Retail, wholesale distribution, and third-party logistics businesses must be prepared to navigate rapid market changes, drive and manage future growth, and provide excellent customer experiences. This paper examines how modern integrated technology and a digital-first mentality can better prepare companies for these challenges.

Optimizing Omni-Channel Order Management for Improved Customer Experience and Profitability

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Introduction

The world of commerce faces a "perfect storm" of challenges unprecedented in modern times in variety, scale, and complexity. There are, of course, macroeconomic factors ranging from geopolitical concerns to weather events, all of which affect product supply and consumer demand. On a microeconomic level, commerce has been undergoing widespread transformation for some time now, primarily driven by the rise in digital commerce. This has prompted changes in store formats and to the evolution of omni-channel business models, which were accelerated by the pandemic and further strained by labor shortages.

As ecommerce escalated rapidly with the advent of COVID-19 in 2020, many retailers, wholesale distributors, and third-party logistics (3PL) providers were forced to quickly cobble together solutions to manage the surge in online business and in new fulfillment formats. For some, the pandemic prompted their first real forays into ecommerce and to last-mile models such as curbside pickup and same-day delivery. Others that had already moved further down the path toward digital transformation were in better shape to handle the demands of accelerated omni-channel models but still had to pivot quickly to scale up those services or add new ones — offerings that became crucial to the survival of both retailers and customers during the pandemic and whose popularity has remained a fixture of shopping even as consumers have returned to stores in force.

In IDC's September 2020 *Consumer Sentiment Survey,* 49% of consumers reported that they were likely or very likely to go elsewhere if a retailer did not offer curbside pickup, and 54.9% said the same about the ability to return purchases made in store or online to either channel. In the July 2022 version of the survey, the numbers were similarly high — 45.5% and 50.9%, respectively. And desired accommodations are not just for curbside and omni-channel returns. Expectations continue to persist around a multitude of offerings; consumers will abandon retailers that do not offer the experiences that they want (see Figure 1).

AT A GLANCE

KEY STATS

» 45.5% of consumers reported that they were likely or very likely to go elsewhere if a retailer did not offer curbside pickup.

» 50.9% of consumers said that they were likely or very likely to go elsewhere if a retailer did not offer the flexibility to return purchases made in store or online to either channel.

» 29.8% of supply chain organizations reported that they lack the agility to accommodate fast-changing types and sizes of orders.

