Honeywell

Intelligrated®

2020 Honeywell Intelligrated Automation Investment Study



The 2020 Honeywell Intelligrated Automation Investment Study was conducted April 21 to May 7, 2020 in collaboration with KRC Research, and independent third-party research firm not affiliated with Honeywell or its business groups. The 434 U.S.-based professionals polled work full-time in senior roles working for companies that directly manage warehouses, DCs or fulfillment centers; have insight into the operations of those facilities, are familiar with automation and make or influence purchase decisions for their company.

Keeping pace with e-commerce expectations in the face of escalating labor costs, scarcities and challenges is placing constant pressure on distribution center (DC) and fulfillment center operators.

Today's e-commerce driven supply chains have little margin (or time) for error. Automation technology has helped further increase productivity, worker satisfaction and more.

COVID-19 ushered in changes to business that were already on their way – the severity of the pandemic simply made these changes happen more quickly.

Honeywell wanted to understand how companies are adopting and implementing automation technology solutions in their businesses.















Specific research questions for this study include:

- What technologies have the biggest perceived impact on business?
- What barriers do companies face in adopting automation?
- Does automation translate into less need for physical labor or changes in labor attrition in DCs and fulfillment centers?
- Is COVID-19 having an impact on businesses and changing investment strategy in automation going forward?

Industries polled in the study are:

- Consumer Packaged Goods
- E-commerce
- Food and Beverage
- Pharmaceutical and medical supply
- Postal and Parcel
- Retail
- Third-party logistics

Key Trends:

1 Automation is a top priority as companies return to work

Nearly all companies are reconsidering the way they operate their business as a result of the pandemic, with more than half of companies more willing to invest in automation as a result of the pandemic.





2 Automation implementation is widely challenging across industries

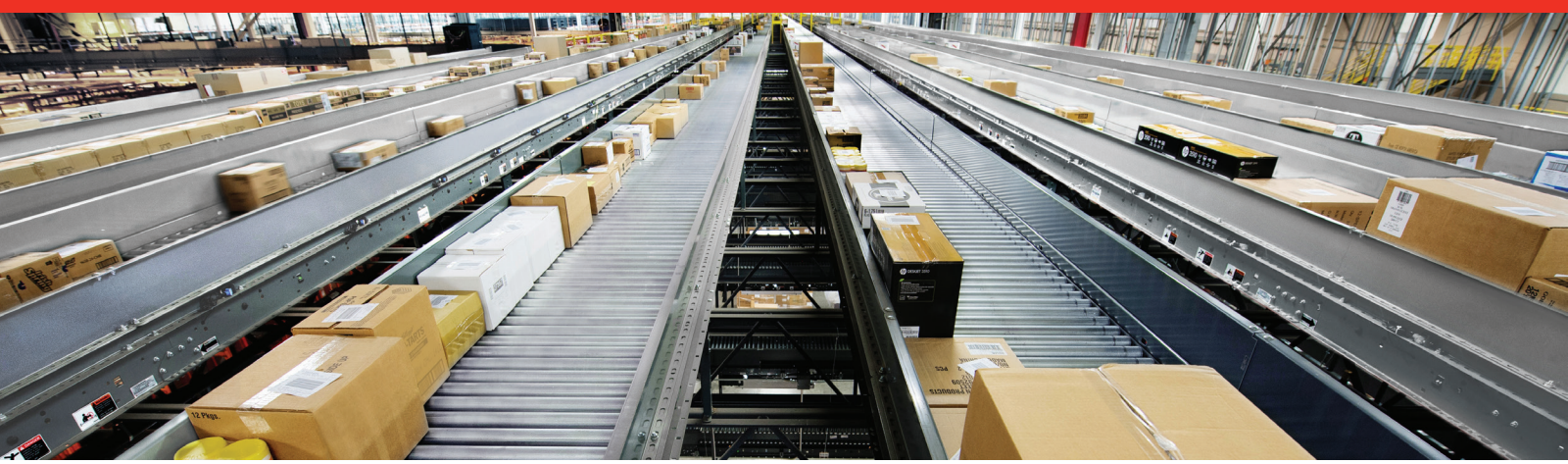
The cost and frequency of maintenance are the most widely important limitations of automation in use. The benefits of automation are numerous; however the solutions can be challenging to implement.

