

Q&A

Automating ecommerce fulfillment helps to reduce labor dependency

An executive conversation with **Mike Jennison**, vice president of supply chain engineering, Saddle Creek Logistics Services



The COVID-19 pandemic spurred a massive shift to ecommerce. As shoppers move online in record numbers, retailers and brands are looking for technology solutions to help handle order fulfillment. Digital Commerce 360 recently spoke with Mike Jennison, vice president of supply chain engineering at Saddle Creek Logistics Services, about the latest trends in fulfillment automation.

Now more than a year into COVID, what are the biggest fulfillment challenges facing retailers and brands?

Labor is the No. 1 challenge today. Ecommerce fulfillment is much more labor-intensive than traditional warehousing operations. Finding and keeping warehouse workers has become extremely challenging in today's competitive environment.

With ecommerce growth expected to continue at an aggressive pace, retailers and brands need to prepare for dramatic spikes in online order volume. And, of course, peak season is just around the corner. Having the ability to scale to meet demand is critical.

Are automation technologies ready to address these challenges?

We're seeing a massive demand for automation technology in the fulfillment space. Many of the latest developments focus on helping operations address the need for greater productivity, reduce labor dependency and flex to accommodate fluctuations.

As competition fuels development and drives cost reductions, automation is getting better, faster, and more economical, improving the business case for implementation.

The most significant advancements involve robotics, artificial intelligence (AI), machine learning and vision systems. Robotics technology has become much more sophisticated and promises to deliver real value for fulfillment operations.

What's making robotics more attractive for fulfillment?

Autonomous mobile robots (AMRs) can achieve two or three times more productivity than traditional manual cart picking. They are particularly attractive because they generally have a shorter lead time for implementation than traditional mechanical conveyor or sortation-based solutions. They're also more scalable, so you can start small and flex up or down as needed.

Robotic arm technology also has become more sophisticated. Robotic arms are now able to handle complex tasks such as picking up and positioning items of various sizes, making them ideal for applications such as piece picking and kitting lines. While they require a more substantial investment and longer lead time than AMRs, the business case for use continues to improve with today's rising labor costs and availability.

What software do fulfillment operations need?

Of course, robots don't operate in a vacuum. You need the right infrastructure in place to direct them to achieve optimal performance.

Robust software is critical in an ecommerce fulfillment environment. At a minimum, you need a warehouse management system (WMS), a warehouse execution system (WES), or both, to help execute fulfillment processes.

If you have multiple distribution centers, you should also use an order management system. An OMS can provide real-time inventory visibility enterprise-wide and optimize order routing to ensure efficient, cost-effective service.

How might retailers and brands implement these new technologies quickly?

If implementing new and emerging technologies is a priority, it may be helpful to partner with a third-party logistics provider. An experienced 3PL can help you evaluate available automation options and determine the best fit for your business requirements.

They're likely to have established relationships with automation providers and may even have robotics in place, helping to reduce the lead time for implementation. If your 3PL shares resources across multiple clients, you'll have access to the latest technology without the associated overhead investment. Leveraging their expertise will enable you to stay focused on your core competency.