



CAN COLLABORATIVE ROBOTS HELP COMBAT WAREHOUSE LABOUR SHORTAGES?

July 2021

INTRODUCTION

6 River Systems sought to investigate whether collaborative picking robots could help UK warehouses and fulfilment centres expand the potential labour pool by reducing the physical nature of the work. This report highlights the key findings of the study.



Chuck, 6 River Systems' collaborative picking robot, leads an employee around a warehouse.



KEY FINDINGS





**15% ENJOY THEIR
WAREHOUSE JOB**

HAPPINESS AT WORK

- ▶ Warehouse and fulfilment workers said they were unhappy at work for a variety of reasons. Key complaints included the physical nature of the job, being short-staffed and pressure to work faster. Only 15 per cent said that they really enjoyed their job.



**8% WANT TO WORK IN
A WAREHOUSE UNTIL
THEY RETIRE**

FUTURE LABOUR SHORTAGE?

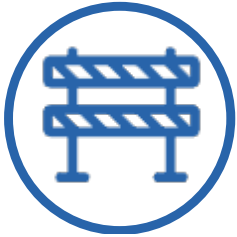
- ▶ Just eight per cent of warehouse or fulfilment centre workers said that they could definitely see themselves continuing in a warehouse or fulfilment centre role until they retired, suggesting that the sector faces a labour shortage in the context of an ageing population. The most common reason for not spending the rest of their career in a warehouse (21 per cent) was that the work would be too physical.



**23% ARE DETERRED
FROM WORKING**

COMMON DETERRENTS

- ▶ Fourteen per cent of those deterred from working in a warehouse said that such a role was either too physical or involved excessive walking, while nine per cent said they were put off because they struggled either with maths or reading.



REMOVING BARRIERS

32% WOULD CHANGE THEIR ATTITUDE IF BARRIERS WERE OVERCOME

- ▶ Around a third (32 per cent) of respondents said that overcoming such barriers would change their attitude to working in a warehouse or fulfilment centre.



TOOLS FOR THE JOB

35% SEE BENEFIT IN COLLABORATIVE PICKING ROBOTS

- ▶ When asked whether they would welcome collaborative picking robots that would make the work less physical, 35 per cent said that they would help, either because the job was physical, they became very tired or because they were short-staffed at work and they perceived that the robots would make them faster.



ACCIDENTS AT WORK

11% HAVE HAD A TROLLEY-RELATED ACCIDENT

- ▶ Eleven per cent said they had had a trolley-related accident, of which three per cent had to take time off work.

SURVEY RESULTS

In June 2021 we conducted an online survey of 200 warehouse workers and those who'd considered warehouse work.

The results to the questions are as follows:

A woman with blonde hair, wearing a black long-sleeved shirt, black leggings, and black sneakers, is walking through a warehouse aisle. She is wearing a high-visibility yellow safety vest. The aisle is lined with tall metal shelving units filled with boxes. In the foreground, on the right, is a black mobile cart with three large white plastic bins. The cart has the "RIVER SYSTEMS" logo on its side. The entire image has a blue tint.

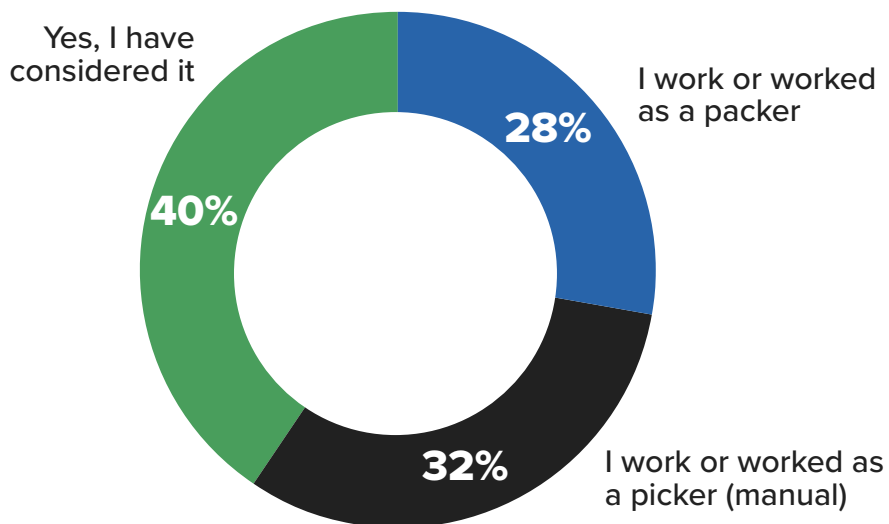
Section A:

