MULTICHANNEL MERCHANT

MCM SPECIAL REPORT

COVID-19 Upheaval Elevating Order Fulfillment Software Priorities

By Mike O'Brien, Multichannel Merchant

Before COVID-19 came in and shut everything down in March, 2020, operators of ecommerce and retail distribution and fulfillment centers were facing a significant shortfall of available labor, due to a strong economy and historically low unemployment.

In geographic hubs with high concentrations of fulfillment operations like Columbus, OH, Indianapolis, Louisville, California's Inland Empire and others, workers were often lured away with the promise of slightly higher starting hourly wages – often with Amazon dangling the carrot.

This workforce challenge, coupled with customer expectations demand driving for faster order fulfillment, bumped up investments in automated systems for greater efficiency, including high-speed sortation, automated storage and retrieval (AS/RS), goods-to-person and a range of robotic solutions. It also created demand for next-generation warehouse software to both control the automated hardware and better orchestrate the flow of orders across channels.

As of May 2020, in the wake of COVID-19 many distribution and fulfillment centers remain closed or are limited to skeleton crews, and many kinds of precautions and protocols are likely in the "stay safe" reality going forward. Coupled with the boost in ecommerce spend as everyone shelters in place, reliance on fulfillment automation and requisite software upgrades, already well underway, will only increase.

"Paradoxically, the same pressure that drove automation investments with high employment will drive it now," said Ian Hobkirk president of ecommerce consultancy Commonwealth Supply Chain Advisors. "Labor is suddenly plentiful but because of COVID-19 and fears of a bounce back effect, even companies that are doing well are looking to automation as absenteeism and lack of productivity is plaguing a lot of them. One retail client had two associates test positive and absenteeism shot up, so they went to a skeleton crew for two weeks."

David Strobelt, EVP and CIO of women's fast-fashion apparel company Retailwinds, formerly New York & Co., said in May 2020 the company will wait until it can reopen 80 of its 385 stores at once before turning them on again. Fashion apparel has been one of the most challenged categories since the COVID crisis began, and Retailwinds was hit particularly hard after closing its doors. New CEO Traci Inglis stepped down in mid-April 2020, less than a month after she started, with CFO Sheamus Toal stepping into the lead role as well. Four directors also resigned from the board.

CONTINUED ON PAGE 2

FEATURED IN THIS REPORT

"We haven't been able to reopen stores because of all the inconsistency around rules and regulations, not only in states, but within states," said Strobelt, adding the company hoped for a June reopening. "There's disagreements between county and city administrations. "We're trying to develop a (reopening) plan and be as flexible as possible. Some businesses have reopened and had to quickly close back down when cases broke out."

Manpower Issues Compounded, Driving Investments

Going forward, the imperative to keep fulfillment operations flowing with reduced manpower has been compounded substantially in the wake of the pandemic. While many retailers have been blindsided by the crisis, with order flows slashed to nothing, others are doing a booming trade yet are hampered by government restrictions and worker safety requirements.

This can be addressed both in terms of technology as well as process solutions, said Jonathon Jonas, co-founder of Decent Startup, an ecommerce infrastructure consultancy.

"You can use technology to help stagger where people are in a facility, for instance, using every other aisle or packing line by turning things on and off," said Jonas, whose ecommerce resume includes stints at Jetblack, Tuft and Needle and Bonobos. "Even numbered aisles could be on while the odd number aisles are cleaned and then you could switch. As systems get better at directing where people should and should not go, additional constraints can be added to maintain social distancing."

Jonas added changes can be made so that associates touch products less frequently, for instance by installing automated conveyors and sorting trays. Increased zone picking is another option to address distancing requirements. "These same types of objectives could be implemented further up the flow of goods within a fulfilment center, at put away for example," he said.

Two major changes in the post-COVID-19 environment, Jonas predicted, will be larger ecommerce fulfillment centers and a huge jump in ship-from-store operations – the latter of which is already well underway.

"Brands are going to aim to hit their revenue targets in aggregate, which will require more product being shipped direct to consumer vs. in store," he said. "This means deeper inventory levels, more back stock and more product to maneuver through to hit same-day shipping service levels."

As far as ship from store, Jonas said shopper apprehension event after stores reopen will necessitate this function is stepped up significantly.

"From a policy perspective, it will force even further flexibility with inventory," he said. "Brands and retailers might want it still to be available for in-store purchase but turns will be reduced. Flexible inventory is the best inventory. And we could also see more and more same-day offerings as fulfilling ecommerce orders from store becomes a normal part of everyday operations."

Crisis Operations Causing Some Retailers to Modify ROI Calculus

Carlos Ysasi, vice president of system engineering for warehouse execution software provider Vargo, said with the labor situation so dire, some retail and ecommerce companies have altered their standard ROI requirements for warehouse technology investments in order to address the immediate situation.

"It's usually 18 months to two years, but we're seeing a bump up to three to five years in some cases," Ysasi said. "They're still making tech buys to reduce the people impact, but I'm not sure it's going to continue like that."

With the level of unpredictability of ecommerce volumes, exacerbated by COVID-19, just relying on legacy warehouse management systems (WMS) is insufficient to create the right kind of order flows through a facility, Ysasi said.

"You need real-time feedback to make the most optimal flow decisions," he said. "I see a lot of companies with DC designs based on the old retail WMS thought process, but they're not flowing the building correctly. With demand so unpredictable, you can't use the methodology of setting up a system to deal with cubic volume of SKUs based on A, B and C movers. When you have no idea what customers are going to do, you can't use old systems to predict where to locate inventory in a building to optimize flow. That's one of the big premises of legacy WMS, using buying patterns to understand what the movement inventory looks like."