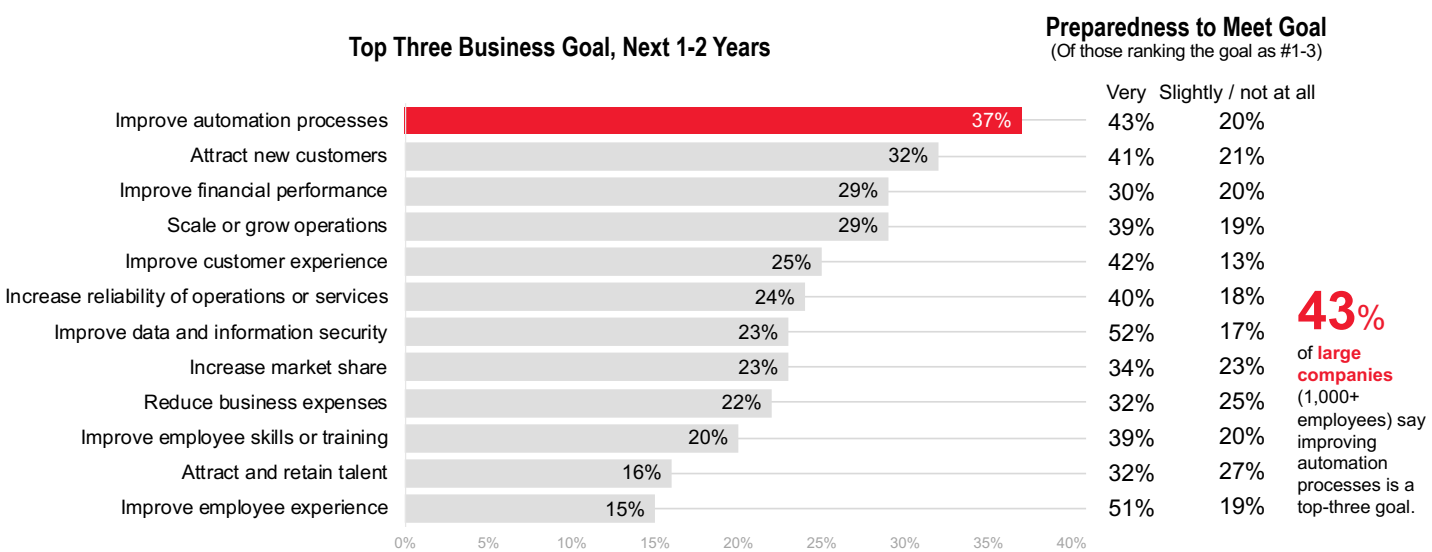
3 Automation presents opportunities for new jobs, particularly maintenance

Automation could reduce the need of physical labor for menial roles, however companies see automation in supply chains leading to opportunities for new and different jobs in multiple areas.



Improving automation processes is the most-cited business goal for companies (particularly those with more than 1,000 employees) for the next two years, though less than half of companies with this top objective indicate their company is “very prepared” to achieve it.





43% of **large companies** (1,000+ employees) say improving automation processes is a top-three goal.

