

WHY AUTOMATION WON'T REPLACE THE HUMAN WORKFORCE

It's time to shift our thinking about warehouse automation and focus on its less visible applications, uncovering a hotbed of opportunity.

September 13, 2021 • Industry Today • Kevin Beasley, VAI CIO

Warehouse automation software and systems are forecasted to become a \$47.4 billion market by 2023. But questions persist about how humans will fit into our increasingly automated future.

For example, will some workers lose their jobs? If not, what will they do instead? And is a transition to automated, nonhuman warehouses possible or even desirable?

Mega-distribution centers like Amazon's, complete with nicknamed robots, are some of the most visible images of warehouse automation. However, cost savings, operational efficiencies, and even training opportunities are possible when organizations opt to implement warehouse automation — potentially without losing a single worker.

3 facts about the impact of automation

The fear that automation may displace workers is rooted in a general misunderstanding of the technology. Automation does not necessarily render the human workforce obsolete. Instead, it can make existing warehouse jobs more efficient, fill labor gaps, and provide career advancement opportunities for employees who learn new skills.

1. Humans are behind the success of warehouse automation systems — Automation is not possible without human intelligence. Workers who engineer, oversee, control, and repair automation technologies are just as vital to operations as the technology itself. And with automated technologies in place, you have time to zoom out and identify opportunities for improvement elsewhere.

2. Automation creates opportunities for advancement — The adoption of warehouse automation reduces the need for unskilled labor, but increases demand for higher-paying, higher-skilled jobs to oversee technology and operations. To meet this need, you must provide education to upskill the current workforce. This means investing in training for existing employees to gain a competitive advantage — both for your company and employees. Additionally, many universities offer degrees and certifications in warehouse management, enabling employees to work at a management or executive level in warehouses.
3. Automation can help alleviate labor shortages — We need to shift our thinking from automation taking jobs to filling



them. Currently, the U.S. is in the midst of a truck driver shortage that poses a threat to supply chains everywhere. In this scenario, automation is a promising solution, and driverless trucking is starting to become a reality. But aside from filling drivers' seats, automation can help you achieve full staffing to keep pace with order fulfillment and deliveries during peak shopping seasons.

How warehouse automation supplements the human workforce

Now that we have broken down the realities behind the impact of automation on the workforce, we can take a closer look at the efficiencies and improvements that come from adopting warehouse automation. Automation helps increase inventory accuracy, improve safety, and streamline operations — all of which can reduce operational costs in the long run.

Operation optimization

Automation can complement

human activity in nearly every aspect of warehouse operations. For example, radio frequency identification (RFID) and barcode scanning are replacing manual data entry to keep a more accurate inventory count, allowing you to reallocate time and energy to other tasks. Automation can also be used for more efficient and accurate warehouse order picking, which plays a pivotal role in reducing operational costs.

But automation technology can do more than just perform repetitive and laborious tasks. It can also complete complex tasks like analyzing workflows and identifying the speeds at which products move through the supply chain. Coupling these technologies with an enterprise resource planning (ERP) system allows you to collect data and unlock valuable insights that lead to smarter decision-making and streamlined processes.

Safety improvements

In 2019, the U.S. Bureau of Labor Statistics reported a rate of 4.8 injuries and illnesses for every 100

warehouse workers, with forklifts, falls, working with hazardous materials, and repetitive motion as the most common sources of injuries. Warehouses are growing in size — both in width and height. Robotics can aid in areas such as restocking and moving the products on shelves too tall for you to access safely. Additionally, the temperatures in warehouses, whether freezing or scorching, can create uncomfortable or unsafe work environments. Adopting automation reduces the need for you to work in such environments, along with potentially reducing the need for you to perform repetitive and laborious tasks that can cause injury.

It is critical to reframe our thinking around warehouse automation and look beyond the superficiality of robotic-powered warehouses portrayed in the media as simply a cost-saving measure. Automation benefits warehouses in much more significant ways that supplement the work of humans and result in substantial operational efficiencies and cost reductions.