WORKING IN A WAREHOUSE



Have you ever worked or considered working in a warehouse or fulfilment centre?

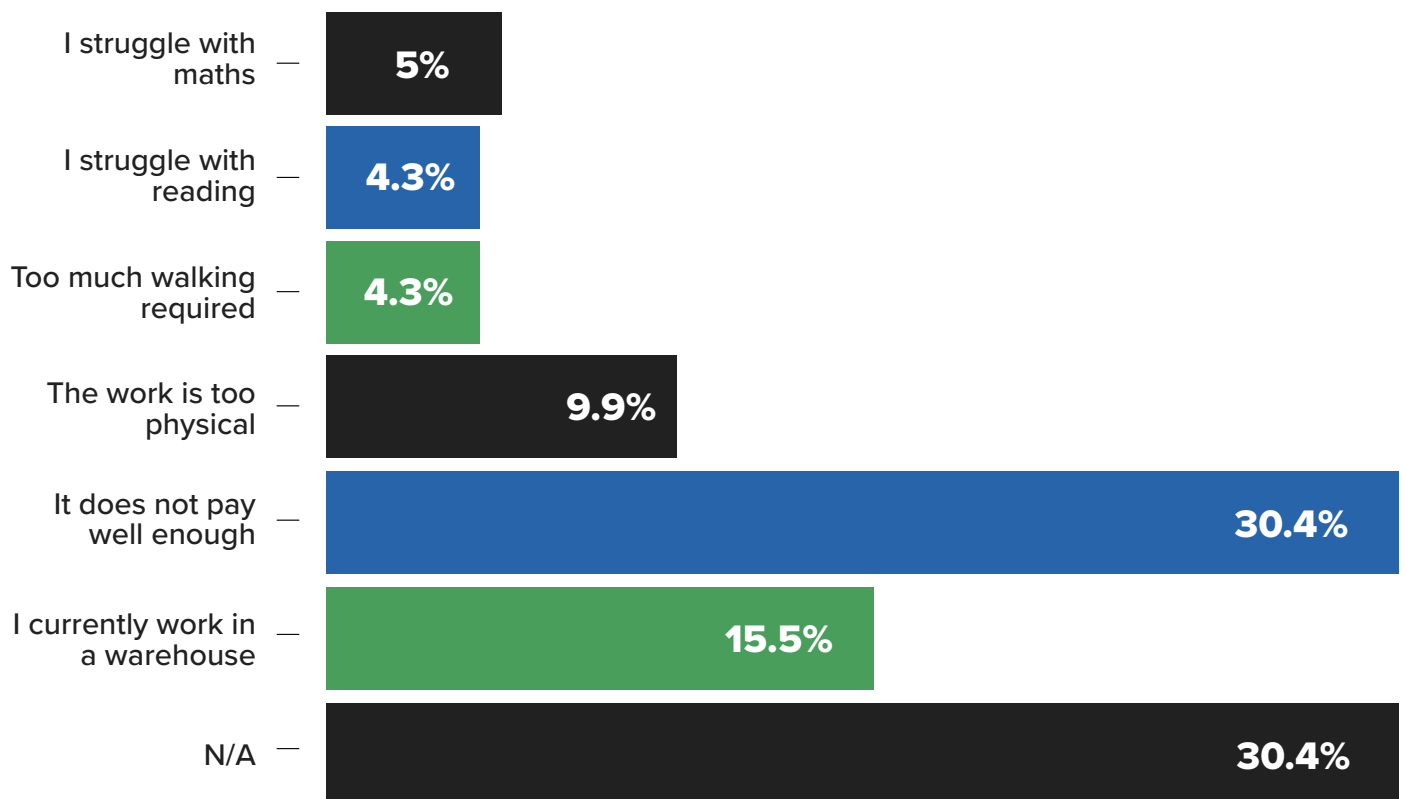
The first question was a screening question to exclude people who had not previously worked in a warehouse. A total of 40 per cent of respondents said they had considered working in a warehouse or fulfilment centre, while 32 per cent currently work or worked as a manual picker and 28 per cent work or worked as a packer.