Questions

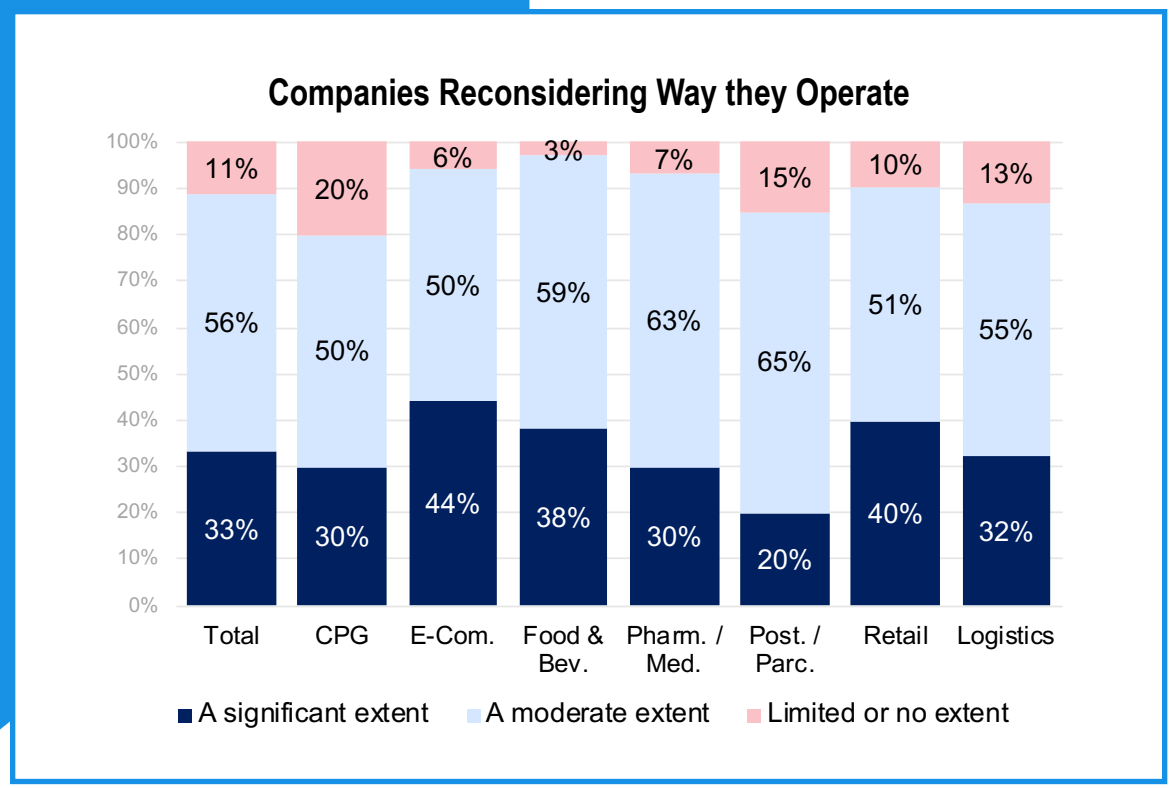
Q22. What are your company’s top three goals or business initiatives for the next 1-2 years? Rank up to three.

Q23-25. How prepared is your company now to meet and achieve the goals you selected? (n=67-160, depending on business goal ranking)

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THE PANDEMIC IS CAUSING COMPANIES TO RECONSIDER OPERATIONS AND INVESTMENT.

Nearly all companies are reconsidering the way they operate their business as a result of the pandemic, including a third doing so to a significant extent. E-commerce, retail and food and beverage companies are most widely and significantly reconsidering operations.



