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Introduction

The term "supply chain" conjures up images of packages, parcels and pallets but supply chains are really all about people. Customers, employees and even shareholders are the real driving forces behind a supply chain, and those groups of people have very different wants, needs and expectations.

In this eBook, we explore how to unlock improved performance and profitability by placing people at the center of your supply chain execution, while delivering an enhanced customer experience.



The challenge

The supply chain is now recognized as a mission-critical function. It now features prominently on the C-suite agenda due to its position as a profit center and source of competitive differentiation. However, the effectiveness of the supply chain is being measured against increasingly agile competition with expansive distribution networks, highly automated facilities and short, accurate delivery windows. Furthermore, customer expectations have evolved such that they not only expect fast, on-time delivery, but also more choice about where and how orders are fulfilled – and more transparency into inventory numbers and locations.

To be successful, leading organizations need to rethink supply chain execution and triangulate the needs of the business, its shareholders and, most importantly, the customer. Without optimized supply chain execution, companies are facing an uphill battle to succeed. Fortunately, balancing speed, cost effectiveness and positive customer experiences does not have to be a game of either/or. Leading companies are already achieving it and in this paper we explore the "how."

Poor customer experiences in supply chain execution usually fall under three broad areas: fulfillment, facilities and relationships.

1. Fulfillment

Poor inventory accuracy and manual warehouse processes

The modern warehouse is not a static environment. Inventory can be spread across a variety of possible locations and statuses. A lack of real-time visibility into inventory, stocks and order statuses can be a major cause of inefficient fulfillment. Furthermore, a lack of adaptable execution workflows, which factor in cut-off times and advanced business logic like delivery options, can also have a negative impact.

 Workforce availability and new hire onboarding times

A lack of sufficient skilled labor in the distribution center is one of the biggest causes of inefficient fulfillment. This problem is amplified during peak season when demand spikes significantly. Retaining staff, ensuring access to potentially untapped labor pools and streamlining new employee onboarding is therefore critical to achieving efficient fulfillment.

· Labor inefficiency and output

Labor is the number-one cost in warehouse and distribution center operations. It is therefore vital to maximize the productivity and output of the workforce.

Organizations that fail to measure the real-time performance and utilization of their teams run the risk of negatively impacting the customer experience, by failing to get inventory on shelves and failing to meet fulfillment expectations.



The challenge

2. Facilities

Sub-optimal warehouse layout and workflows

New greenfield distribution centers can be an enabler for customer success via the intentional way in which they accommodate current business needs and models. The opposite can be said for some legacy, brownfield sites since they often struggle with volumes, throughputs and understanding where stress points are located.

Physical demands placed on warehouse associates

Distribution centers can be vast, sprawling facilities and the items stored and picked can be large, heavy and cumbersome. A lack of consideration for the physical demands placed on warehouse associates in their daily work can have an extremely negative impact on the customer experience. The enablement of workplace injuries, staff attrition and limited labor pools is a sure way to hamper goods reaching customers in a timely, accurate manner.

Inefficient inventory storage

Today's warehouse inventories reflect the growing complexity of the supply chain. They are constantly changing, driven by seasonal demand, customer expectations and product availability. The targeted assignment of storage slots has become critical for optimizing picking processes, labor utilization and storage space. However, traditional, manual approaches to slotting optimization have become nearly impossible, which poses risk to warehouse efficiency and customer satisfaction.