FIGURE 1: *Consumers Jump Ship When Services They Want Are Unavailable*

Q *How likely is it that you would choose to shop elsewhere if each of the following services was not provided by the retailer?*
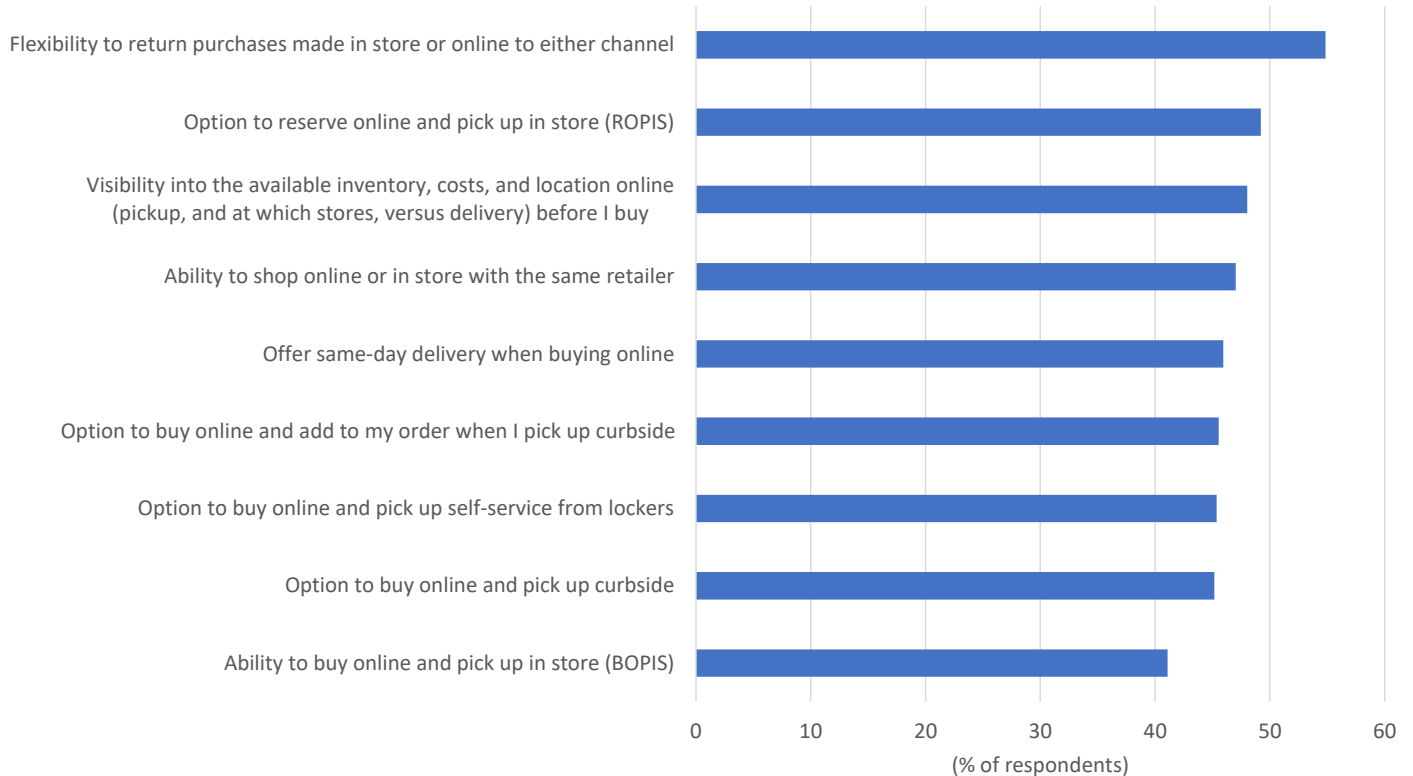
n = 1,010

Source: IDC's Consumer Sentiment Survey, July 2022

Consumers' rising expectations for omni-channel fulfillment impact a company's people, processes, and customer experiences in new ways and across multiple touch points. Legacy ways of doing business combined with the often patched-together solutions retailers stood up quickly to manage the explosion of omni-channel during the pandemic are not up to the task of managing this level of complexity optimally or profitably for the short or long term. The challenge of balancing customer service (essentially speed, accuracy, visibility to delivery, and any value-added flourishes that make a brand unique) with profitability has increased dramatically as the number of variables in the omni-channel equation has escalated.

Now, three years after COVID reared its ugly head, retailers and other organizations are realizing they need to revisit their end-to-end order management to ensure the flexibility and visibility they need to meet constantly shifting consumer expectations in a way that is seamless and engaging for the consumer and also sane and profitable for the vendor. Furthermore, these same expectations are making their way into business-to-business (B2B) environments as people — all of whom are also consumers — have begun to expect the same type of experiences in their business environments that they do from Main Street. The risk of not enabling these services is high. Across retailers, wholesalers, and manufacturers, "improving supply chain visibility" is a top goal (21.5%) when it comes to mitigating risk in the supply chain, according to IDC's March 2022 *Supply Chain Survey.*

The Growing Complexity of Omni-Channel Ordering and Fulfillment

In today's omni-channel commerce environment, the number of customer journeys is nearly infinite. A consumer may want to browse and, before they put something in their cart or hit the buy button, know up front how quickly they can receive a product and/or if it's available in a nearby store for pickup, and how many of each item are available. They may want to put items in a cart but request different services for each, such as a gift card and gift wrap and shipping for one and a pickup in store for another. They may want to use a specific payment provider and a specific financing option, such as the very popular buy now, pay later (BNPL).

