

# Start the Cart

A Manufacturer's  
Guide to Achieving  
E-Commerce  
Fulfillment Excellence



Meet customers' evolving demand for e-commerce service and pursue direct-to-consumer online growth opportunities.



## Start the Cart

The retail landscape for consumer products and their manufacturers has changed dramatically since Amazon started convincing us to buy books online in 1995.

Today, thanks to “the Amazon effect,” two key trends are influencing how retailers sell consumer products – and how manufacturers deliver them.

- Ongoing rapid growth of e-commerce is an increasingly critical part of the sales process for manufacturers and retailers. That growth is expected to continue at an annualized rate of 20.1 percent for the next five years, until 2024.<sup>1</sup>
- Both direct-to-consumer and business-to-business customers have an appetite for speedy and low- to no-cost delivery. In a survey of 1,015 consumers, 75 percent voiced expectation of same-day delivery by early 2020.<sup>2</sup>

Online retailers of all types and sizes are increasingly requiring manufacturers to drop ship e-commerce orders directly to customers. And there’s good cause. **More than 80 percent of retailers surveyed said drop shipping resulted in increased revenue, and more than 60 percent said it also reduced their costs.**<sup>3</sup>

In addition to getting orders to consumers more quickly, this popular strategy reduces expenses in two ways. Because it eliminates one leg of the journey – from the manufacturing facility to the retailer’s distribution center – it reduces transportation costs and the company’s carbon footprint. At the same time, it makes it possible for retailers to spend less on inventory warehoused in their own facilities.

Drop shipping has forced manufacturers to operate more like online retailers, and many are reaping the benefits – **53 percent of surveyed manufacturers say drop shipping has increased their profit margins.**<sup>4</sup> To do that, manufacturers must become adept at managing the intricacies involved with e-commerce – and they are often required to do so at the drop of a hat. As they master sophisticated shopping cart, order fulfillment, and fast delivery requirements, manufacturers begin to see the potential in selling directly to consumers themselves.

This shift in retail fulfillment strategy is where problems begin for many manufacturers. Many are not prepared to send orders directly to the consumer.

**This report explores some of the challenges and solutions for consumer products manufacturers when filling and delivering online orders, whether the manufacturer is drop shipping for retail clients or managing their own e-commerce initiatives.**

1 IBISWorld Business Environment Profile, E-commerce sales, April 2019

2 “The Sci-Fi Shopper,” Elastic Path

3 & 4 “Supply Chain Collaboration in Transformative Vertical Industries: Implications of Omnichannel and Dropshipping,” Lehigh University

*According to a survey of 1,015 consumers by Elastic Path, 75 percent of consumers expect to be able to enjoy same-day delivery by early 2020.*



## It Often Starts With Drop Shipping

Drop shipping for retailers offering online ordering is often a manufacturer's gateway to e-commerce. After mastering the challenges introduced by this "forced" entry into direct-to-consumer fulfillment, they begin exploring whether selling directly themselves is wise – or necessary.

**More and more manufacturers are recognizing that establishing a direct-to-consumer sales channel is required to protect market share and remain relevant.**

Some bypass traditional retail channels and sell directly from brand-owned e-commerce sites, often offering products they know are in demand rather than making every product available. Others collaborate with retailers, giving the shopper the potential for immediate gratification if they purchase the item at a brick-and-mortar retailer instead of from the manufacturer's site.

Other manufacturers choose to leverage Amazon's reach. Participating in the Fulfillment by Amazon program lets them ease into the marketplace by delivering large product quantities to an Amazon warehouse, which fills and ships individual consumer orders. While this has advantages, disadvantages include the fact that Amazon, not the brand, sets the product price. That approach has the potential to undermine the brand's image.

Some manufacturers become Amazon Prime-certified or partner with a certified third-party logistics provider. This lets the brand control pricing and order fulfillment.

**The challenge, of course, is how to make it profitable. Data-gathering and analysis is essential. It not only guides forecasting for demand and inventory placement, it also identifies high- and low-performing SKUs, on-time delivery metrics, and under-performing areas in the warehouse. Using real-time data effectively is one way that products with tight margins can maintain profitability amid consumer "free delivery" expectations.**



## Planning teams must be multi-disciplinary and include:

- Finance
- Product development
- Marketing
- Sales
- Purchasing
- Supply chain management
- Logistics
- Operations
- Manufacturing
- Packaging

## Fulfillment Options

Manufacturers entering the marketplace quickly in response to retailer needs often outsource fulfillment, at least initially, because it offers a few significant benefits that include:

- Paying a specialist to handle it buys time.
- In-house supply chain and logistics professionals learn from best practices implemented by experienced organizations that already do it well.
- The manufacturer can test the viability of the direct-to-consumer model without making a significant capital investment in its own facilities. Many believe that it doesn't make sense to allocate resources to a new business model without first testing consumer demand and ultimately, concept feasibility.