If you have considered working in a warehouse but decided not to, what put you off?

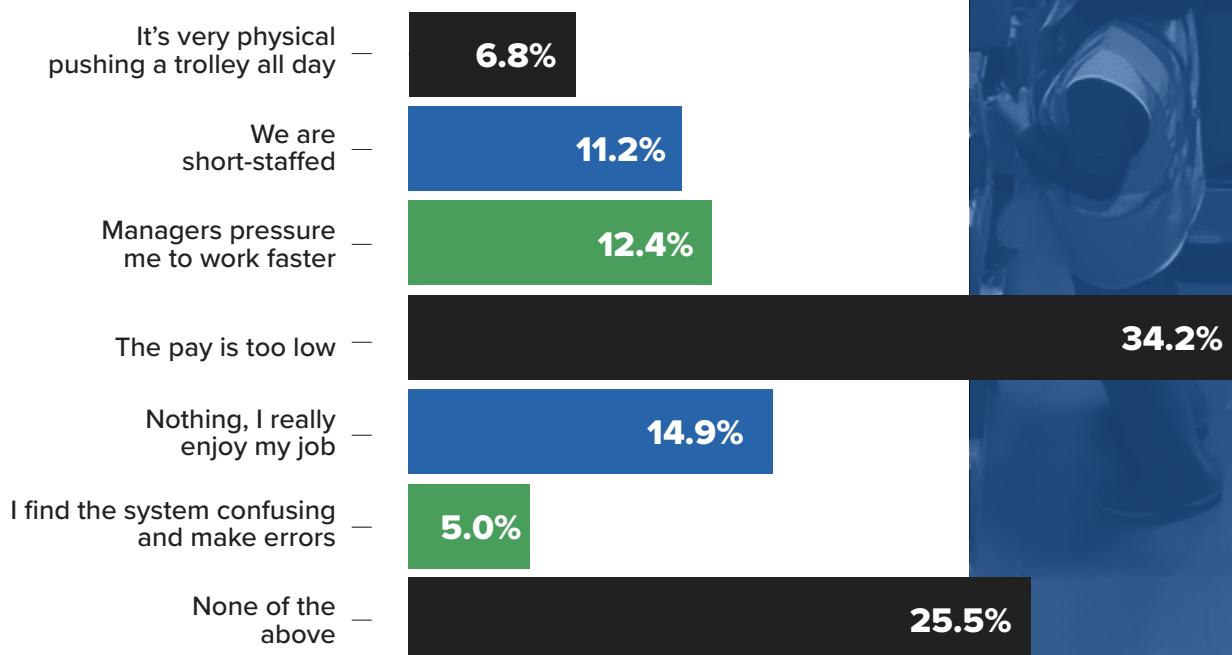
The second question explored the barriers that might deter people from working in a warehouse or fulfilment centre. Of these, around three out of 10 (30.4 per cent) said that the work did not pay well enough. Ten per cent said that the work was too physical, while four per cent made the related comment that too much walking was required. Nine per cent said that they struggled either with maths or reading.





If you work in a warehouse/ fulfilment centre at the moment (or have in the past) what do you dislike the most about your job?

This question probed factors that led warehouse or fulfilment centre employees to be dissatisfied, and the question produced a variety of responses. Over a third (34 per cent) said that the pay was too low, while 12 per cent said that managers pressured them to work faster. A further 11 per cent said that they were short-staffed, while seven per cent said that it was very physical pushing a trolley all day. Five per cent said that they found the system confusing and made errors. However, 15 per cent really enjoyed their job.