In short, consumers want the options that match their needs. They want to see what's available and where they can get it, how quickly they can get it, by what method, and at what cost to them in both wallet and time. They want a variety of payment methods, a variety of fulfillment speeds, and a variety of fulfillment offerings. Some expectations that we have seen in the business-to-consumer (B2C) space are even more prevalent in the B2B space. This means all "sellers," whether wholesale distributors, retailers, or even 3PL providers, must readjust and implement operations and technology to manage the scale and complexity of these changes — or customers will go elsewhere. Significantly, 29.8% of supply chain organizations reported that they lack the agility to accommodate fast-changing types and sizes of orders (IDC's 2022 *Supply Chain Survey*).

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A few of these offerings and models and what they require to execute are as follows:

» **Marketplaces.** As marketplaces proliferate, businesses require the ability to provide real-time inventory availability to all sites and to integrate orders from all sources in one unified platform that offers a single view of orders and inventory.

» **Last-mile, same-day delivery.** This service requires integration of order management with on-demand last-mile delivery services, whether internal or third party. For cost, efficiency, and sustainability reasons, routing, packaging, and packing considerations are important components of optimal last-mile delivery. Today, some retailers are even starting to allow consumers to play a role in making sustainability-related choices by providing information about the carbon footprints of various types of delivery.

» **Drop ship by partner.** This service requires integration of order management with supplier or distributor partner inventory. Depending on the model, a retailer may use drop ship as the fulfillment process only when that is the optimal choice, routing orders to stores or other locations for fulfillment as well.

» **Ship from store (SFS).** This operation requires labor to pick and dedicated space to pack as well as the ability to print labels and ship. On the back end, SFS is more complex than buy online, pick up in store (BOPIS), requiring that order management, inventory, and fulfillment systems be fully integrated. It uses rules-based or more advanced artificial intelligence (AI) to route an order to the optimal location for fulfillment, based on variables such as inventory availability, shipping cost, proximity, labor, and opportunity cost.

» **Direct to consumer.** Many brands/manufacturers that have never dealt with consumers before are now connecting directly. They require front-end capabilities such as the ability to take orders online and provide customer service yet do not want disparate systems across channels.

» **Buy online, pick up in store.** An order management system (OMS) must be able to see inventory by store to route the order directly to the particular store selected by the consumer. Associates must be available to pick orders, bag them, stage them for pickup, and pass them to customers upon their arrival. Delivering the best service that also optimizes labor requires a mobile-enabled workforce that can quickly execute intelligent workflows.

» **Reserve online, pick up in store.** Similar to BOPIS, but without the payment process, this service mode gives consumers the opportunity to nab something before it's gone or to try on clothing or just postpone payment until they've finished other shopping.

» **Endless aisle.** This service mode allows in-store customers to order from the wider scope of inventory across a retailer's network versus being limited to the products in the particular store they are in. Work associates enabled with mobile point-of-sale (POS) devices connected to an OMS can look up inventory and place orders for customers on the retail floor.

» **Curbside.** This service mode includes everything needed for BOPIS, with additional scheduling management and communication to handle delivery to outside locations and the ability to add or change orders at the vehicle. Procedures and policies related to worker safety and security must now consider space outside of a retailer's four walls.

» **Lockers.** With similar requirements to BOPIS, lockers allow for asynchronous operations so that neither workers nor customers are beholden to the other's schedule. Retailers require space for lockers (sometimes including refrigerated units) and must track items that are not picked up and need to go back into inventory, ideally via automated processes.

» **Ship from distribution center or microfulfillment center.** More like traditional warehouse operations, microfulfillment centers are cropping up adjacent to their retail facilities or in proximity to large customer bases to enable quick and less expensive shipping or last-mile delivery. Some microfulfillment operations (including dark stores) are designed to accommodate curbside delivery.

» **Package tracking.** Across the universe of order and fulfillment combinations, "where is my order" (WISMO) queries are common among B2C and B2B customers. Automated tracking that is surfaced online can enable customers to quickly answer WISMO questions for themselves. Tracking among B2B business models is growing in popularity as well for shipments on order or in transit — providing more insight into available-to-promise (ATP) stock.