**Those that succeed in the long run and move forward with successful e-commerce options of their own bring in experts to help plan and execute a successful vision.** Options typically include working with specialist consultants; partnering with enterprise logistics providers with in-depth knowledge and experience; and adding leaders with relevant expertise to the staff.

Regarding staff expansion, it's usually unrealistic to expect a legacy consumer brand to pivot to e-commerce success solely with existing personnel. The challenges introduced by a sound digital strategy typically require expanding the team to include specialists that have direct experience with e-commerce technology, marketing, and logistics. When seasonality creates demand fluctuations, warehouse management and shipping functions can be crippling to manufacturers. Many lack the facility space and expertise required to lead a large labor operation during a peak demand season, like Christmas.

**When developing a new digital strategy for marketing and selling online directly to consumers, it's essential that the planning committee includes representatives from all affected areas, but particularly those managing supply chain and logistics.** Insights from multiple departments and perspectives will ensure that nothing critical is overlooked.



## Supply Chain Changes

Adding direct-to-consumer fulfillment requires significant changes throughout the supply chain. These include:

- Anticipating the possibility of system modifications to accommodate a sophisticated online order interface, shopping cart capabilities, and picking modules. Often this requires completely new systems, especially for external-facing functions.
- Implementing new warehouse processes, systems, and materials that might include product racks, packing stations, packaging, and technology.
- Understanding last-mile delivery options, costs, and tracking, whether it's by parcel carrier, "white glove" service, or less-than-truckload (LTL) heavy home.
- Optimizing inventory management to efficiently fulfill both e-commerce orders and store replenishments. Do you have one pool of inventory used to fulfill both, or do you segregate your inventory and manage both pools differently?
- Re-configuring the warehouse to accommodate picking variations required by e-commerce fulfillment in addition to existing business-to-business picking processes.
- Placing distribution centers in locations that can meet consumer expectations for same- and next-day delivery.
- Preparing for a more robust order returns process.

The following pages detail areas of focus for achieving these changes.

- Modifying Technology
- Multi-modal Supply Chain Know-how
- Warehouse Configuration
- Reverse Logistics



## Modifying Technology

Technology adjustments are often required to integrate retail client or brand e-commerce systems so order processing, fulfillment, delivery, and returns are efficient and transparent.

Well-managed, digitally native vertical brands (DNVB) often have a technological advantage over legacy brands. Because they are built on an e-commerce model, DNVBs launch their businesses with the right data-gathering, analytics, forecasting, e-commerce, and logistics technology in place. That, combined with their social media expertise, makes them nimble and competitive.

On the other hand, **older, established brands transitioning to direct-to-consumer sales and fulfillment must take a close look at their current enterprise resource, order, warehouse, and transportation management systems.** While many try to minimize initial spending by piecing together connections within existing systems, they often find that doing so postpones the inevitable investment in new technology while it delays progress.

Manufacturers that drop ship orders placed through client e-commerce platforms need to integrate certain system components with the client's so the entities can share essential information. For example, the retailer's e-commerce platform needs access to real time inventory levels as well as to inventory location in order to present product and delivery options.

In addition to providing the basic information needed for an excellent customer experience that includes timely delivery of the correct products, **well-integrated systems generate the data required for optimal forecasting, analytics, and managing product margins.**

*Manufacturers that drop ship orders placed through client e-commerce platforms need to integrate certain system components with the client's so the entities can share essential information.*



## Multi-modal Shipping Know-how

Consumer products manufacturers are skilled at shipping goods to distributors or other businesses via full-pallet quantities transported by truckload or LTL carriers. In these situations, transportation management systems with carrier specifics and corresponding processes focus on optimization, efficiency, and cost effectiveness.

When shifting the focus to consumer delivery, little of what works for truckload and LTL modes carries over to this type of customer.

**Companies expanding from pallets to pieces need to address a range of transportation specifics.** These include:

**Different carrier relationships:** What parcel carriers are available to transport small packages from your facilities and how much volume can they handle? What LTL carriers are positioned for home delivery and offer options consumers expect and need? What's the best way to assign the correct mode and select appropriate carriers when deliveries need to be split among several of them? How is last mile delivery handled in different regions and settings?

Similarly, packaging is critical for home deliveries shipped through an LTL carrier network. Is packaging robust enough to withstand multiple touches, yet arrive at the destination in a near-pristine state? Many packages are rejected when delivered because the case is creased or torn.