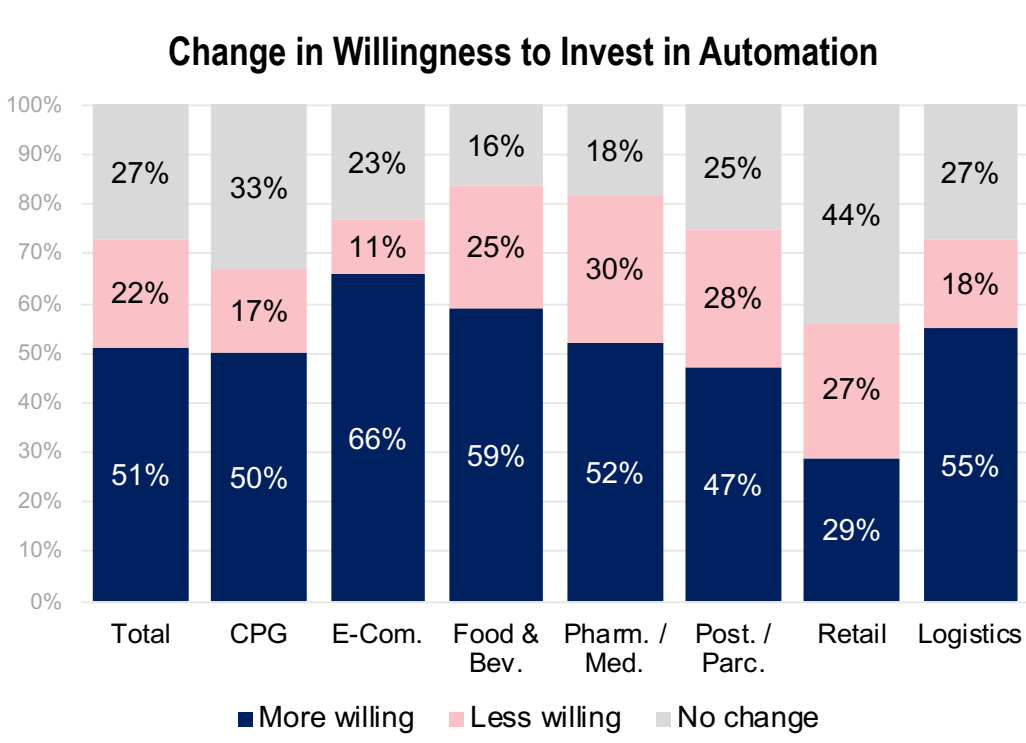
Questions

Q21. To what extent has the COVID-19 pandemic caused your company to reconsider the way it operates?

MORE THAN HALF OF COMPANIES ARE MORE WILLING TO INVEST IN AUTOMATION AS A RESULT OF THE PANDEMIC.

The ***E-commerce, Food & Beverage,*** and ***Third-party Logistics*** industries are more willing to invest than other industries.



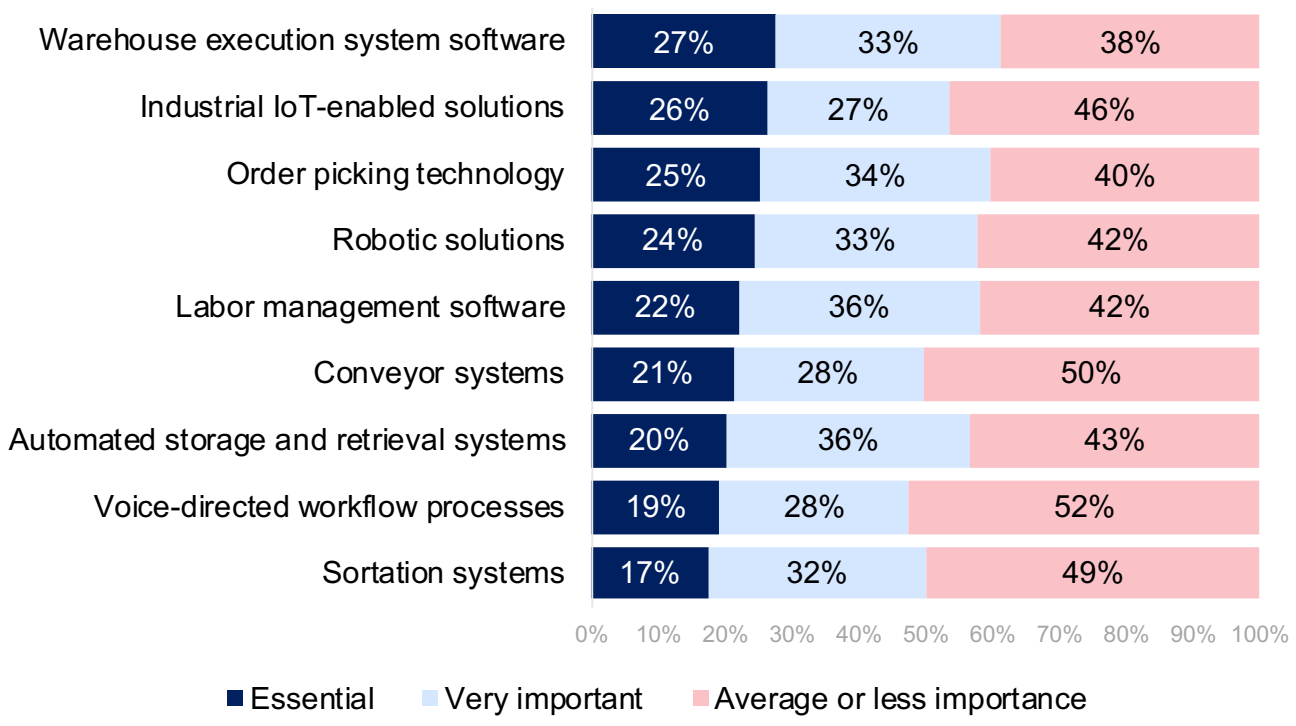


Questions

Q94. Do you believe your company is now more or less willing to invest in automation specifically because of the coronavirus (COVID-19) pandemic than it was before?

