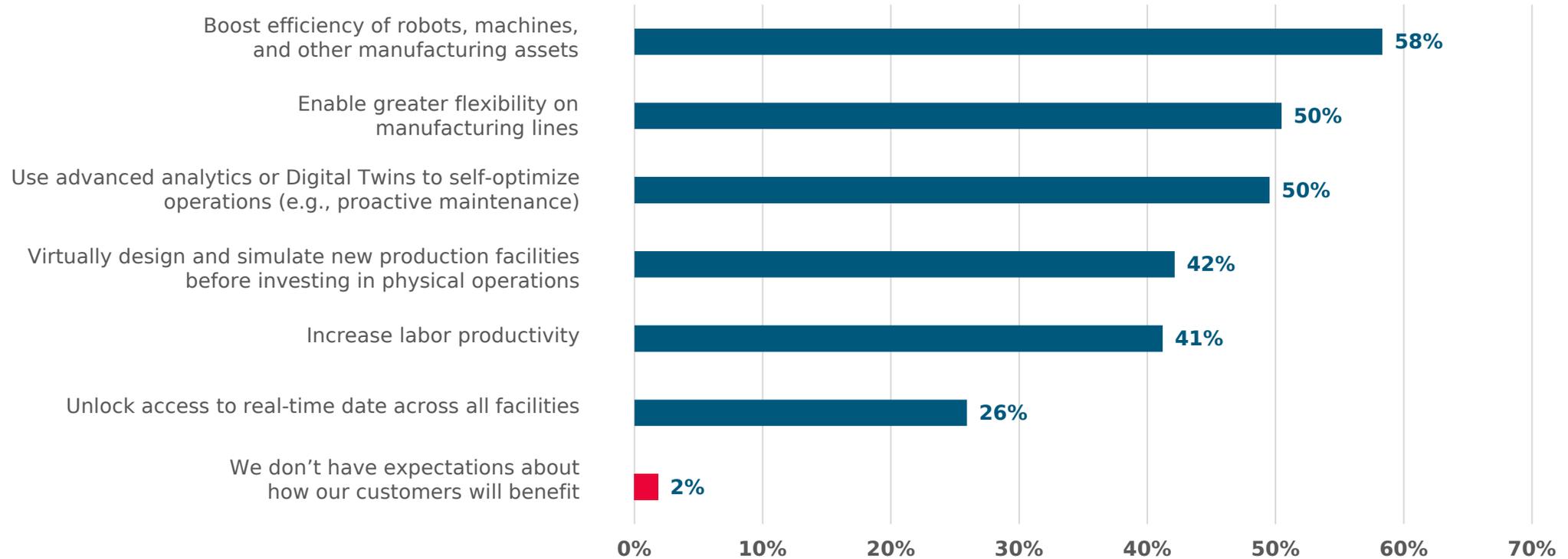
Continue to think of the eventual best-case scenario for your company's Industry 4.0 solutions. When do you expect to achieve this goal?

STAKEHOLDERS ARE SPLIT ON THE ROI TIMELINES OF INDUSTRY 4.0 INVESTMENTS FOR THEIR CUSTOMERS



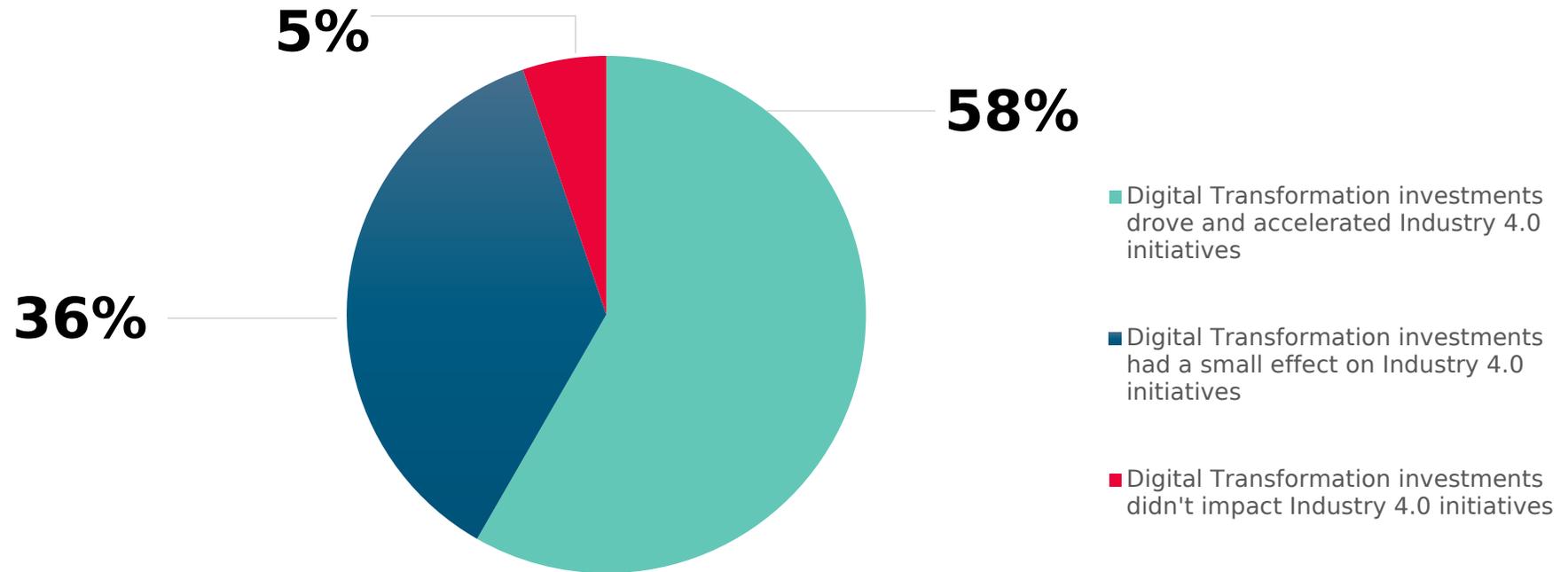
Which of these statements most closely represents your expectations for when your customers will see return on their Industry 4.0 investments?

