

9<sup>TH</sup> ANNUAL

# State of Smart Manufacturing Report: CPG Edition

How the Consumer Packaged Goods (CPG) industry is harnessing emergent technology to reduce risk, improve forward planning and maximize workforce potential



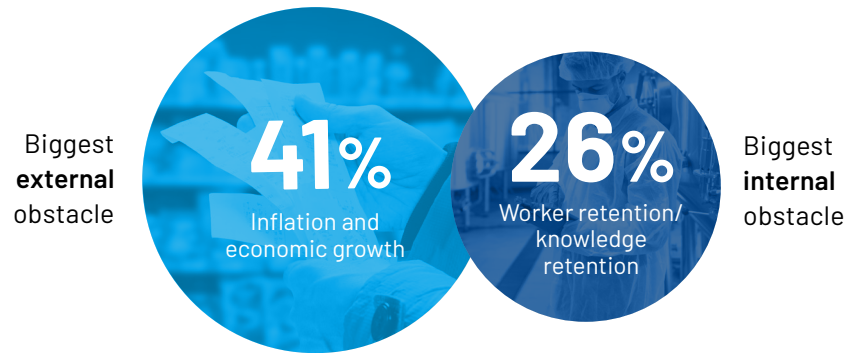
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# OBSTACLES AND OUTLOOK FOR CPG

Inflation and the energy crisis are the top external barriers to growth for Consumer Packaged Goods (CPG) firms, followed by workforce issues.

The impact of inflation worries a higher proportion of respondents from CPG firms than from the cross-section of organizations surveyed for our full report. However, while supply chain disruption was second on the list of external obstacles for CPG last year, it has now dropped to fifth place – replaced by energy costs at number two.

Internally, workforce concerns take three of the top five spots – attracting, onboarding and retaining skilled employees is hampering growth. Last year’s top three internal obstacles for this sector related to quality, technology, and data; demonstrating how the people challenge has rocketed up the agenda this year.



## EXTERNAL OBSTACLES



## INTERNAL OBSTACLES





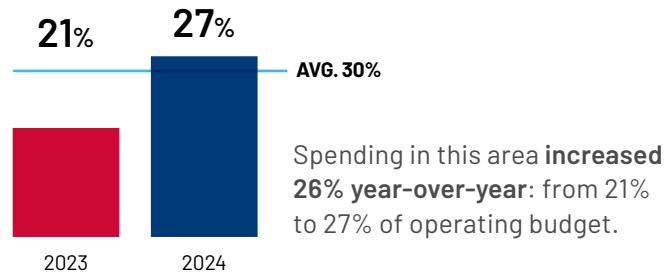
# TECHNOLOGY INVESTMENTS RISE FOR CPG MANUFACTURERS

CPG's investment in technology has risen by more than a quarter year-on-year. However, the percentage of operating budget CPG invests in technology is slightly lower than average, when compared to our cross-sector survey.