The challenge

3. Relationships

 Lack of end-customer choice and transparency during the order process

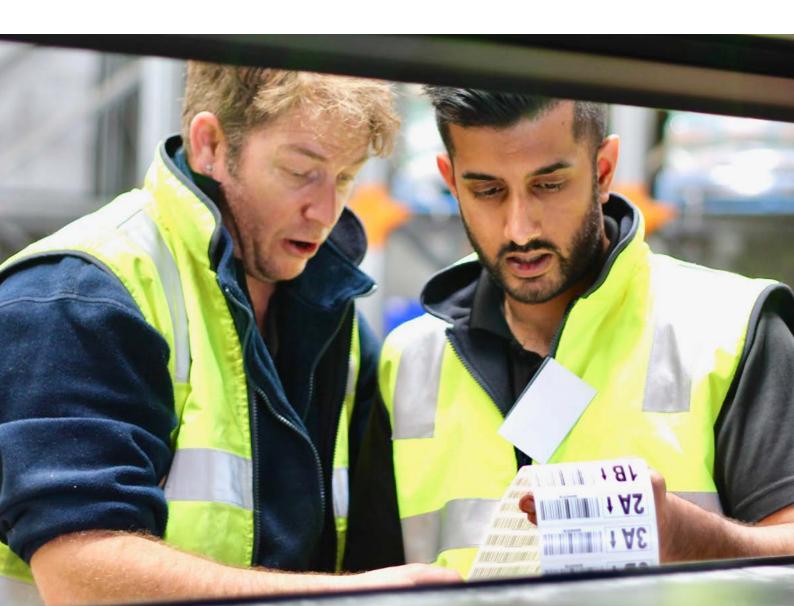
Customers expect choice, transparency and convenience. Meanwhile, commerce channels have become wider and more complex. To maintain good customer relationships, it is imperative that organizations have network-wide insight into inventory levels and inventory locations, plus where and how orders should be fulfilled. Anything less can lead to delays and disappointment.

 Sub-optimal transportation expenditure and carrier contracts

Transportation route planning, carrier selection and mode choice can make a huge difference in reducing transit times and increasing operational efficiency. However, the desire to expedite shipping can result in unnecessary expenditure and bad relationships with transportation carriers. To meet the needs of customers and the business, organizations must find the right balance between operational performance and the bottom line.

· Disengaged warehouse workers

The warehouse workforce is a critical component of operational efficiency. Not only are workers the biggest asset, but they are also the biggest expense and – in the current climate – very difficult to replace. To be successful, a happy and engaged workforce is essential.



The solution

To deliver better customer experiences, organizations can unlock performance and profitability by placing people at the center of their supply chains. A prerequisite for getting the most out of people is a modern, cloud-based Warehouse Management System (WMS) like those offered by industry leader, Körber. While most modern WMSs will help to address challenges like warehouse inventory visibility and accuracy, Körber's is unique since it is highly flexible and extensible.

Our technology enables organizations to configure the WMS to their unique business needs without platform customization, and thus enable supply chain leadership to provide positive customer experiences faster and more cost effectively.

Two examples of organizations leveraging the WMS to delight their customers are **Parts Town** and **FabFitFun**. While their business models are extremely different, both place people at the center of the supply chain and in doing so, meet and exceed the needs of their customers.

Building upon your modern WMS

A modern WMS is not the only factor in optimizing supply chain execution for better customer experiences. There are many other solutions that add significant value as a force multiplier. Most of the solutions listed below rely on a modern WMS but are vendor agnostic.

The solutions to enhance supply chain execution and customer experiences fall into three broad categories:

- 1. Optimized fulfillment
- 2. Optimized facilities
- 3. Optimized relationships



Parts Town is a long-established international food service equipment parts distributor. They faced challenges with their previous WMS due to its inflexibility and lack of support. Our solution provided a flexible solution that could scale with Parts Town's rapid growth, improving both speed and accuracy.

"Our experience with Körber has been one that has fulfilled nearly all the promises that were made when we signed on."

Kenny William Senior Director, Parts Town

- 30% improvement in inventory accuracy
- 20% increase in picking productivity
- Streamlined training, enabling employees to follow optimal paths via RF scanner instructions
- Created job opportunities by building a team around the WMS to customize and oversee its impact
- Enhanced end-customer experience



Optimized fulfillment

Voice-directed work

Voice technology for use in the distribution center was created with one purpose in mind: maximizing operational efficiency. Traditional warehouse technologies, like paper and RF scanning, require workers to transfer their attention from the task at hand to a piece of paper or screen and back, expending valuble time and increasing the likelihood of error.