Warehouse execution system software, industrial IoT-enabled solutions, order picking technology, and robotic solutions are most often deemed essential to business success. However, less than a third of companies have scaled up any of these solutions to date.

Importance of Automation to Business



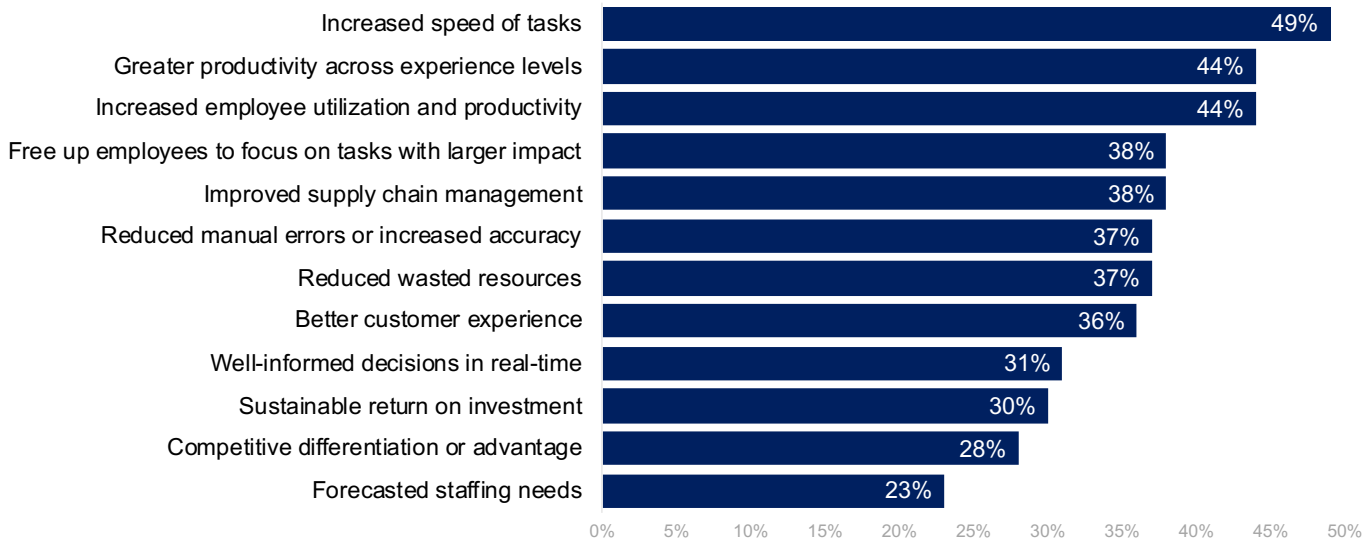
Questions

Q. 43-51. How important is each of these categories of automation to the success of your company's business?

The potential benefits of automation are as numerous as they are varied and range from benefits for business, to benefits for workers, to benefits for customers. Increased speed, greater productivity and better employee utilization are three top benefits that companies think they can realize.



