

# THE STATE OF E-COMMERCE AND ITS SUPPLY CHAIN

How consumer-driven trends and the rise of e-commerce changes supply chains as we know it.



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# INTRODUCTION

**E**-commerce has been an important term and concept in the retail industry for the last two decades, with continued growth since its inception. But, in just one year, the Coronavirus disease (COVID-19) pandemic pushed e-commerce dramatically forward in a short period of time just out of sheer necessity in a way never seen before. According to a survey from McKinsey and Company, executives believe that the digitization of their customer and supply chain interactions and internal operations grew by 3-4 years in 2020, while digitally enabled products accelerated by seven years.

But, prior to the pandemic, e-commerce already experienced strong growth in the last decade; it did not just appear because of COVID-19. Digital platforms solved many pain points and made consumers' lives easier, which was a natural opening for popularity growth.

At the start of e-commerce, the retail landscape was relatively unknown, causing many retailers, brands and the supply chain itself to find it difficult to keep up. But, after some years of unsteadiness, these companies made rapid changes to keep up with consumer demands. New and improved digital systems such as curbside pick-up, same-day and two-day delivery, easy-to-navigate websites, simple returns and cybersecurity became not only common place, but a necessity.

Consumers flock to these solutions for an easier way of digital shopping.

All of this was in place prior to 2020, but after the pandemic hit, these features quickly became the only way to get goods to consumers.

Much of this was pushed by direct-to-consumer (DTC) brands who were able to scale quickly with new technological advancements that are now more accessible to everyone rather than just major corporations. Since COVID-19, many big brands have taken on a DTC strategy to navigate the pandemic.

The 2021 Direct-to-Consumer Purchase Index from Diffusion shows that the line between what makes a traditional retail brand and a DTC brand are so blurred, it is unrecognizable to the consumer. More than two out of five consumers in the United States are familiar with at least one DTC brand, with seven out of 10 having purchased from a DTC brand in the last year.

In addition to DTC players setting the standard in how to sell online during the pandemic, online marketplaces helped set the stage for a new way of digital retail prior to 2020, setting up strategies that became even more prolific following the COVID-19 outbreak.





# SUPPLY CHAIN TRANSFORMATION

So, how has all this e-commerce growth and change affected the supply chain? For starters, the supply chain is now in the spotlight after years of being the invisible force behind retail. As the last mile becomes an important aspect of retail and consumers demand faster shipment times and greater visibility, all eyes are on the logistics sector. Adding to this, once the shortages started due to COVID-19 issues, the supply chain became front page news every day.

Traditionally in the industry, if no one is talking about you, that is how you know you are doing your job. Today, that's a little more difficult. The major way the supply chain adapts to fit the new wave of e-commerce and its operations is rebuilding infrastructure throughout the entirety of the supply chain. This includes logistics and warehousing. From both an operations and equipment standpoint, logistics and warehousing companies needed, and still need to, adapt to new processes. New infrastructure strategies now seen include greater automation, growing physical footprints specific to e-commerce, focus on fulfillment and cost optimization and the management of the three times return ratio seen in e-commerce. Other consumer-facing changes include optimized websites and streamlined solutions such as convenient curbside pickup experiences and robust return policies.

In the beginning of the pandemic, during lockdowns, retailers and companies that did not have these processes in place scrambled a bit, but quickly responded to the long-term shift where consumers are comfortable with and often prefer e-commerce solutions.

One way to accomplish an efficient e-commerce operation is to cut out the middleman, like



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**Companies now tap data and analytical forecasting to gain an advantage and insight to constant changing consumer behavior.**

established companies adopting DTC strategies and dealing directly with the customer. This concept reduces total supply chain costs, which can be passed on to the customer. Businesses now look at strategic logistics networks, with inventories of key products in decisive areas to reduce travel length. Additionally, this strategy allows for greater control and knowledge over inventory.