With voice, workers are hands-free and eyes-free, with the voice system feeding instructions from your WMS to your worker through a headset. This allows them to work quickly and efficiently, increasing productivity and accuracy throughout your warehouse. Voice is typically used to support tasks such as order selection, put-away, replenishment and cycle counting within the warehouse, but it can be deployed in many other areas as well.

DORFMAN PACIFIC

Global headwear and handbag company **Dorfman Pacific** had an exceptional experience implementing Körber voice into their outbound picking process.

"The most compelling part of voice is the pick times. It made a difference the day we turned it on. Again, accuracy has gone up and we've improved our efficiencies."

Michael JohnsonOutbound Distribution Manager

- 99% outbound picking accuracy
- Reached ROI in six months
- Multiple language support expanded available labor pool



Optimized fulfillment

Collaborative mobile robotics

Efficient order picking is a core component to efficient order fulfillment. Collaborative mobile robotics – sometimes referred to as person-to-goods robotics – helps to take order picking to the next level by actively directing workers to their next pick location and thus eliminating non-value-added roaming of aisles. The robots also eliminate the burden of warehouse associates having to push heavy manual carts and let them pick at their own pace. Picking speed and accuracy can therefore see significant gains with less walking and more time on task.

Collaborative mobile robots also expedite new worker onboarding by offering an intuitive graphical user interface that guides workers through the entire pick process. They can also automatically switch onscreen languages to match the worker's preference. Combined with the fact that warehouse work becomes less physically demanding as a result, collaborative mobile robots can unlock new labor pools and expedite training. This is particularly useful for temporary and seasonal workers.

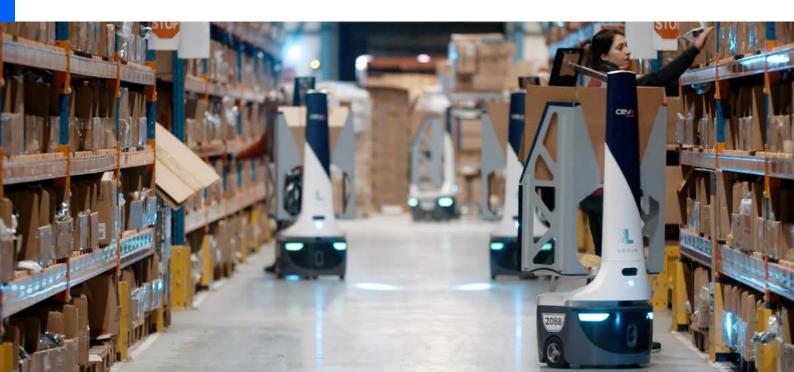


Integrated Supply Network (ISN) is the largest independent automotive tool and equipment specialist throughout North America and the UK. It uses Körber's WMS combined with AMRs from Locus Robotics to fuel its rapidly growing eCommerce business and overcome issues related to labor availability.

"We would not be able to keep up with volume without the addition of the robots."

Theron NeeseChief Supply Chain Officer

- · 266% improvement to picking speeds
- 106 days for implementation
- Increased picking quality and accuracy
- Increased associate wages by reinvesting related cost savings
- Stabilized workforce and reduced attrition



Optimized fulfillment

Labor Management

Labor is the number-one cost in warehouse and distribution center operations. Consequently, many organizations are trying to increase efficiency and reduce operating costs via labor management software that enables the tracking, measurement, reporting and planning of labor-related activities.

Körber's Labor Management solution helps organizations objectively measure performance and utilization in real time across facilities, shifts, teams, associates and processes. The result is a reduction in unproductive activity, plus the ability to identify high and low performers, including indirect labor. Warehouse and distribution center workers can even be given guidance throughout the working day to ensure daily performance is on track.

Once the workforce is efficient and productive, additional value can be derived from the Labor Management solution by combining it with data residing in the organization's WMS for planning purposes. This capability enables optimized allocation and reallocation of labor resources across the organization based on demand. This functionality is especially valuable during periods of elevated demand, such as peak season, when workloads spike and prioritizing optimized fulfillment becomes all the more imperative.