INCREASED EFFICIENCY OF MANUFACTURING ASSETS IS THE TOP CUSTOMER BENEFIT EXPECTED



*What benefits do you believe your customers will gain by adopting Industry 4.0?
Choose all that apply.*

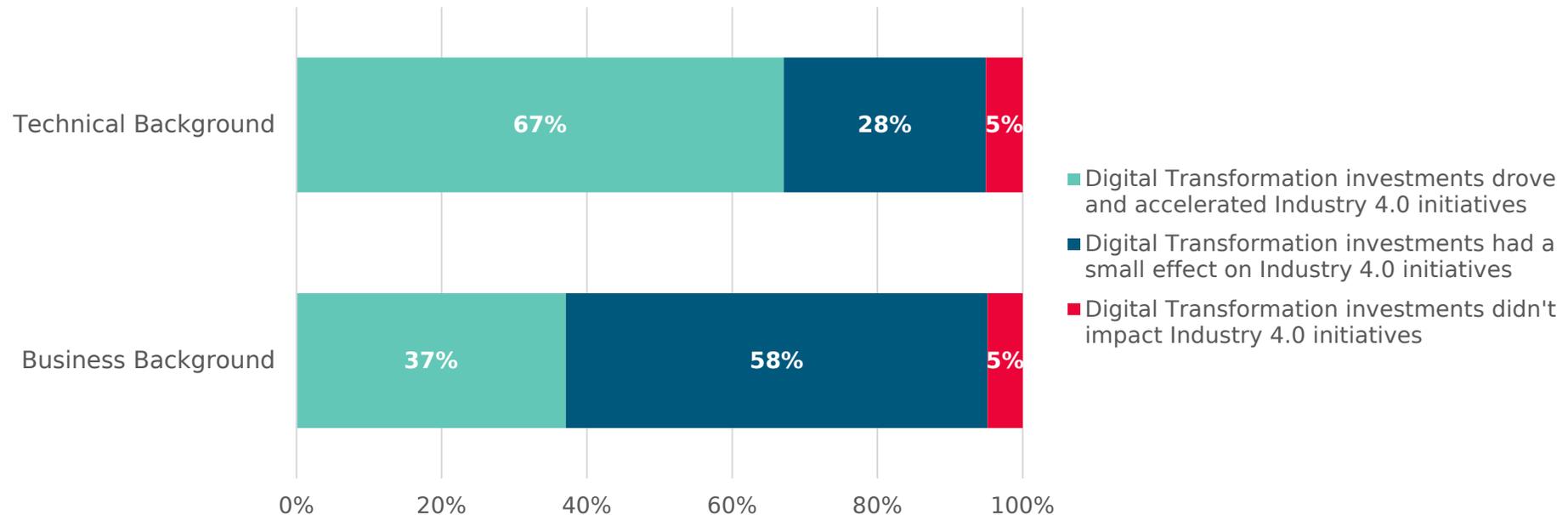
MORE THAN HALF SAY THAT DIGITAL TRANSFORMATION INVESTMENTS ACCELERATED INDUSTRY 4.0 INITIATIVES



In your experience, what impact have investments in Digital Transformation and Information Technology had on Industry 4.0 initiatives?