But, with constant shifts in consumer demands and market changes, it can be difficult to know how to accurately fulfill customers' needs. However, digital properties have not just helped consumers get the products they need sooner; it also helps companies make better decisions and predict what the market might do. Today, logistics operations need to be extremely flexible and agile due to the volatility of seasons and SKUs. Companies now tap data and analytical forecasting to gain an advantage and insight to constant changing consumer behavior.





# EVERYTHING HAS CHANGED

The extreme focus on demand has shifted virtually everything in the logistics industry, even ocean carriers, which have grown in popularity as retailers search overseas for materials and products to help fulfill consumers' needs. Ocean freight delays now impact inventory and high freight rates put financial pressure on shippers. But, the need for greater buying options for the consumer means companies need a more flexible and nimble approach to the supply chain.

While globalization and ocean freight grew throughout e-commerce, so did last-mile delivery.

The last-mile delivery market is expected to reach \$642.2 million by 2027, growing at a compound annual growth rate of 8.4% from \$354.6 million in 2020, according to Precision Report. And, since consumers are no longer comfortable with delivery times that last more than a week, the last-mile delivery market is now highly competitive. The report explains that during the pandemic, last-mile providers immediately adapted new strategies and development skills to retain operations as well as different funding sources and business approaches for sustained growth. When it comes to last-mile delivery, consumers now expect Amazon-level visibility, speed and convenience from every retailer.

Not only is detailed and real-time visibility imperative in business-to-business operations and consumer-facing platforms, but proof-of-delivery is also now extremely necessary in the last mile. A 2021 Anyline survey found that 70% of consumers in the United States want contactless digital alternatives for proof-of-delivery signatures for high-value packages.

With all this focus on logistics though, the e-commerce warehousing industry also faces transformation. E-commerce will only continue to rise and cater to the complex demand; the warehousing industry needs to change to conform. For instance, with the demand for lesser lead time in deliveries, the product needs to be closer to the consumer.



**“70% OF CONSUMERS IN THE U.S. WANT CONTACTLESS DIGITAL ALTERNATIVES FOR PROOF OF DELIVERY SIGNATURES FOR HIGH-VALUE PACKAGES.”**

*The 2021 Anyline US Survey of Consumer Attitudes*

This means warehousing facility location must focus on serving the largest number of people in the shortest delivery time. Retailers need to redesign their warehouse networks to comply and find the best balance of warehousing and transportation costs and still meet customer expectations.



**M**icrofulfillment centers increase in popularity due to this concept while other strategies focus on faster transportation methods from centralized distribution centers.

Today, brick-and-mortar stores are even used as distribution centers.

In addition to location, warehouses change the way many of the processes are handled. In the days of e-commerce, warehouses focused on handling a larger number of small orders rather than smaller numbers of batch orders. Warehouses now look to automation to offset this change while re-strategizing the workforce, physical inventory placement and inventory replenishment. Robotics systems and augmented reality tools help drive picking efficiency while planning tools help optimize the process.

These processes become even more complicated now that consumers buy across categories in one checkout, which requires drastically different needs for storage. For instance, a shopper today can buy frozen foods as well as home improvement materials in one online shopping trip, forcing facilities to be agile and support this type of shopping behavior.

All in all, the most important change to the warehousing industry is the shift in the thought process behind it. Today, the warehouse shifts from an afterthought to a priority. While in the past, warehousing space would be a luxury, it is now a necessity, and retailers race to find the space and labor needed to run an efficient operation.

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# PACKAGING UP SUCCESS

**A**nother focus in the supply chain's growth through e-commerce is packaging, especially now that shippers send products directly to consumers' homes.

Today, customers look for a growth in sustainability when it comes to packaging, not just in support of the environment, but also for general convenience. Downsizing boxes and packaging material makes life easier for the consumer and creates a favorable image for those interested in ecofriendly strategies.

However, it's not just the consumer that needs to be considered when packaging is involved. Throughout the warehousing and logistics processes, packaging needs to support each partners' mission for safe and easy product handling, with the ability to interact with automation and remain as lightweight as possible. Consumers themselves now look for ecofriendly packaging without sacrificing speed and personalization.