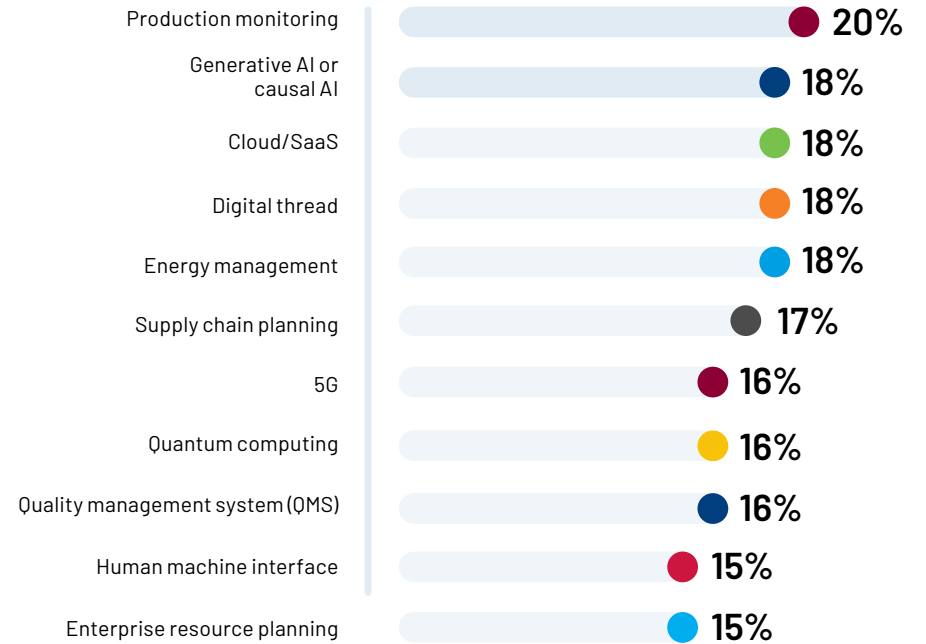
CPG manufacturers are seeing the best return on investment from **production monitoring systems** – in contrast to our cross-section of industry respondents who don't include this technology in their top 5.

In line with other industries, spend on generative AI and cloud solutions are generating strong returns for the CPG sector.

## TECHNOLOGY INVESTMENT



## BIGGEST ROI



### ABOUT THE RESEARCH

This report is based on the responses of 158 managers and executives from Consumer Packaged Goods manufacturers in 17 countries.

It's part of the 9th annual edition of the [State of Smart Manufacturing report](#), which surveyed 1,567 manufacturing leaders across multiple industries.

Q. Which of the technologies that your company has invested in had the biggest ROI over the last 12 months? Select top 3.

Base: 1562

# BETTER DATA MANAGEMENT NEEDED TO FUEL INNOVATION AND IMPROVE PLANNING

Respondents believe that those at the forefront of this industry are using data to fuel AI and production scheduling. Leaders are also perceived to be using the data they collect to improve processes and quality. In contrast, respondents say the top way their organizations use data is for sales analysis.

When it comes to their own data, CPG respondents believe their organizations use well under half of what they collect effectively.



Only **40%** of data is being used effectively

## HOW LEADERS USE DATA



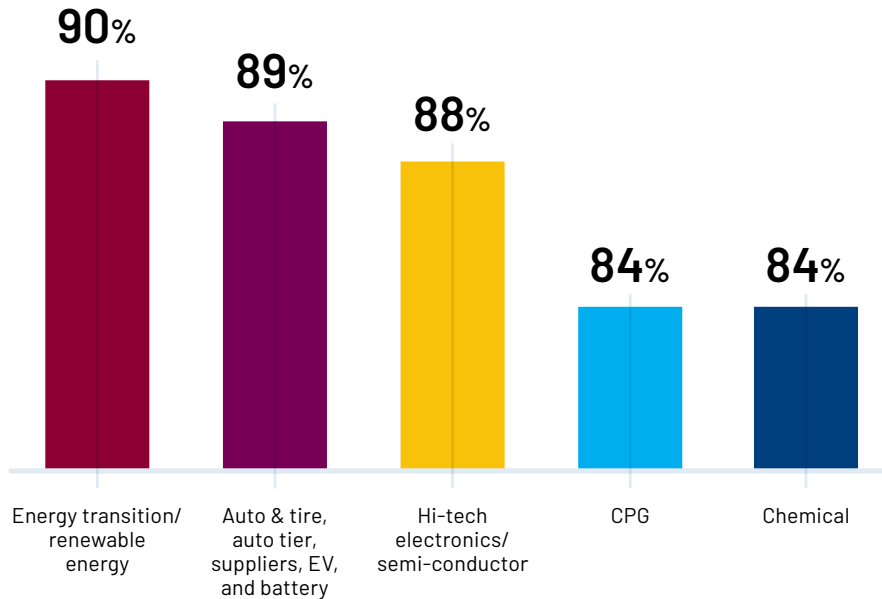
Q. How do you perceive leaders in your industry are using the data collected from their currently employed technologies, processes, connected devices, etc.? Select all that apply.