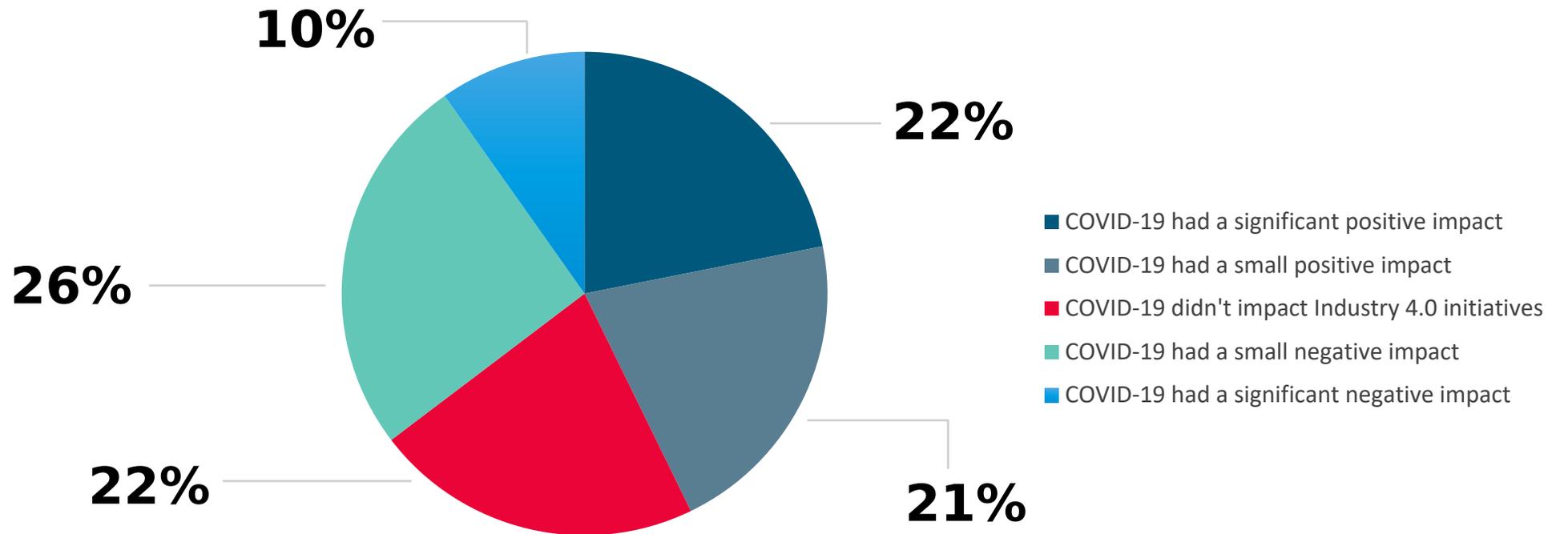
TECHNICAL STAKEHOLDERS FAR MORE LIKELY TO REPORT A SIGNIFICANT CONNECTION WITH DIGITAL TRANSFORMATION

By Professional Training and Expertise



In your experience, what impact have investments in Digital Transformation and Information Technology had on Industry 4.0 initiatives?

78% SAID COVID-19 IMPACTED INDUSTRY 4.0 INITIATIVES, BUT THERE IS NO CONSENSUS ON DIRECTION OF IMPACT



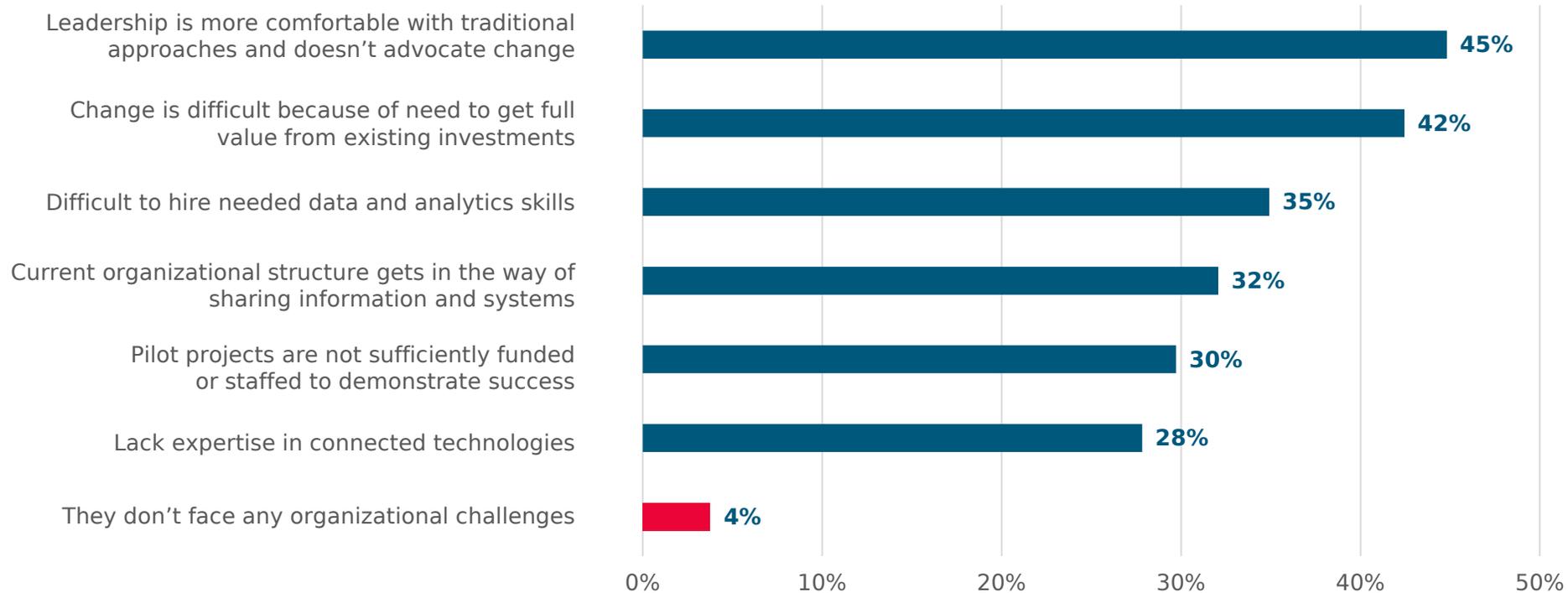
In your experience, to what degree did COVID-19 and remote work impact Industry 4.0 initiatives?