**Product tracking:** Just as retailers want to know when their shipment will arrive at the distribution center, consumers want to track their online order's progress, too. According to research by Dropoff, **88 percent of consumers say they want to be able to track shipments in real time.**<sup>5</sup> These metrics exceed most manufacturers' norms.



5 "I Want it Now: Same-Day Delivery + The U.S. Consumer," Dropoff, <https://www.dropoff.com/blog/retail-delivery-consumer-survey-shoptalk-2018>

**Fast delivery:** Dropoff's research also reports that 99 percent of U.S. consumers say fast delivery is important to them – and they are willing to pay for it: 47 percent of U.S. consumers have paid extra for faster delivery. Luxury shippers are 110 percent more likely to have paid extra for same-day delivery in the past year.<sup>7</sup>

**Oversize delivery challenges:** When the merchandise being drop-shipped or delivered is oversized, such as furniture or appliances, final mile delivery is much more complex and labor-intensive. For example, drivers need to communicate with customers to make sure someone is at the destination to accept inside delivery. Some products require set-up, as well, which means delivery personnel need special training. In addition, it's important to know what modes are available and appropriate for heavy home deliveries. What about “white glove” service? When it's needed or expected, especially for high-end products, who can provide it and where?

**Product packaging:** When every ounce adds to transportation costs, brands selling direct-to-consumer often work to minimize original product packaging weight while maximizing protection. This applies to packaging used for shipping, as well. Parcel dimensions not only impact weight and therefore costs, they also have an effect on the number of packages a truck can load. Amazon's move to require consumer product organizations to reduce packaging size is driven in part an ongoing focus: reduce excess weight and volume to generate savings on shipping.<sup>6</sup> **The challenge is finding that sweet spot that protects the product while minimizing shipping charges.**



6 “Amazon Pushes Brands to Be Less Boxy,” The Wall Street Journal.  
<https://www.wsj.com/articles/amazon-pushes-brands-to-be-less-boxy-11564490849>

7 “Consumers Want Faster Delivery and They’re Willing to Pay for It,” Dropoff.  
<https://www.dropoff.com/blog/retail-delivery-consumer-survey-shoptalk-2018>



## Warehouse Configuration

Manufacturers adding direct-to-consumer, piece-by-piece fulfillment to an operation optimized for high-volume shipping might quickly see the need for a warehouse re-design.

Necessary changes specific to physical layout include segregating a portion of the inventory in a dedicated space set up with new equipment that allows for efficient piece-picking.

This space needs to be designed in a way that:

- Optimizes picking and packing
- Includes pack out stations
- Incorporates parcel pickup locations

## Manufacturers Checklist for Drop-Shipping and Filling E-Commerce Orders

- Dedicated space that protects human or robotic pickers from equipment and other hazards moving through the warehouse
- Different racking systems for storage and picking
- New order-picking technology, procedures, tracking, and quality control
- Carefully selected packaging materials that minimize shipping costs while providing maximum product protection
- Warehouse labor management practices that are mindful of changing labor standards and new types of training programs.

Consumer goods manufacturers often consult with e-commerce logistics specialists when making these changes. That allows them to avoid trial and error and start with the most efficient processes and systems early on.



## Location, Location, Location

According to *Inbound Logistics* magazine's 2019 "3PL Perspectives" report, nearly two-thirds of shippers surveyed – 63 percent – reported that cutting transportation costs is their top challenge.<sup>8</sup>

And, with freight transportation costs comprising the biggest share of U.S. business logistics expenses, it's no wonder that cross-country overnight delivery to meet consumer demands is cost-prohibitive for anything but highly profitable luxury brands.<sup>9</sup>

**To meet delivery expectations, manufacturers are forced to identify fulfillment options in strategically located geographies that can provide same- or next-day delivery to the regions they serve.** Brands achieve this in a number of ways, including acquisitions, opening new facilities, using retail outlets for fulfillment, and contracting with third-party or enterprise logistics providers.

With each solution, key considerations beyond costs and square footage include:

- **Location:** What market(s) are you serving out of each location? Is there adequate access to transportation and logistics partners? Can you deliver according to customer expectations?
- **Space suitability:** What's available for special handling, such as cold storage? What's already in place for energy efficiency? Are there enough loading docks? Do racking and materials handling processes in place already meet your direct-to-consumer order needs?
- **Talent:** As e-commerce heats up, it can be a challenge to find the right workers, especially during the holiday selling season. Is there an appropriate workforce supply? Are there opportunities to collaborate with local government agencies or educational institutions to provide training?