Base: 1567

# ROOM FOR IMPROVEMENT IN THE FIELD OF ESG

## AT LEAST SOME FORM OF ESG POLICY (%)

CPG lags behind the energy, automotive, and technology sectors when it comes to implementing environmental, social and governance (ESG) policies.



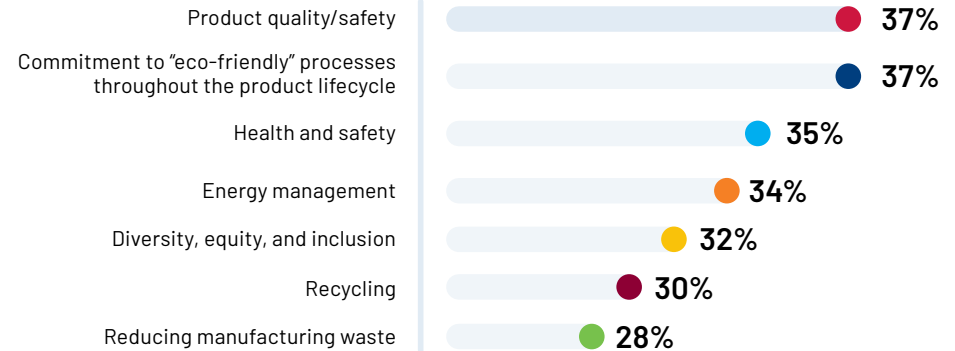
Q. Which of the following best describes your organization's current efforts around ESG (Environmental, Social, and Governance/ Sustainability)? Select one.

Base: 917

\* Only showing respondents from these industries

The thing that matters most to CPG firms' ESG programs is product quality; this is considered more important than the top-ranked answer – energy management – given by our cross-sector respondents. Diversity, equity and inclusion rank higher for CPG manufacturers than in our aggregated industry results, where it doesn't make the top 5.

