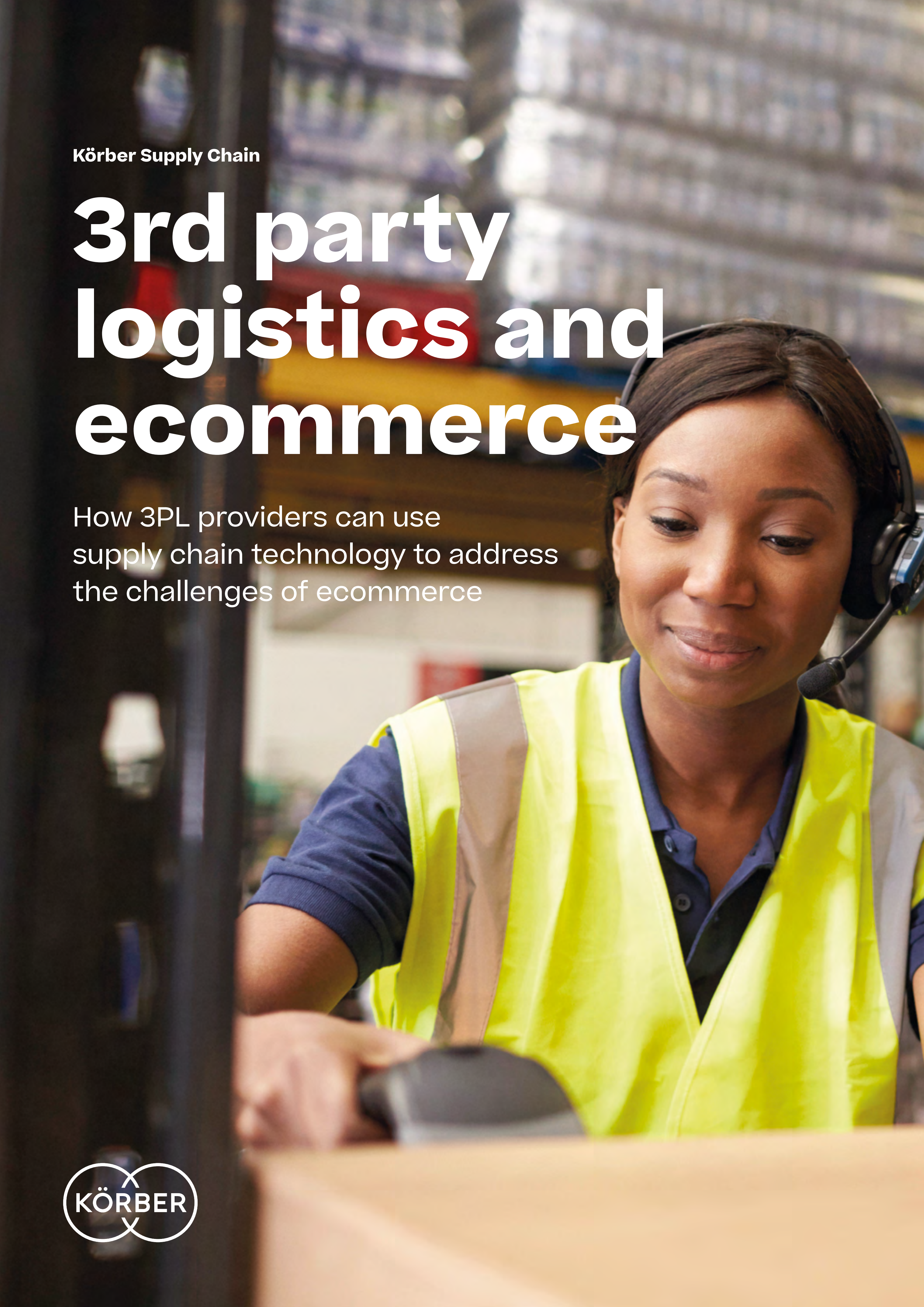


Körber Supply Chain

3rd party logistics and ecommerce

How 3PL providers can use supply chain technology to address the challenges of ecommerce

Contents

Introduction:
The rise of ecommerce

Prior to the online retail boom of 2005–2010 – spearheaded by ecommerce giant Amazon – only 22 percent of people shopped online.[1]

Now, it's expected that ecommerce will generate a staggering $4.5 trillion in sales by 2021. Further, Statista predicts that by 2023 the United States alone will house 300 million online shoppers – which is 91 percent of the total population.[2] And by 2040, 95 percent of all retail purchases will likely be made online.[3] The Amazon effect has changed behavior and created a new kind of consumer who values speed and convenience. Amazon, for instance, offers one-click buying and one-stop shopping, lower prices on average, a catalog of over 12 million products to choose from, special deals with membership, and lightning fast shipping.[4] To consumers, anything less feels like an unnecessary compromise.