Companies now re-evaluate the packaging process to cut out waste and inefficiencies. These complex packaging needs prompts the industry to be more organized in its decision-making.

And, if there aren't already enough little nuances companies need to keep track of with regards to packaging, they also need to consider the way packaging forges a connection with their customers.

So many companies today cultivate an unboxing experience for recipients, creating strong messaging as well as a fun and engaging experience, pushing others in the industry to do the same.



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RECYCLED MATERIALS



ORGANIC FABRICS



ETHICAL FACTORIES



FAIR TRADE POLICY



RECYCLABLE PACKAGING

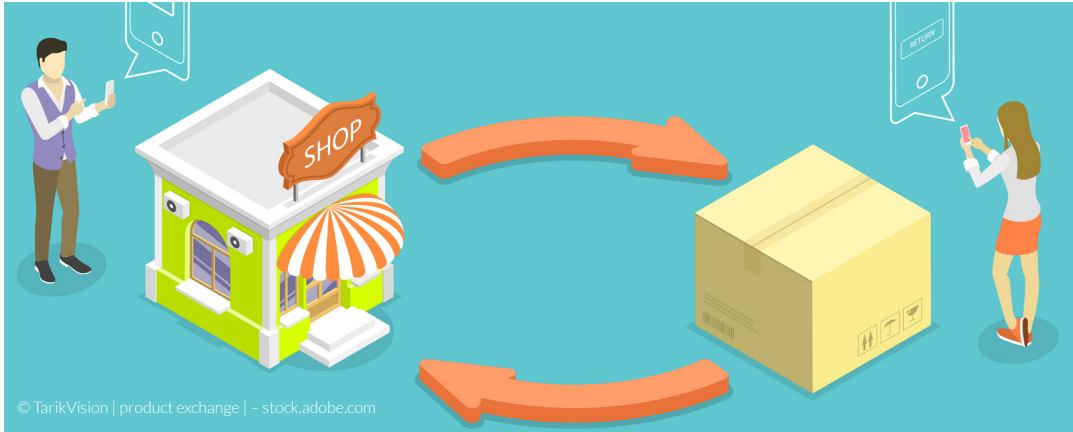


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# REVERSE THE PROCESS



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**“E-COMMERCE SEES A THREE TIMES HIGHER AVERAGE RETURN THAN COMPARED TO BRICK-AND-MORTAR PURCHASES.”**

*Digital Commerce360*

**A**fter all these complicating factors that transformed the supply chain over the past couple decades, what happens when an order needs to be returned? Without the ability to be able to try on clothing or physically inspect the product before purchasing, the chances of needing to return an order are much higher.

According to Digital Commerce360 research, e-commerce sees a three times higher average return than compared to brick-and-mortar purchases. Because of this, retailers need to create an entirely new process when it comes to returns on the consumer-facing side as well as behind the scenes.

For instance, companies now offer free returns to help ease consumers' fears of buying something online that ends up not being a fit once it arrives.

But, the business of reverse logistics is complicated. For customers shipping back products, the size, shape and type of product will alter the method of return. For the warehouse, protecting the quality of the product and making sure it can be re-sold is an extremely important factor, especially in a timely manner.

The 2020 State of Returns Report from Returnly says that 80% of consumers think about the returns experience before even purchasing and 73% say that they will not shop with a retailer or brand again after a bad returns experience.

To help combat reverse logistics issues for the consumer-facing portion as well as the warehouse aspect of it, retailers and brands use reverse logistics as another opportunity for technology's help. Machine learning can be used to determine which online items are more likely to see higher return rates and for other predictive analysis strategies. But, most technology is simply used to streamline the reverse logistics process.

Moving forward, e-commerce will see these trends only strengthen and shift, forcing the supply chain to be an everchanging organism. Some changes will return post-pandemic, but many behavioral changes in consumers are not temporary. Many say that the pandemic is only an accelerant for changes that were already happening in the industry.



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