## WHAT MATTERS MOST FOR 2024



Q. What matters most to your organization's sustainability/ESG policy? Select all that apply.

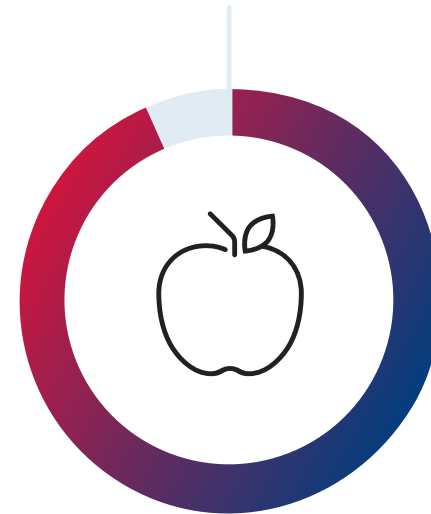
Base: 1567

# CPG FIRMS ADOPT SMART MANUFACTURING TECH TO CUT COSTS

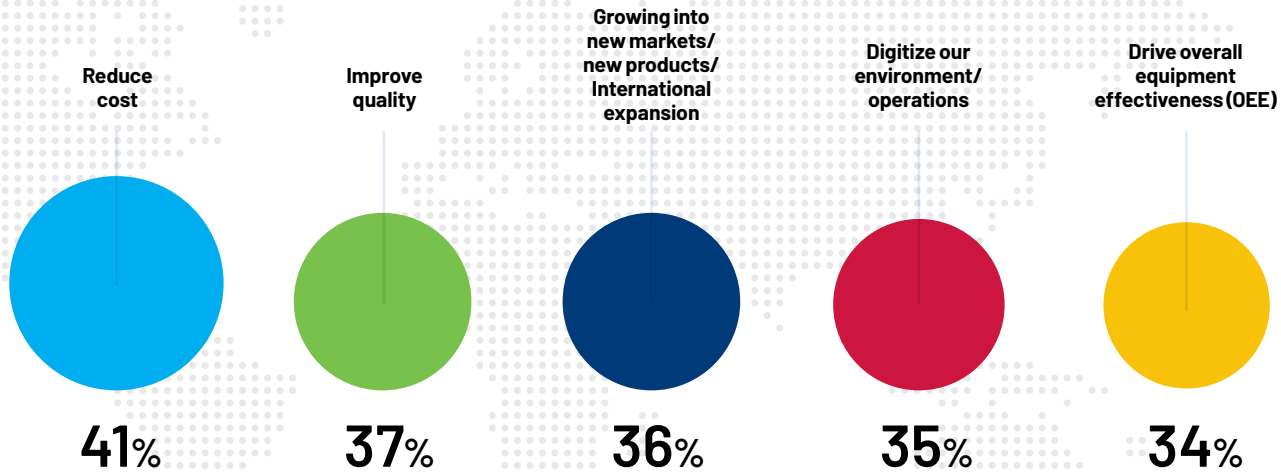
86% of CPG manufacturers are using or evaluating smart manufacturing technology and most believe it will help them to reduce costs. This is in contrast to our overall survey, where quality improvement topped the table of expected outcomes.

However, cost is also seen as the main barrier to adoption of smart manufacturing in the CPG