Unfortunately, without the resources of a retail giant, it's hard to adapt to a new economy in which only the most forward-looking and flexible organizations survive. As of February 2020, over 2,400 retail stores are set to close. However, not all bricks-and-mortar businesses have been obliterated by ecommerce. The most interesting consequences of the Amazon effect can be observed in companies that have adapted their offerings and processes in order to thrive during the Amazon era, specifically meeting customer expectations in terms uniqueness of experience and quality of order execution. These organizations represent a huge opportunity for 3PLs, as they may be new, or rapidly growing organizations that lack the ability to execute when it comes to supply chain.

1. https://qz.com/1688548/amazons-control-of-e-commerce-has-changed-the-way-we-live/
2. https://www.statista.com/statistics/273957/number-of-digital-buyers-in-the-united-states/
3. https://www.nasdaq.com/articles/uk-online-shopping-and-e-commerce-statistics-2017-2017-03-14
4. https://www.investopedia.com/terms/a/amazon-effect.asp

What challenges are 3PLs facing?

The increased importance of shipping speed presents both challenges and opportunities for third-party logistics providers. In this new landscape, flexibility and cost control are key to survival.

For instance, 3PLs might experience growing volumes year over year, but contract terms tend to be short and vary widely. Contracts are typically one to three years in length – particularly when it comes to North American markets – but sometimes can even be month-to-month.

With the prevalence of short-term contracts, it has been difficult for 3PL organizations to justify spending money on high levels of automation. Due to inability to invest in automation vis-à-vis the lack of predictable revenue, 3PLs often find themselves hiring more personnel to keep up with ebbs and flows during contracts. Unfortunately, in this full employment economy, competent team members are hard to find and retain; temporary employees are also a critical component of a successful 3PL. Temporary agencies send over people who are eager to do the job but often don't know their way around the new technology, and there's not always time to teach them. For this type of labor to contribute successfully, both operational processes and software need to be simple to learn.

Beyond that, providing a service to ecommerce companies can be lucrative but unpredictable. Businesses in this space may scale up or down daily or weekly, and often lack the data to forecast volumes, especially during promotions and peak seasons. Without this vital information, it's difficult for 3PLs to plan accordingly and ensure that they have enough resources in place to handle order volume efficiently. For fear of not having enough personnel to handle a sudden influx of orders, many 3PLs overcompensate and hire more help than operationally necessary. Panic hiring and addressing the problem with unqualified labor is a less-than-optimal solution to handling a high volume of orders.

What's worse, fulfilling ecommerce orders has become an increasingly complex process – now, most shipments have four to eight steps. The retailer must receive the order, send out a communique to neighboring warehouses to find out which stores have the product, send the shipment out to the first delivery partner, transfer the shipment to another partner that can deliver the product within the delivery window, and so on and so forth. Further, global shipment requirements and varying types of regulatory and carrier compliance at the ecommerce level lend additional variables. Therefore, not only are there more steps to fulfilling ecommerce orders, but the requirements to meet these steps are complex. With this many moving parts, it's easy to drop the ball due to human error, and cost 3PLs in the form of chargebacks.

Even more steps in the order fulfillment process are to be expected. Requests for value-added services are increasing in number and complexity. Special inserts, special packing instructions and ship-with requirements are just three examples. It is critical that 3PLs be able to handle these types of requests, but the ability to process them efficiently (and profitably) is as important.

Returns also provide unique challenges for 3PLs. The amount of labor required to process a return is exponentially greater than the labor required to process an order. Compounding the situation, clients may be unable or unwilling to provide accurate return profiles and volume estimations.

As mentioned, 3PL clients may be newer or rapidly growing organizations and may not have sophisticated in-house technology. Inaccurate or invalidated details such as customer addresses, product master information etc. present a huge challenge for 3PLs. The 3PL will have limited ability to apply technology and automation on an account, as the lack of quality data will require too much human intervention for process automation.

The rise of ecommerce therefore places 3PL providers in a tight bind. To fulfill the last leg of the retail supply chain and get shipments to buyers on time, they must become faster and more efficient, as well as adept problem solvers. Unfortunately, many 3PLs don't have a lot of capital to invest in expensive supply chain management solutions. The good news is that the two most innovative strategies for increasing efficiency and addressing common industry pain points – voice technology and robotics – are affordable and can rapidly achieve a return on investment (ROI).

Technology helps 3PLs meet demand

As technology is the backbone of ecommerce, companies looking to partner with a third-party logistics provider prefer those that are tech-savvy and adaptable.

Technological literacy proves to prospective clients that a 3PL can hold their own in a rapidly changing digital landscape. If a potential partner sees that a 3PL is progressive, capable, and scalable with the help of automated technologies, the value is clear. Value breeds trust, which is leveraged into longer contracts, revenue predictability, and more capital investments down the road.