8 2019 "3PL Perspectives," *Inbound Logistics*, <https://www.inboundlogistics.com/cms/article/3pl-perspectives-2019/>

9 "State of Logistics in 2019: What's next?," *Logistics Management*, [https://www.logisticsmgmt.com/article/state\\_of\\_logistics\\_in\\_2019\\_whats\\_next](https://www.logisticsmgmt.com/article/state_of_logistics_in_2019_whats_next)



## Reverse Logistics

The question isn't, "Will consumers return merchandise?" It's "What percentage of merchandise will be returned?" Processing returns is a significant part of any direct-to-consumer fulfillment system.

E-commerce returns are significantly higher than those of their brick-and-mortar store counterparts and, undoubtedly, those of traditional manufacturing business-to-business customers. In fact, according to the Reverse Logistics Association, e-commerce return rates are three to four times that of brick-and-mortar stores, with online averages of 25 to 35 percent. Apparel and footwear trend even higher at 30 to 50 percent because online shoppers often order more than one size and return what doesn't fit.<sup>10</sup>

Returned goods must be inspected, re-packaged if necessary, and returned to inventory as quickly as possible so they can be purchased again. Getting returns back into inventory immediately is particularly important with popular items or merchandise with a short selling season.

**Navigating reverse logistics requirements is new ground for most manufacturers that don't have experience processing and filling direct-to-consumer orders. It's important to consider what's involved and various process options, including outsourcing, before launching an e-commerce operation.**





## Success Snapshot:

### Brick-and-Mortar Retailer Optimizes Logistics for Sales Growth

After expanding from brick-and-mortar locations to online sales, a national retailer encountered challenges that included problems with shipping trends analysis, invoice audits, and payment protocols. In addition, a recent acquisition added new distribution locations to a system that was already struggling with issues in its transportation mode selection process.

Reducing transportation costs and creating a more efficient supply chain soon became a top priority, so the company turned to enterprise logistics provider Transportation Insight for solutions. By optimizing the retailer's logistics operation, providing auditing services, and creating greater shipping data visibility, the enterprise logistics provider helped the retailer enjoy a 50 percent increase in digital sales and 9 percent growth in same-store sales.

### Omni-Channel Retailer Significantly Reduces Transportation Budget

When a consulting firm partnered with Transportation Insight to build efficiencies into an omni-channel retailer's 27 business units, the collaboration helped reduce the retailer's transportation budget by 18 percent – approximately \$10 million – in just six months.

The team used Transportation Insight's logistics modeling tools and proprietary software to optimize the organization's agreements, practices, and processes. Collaborators increased productivity, reduced costs, and ensured the retailer had the most competitive parcel and less-than-truckload shipping program available.

Strategies included identifying and leveraging each foreign market's most efficient transportation modes while helping the company use brick-and-mortar locations as e-commerce fulfillment centers for seamless in-store pick up.



Today's shoppers are buying online more than ever before. Smart consumer brands are finding that with planning and partnerships, they can successfully incorporate a profitable omni-channel strategy.

### About Transportation Insight, LLC

Transportation Insight is a multi-modal, lead logistics provider that partners with manufacturers, retailers and distributors to achieve significant cost savings, reduce cycle times and improve customer satisfaction rates through customized supply chain solutions. Transportation Insight offers a Co-managed Logistics® form of 3PL, carrier sourcing, freight bill audit and payment services, state-of-the-art transportation management system (TMS) applications, parcel technology platform (audit, engineering, advanced analytics) and business intelligence. The Enterprise Logistics division of the Transportation Insight Holdings, LLC, (TI Holdco) portfolio, Transportation Insight operates alongside transactional freight brokerage Nolan Transportation Group (NTG) to help client shippers engineer efficient supply chain networks. Combined, the \$3.2 billion TI Holdco organization serves 7,000 clients with logistics management services that include domestic transportation (TL, LTL, Parcel), e-commerce solutions, supply chain analytics, international transportation, warehouse sourcing, LEAN consulting and supply chain sourcing of indirect materials including secondary packaging. Headquartered in Hickory, NC, Transportation Insight has secondary operating centers and client support offices across North America.

For more about Transportation Insight, visit [www.transportationinsight.com](http://www.transportationinsight.com), email [info@transportationinsight.com](mailto:info@transportationinsight.com) or call 877-226-9950.



☎ 877.226.9950  
✉ [www.transportationinsight.com](http://www.transportationinsight.com)  
🌐 [info@transportationinsight.com](mailto:info@transportationinsight.com)

310 Main Avenue Way SE • Hickory, North Carolina 28602