» **Subscriptions.** A subscription enables automated, recurring payments for a product or service that provides a frictionless experience for the customer across the buying journey, driving adoption, renewals, retention, and growth.

This is just a sampling of the many services that today's consumers demand. In short, both B2B and B2C customers have developed strong expectations around omni-channel that require retailers to deliver a variety of seamless ordering and fulfillment experiences into their purchasing journeys.

Optimizing the Order Life Cycle from Browsing to Unboxing and Beyond

Omni-channel challenges can have a substantial impact on margin. The most significant source of the problems that retailers face is siloed data, as retailers struggle to gain a single picture from 10 to 20 or more systems and applications. These legacy applications, or even best-of-breed applications that do not easily integrate, cause issues of data latency and lead to errors, inefficiency, and lack of visibility that prevent them from optimizing resources of labor, time, inventory, and transportation. Consider, for example:

> *Legacy applications, or even best-of-breed applications that do not easily integrate, cause issues of data latency and lead to errors, inefficiency, and lack of visibility.*

» The expense of inventory when retailers must carry high safety stock to ensure that what is sold online for pickup is not a mismatch with store inventory counts

» The high cost of paying customer service to manage tasks such as order cancellations or returns or WISMO because customers are not provided with the tools to initiate or manage these tasks themselves

» The high cost of last-mile delivery when inventory allocation is not optimized and orders are consistently shipped from many zones away

» The cost of lost sales when retailers cannot see where inventory is in their supply chain and are unable to make it available to promise to the customer

These challenges are altering how all participants in commerce — whether retailers selling directly to consumers, wholesalers, or 3PL providers serving as the operational face for brands — are investing in and planning for the future.

To satisfy and even exceed customer expectations while also driving revenue growth and profitability, brands need a variety of integrated technologies and data to power and support a unified order orchestration and fulfillment experience from browsing through unboxing, and even beyond, to returns and other post-purchase activities.

Across this end-to-end supply chain, different software and technologies impart different value; bringing multiple technologies together acts as a force multiplier in terms of a retailer's capability to gather and expose data and "connect the dots" effectively and in real time with actions and insights that serve the consumer.

Retailers and others must integrate order, inventory, and customer data to enable fast, frictionless, and profitable customer order and fulfillment experiences. Uniting this data across the supply chain allows retailers to optimize resources from browsing to buying and unboxing by:

» Enabling a near-real-time or real-time view of inventory across the network

» Providing insight into customer service by providing a unified view of orders and inventory (This enables customer service not only to quickly answer questions about an order but also to make changes to orders, handle returns, suggest substitutions, cross-sell or upsell, or handle multiple orders to enable customer service to assist customers as well as to enable the best match of order to fulfillment location. Integrating customer history into the mix provides even more opportunity, enabling customer service to make recommendations on the fly based on past purchases.)

» Providing data to meet expanding omni-channel models and related customer service-level agreements while fulfilling orders profitably

Additionally, and importantly, while retailers need to be able to offer and support a wide range of technology-enabled solutions to provide the omni-channel experiences consumers demand, they also need to be able to easily pivot to accommodate new innovations, data from different sources, and shifting physical environments and business models without heavy investments in IT and technology resources each time new opportunities arise or consumer behavior or trends change.

In other words, retailers need to be able to spin up new offerings quickly, experimenting with what works and what doesn't and introducing and removing components as necessary. Today, BOPIS, curbside pickup, same-day delivery, and inventory visibility are in demand, but new models surely will come along. Accommodating these changes is possible only with an integration layer that is not constrained by proprietary and inflexible technology stacks and that can enable a variety of flexible order and fulfillment experiences.

Order management has become the heart of the retail enterprise and supply chain. The OMS can serve as the key tool for optimization and cost savings by automating complex processes, reducing lead time from a labor perspective, and flexibly enabling a wide variety of functionality across an optimized tech stack.

Benefits of Order Optimization

Implementing a modern order management system gives retailers the ability to minimize errors, speed order life cycles, increase efficiency, and free up labor by automating manual processes. With automation and integration of the order life cycle, retailers can connect people, data, technology, and other assets for more efficient and optimized operations.