Detailed findings
MANY BARRIERS CONTINUE

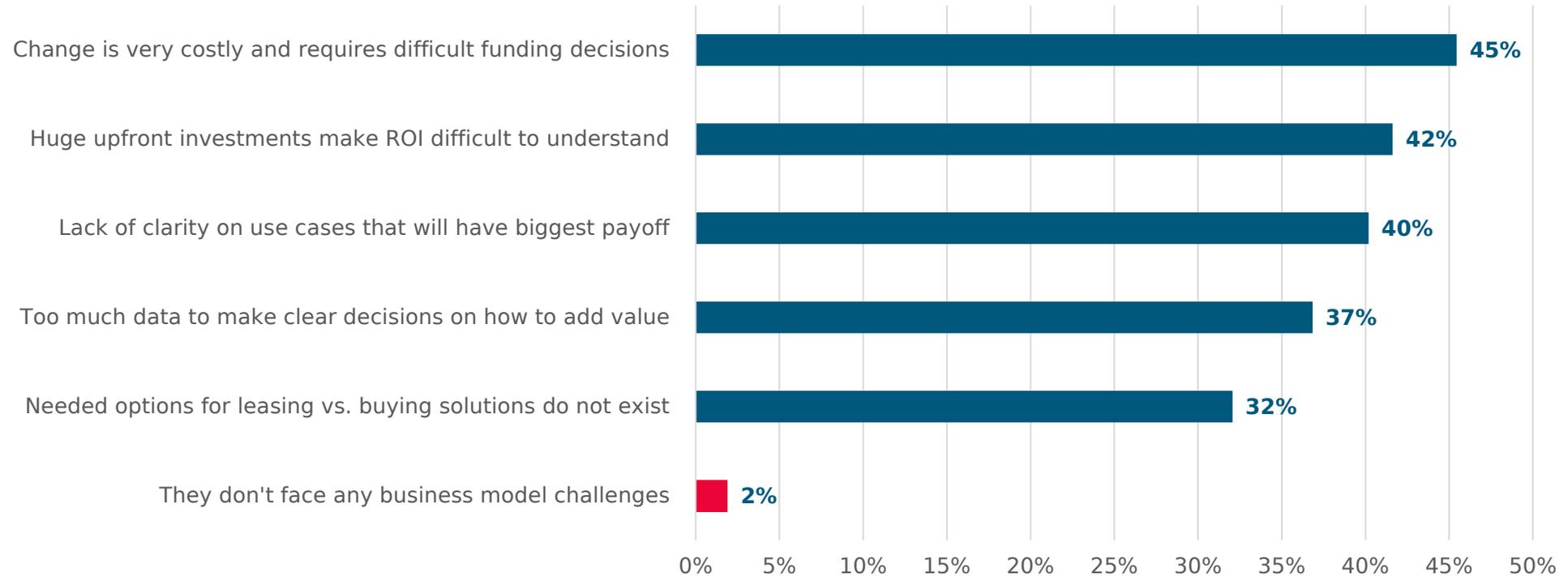
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96% REPORT THEIR CUSTOMERS FACE CULTURAL CHALLENGES TO IMPLEMENTING INDUSTRY 4.0