A 3PL's first step toward conquering complexity and riding the ecommerce wave is choosing a purpose-built 3PL warehouse management system (WMS). The last mile of the logistics race can be unpredictable and volatile, which is why it's critically important for 3PLs to streamline processes wherever they can. A WMS allows 3PLs to reduce operations costs, quickly respond to the changing market needs under ecommerce, and integrate with any level of automation.

A tier-1 3PL WMS offers the capability of direct work creation and assignment, enabling logical and efficient handling of high volumes of orders with short turnaround times. A sophisticated WMS can also group and assign work to users or automation to efficiently process. With the increase in order complexity (value-added services, short ship windows, high volumes), every second of lost productivity due to human process or intervention requirement is lost profitability.

Carrier integration and packing
Again here, systematic processing drives efficiency and profitability. Carrier integrations improve order processing times and visibility. System-directed packing reduces package sizes. Features such as rate shopping based on service level and system-directed packing can reduce freight costs for 3PLs and their clients.

Profit and loss reporting
Critical to the financial health of a 3PL is the ability to report on profitability not only across clients but also on activities and product handling. Client billings, labor cost and overhead cost data all need to be consumed in the WMS. This allows 3PLs to monitor revenue but also cost to serve. Revenue minus cost to serve = profit.

Investing in a WMS that is rapidly deployable and quick to implement can make all the difference when it comes to attracting the right clients.

In addition to a WMS, voice and robotics are good starting points when it comes to choosing strategic supply chain technology.

Voice

Implementing voice-enabled technology is one of the most effective ways of increasing operational efficiency in 3PL warehouses. First and foremost, it allows employees to focus on their work and complete tasks more quickly. Voice-directed picking tells the employee what to pick and where, through a hands-free headset. When the employee needs to communicate with the server, they can speak into their microphone. The voice system immediately recognizes the worker's commands and transmits them back to the server.

Voice technology allows employees to freely move about the warehouse and focus on critical tasks without wasting time looking back and forth between shelf and tablet. It does wonders for inventory, but other important use-cases include safety, order selection, replenishment, and cycle counting. Voice also helps solve 3PLs' under-qualified personnel problem – the headsets can easily learn a user's voice, and onboarding typically takes about 15 minutes.

Voice technologies are great options for 3PLs that are just starting out with a tech-enhanced warehouse, because they are so flexible. Voice may be used with any kind of product and be implemented as a fully automated or semi-automated solution, depending on a 3PL's needs and budget. Fortunately, budget concerns shouldn't be an obstacle – voice is one of the more affordable warehouse solutions on the market, and most 3PLs see an ROI in only nine months. In fact, industry research has found that 3PLs using voice-enabled technologies are 85 percent more accurate when fulfilling orders, and 80 percent more productive. In terms of labor, they also have 50 percent more satisfied employees.

Robotics and automation

According to Shopify, the future of ecommerce and the global supply chain therein will heavily feature warehouse robotics and artificial intelligence. Over 3,200 fulfillment centers have already been outfitted with robotics, and global spending on robotic process automation is expected to reach and exceed three billion by 2022.[5]

Yet many 3PLs still consider robotics solutions to be prohibitively expensive for mid-sized companies. These companies often end up spending more money than they should on robotics because they assume their entire warehouse has to be filled with robots or that they must pay for all of the robots they could possibly need upfront.

However, a "pay-as-you-go" strategy is smarter and more cost-effective. 3PLs can use robotics as a service and only pay a monthly fee for using the technology – with no upfront capital investment required. From there, 3PLs can scale robots to the appropriate volume of business in order to keep costs down and avoid creating a work environment that is plugged-in but inefficient. 3PLs can fully automate robots to take over tasks like picking and inventory, or opt for a hybrid approach where "cobots" help warehouse employees do their jobs safely and efficiently. Further, integrating automated robotics with voice-enabled technologies is the most practical, affordable, and cutting-edge way to boost operational efficiency.

Process and profitability modeling

A common theme for 3PLs is the peaks and valleys in volumes and lack of data around transaction profiles, returns (as mentioned) and other factors. 3PLs need to simulate building and material-handling configurations as well as transaction profiles and labor data. Simulations can be run on volume fluctuations, best and worst cases for labor availability, transaction profiles and any other available, relevant data element. Performing this modeling is crucial to enable accurate quoting of new business opportunity to protect profitability and the organization's financial health.

Process and profitability modelling tools may be leveraged to reconfigure existing accounts. By loading historical data and running simulations on the inputs noted above, 3PLs can look to predictably improve efficiency by applying operational reconfigurations based on the modeling; profitability follows efficiency.