> With unified data, retailers can overlay analytics and AI to make intelligent decisions that optimize the business across a variety of factors, including inventory, promising, fulfillment, and delivery.

Efficiency leads to more seamless consumer experiences. Orders are filled on time. Customers are provided with frictionless experiences that suit their lifestyles and needs, such as the ability to buy with interest-free payment plans or to shop from a variety of retailers and marketplaces. Questions are easily answered, whether through self-serve automation or customer service. The decrease in queries and complaints to customer service reduces costs and allows IT and other human resources to focus on building even better experiences. It's a virtuous cycle.

With unified data, retailers can overlay analytics and AI to make intelligent decisions that optimize the business across a variety of factors, including inventory, promising, fulfillment, and delivery. As AI learns, it continues to improve its ability to optimize. Realistically, retailers cannot dump all legacy systems at once (or sometimes at all) because they still require these capabilities. Using microservices and APIs, companies can achieve much of the inventory and fulfillment optimization and customer service capability they require without ripping out deeply embedded enterprise resource planning (ERP) systems.

By implementing and integrating modern software systems, organizations gain real-time visibility and the ability to act on events quickly, keeping business moving while making intelligent decisions about inventory and order management and fulfillment. The integration and real-time flow of information enable a shift from a linear supply chain to a collaborative supply "matrix." This is the hallmark of a modern retail enterprise, where one unified version of orders and inventory is available to all parties that need it in real time and where the location from which to fulfill those orders is selected based on a wide range of relevant variables to balance across and optimize for customer satisfaction and omni-channel profitability.

Order Management Trends

The following are key trends impacting order management:

» **Supply chain convergence.** The separation between the supply chain and the consumer has narrowed as consumers demand more omni-channel fulfillment options that bring consumers closer to supply chains. The upshot is that retailers must place more emphasis on customer experience at a multitude of points where consumers now connect, such as last-mile or curbside delivery. All stakeholders, including customers and sales associates, must be enabled with the order and inventory information they need.

» **Sustainable commerce.** In IDC's July 2022 *Consumer Sentiment Survey,* 45.6% of consumers said that a brand's sustainability program has a large or very large impact on their decision to do business with an organization. Efforts to achieve greater sustainability by reducing emissions, such as optimizing routing or situating inventory where it needs to be from the start, also lead to greater profitability. Order management systems and fulfillment optimization software will fuel this transition to more sustainable supply chain operations by providing retail supply chains with greater ability to factor these considerations into their decision-making processes. As sustainable commerce matures, retailers will have increased opportunity to draw the consumer further into the process, such as by exposing not only inventory and fulfillment options but also the environmental cost of each.

» **Cloud.** Cloud has become the default deployment option in the order management application market. While large enterprises have historically been hesitant to move to the cloud, IDC has witnessed a shift in the past couple of years as businesses realize they prefer to outsource hosting, security, and updates and that a cloud infrastructure is a crucial factor in achieving resilience and flexibility.

» **AI.** This technology is driving a new age of omni-channel retailing by delivering predictive and prescriptive analytics. AI lends a hand across many decision-making points such as determining the optimal location to place inventory, deciding what promises to make to the customer, choosing the optimal location from which to fulfill orders, selecting which sales associates to assign to which tasks, and picking the optimal last-mile delivery routes to follow.

Considering Körber

Körber's combined brands have supported B2C and B2B organizations' supply chain management efforts for 40 years, with the 12 brands that were integrated together under the Körber umbrella starting in 2017 representing an array of solutions to meet the needs of the end-to-end supply chain by helping companies operate with greater agility and speed. Körber recently rounded out its portfolio of offerings that span warehouse management; automation; voice, vision, and mobility; robotics, materials handling equipment, systems integration; and consulting with the acquisition of enVista's order management and fulfillment solution and services.

Körber's order management and fulfillment offerings enable a wide variety of retailers, including Titan Brands and Spencer Gifts, to serve the omni-channel order orchestration and fulfillment needs of customers and deliver on the promises they make.