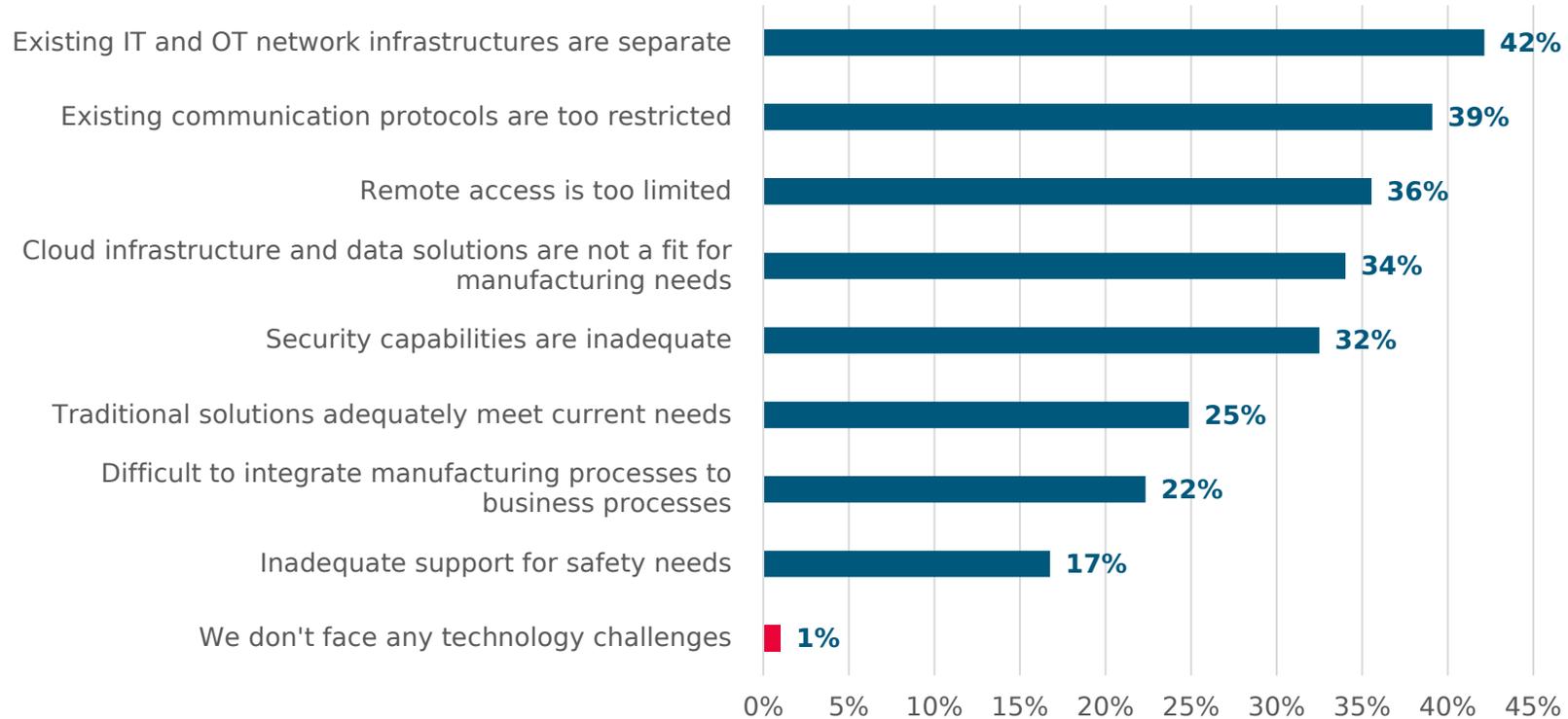
Do your customers face any organizational or cultural challenges with implementing Industry 4.0 initiatives? Choose all that apply.

98% FACE BUSINESS MODEL CHALLENGES WHEN IMPLEMENTING INDUSTRY 4.0 INITIATIVES



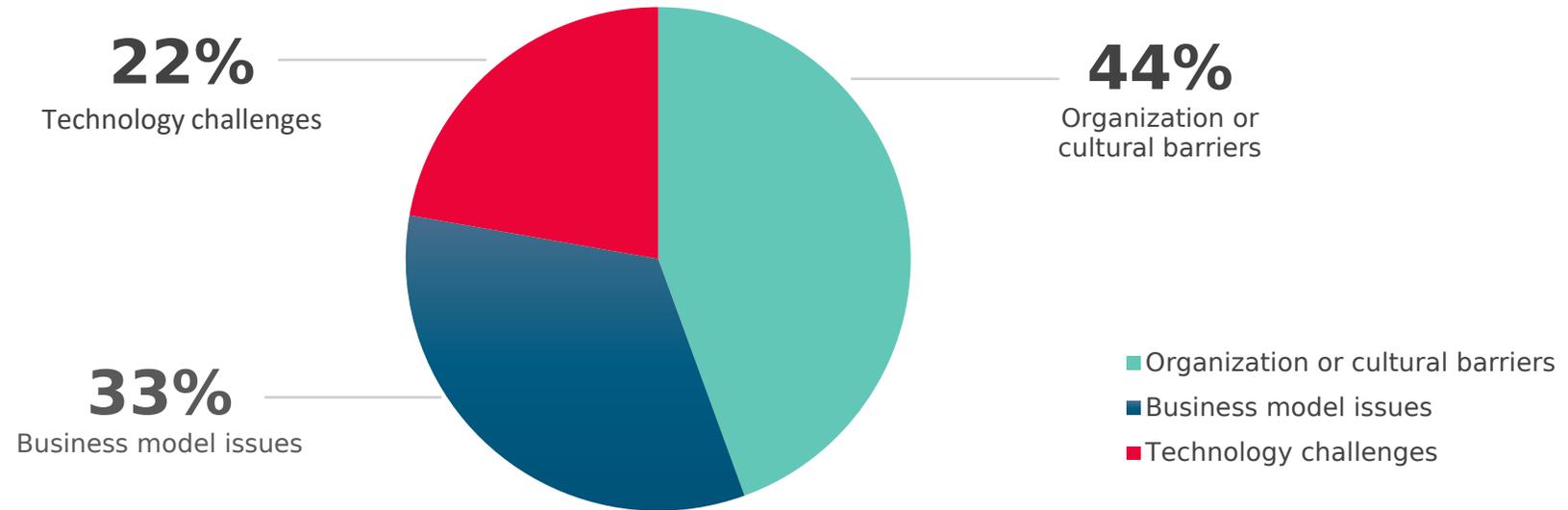
Do your customers face any business model challenges with implementing Industry 4.0 initiatives? Choose all that apply.