sector, followed by workforce-related issues; namely a lack of necessary skills to implement and use the technology.

**86%** of CPG manufacturers are using or evaluating **smart manufacturing technology**



## SMART MANUFACTURING IS DRIVING BUSINESS OUTCOMES AROUND THE WORLD



Q. What positive business outcomes are you looking to achieve from your smart manufacturing technology? Select all that apply.

Base: 1567

# FACTORY FLOOR PROCESSES SEE MOST SMART MANUFACTURING ADOPTION

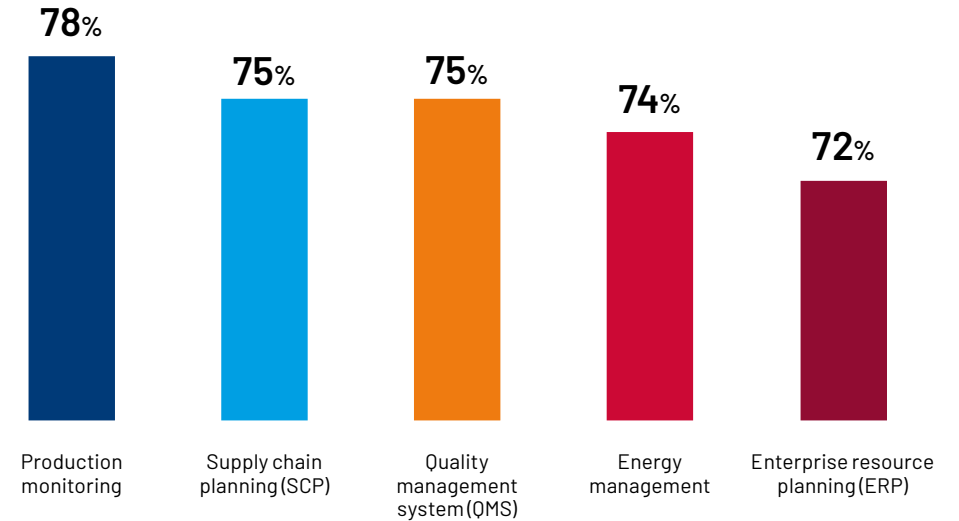
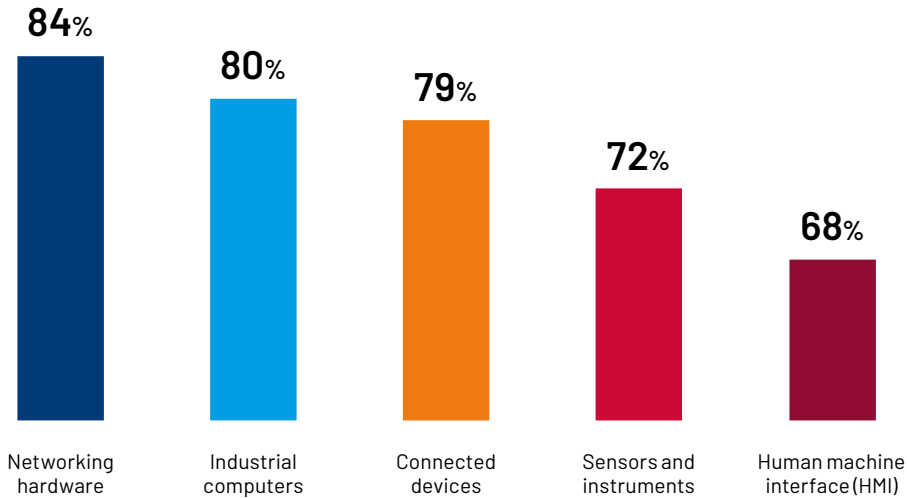
## PERCENT OF SMART MANUFACTURING ADOPTION