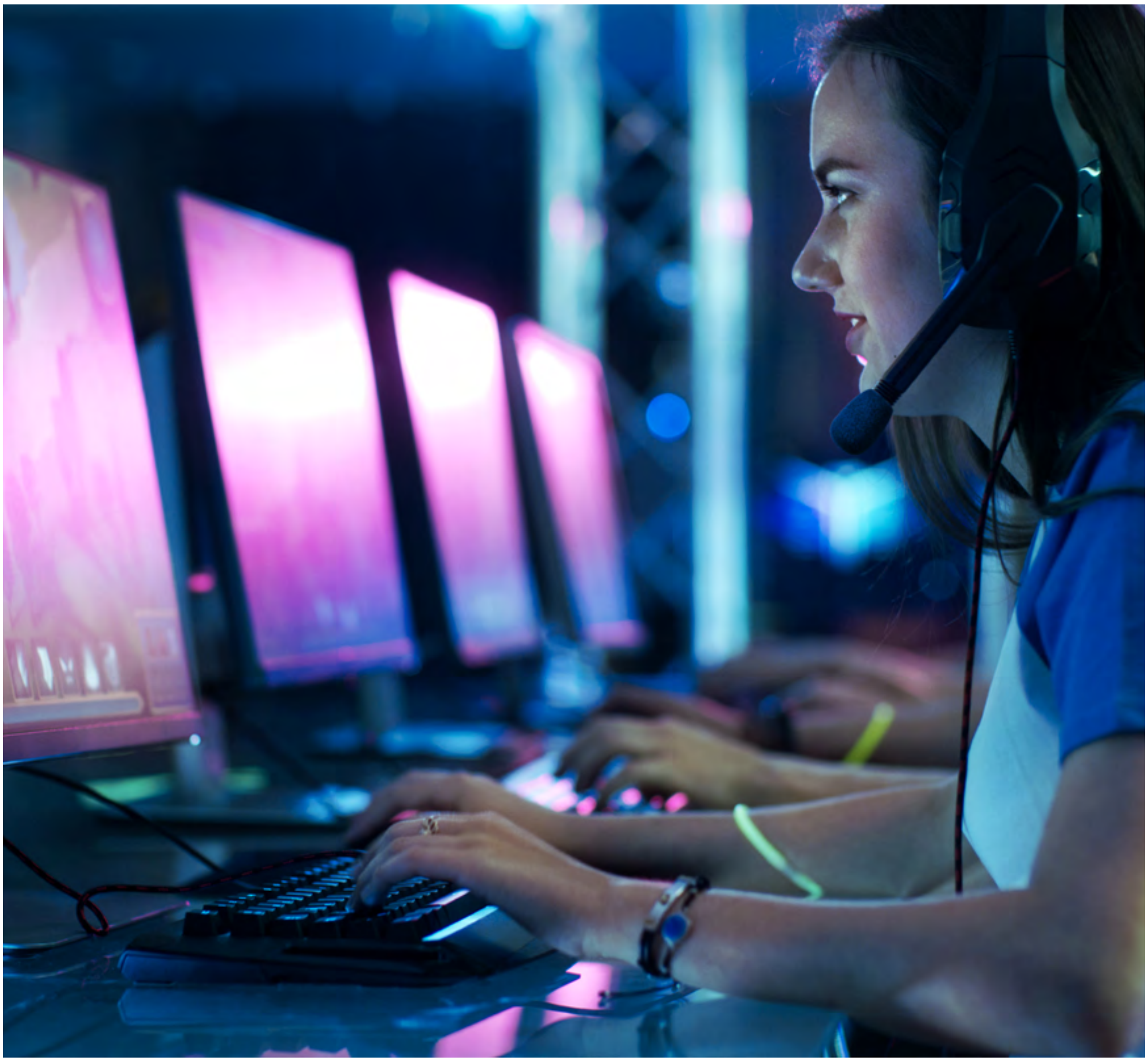
5. https://www.businessinsider.com/stores-closing-in-2020-list-2020-1

How 3PLs can solve complexity

Third-party logistics providers find themselves faced with an increasingly complex landscape that is continuously evolving.

The rise of ecommerce – and everything that comes along with it – presents the biggest challenge of all. From external forces like customers' changing expectations of delivery speed to internal forces like evolving labor needs, 3PLs need to be both agile and robust if they want to keep up with a dynamic marketplace.

Fortunately, 3PLs can conquer complexity with the right technologies, the right strategies, and the right partners. In particular, voice-enabled technologies and robotics, as part of a comprehensive automated warehouse management system, can help 3PLs rise to the challenge of omnichannel fulfillment during the ecommerce era.



Körber AG
Anckelmannsplatz 1
20537 Hamburg
T +49 40 21107-01
info@koerber.de
koerber-supplychain.com