99% FACE TECHNOLOGY CHALLENGES WITH IMPLEMENTATION OF INDUSTRY 4.0



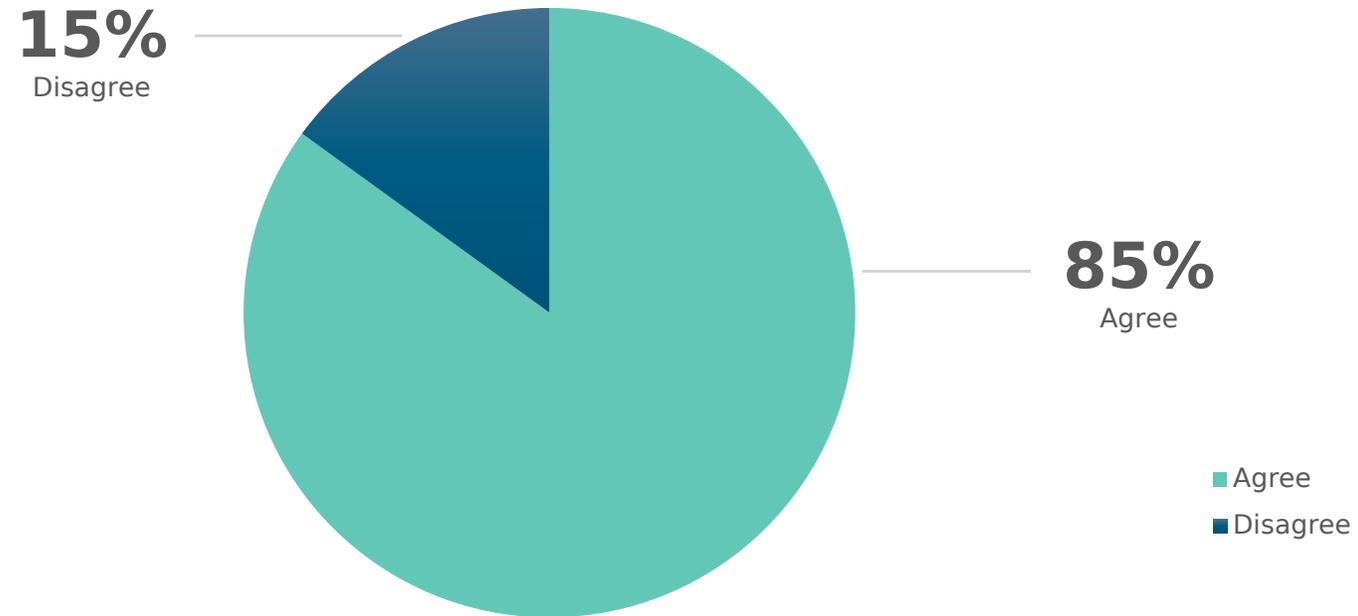
Do your customers face any technology challenges with implementing Industry 4.0 initiatives? Choose all that apply.

CULTURAL ISSUES ARE TYPICALLY CONSIDERED THE MOST DIFFICULT FOR CUSTOMERS TO OVERCOME



In your opinion, what type of barriers to adoption of Industry 4.0 are the most difficult to overcome among your customers?

