

Using Automation to Help Alleviate Retail Labor Challenges



As the nation faces critical labor shortages, fresh strategies and technologies must be adopted to make better use of the existing workforce – and to evolve retail’s digital operations to adapt to future requirements.

In the wake of the Great Resignation, the US faces a staggering shortage of available employees. The retail industry faces a particular conundrum as retailers work to manage their store operations amid these labor challenges. According to a recent [survey conducted by LinkedIn](#), retail has the highest percentage (23%) of employees looking to leave their jobs. In addition, according to Deloitte’s 2022 Retail Industry Outlook¹ report, 70% of retail executives say that labor shortages will impede growth this year, and 74% predict shortages in customer-facing positions in 2022.

Rising labor costs – driven by the tight labor market – and growing store associate tasks, as well as expanded tasks to support digital operations, are exasperating labor challenges. Due to these issues, it’s becoming more difficult for retailers to attract and retain the talent necessary to properly service customer demands. But in every crisis, there are opportunities, says Verizon Global Retail Strategist Katie Riddle. “The need to adapt to labor shortage issues creates an opportunity to radically rethink the customer experience and store operations to make them more streamlined and seamless,” Riddle says.

In response to these critical staff shortages, retailers are turning to automation to perform many operational tasks. By using innovative mobile apps, Internet of Things (IoT) sensors and robotics,

retailers can enable store associates to spend more time on customer-facing activities.

How automation can help retailers through the labor crisis — and beyond

Retailers are helping existing employees bring more value to the business by automating as many of their low-level, routine tasks as possible. Automation has the potential not only to remove many of a retail associate’s more repetitive duties, such as inventory tracking or addressing online customer service queries, from an already burdened workload, but it also frees up associates to perform more critical work within the store.

“By automating associate tasks, retailers can reap many benefits, including reduced labor costs, increased accuracy of inventory and pricing, more consistent processes and more associate time spent on higher value tasks,” Riddle says.

Many of those top-level tasks focus squarely on the customer and their shopping experience. With automation in place, associates can:

- Offer customers enhanced engagement and personalized services, including product recommendations based on indicated preferences, previous purchases and browsing history
- Share more in-depth product information with the customer
- Show customers how to use products
- Assist customers with locating products within the store
- Ring up transactions with mobile point-of-sale systems wherever customers are in the store



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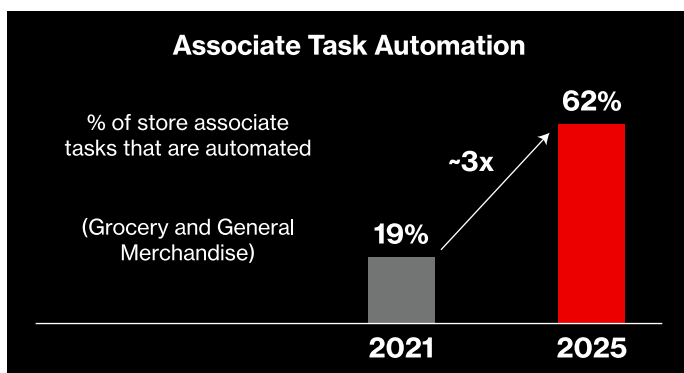


Key forms of retail automation

The retail industry is certainly focused on tapping innovative technology to automate store associate tasks. Grocery and general merchandise retailers have been slower to adopt associate automation within their stores, but they are on track to do so at a faster rate than specialty and department stores. According to the Incisiv 2022 Connected Retail Experience Study², associate task automation for grocery and general merchandise retailers is expected to more than triple from 19% in 2021 to 62% in 2025. Specialty and department stores are planning to double their associate task automation in the same time frame.

But what exactly does automation look like in the retail setting? By leveraging innovative technology such as IoT sensors, digital labels, robotics, mobile apps and other technologies that benefit from the speed of 5G, retailers have the opportunity to improve customer experiences and operational efficiencies. The key areas of opportunity include:

- **Digital shelf labels.** Leveraging digital shelf labels, retailers can eliminate the labor-intensive task of printing new price labels and attaching them to shelves. With digital labels, price changes can be made remotely and instantly from the corporate office, and the shelf labels can provide customers additional product information or special promotions.
- **Real-time inventory and stock visibility.** With radio-frequency identification (RFID) tagging or IoT sensors, retailers can track inventory in real time across the enterprise and throughout the supply chain to reduce out of stocks and enable fulfillment of online orders from store inventory.
- **Self-checkout functionality.** With dedicated self-checkout terminals or a mobile app, customers can checkout without the need for cashier assistance.
- **Autonomous checkout.** This innovative solution enables customers to simply walk in, select their items and leave without the need to stand in a checkout line, enhancing customer convenience. Autonomous checkout is made possible through use of shelf sensors or computer vision cameras that track customers’ purchases and automatically charge the payment card on their account.
- **Robotic assistants.** Robotics can be deployed for cleaning purposes or for monitoring and moving inventory in the store.
- **Wayfinding apps.** Indoor positioning systems are designed to assist associates and customers with precise, turn-by-turn directions to help them efficiently locate the items in the store.



Regardless of the type of retail business, the possibilities offered by automation can enhance customer experiences and improve associate productivity. Riddle points out that “by leveraging 5G Fixed

Wireless Access, mobile edge computing, and computer vision to track products, retailers can automatically monitor out of stock/low stock and planogram compliance, relieving this burden from associates' task list."

In addition, automation can be of tremendous use for monitoring products that require refrigeration or freezing, aiding in cold-chain management.

"Instead of having employees manually check freezers and refrigerators for proper temperatures, 5G and IoT sensor technology, as well as AI and machine learning can monitor temperatures in real time," Riddle says. "The temperatures are monitored on a centralized dashboard that reduces manual labor and can predict potential issues before they become problems."

From here to the new future of retail

While much of the new wave of retail innovation involves technological solutions, supplemental personnel-related practices are necessary to reach the next phase. Foremost among this is a commitment to upskilling, reskilling and redeploying employees to help them carry out these customer-facing tasks. Increasing employee value isn't simply a matter of installing an array of robotics and sensors to lighten their workloads. It's about developing internal talent to enable associates to bring greater value to the brand.

And of course, to execute these highly technical functions, companies need to ensure that their connectivity is up to the challenge.

"Retailers need a strong infrastructure foundation, and that really starts with the network and 5G, which allows for faster, near real-time, computing. It's what can enable all of the new and exciting automation solutions," Riddle says. But it's not just about speed — capacity and computing power are also essential. "As for bandwidth and data-intensive solutions, MEC can provide the necessary compute power where it's needed," Riddle adds.

Conclusion: Automation, a solution to labor shortages

Though the current labor shortage presents challenges to retailers, automation technology can go a long way toward solving this conundrum. As the retail industry reimagines the services and experiences that it can provide to its customers, it must also rethink how automation capabilities can change and enhance the role of the retail associate. Automating store associate tasks will be a big focus for retailers across all retail formats moving forward.

Learn more about how we can help you ease your labor challenges. Visit Verizon's website at <https://www.verizon.com/business/solutions/industry/retail/>



References

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