Körber offers a **cloud-native solution** built as a **microservices architecture** on a multi-enterprise integration framework and common data model. Key components of Körber's Order Management System (OMS) include:

» **Omni-channel order orchestration.** The OMS orchestrates sourcing and fulfillment workflows to complete orders quickly and efficiently by routing orders to the optimal location using an enterprisewide view of inventory and an underlying routing and fulfillment logic engine. The system offers a single view of customer inventory orders, items, shipments, and payments across the enterprise.

» **Enterprise inventory visibility.** The system enables one view of inventory including available to promise and available to ship throughout the enterprise, including stores, distribution centers, suppliers, and 3PL providers. The system uses customized rules to balance workload resources, speed, and costs to fulfill.

» **Buy, fulfill, and return from and to anywhere.** The OMS enables BOPIS, ROPIS, curbside pickup, SFS, ship to store, drop ship, dark store, microfulfillment, and mobile fulfillment. It rapidly scales these services up and down as needed while personalizing to customer demands.

» **Customer service.** Körber's OMS enables customer service and store associates to quickly and completely assist customers by providing them with a 360-degree view of orders, inventory, shipments, payments, and sales. The user interface is easy to use and intuitive, requiring no training to fulfill orders and deliver personalized service to customers, from pre-cart to post-order fulfillment.

Businesses need omni-channel solutions that can help them focus on their customers with agility while maintaining profitability. Körber's OMS can help retailers, wholesale distributors, and 3PL providers achieve the following benefits:

» **Speed integration and return on investment (ROI).** Körber's OMS can be integrated with existing systems and integration points across the enterprise in weeks or months.

» **Reduce costs and improve profitability.** Optimizing order orchestration improves gross margin return on inventory investment (GMROI), reduces fulfillment costs, and improves working capital, all of which lead to overall lower total cost of ownership (TCO).

» **Improve sustainability.** Through improved enterprisewide visibility to inventory, retailers reduce inventory waste and unnecessary fuel use and carbon emissions from actions such as reducing nonessential long-distance shipping or the splitting of orders.

» **Improve customer experience.** The efficiency and seamlessness that come from automating and optimizing across omni-channel journeys not only improve profitability but also provide a far better experience for the customer and consumer, promoting brand loyalty and repeat business.

Challenges

Körber faces the following challenges in the order management and fulfillment market:

» **Market awareness.** Given the recency of Körber's acquisition of the enVista order management platform, potential Körber customers may remain unaware that Körber has filled the order management gap in its portfolio.

» **Competition.** With the rise and persistence of omni-channel commerce in recent years and the explosion of fulfillment and other related offerings, new contenders have entered the order management space. Körber will need to stay on its toes to remain competitive in this market, where solutions that are easy to operate and configure and quick to implement are increasingly in demand.

Conclusion

IDC anticipates that change in omni-channel commerce and fulfillment will continue across retailers, wholesale distributors, and 3PL providers. These businesses must be prepared to navigate that change while fostering and managing future growth profitably and providing customer experiences that meet and often exceed expectations. Businesses with modern, integrated technology and a digital-first mentality are better prepared to quickly assess and respond to these challenges. They are also more resilient.

Today's B2C and B2B organizations require order management, inventory management, and fulfillment optimization systems that are built to handle today's complex challenges while being able to scale to adapt to the future needs of customers.

About the Analyst

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Jordan Speer is Research Director for IDC Retail Insights, responsible for covering the global retail supply chain, with emphasis on product sourcing, fulfillment, and sustainability. Ms. Speer's core research examines how digital technology opens opportunities to better connect and optimize the execution of the end-to-end product life cycle from the design and sourcing stages through order orchestration and fulfillment to the customer.

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More About Körber

Supply chains are growing more complex by the day. For over 40 years, Körber uniquely provides a broad range of proven end-to-end solutions tailored to help manage the supply chain as a competitive advantage. Fitting any business size, strategy or industry, our customers conquer the complexity of the supply chain thanks to our portfolio of software, voice and robotics solutions – plus the expertise to tie it all together. Conquer supply chain complexity, with Körber. Find out more on www.koerber-supplychain.com.

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