The Order Fulfillment Software Stack

While a traditional WMS system allocates orders for fulfillment in waves, the unpredictability and variations in volume common to ecommerce has led to the rise of warehouse execution systems (WES). A WES drives continuous or waveless order release, dynamically orchestrating machine, labor and inventory resources against order requirements. For instance, the WES interfaces with warehouse control system (WCS) software built into automation and robotics systems, in order to optimize the order flow.

Companies selling into multiple channels – store, wholesale and online, for instance – used to have mostly dedicated, single-channel facilities and separate inventory pools. For the past five years or so, facilities have become more hybrid in nature and function, with a shared inventory pool to gain operational efficiency.

"When you look from a system standpoint, it looks like a single system, not two handling retail and ecommerce," Ysasi said. "It's one inventory. It may go to different places in the facility for processing, but in the system, it looks and feels the same. Rarely do we see a facility set up that's channel focused. Everyone is trying to leverage inventory and inventory buys to achieve efficiency and economics."

This gives companies a huge benefit in the fulfillment process. Workflows are set up so that orders are picked for store and ecommerce simultaneously, instead of two separate passes.

"Previously, in a retail workflow, when full case picking was done, you could throw on the remaining parts of an ecommerce pick into totes and send them to

packing and shipment," Ysasi said. "Now with a combined inventory, you could be picking ecommerce eaches, and at the same if you had an order for retail cases, you can stop the workflow and interleave them together, and vice versa. The pickers don't know the difference. And you don't have to double the pick paths."

Ysasi said to achieve true omnichannel flow through a fulfillment center, there is a place for letting the WMS do what it does best (track and report inventory to the order level), WCS to optimize the automation and mechanics, and WES as the administrative glue holding them together.

"The WCS can take on multiple layers, but the real goal is to limit its presence, while also taking out unnecessary functional pieces within the WES, like PLC controls," he said. "On the WMS side, you need that functionality to connect to the host system or ERP."

Strobelt said Retailwinds's customers want convenience and fashion at value, and those expectations drive everything the company does in its order fulfillment, which is outsourced to Radial.

"Whether it's mobile, in store or online, we give them access to a single inventory, whether the item is located in a DC or a nearby store," Strobelt said. "All the technology helps make that happen. We do have BOPIS, save the sale and endless aisle, where we can ship it to her for free from the DC or another store if it's not in stock. It's all through the OMS and mobile app, all the technology is integrated to create one seamless customer experience."

He said the order logic for ship from store will seek first to fulfill complete orders from the closest store to the customer, but split orders will be fulfilled from the DC as much as possible, with individual line items coming from nearby stores.

Tough to Launch Ecommerce Fulfillment in a Crisis

Hobkirk said he's not sure how companies that either had no ecommerce or an immature online channel will survive the COVID-19 shakeout.

"Companies where a web storefront didn't exist, they're way behind," he said. "Then there's a whole host of companies that have some degree of ecommerce, but they weren't doing a lot of it or promoting it heavily. It was an annoyance, but now it's vital. If they had zero online presence coming into this, I'm not sure between now and the end of the crisis you can create an ecommerce channel."

For companies with primarily a retail or wholesale focus who dabble in ecommerce, "there are so many inefficient ways to fulfill orders," Hobkirk said.

"When you pick a bunch of small ecommerce orders from a huge group of SKUs, walking through the FC, it's incredibly inefficient," he said. "You need the ability to use more sophisticated cluster or zone picking. Usually those pick methodologies are enabled by a good WMS, allowing associates to pick 10 orders to a cart, then have them auto sorted quickly and accurately with a mobile device and auto data capture."

Some Aspects of the "New Normal"

When the first wave of the COVID-19 pandemic hit, huge volumes of inventory were sent back to FCs and DCs to facilitate online orders. Consumers quickly became accustomed to ecommerce as their sole means of acquiring essential and non-essential goods, including many who had never done so before.

"Once things settle, there will be a lot more of those activities," Ysasi said, referring to curbside and counter pickup. "Maybe stores won't be staffed as much. We're definitely not going back to the way things were."

Many malls, department stores and apparel retailers, already challenged with reduced foot traffic, will also not survive this shakeout. Just in April and May 2020 there were bankruptcy filings from Neiman Marcus, J.Crew and J.C. Penney, with others sure to follow. "How can you revitalize them?" Ysasi asked. "Maybe some will become FCs where you go and pick up ecommerce orders. We'll have a different experience at the mall."

Fulfillment center operations will also look very different, even after the COVID-19 outbreak has died down. Michael Parsley, SVP of supply chain for Tailored Brands, which owns the Men's Wearhouse and Jos. A. Banks chains of men's apparel stores, said his operations have been modified for worker safety in a number of ways.

"Our store fulfillment has been turned off until the stores open back up, and workers in the DC are screened daily and follow CDC and WHO guidelines for safety," Parsley said.

"As we work with companies that are remaining open, we found the CDC has published some very clear guides for employee and facility safety," said Brian Barry, president of F. Curtis Barry & Co., which provides operations consulting for multichannel companies. "It is also publishing daily and weekly updates to keep you informed. Contrary to the government's typical long, jargon-filled procedures, these are clear and can be a great resource to inform your policy, procedures and training materials."