STRONG AGREEMENT THAT LEADERSHIP NEEDS TO CHANGE THEIR THINKING FOR INDUSTRY 4.0 TO THRIVE



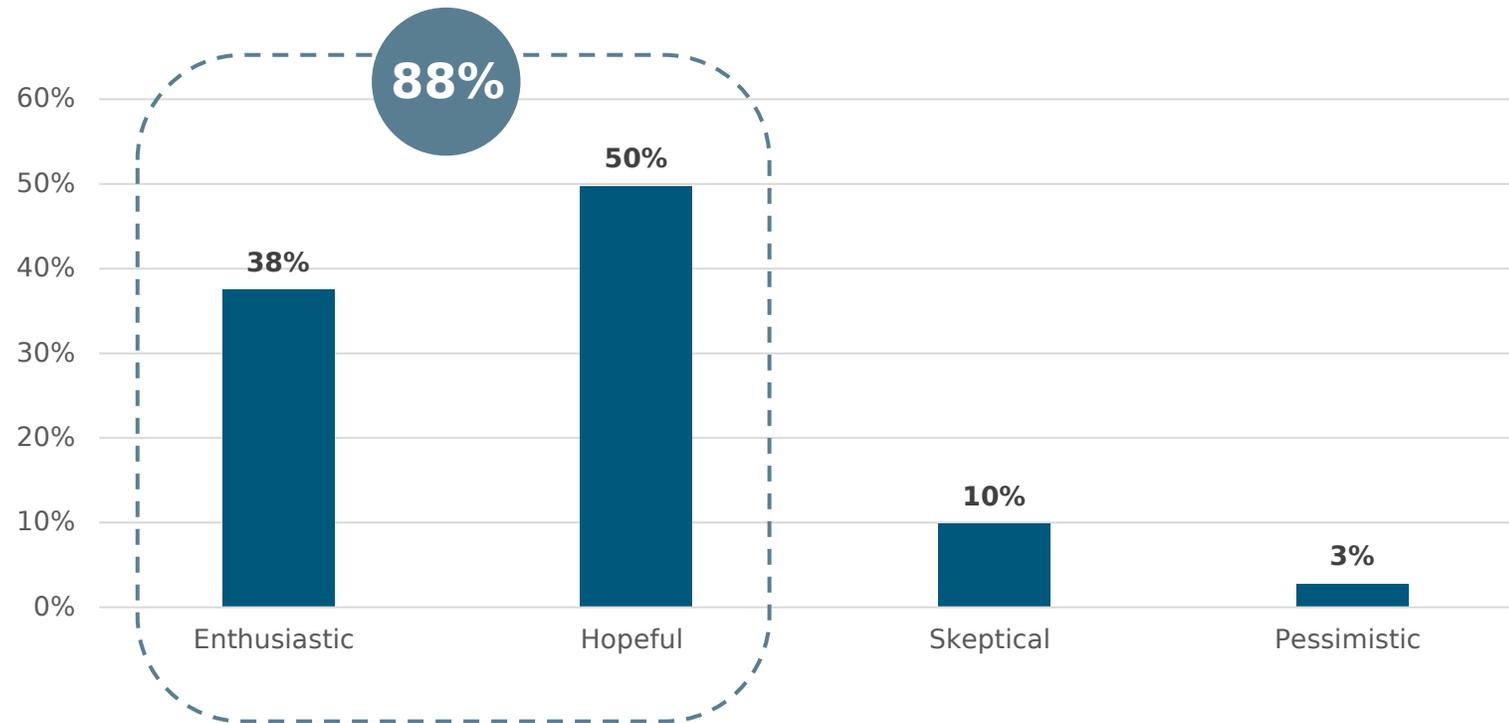
“Success with Industry 4.0 requires a change in the way leadership thinks.”



Detailed findings
**SIGNIFICANT MOMENTUM
EXPECTED IN COMING DECADE**

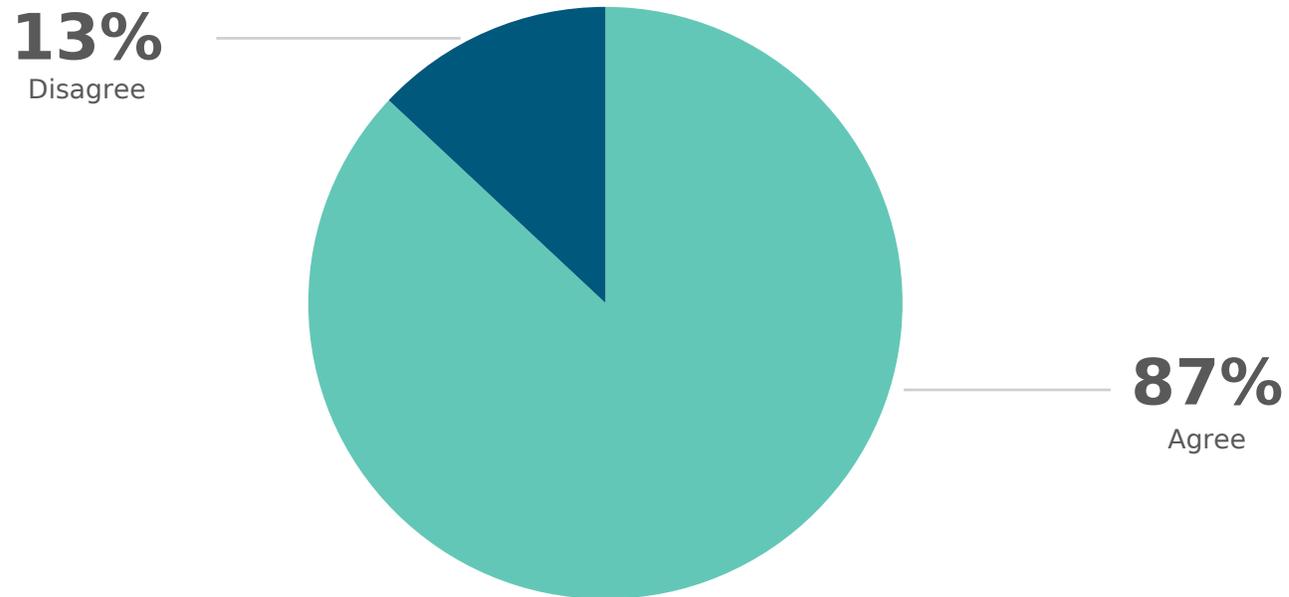
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88% ARE POSITIVE ABOUT THE POTENTIAL OF INDUSTRY 4.0