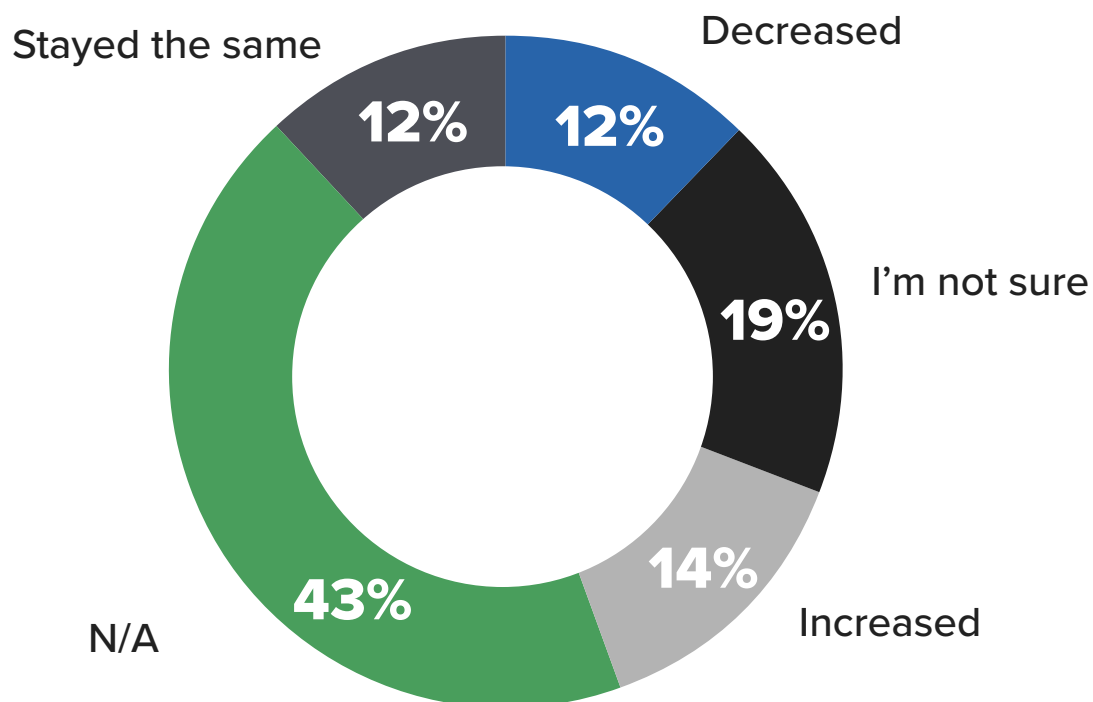




If you work in a warehouse/fulfilment centre, has the number of EU (non-UK) Nationals at your workplace changed in the last 12 months?

6 River Systems asked those currently working at warehouses and fulfilment centres whether the number of non-UK nationals at their workplace had changed over the last 12 months to see whether Covid-19 and Brexit were having an impact on the composition of the workforce.

The results showed a mixed picture. Nineteen per cent were not sure, while 14 per cent commented that they had noticed an increase. Twelve per cent said that it had remained the same, with another 12 per cent noting a decrease.



Section B:

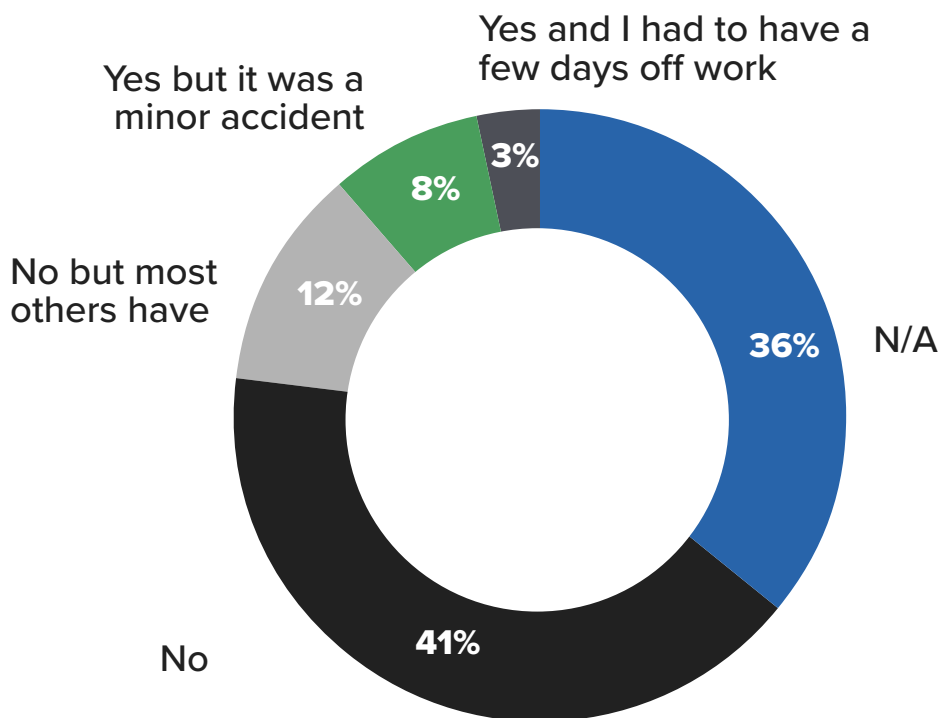
WAREHOUSE TOOLS



Q5

Have you ever had an accident with a trolley whilst working in a warehouse/fulfilment centre?

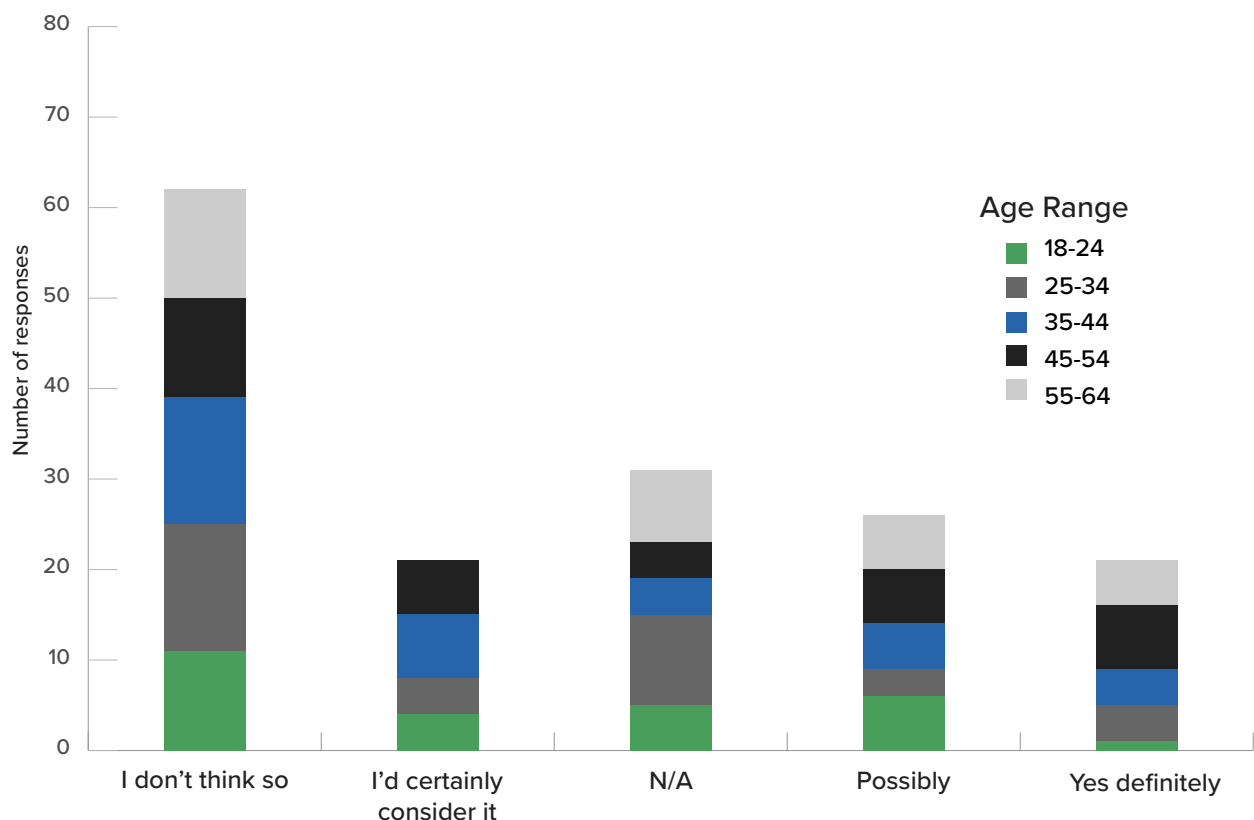
The fifth question probed the incidence of trolley-related accidents. A fifth of respondents (20 per cent) had a minor accident or had a colleague who had had an accident. Of those that had a minor accident, three per cent had to take time off work.





