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# Solving the retail labor shortage with a robotics revolution

Meta:

The retail labor shortage has meant inconsistency for retailers. What's causing the shortage? And can robots solve it?

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## SUMMARY

What's causing the retail labor shortage in 2023? Is it here to stay? And can robots solve it?

The pandemic took an immense toll on retail workers, with business closures, reduced hours, and health risks forcing many to leave the industry. This drastically shrank the retail labor pool. And while some recovery continues, signs increasingly point to an ongoing labor challenge - not just a temporary blip. Robots are proving invaluable in filling the gaps.

## CONTENTS

- Retail labor shortages: the new normal?
  - What the retail labor shortage looks like
  - How robotics can help the retail labor shortage
  - Humans + robots make the most of retail labor
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# Retail labor shortages: the new normal?

The global pandemic caused immense upheaval and strain across industries, but perhaps none felt it as acutely as the retail sector. Already facing challenging conditions, retail workers saw their livelihoods and well-being threatened as businesses shuttered, hours were slashed, and health risks mounted. Many made the difficult decision to leave the industry altogether, whether to protect their families, pursue new opportunities, or retire early.

These departures, combined with broader economic disruptions, drastically shattered the retail labor pool. Even now, as the world slowly recovers, the retail industry is grappling with a severe labor shortage that [shows no signs of easing up](#).

The shortage has been compounded by a decline in the number of working-aged people and an overall shift towards a “new normal” characterized by high inflation, shorter working hours, and elevated labor costs.

As the economy slowly recovers, several indicators suggest that the labor shortage is not temporary but a long-term challenge. The retail sector is one of the hardest-hit industries, with Forbes recently calling the issue a “[forever labor shortage](#).” Businesses, retail locations, and economic growth are expanding, but the ability to fill positions is declining.

To address the shortage, companies are increasingly turning to robots, not to replace human workers, but to perform tasks that would otherwise go undone.

By doing so, they hope to alleviate the burden on human employees and help businesses operate more efficiently. As robots become more specialized, they can provide even more significant benefits. Let’s look at how [robots can help alleviate](#) the retail labor shortage and how they will be specialized to perform various tasks.

## What the retail labor shortage looks like

Most retail jobs (e.g., cashiers, salespersons, and first-line supervisors) require a physical presence. [Eighty percent of retail employees work on-site](#), and an overwhelming 74% [of retailers](#) anticipate that they will be unable to fill customer-facing positions with enough workers this year.

The shortfall of [one million unfilled jobs](#) in the retail industry persists even as the pandemic subsides.

It’s [not just retail](#) that’s feeling the strain. The baby boomer generation, which makes up the largest cohort of workers in America, is [retiring at a rate of 10,000 per day](#). This trend will continue for the next few decades until the last boomer leaves the workforce.

(The situation is not much better behind the scenes in warehouse operations. Industry giants like Amazon expect to “[run out](#)” of new warehouse hires as early as this year.)

Unfortunately, future labor market growth [is expected to be weak](#), with an increase of only [1.8 million people](#) – from 167.8 million to 169.6 million – by 2031.

In short, the retail industry will have to adjust to a future with fewer in-person workers.

# How robotics can help the retail labor shortage

In [retail operations](#), robots are stepping in to perform physical tasks that AI software alone cannot handle, offering a tangible solution to the challenges posed by a dwindling workforce.

The rise of robotics in retail is evident in the numbers. Industrial robot installations surged by an impressive [31% from 2021 to 2022](#), while service robot use experienced a somewhat more remarkable [37% growth in the same period](#). This trend shows no signs of slowing down, including in retail, where investment in technology is projected to nearly double from 2021 to 2030, from [1.7% to 3.25%](#).

Here are some of the key areas where robots are making a difference for retail businesses:

## Shelf scanning

[Robots with computer vision](#) and RFID can autonomously navigate store aisles to assist [with inventory management tasks](#). They can scan shelves to identify misplaced items, update inventory levels, and detect out-of-stock products that need to be replenished, ensuring optimal product availability and presentation.

Additionally, AI algorithms can analyze the vast amounts of data these robots collect to forecast demand, optimize pricing, and identify trends, enabling retailers to make data-driven decisions and improve operational efficiency.

## Autonomous cleaning

[Robotic floor scrubbers and vacuums](#) can efficiently clean large retail spaces, maintaining a hygienic and inviting customer environment while freeing human staff to focus on other tasks.

## Customer assistance

In-store robots can serve as mobile kiosks, providing product information, wayfinding assistance, and even escorting customers to specific items, enhancing the shopping experience and reducing the workload on human staff.

## Curbside pickup and delivery

Autonomous robots can facilitate curbside pickup and last-mile delivery services, streamlining the process and providing contactless options for customers.

## Hazard detection

Robots can identify potential safety hazards, such as overhanging obstacles from racks or shelves, and alert human staff or take immediate action to mitigate risks, contributing to a safer shopping environment.

# Humans + robots make the most of retail labor

Humans can adapt to changing situations and think ahead, taking into account human emotions and feelings when making decisions. Like agile queen bees, humans are well-equipped to make important decisions, see the bigger picture, and create change.

On the other hand, robots are highly efficient and can perform monotonous or dangerous tasks, freeing human talent to be utilized in different areas. Robots can also provide businesses with valuable data to make better decisions.

Integrating robots into retail is a game-changing revolution, but it is important to remember that human talent is still vital to success. By utilizing robots to handle mundane tasks, businesses can focus on nurturing their employees for higher-level, more meaningful work.

Brain Corp offers cutting-edge autonomy and AI so AMRs can efficiently handle tasks like inventory tracking and floor care, allowing retail workers to focus on more important work. [Contact us](#) for a personalized assessment of how retail robots can benefit your business.