### HARDWARE

### SOFTWARE

Manufacturers are upgrading their networking infrastructure and investing in more industrial computers and connected hardware devices to capitalize on advancements in connectivity.

In terms of software adoption, respondents favor modular, scalable smart manufacturing solutions for tasks such as production monitoring and quality management that can be deployed quickly at a lower cost than more highly complex, rigid legacy systems.



Q. Which of the following smart manufacturing hardware/smart devices has your company adopted or has plans to adopt?

Base: 1567

Q. Which of the following smart manufacturing software solutions has your company adopted or has plans to adopt?

Base: 1567

# BUILDING A WORKFORCE WITH A BALANCE OF SKILLS

CPG employers are looking for a combination of technology knowledge and 'softer' skills to build a strong workforce over the next twelve months. The importance of employees finding purpose in their roles is felt more strongly here than in our cross-sector responses, where it ranked sixth.

Manufacturers recognize that supporting their workforce through an era of seismic change will be crucial for success; respondents say **training for new processes, and change management, will be the biggest workforce-related obstacles over the next 12 months.**

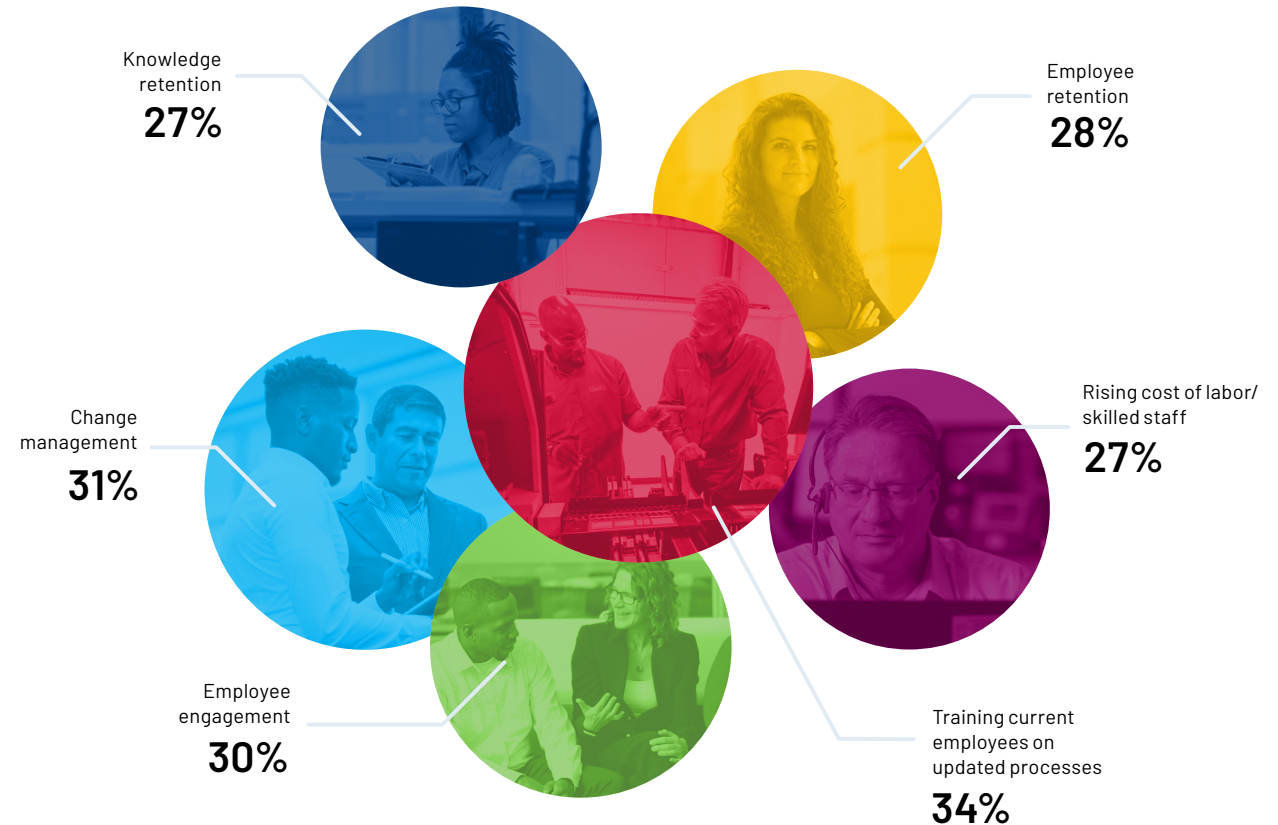
## SKILLS EMPLOYERS ARE SEEKING



Q. Over the next 12 months, how important are the following knowledge and/or skills as your organization recruits its next generation of employees?

Base: 1567

## WORKFORCE-RELATED OBSTACLES



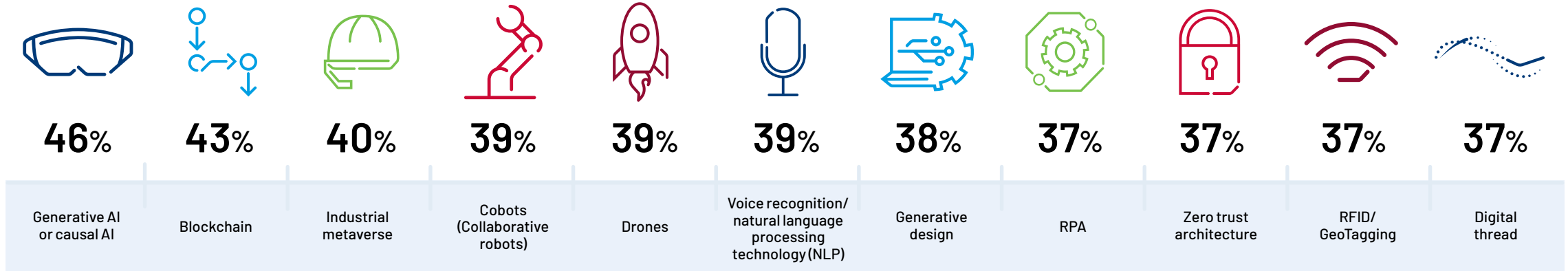
**More than 1/3** rated training employees on updated processes as the top obstacle when it comes to the workforce.



# AI AND BLOCKCHAIN TOP PLANNED TECH INVESTMENTS

The top technology investment for CPG in the coming year will be generative or causal AI – the same finding as in our main report. However, where other industries are yet to see the potential in blockchain, it's the second most popular planned investment for CPG, pointing to the benefits it can bring in tracking and verifying consumer goods.

## TOP 10 INVESTMENT AREAS OVER THE NEXT 12 MONTHS



Q. Which of the following technologies has your company invested in?  
 Respondents selected: Plan to invest in the next 12 months from four options.