If a robot and software made the job less physical, reduced walking and didn't require good reading or maths skills would you consider a role in a warehouse/fulfilment centre?

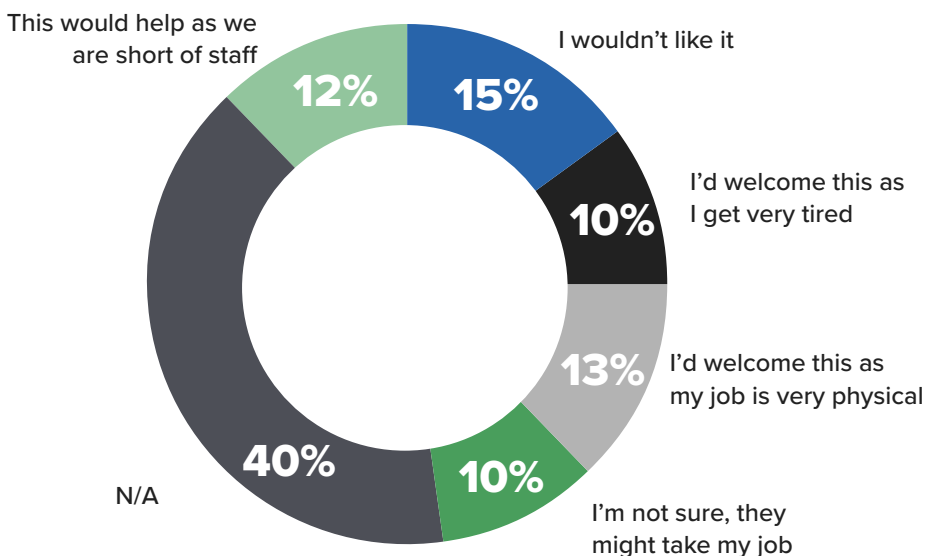
This question investigated what factors might overcome potential employees' barriers to working in a warehouse or fulfilment centre. Of these, almost four out of 10 (39 per cent) would not consider a role if the barriers were overcome, while 32 per cent said they would definitely, certainly or possibly consider it.





How would you feel if you were provided with a collaborative picking robot that halved the amount of walking you have to do and meant you didn't have to push a trolley?

The seventh question asked how people would feel if a collaborative picking robot were to make the work less physical. While 15 per cent said they would not like it, 13 per cent said they would welcome it as their job was highly physical. A further 12 per cent said it would help as they were short of staff. Ten per cent said they would welcome it as they got very tired, and the same number was not sure due to fears that the robot might take their job.