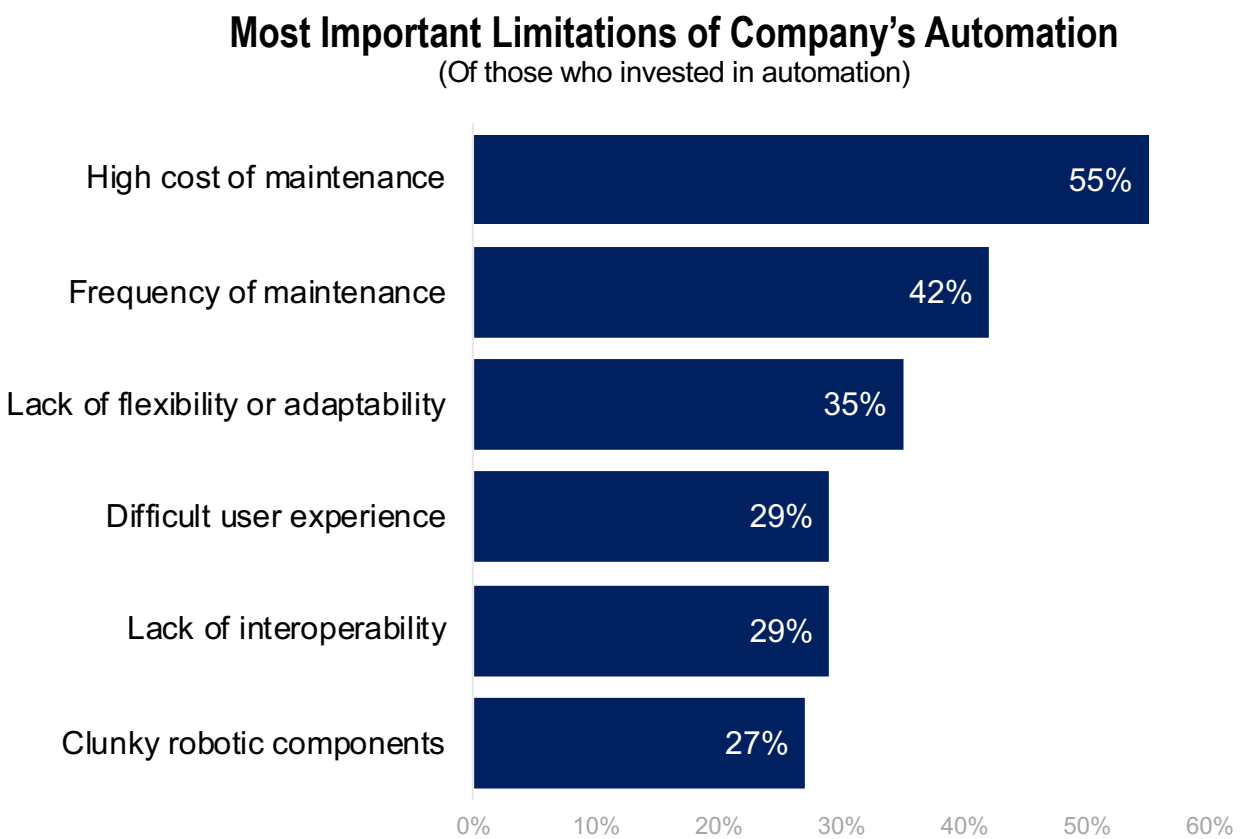
Companies' Potential Benefits from Automation



Questions

Q82. Which of the following benefits do you believe your company could realize form the use of automation? Please select all that apply.

While automation is seen to have a significant overall ROI, survey respondents have found that it has limitations in certain areas. Survey respondents identified cost and frequency of maintenance as the most important limitations of automation technology in use at their companies today.



Questions

Q89. What do you see as the most important limitations of business automation technology in use at your company today? Select all that apply (n=420)

"Very" or "Moderately" Challenging Implementation or Scaling (%)
(Of those who at least piloted a given solution)

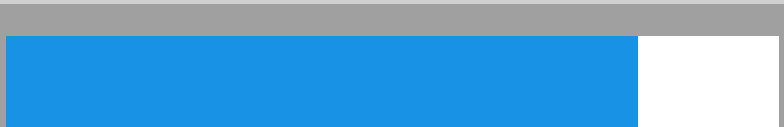
%	Total	CPG	E-Commerce	Food & Bev.	Pharm. & Med. Supp.	Postal & Parcel	Retail	Third Party Logistics
AS/RS	81	69	91	*81*	88	74	*85*	76
Voice-directed workflow	75	*75*	*80*	*63*	*75*	*78*	*73*	*79*
Industrial IoT solutions	75	71	82	*65*	75	*75*	*83*	*70*
Warehouse execution sys.	75	70	87	*77*	*70*	*67*	76	77
Order picking technology	75	63	85	*91*	77	*61*	75	74
Robotic solutions	74	68	88	68	84	72	*74*	66
Sortation systems	72	*75*	*67*	*71*	*78*	*65*	*80*	*69*
Labor mgmt. software	68	62	77	50	*65*	*74*	*81*	77
Conveyor systems	61	*58*	*67*	*50*	*53*	*59*	*74*	*61*

Top 1 (or more, if tied) in each column. Excludes small sample size cells.

Although automation solutions generate positive business outcomes, the solutions are still quite challenging to implement. Automated storage and retrieval systems are a good example – although nine in 10 are seeing positive outcomes, eight in 10 say implementation is (or was) a challenge.



9 in 10 are seeing positive outcomes.