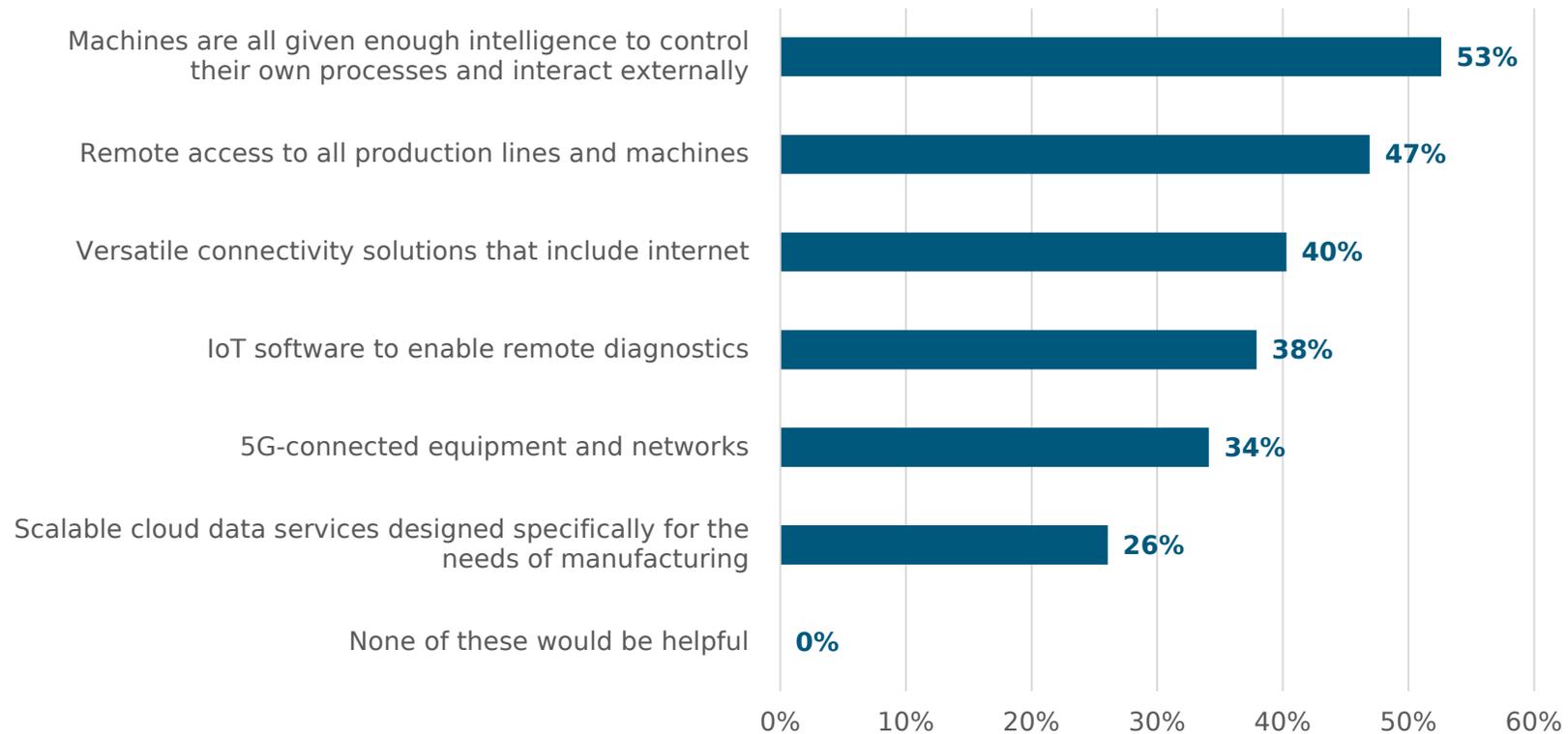
Which of the following best represents your personal opinion about the potential future of Industry 4.0?

87% ARE EXCITED ABOUT THE POTENTIAL OF INDUSTRY 4.0 OVER THE NEXT DECADE



“Industry 4.0 has tremendous potential and I’m personally excited to see what will happen over the next decade.”

100% WOULD BENEFIT FROM ADDITIONAL INDUSTRY 4.0 CAPABILITIES



Which of the following capabilities would most benefit your organization's Industry 4.0 initiatives? Choose up to 3 of the following.

FOR MORE INFORMATION

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