Big Y is an American, family-owned supermarket chain located in Massachusetts and Connecticut. Big Y chose Körber's Labor Advantage solution due to its impressive labor-related data tracking and insights.

"We heard our employees request for an incentive system, but it was hard to act on due to lack of previous metrics. Before the five-week mark, immediate improvement was noticed as a result of Labor Advantage tracking and incentives."

Steve Creed

Vice President of Logistics and Distribution

- 27% boost in productivity in first 8 weeks
- · 29% reduction in cost per case shipped
- Enabled real-time coaching which taught employees to be more efficient during their shift
- Immediate boost in workforce productivity and motivation



Optimized facilities

Warehouse modeling and simulation

When market opportunities arise or business models change, warehouse layouts can prove to be a bottleneck to supply chain execution success. Even if layout and workflow changes are proposed, there is risk involved in making changes that then fail to realize the expected improvements. This is where Körber's Warehouse Design and Simulation software comes in.

The starting point is the creation of a digital twin of the distribution center facility. After that, a combination of real-time data feeds and predictive analytics allow users to simulate various scenarios that test different strategies for better decision making and risk mitigation. The solution allows for the measurement and analysis of key performance metrics such as order fulfillment, time, accuracy and throughput. The simulation of goods and materials moving through the facility also provides a visual representation of processes and workflows.

The end result is the optimization of warehouse facilities – encompassing space, services, resources and machinery – without the cost and disruption associated with making bad decisions or unnecessary changes to existing layouts. The warehouse workforce benefits from more efficient and more productive workdays, while the customer sees an increased likelihood that their goods reach their doorstep quicker.



Carlsberg, one of the largest brewers in the world, manages its supply chain in-house through Carlsberg Supply Company (CSC). CSC chose Körber's CLASS solution to assess new warehouse layouts – to ensure long-term competitiveness and resilience in an ever-evolving market landscape.

"Using CLASS, our team was able to easily simulate different layouts for warehouses and bottle yards; selecting optimum designs to meet project goals and improve on KPIs."

Svetlana Pavlova

Group Warehouse Senior Manager

- Tackled reluctance to change, by showing how the suggested improvements will work
- Ensured optimum efficiency of all operations
- · Increased capacity during peak periods
- Standardized and communicated best practice across the globe
- Identified cost savings through reduced travel distances, optimized headcount and MHE – while retaining quality customer service levels



Optimized facilities

Goods-to-person robotics

A lack of consideration for the physical demands placed on warehouse associates in their daily work not only affects the employee experience, but it can also have an extremely negative impact on the customer experience too. Workplace injuries, employee turnover and limited labor pool availability can cause workforce gaps that can in turn delay products being put on shelves, picked and shipped.

Goods-to-person robotics present a huge upgrade to warehouse facilities by bringing inventory to employees rather than forcing them to search, while providing detailed, highly visual guidance on what needs to be picked. The goods-to-person process significantly reduces labor intensity while greatly enhancing accuracy and efficiency. Compared to manual picking, goods-to-person improves efficiency levels by two to three times.

A side benefit of the introduction of the goods-toperson robotics shelving is increased storage capacity by compressing the spacing between totes. This can help facility optimization and supply chain execution by improving use of space in the warehouse.



Ariat makes world-class garments with world-class design, materials and workmanship. The team obsesses over every single detail of its boots, jeans and shoes – from the finish of the leather to the durability of the denim. With a high quality product to sell, it didn't want to let supply chain execution be the cause of negative customer experiences. Ariat uses Körber's WMS and goods-to-person robotics from Geekplus to optimize the warehouse while increasing associate productivity and satisfaction.

"If we can take the hours and the heavy physical labor out of the process, we can reinvest that in value services, quality end of line processes and investing in other pieces of the business where there is a service element for the end-customer experience."

