KIBO

ORDER MANAGEMENT:

ONLY AS GOOD AS YOUR INVENTORY VISIBILITY

Inventory management in an omnichannel e-commerce environment is anything but simple. As inventory is segmented among multiple channels and locations, it becomes harder to track an item's availability status and use that data to set pricing, offer promotions, manage scarcity and build trust with customers. Yet that same segmentation is critical to the personalized user experience that online shoppers demand, and has become a fact of life during the COVID-19 pandemic.

Unlike linear order management — typically a single order relayed to a single fulfillment center for a single customer — omnichannel order management tracks multiple orders with several different systems across the supply chain, keeping track of product in physical stores, offsite dark stores, third-party logistics (3PL) warehouses and even direct-to-consumer fulfillment centers. At any of these locations, inventory may be on hand, on reserve or out of stock.

Tracking inventory at this level can be daunting, but failure to do so leaves money on the table. It's bad enough when an online customer finds just what they're looking for and it's out of stock. It's even worse when it's shown as in stock and the customer only learns after ordering that it's not.

A UNIFIED SOLUTION TO OMNICHANNEL ORDER MANAGEMENT

There's a better way to streamline these complex moving parts. "In a traditional, linear system, the fulfill-ment location would mainly consist of a warehouse and a WMS [warehouse management system]," says Tim Nelson, senior principal for unified commerce at Kibo, a unified commerce software provider. According to Nelson, the sophistication of a standard WMS, combined with the relative simplicity of linear order management, enables a high degree of confidence in overall tracking accuracy — above 95%.

Today's supply chains, however, are far more complex and by no means linear. The rise of omnichannel e-commerce fulfillment has been a retail game-changer, with many products shipping in smaller quanti-ties to many locations, such as physical stores, fulfillment centers, dark stores or dropship points. Order and delivery complexity, time sensitivity, cost and heightened customer expectations all converge to compress margins. Inventory visibility, in turn, becomes critical to this more distributed order management and fulfillment.

Upon its launch in 2016 by private equity group Vista Equity Partners, Kibo's strategy was to provide end-to-end unified commerce. A key element of this strategy was improving inventory visibility by combining

inventory reporting across channels with continuous platform updates, a powerful order-routing engine, a microservices-based architecture and an intuitive user interface. Combining these modern order management capabilities with a headless e-commerce solution and AI-powered personalization solution resulted in a comprehensive unified commerce solution. In doing so, companies would be able to draw on better inventory data to deploy omnichannel programs like in-store pickup, ship-from-store or vendor dropship, all with the help of accurate, up-to-date information.

Of course, inventory management is never 100% accurate when one takes into account factors like shrinkage, damage, misplaced items in a store and so on. But by collecting, integrating and continuously updating inventory data across channels in a single, 360-degree dashboard view, an order management system can match product in near real-time with online and in-store searches, minimizing misinformation about inventory levels.

REAPING THE BENEFITS OF A SINGLE SOLUTION

"A foundational element of retail is getting inventory right," Nelson says. "If I see 10 of something in the physical inventory but the system says I have 15, once I get down to that gap it's an exception process from there, finding where the other five went or writing them off in my financials. If I promise you X and I don't totally fulfill, everything from there is an exception — I have to rectify that or give you a refund, I have to offer you an appeasement to get you back, so now I've added to my customer retention cost."

Conversely, near real-time inventory data across channels yields corresponding benefits for retailers. "First, you're better able to fulfill your orders," Nelson says, "and now you can start to execute against the customer experience by setting the right expectations up front." Knowing more precisely what's in available stock is key to managing pricing and promotions — for example, special offers to move merchandise or targeted notifications for items in short supply, which drive engagement and conversion rates.

To achieve this level of visibility, companies have several tools at their disposal. Mobile point-of-sale (POS) data helps fill in potential inventory gaps. An API-first, micro services-based architecture approach to software enables customization to meet unique customer needs. "Headless commerce," which decouples the user interface software from more limiting business and supply chain functions, allows greater cross-channel personalization of the user interface, while retaining a unified digital experience across devices and touchpoints.

Using these and related AI-powered personalization solutions, Kibo cli-ents have seen measurable results:

1 Travelodge was able to run 30 server-side tests over 12 months that together helped boost ROI at least fifteenfold.

2 Hall Wines increased its add-to-cart rate by 55% with scarcity marketing.

3 Reebok increased sales with personalized, holiday and repeat visitor experiences generated by machine learning using customer and third-party data.

DIGITAL PLATFORMS CONNECT THE CRITICAL DOTS

Platform technologies with automated reporting are central to near real-time inventory visibility for retailers and their customers. Platform modules can be bolted onto an e-commerce site, WMS, a POS, an enterprise resource planning system (ERP), or even built into a proprietary integrated system, capturing continuously updated inventory data from store, warehouse and vendor locations as it's entered and plugged into a distributed order management solution.

Near real-time inventory data needs vary among customers, Nelson says, and delivery depends on the ability of multiple systems to update one another on the platform. Legacy ERP systems, running on old hardware and generating Excel spreadsheets, typically delivered daily updates. Many cloud platforms today refresh inventory data hourly for slow-moving inventory, every 15 minutes for faster-moving items, and every few minutes in urgent supply situations such as those seen too often in the past 20 months.

> Many cloud platforms today refresh inventory data hourly for slow-moving inventory, every 15 minutes for faster-moving items, and every few minutes in urgent supply situations such as those seen too often in the past 20 months.

LIFE AFTER COVID

Despite such gains, many companies have been surprisingly cautious in embracing digitization to improve inventory visibility during the COVID-19 pandemic. Many that made the leap failed to follow through on utilizing the technology to its fullest.

"The reason I think that hasn't happened has to do with the abruptness with which organizations had to adapt early on," says Nelson. The initial bullwhip effect of shutdown, remote work, hoarding, a shift from B2B to B2C and a V-shaped spike in demand all left businesses scrambling to adapt. Overnight they had to transact business digitally, cobbling together customizations of existing software and homegrown solutions on the fly. "Because of that, they had to do it fast rather than do it right," he says.

Business conditions are widely expected to stabilize in coming months as vaccines are more widely distributed and uncertainty recedes. Over time, with the necessary research and strategies in place, companies will turn their attention to longer-term transformation of their business models and supply chains, including inventory management and order fulfillment. Expect automated inventory visibility and personalization to take center stage as distributed order management matures.