Section C:

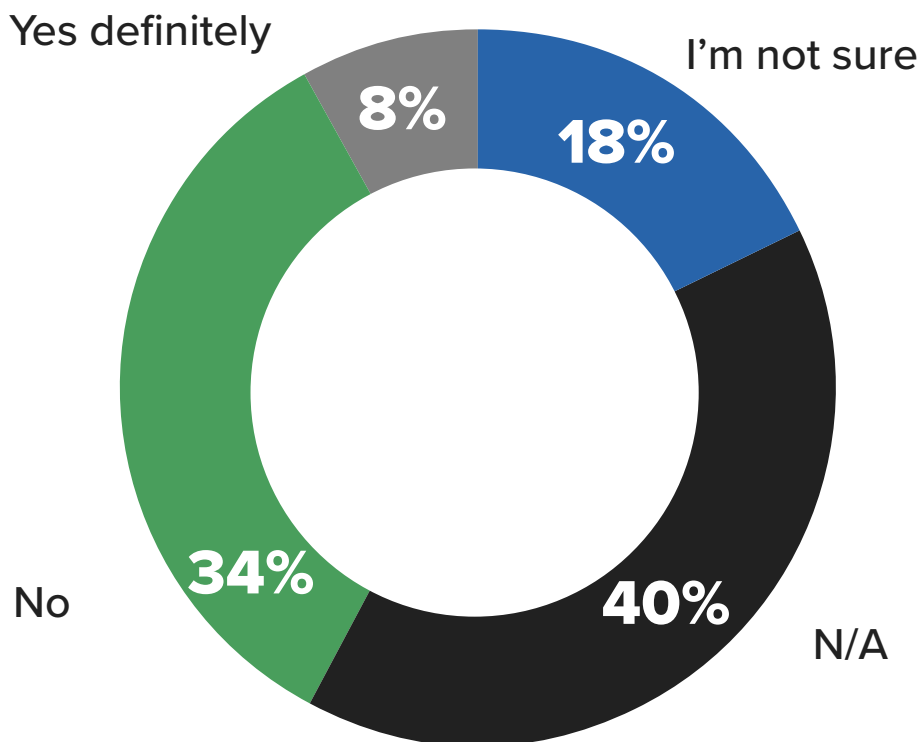
THE FUTURE





If you work in a warehouse, can you see yourself still doing this sort of role until you retire?

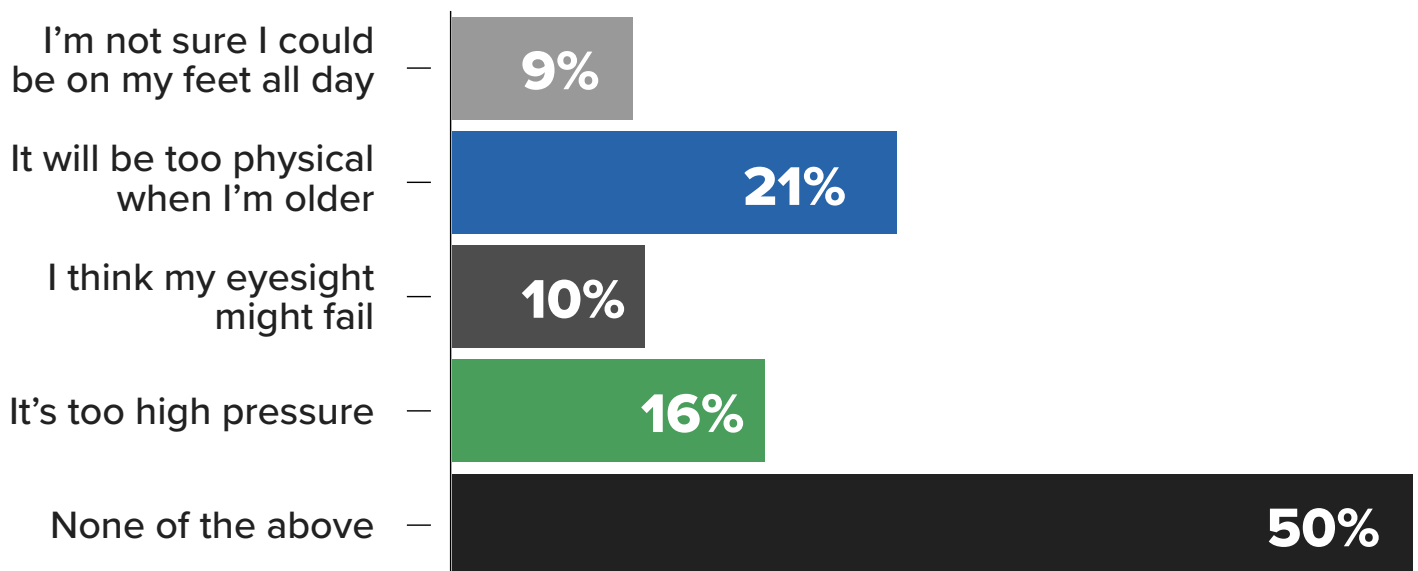
This question explored workers' future plans. Over a third (34 per cent) said they could not see themselves in the same type of role for the rest of their career. Eighteen per cent said they were not sure and only eight per cent said they could definitely see themselves continuing in a warehouse or fulfilment centre role until they retired.