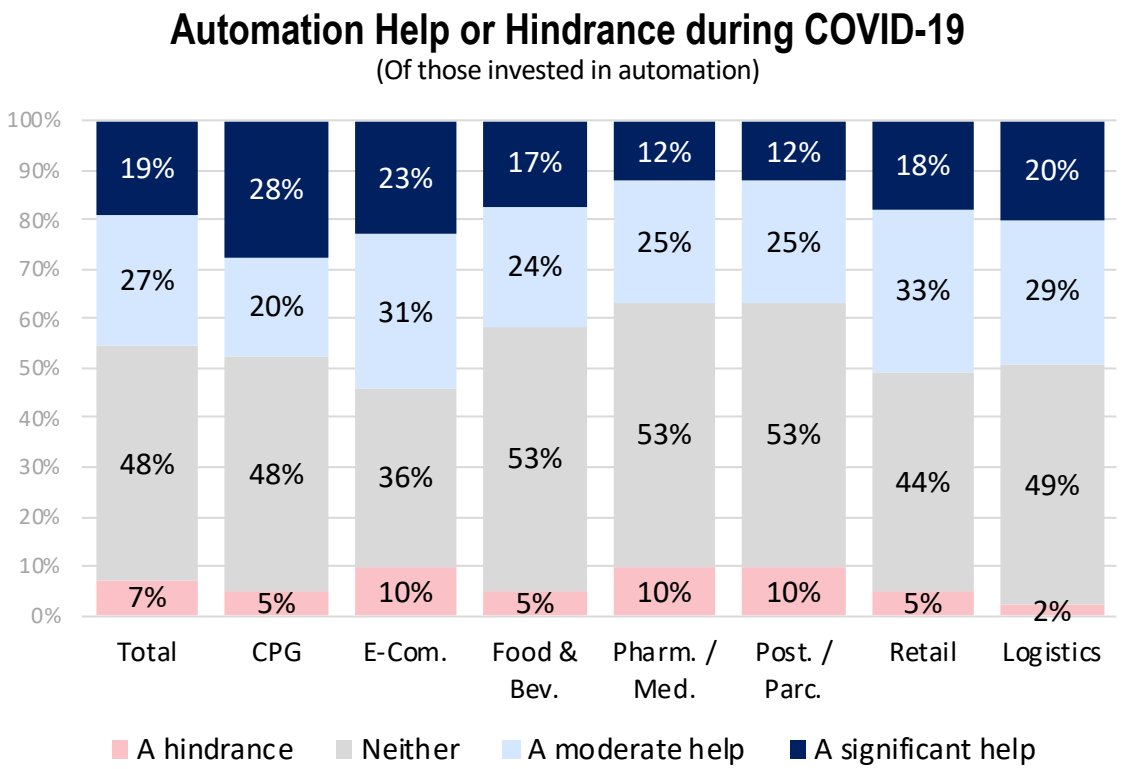
8 in 10 say implementation is (or was) a challenge.

Questions

Q 61-69. How challenging has each of the following categories of automation been for your companies to implement or scale up? (n=108-198 depending on technology)

AUTOMATION INVESTMENTS ARE PLAYING AN IMPORTANT ROLE IN ADDRESSING THE CHALLENGES CREATED BY THE PANDEMIC, PARTICULARLY FOR E-COMMERCE AND RETAIL COMPANIES.

Enabling *social distancing* and *efficiencies* were cited as the most helpful results of automation during the pandemic.