Matt Hardenberg

Vice President of Distribution

- Decreased associate walking by 82%
- Reduced new employee training times from weeks to hours
- Increased associate productivity by 100%
- Improved employee morale through better working conditions
- · Improved picking accuracy



Optimized facilities

* Al-powered slotting

Today's warehouse inventories reflect the growing complexity of the supply chain environment. They are constantly changing, driven by seasonal demand, customer expectations and product availability. Additionally, inventories have expanded significantly, with more diverse consumer preferences propelling the proliferation of SKUs.

However, commonly used approaches for highly efficient inventory storage are meeting their limitations. Manually optimizing slotting for fast-moving, complex inventories has become nearly impossible. At the same time, traditional rule-based approaches are challenged by the realities of fast-turning, frequently changing inventories with tens of thousands of SKUs.

To truly optimize facilities – and related supply chain execution – organizations are seeking new methods for improving inventory placement that help accelerate order picking. Körber's Slotting.IQ solution was designed to address these challenges. It harnesses item master information, warehouse layout data and historical pick paths, coupled with a rich set of customer-specific rules, to optimize SKU placements. Applying data science techniques and advanced analytics, Slotting.IQ enables advanced slotting optimization based on product velocity, slot characteristics and pick-trip length. This facilitates efficient picking, put-away and mixed pallet building.

The outcome? A significant reduction in time spent on picking and replenishment, faster order processing and a more productive workforce. A perfect combination for better supply chain execution and better customer experiences.

NASSAU = PROVISIONS =

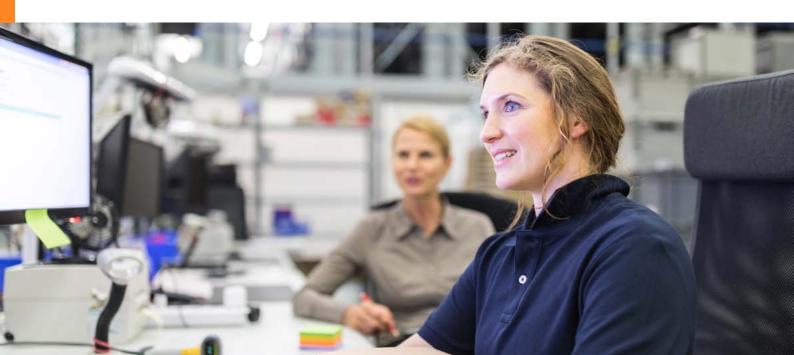
Nassau Provisions specializes in the distribution of specialty and general groceries throughout the tri-state area and beyond. It serves supermarkets, restaurants and convenience stores. The company – which already uses WMS and Voice solutions from Körber – decided to enhance their inventory slotting process with Körber's Alpowered Slotting.IQ application.

"For us, it was night and day when we saw the results."

Shav Hirii

Director of IT, Quality and Control

- Utilized space more efficiently and more effectively
- \cdot $\;$ Reduction in replenishment and travel times
- Flexibility to avoid having brand next to brand
- · Inventory storage that optimizes pick paths



Optimized relationships

Order Management System

Choice, transparency and convenience are essential to the buying journey of the modern customer – whether B2B or B2C. Poor experiences are no longer an option, with alternative products and vendors just a click away. In addition, there are more commerce channels to support than ever before, all of which are being used by customers expecting experiences that align to your brand and their expectations. It's a complex task.

An Order Management System (OMS) - like the one from Körber - is now a prerequisite for facilitating positive buying experiences for B2B and B2C customers. Körber's OMS seamlessly integrates orders, inventory and customer data to adeptly tackle commerce challenges. Not only do customers get real-time visibility into available inventory across all locations, they can also track orders in real time, take control of their preferred fulfillment locations and streamline returns and exchanges. Meanwhile, the business benefits from the ability to prioritize orders based on urgency, value and customer loyalty, plus the automation of order processing and optimization of fulfillment. A single platform consolidating all orders across all channels is therefore a win-win for the buyer and the seller, building stronger relationships and improving levels of satisfaction and loyalty.