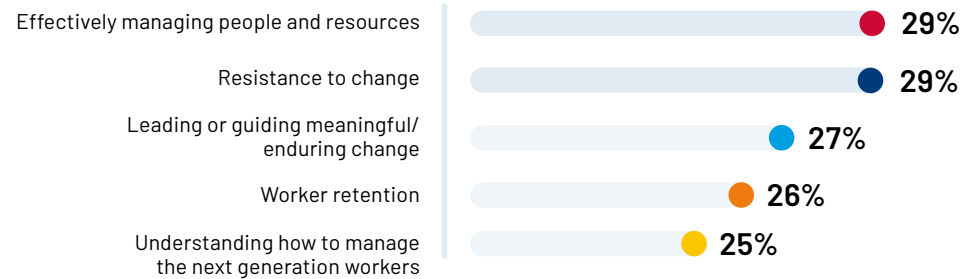
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# LOOKING TO THE FUTURE

The concerns around change management which surfaced elsewhere in this report reappear when we asked CPG manufacturers about future leadership obstacles.

**Effectively managing people and resources and resistance to change are the top barriers in this area.** The importance of being able to lead an organization through change is seen as more critical for CPG than in the full cross-sector report, where it sits outside the top 5.

## TOP 5 LEADERSHIP OBSTACLES

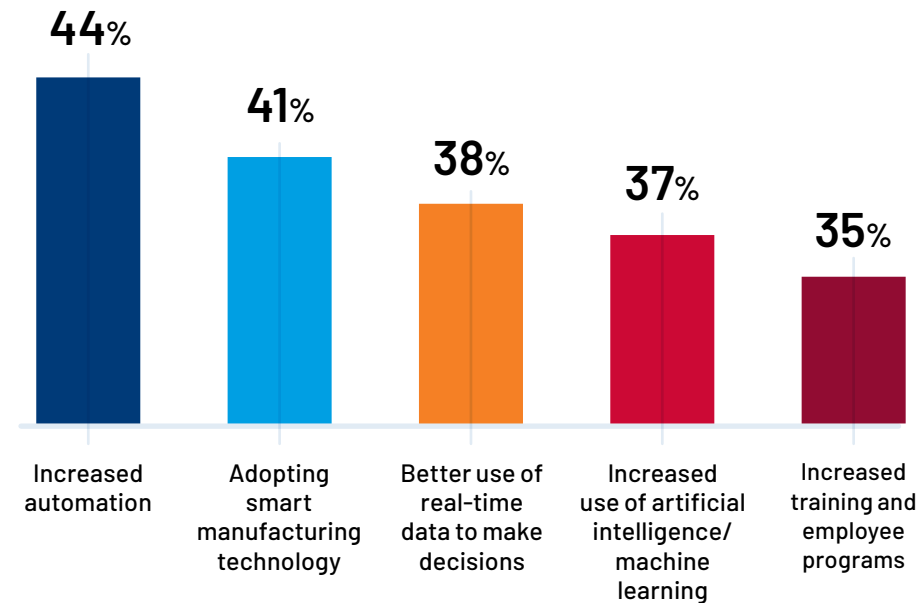


This data represents the top 5 leadership obstacles that will be faced in the next 12 months for CPG.

Going forward, CPG manufacturers are targeting strategies that will help them retain, upskill and engage the workforce in order to thrive and grow. Technologies that complement and augment the value brought by people – such as smart manufacturing technology and automation – are where they see positive business outcomes being created.

Despite the ongoing planning and workforce challenges, there's reason to be positive for those leaders who focus on the benefits to be had by technology when it's thoughtfully applied by an engaged and inspired workforce.





## HOW CPG MANUFACTURERS ARE PLANNING TO DRIVE FUTURE SUCCESS



Q. How do you plan to drive positive business outcomes over the next five years? Select all that apply.

Base: 1567



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