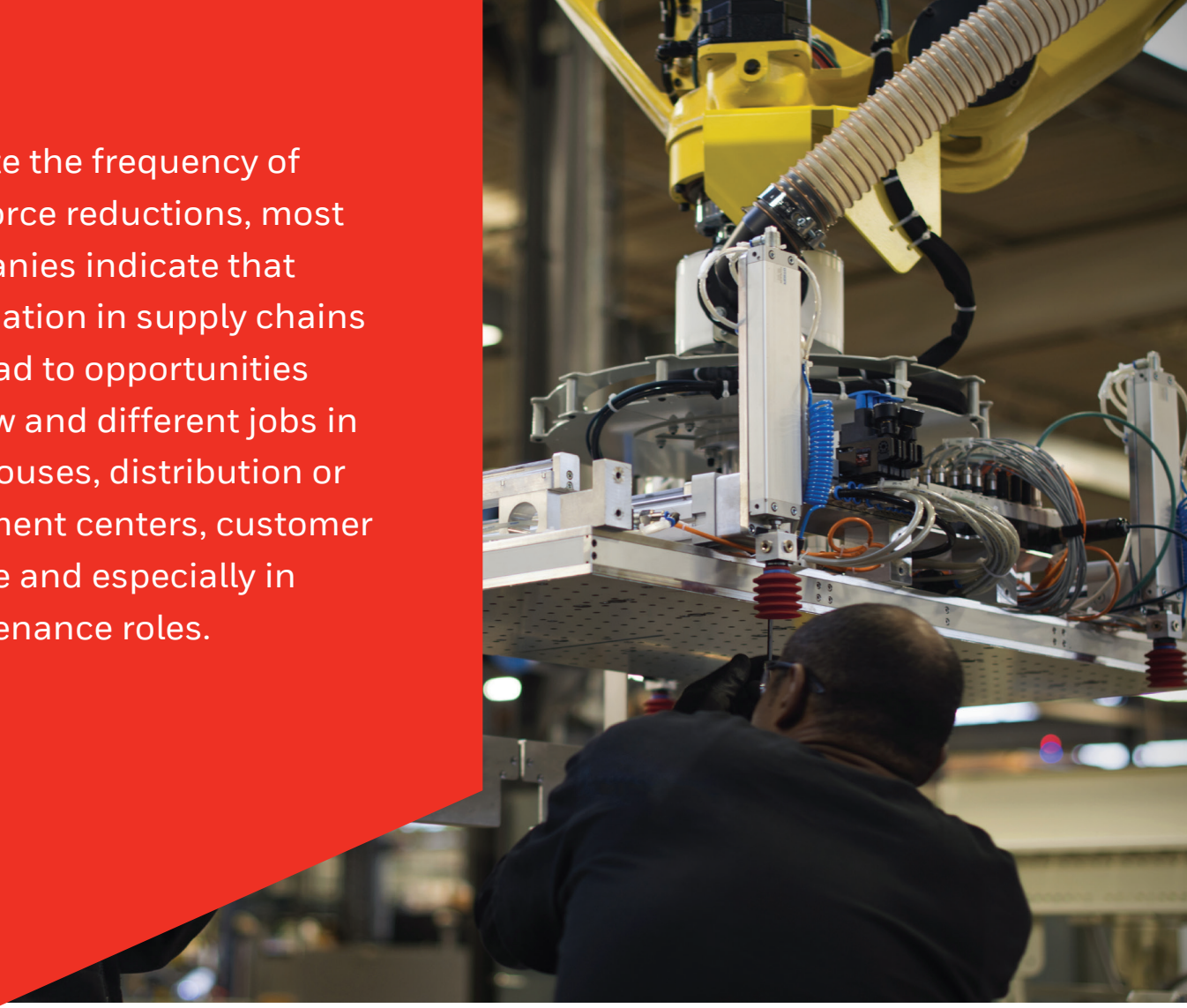


Questions

Q90. Broadly, how much of a help or a hindrance have automation processes been for your business during the COVID-19 pandemic? (n=420; industry n=57-65 each)

Q91. What has been most helpful about automation processes during the coronavirus pandemic (n=190)

Despite the frequency of workforce reductions, most companies indicate that automation in supply chains can lead to opportunities for new and different jobs in warehouses, distribution or fulfillment centers, customer service and especially in maintenance roles.



Opportunities for Automation to Provide New & Different Jobs at Company (Significant or Limited Extent, %)

	Total		CPG		E-Commerce		Food & Bev.		Pharm. & Med. Supp.		Postal & Parcel		Retail		Third Party Logistics	
%	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.	Signif.	Sig or Lmt.
Maintenance	35	81	24	80	47	82	40	90	35	75	30	78	35	70	32	88
Warehouses	25	66	15	58	31	74	24	63	18	58	22	63	29	65	35	78
Distribution and fulfillment centers	23	65	20	70	34	73	14	60	30	62	28	63	13	48	23	78
Customer service	15	64	15	68	23	58	11	56	13	70	13	65	19	63	12	67

Top 1 (or more, if tied) in each column.

Questions

Q85-88. With the increasing importance of automation in supply chains, what opportunity do you see for automation to provide new and different jobs for workers in your company in the following areas?