TITAN

Titan Brands is an online retail company. One of the top 30 fastest-growing eCommerce retailers in the US, Titan Brands wanted to build a strong foundation for the future, while continuing to target growth. The company turned to the combination of Körber's Order Management System (OMS) and Warehouse Management System (WMS) to enhance the customer experience.

"Körber has been an integral part of Titan Brands' digital transformation, helping us to provide a better customer experience through increased visibility and reliability throughout the order and delivery process. We were able to quickly lay a foundation and build world-class processes that will allow us to stay on the cutting edge of customer experience for years to come."

Jeff Hill

Director of Global Supply Chain

- Enabled order allocation for least-cost fulfillment distribution center and carrier selection
- Provided the ability to give estimated delivery times in the website shopping cart for improved customer experience
- Created ability for customers to choose expedited shipping options
- Provided the ability to allocate in-transit inventory so it could be sold before it arrived

Optimized relationships

Freight Audit and Payment

Bad carrier relationships can have a negative impact on an organization's top and bottom line. Carrier issues can lead to problems with performance, capacity, costeffectiveness and customer satisfaction. Furthermore, traditional freight audit and payment (FAP) solutions fail to deal with many of the core problems.

Körber's Freight Audit and Payment (FA&P) solution combines cutting-edge algorithms and data-driven insights to optimize transportation strategies. It helps businesses to enhance resource utilization, minimize the risk of delays and drive efficiency and cost savings – while maintaining quality and meeting customer expectations.

FA&P enables organizations to select the most suitable carriers for specific routes based on performance, capacity and cost-effectiveness. It enables the monitoring of carrier performance, delivery times and other key metrics to ensure service level agreements are met. Analyzing current and historical transportation data allows patterns to be identified and optimized.

These capabilities optimize transportation networks, enhance customer satisfaction and effectively navigate the challenges of supply chain execution.

Peet's Coffee

Peet's Coffee offers superior beverages by sourcing the best coffee beans and tea leaves in the world – adhering to strict high-quality and taste standards. With over 50 years of experience and 5,000 employees, Peet's is available in over 12,000 grocery stores across the United States.

"The journey with Körber has been great. We were operating in the dark with our data, but as our engagement with them progressed from parcel audit to freight payment, we've gained financial and operational visibility to KPIs without us needing to do any heavy lifting."

Marc Dorau

Senior Manager of Logistics

- Consolidated transportation data into a single source of the truth
- Gained visibility across all modes of transportation
- Achieved financial and operational KPI visibility across all distribution channels
- · Created allocation and accrual dashboards



Optimized relationships

Gamification

A significant percentage of warehouse workers lack engagement, which in turn leads to decreased productivity, increased absenteeism and higher turnover rates. When your organization's supply chain execution is on the line, this represents a major challenge.

Körber Gamification is plug and play software that helps companies to develop a highly engaged workforce through a gamified reward and recognition experience. Easy to use and fully configurable, this Software-as-a-Service (SaaS) solution can operate on any device or platform, making it a flexible solution for companies of any size, with personalized support and training.

Körber's Gamification solution increases team spirit using team games, positively impacts productivity with a rewards system and improves individual skills via feedback and learning mechanisms. Gamification really is a valuable tool to improve the relationship with your workforce and uplevel supply chain execution at the same time.



CITY Furniture is a Florida-based retailer on a mission to change the way people live, with beautiful home furnishings at incredible value. The company was eager to drive improved employee engagement and operational efficiency and turned to Körber's Gamification solution to better understand its benefits.

"By gamifying many of the key warehouse functions we have developed a greater understanding of what engages and motivates our team members. Adding a competitive element to their working day really does boost performance and efficiency."

Chad SimpsonCIO

- Increased productivity of 10–20% (depending on the task)
- Improved employee engagement and satisfaction.
- Implemented individual and team competitions with prizes and championship belts





Conclusion

With the support of the right partner, an optimized customer experience is within reach. Körber is that partner.

We offer a portfolio of end-to-end supply chain solutions that can transform your supply chain execution and help you to delight your customers.

To find out more about the Körber solution portfolio, please visit our **website** or **contact us** today.