If you work in a warehouse/fulfilment centre why wouldn't you stay in this sort of role until you retire?

The final question looked a little deeper into why people would not remain in a warehouse or fulfilment role for the rest of their career. Over one in five (21 per cent) said they felt the work would be too physical as they grew older. Sixteen per cent said it was too high pressure, while nine per cent commented that they weren't sure they could be on their feet all day and 10 per cent worried that their eyesight might fail.



CONCLUSION



Collaborative robots could help tackle a looming labour shortage in warehouses by addressing the factors deterring people from working in the sector.

As has already been seen in the hospitality sector, the labour shortage is expected to continue due to EU nationals returning to their home countries due to a combination of Brexit and Covid-19 and an ageing population being less able to undertake physical work. UKHospitality, a trade body, said in May that the sector had a shortfall of 188,000 workers, while in the same month the job seeker website Adzuna noted a 36 per cent increase in job ads for the logistics and warehouse sector since March. These factors will leave the warehousing and fulfilment sector struggling to recruit employees to fulfil the booming demand for e-commerce deliveries, which will have a direct impact on the supply chain all the way down to the consumer.

The survey suggests that people are put off working in warehouses by the physical nature of the work, which often involves walking for miles each day in large warehouses to pick or pack items, together with the perceived reading and maths skills required.

Meanwhile, many employees in the sector are unhappy in their roles and few see themselves doing similar work for the rest of their career.



However, around a third (32 per cent) of respondents said that they might or would consider working in a warehouse or fulfilment sector if such barriers could be overcome. Twelve per cent of women were in this category, along with around 17 per cent of people approaching retirement aged 55-64.

It is clear from this survey that the perceived physical nature of the work in warehouses and fulfilment centres makes it harder for them to attract and retain the employees they need during a boom in e-commerce sales.

The survey also shows that many working in the sector would welcome collaborative picking robots, such as those made by 6 River Systems. These remove the need for the heavy weight of the trolley to be pushed around the fulfilment centre and reduce walking through the use of artificial intelligence (AI) and machine learning (ML) to instantly calculate the shortest routes for employees. This sort of solution can ease the physical burden on employees, virtually eliminate the risk of trolley-related injuries and increase staff retention. Combined with software that uses arrows, pictures and numbers, making it easy for people with poor maths or reading skills to follow, this opens up a much larger labour pool, helping to alleviate a labour shortage in the sector.

Methodology

6 River Systems asked 161 people who had worked or considered working in a warehouse or fulfilment centre a series of questions between Monday June 21 and Monday June 28 2021 via a Google Survey. The questions targeted men and women of working age living across the UK.



ABOUT

6 RIVER SYSTEMS

Founded in Waltham, Massachusetts in 2015, 6 River Systems is a leading collaborative mobile robotics fulfillment solution provider and part of global commerce company Shopify Inc. Founders Jerome Dubois and Rylan Hamilton were previously executives at Kiva Systems (now Amazon Robotics).

The 6 River Systems solution is operating in more than 50 facilities in the U.S., Canada and Europe, fulfilling millions of units each week for companies including Lockheed Martin, CSAT Solutions, ACT Fulfillment, DHL, XPO Logistics and Office Depot.

To learn about 6 River Systems and its wall-to-wall fulfillment solution, please contact Simon Jones at:

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