



Time to Embrace

Supply Chain Complexity

Today's B2B customers expect B2C-like online shopping experiences. While the online customer's journey of browse, order, collect and potentially return may seem straightforward, striking the perfect balance between a seamless shopping experience for the customer and cost controls for the distributor requires in-depth planning. Your organization must be prepared to handle more supply chain complexity than ever before.

B2B e-commerce fulfillment is the process that occurs from the moment a customer clicks to confirm their order to the moment the package is in their hands. It's a process that can make or break the entire online purchasing experience.

In an evolving B2B landscape where customers have a multitude of options to choose from at their fingertips, thanks to the growth of B2B e-commerce, it is essential that distributors ensure their fulfillment processes are fully optimized to compete at the highest level.

This ultimate guide will outline the key elements a distributor needs to achieve omnichannel fulfillment success.

Inventory Visibility

Order Routing

Order Consolidation

Tecsys Omni™ OMS



Inventory Visibility

What Is Inventory Visibility?

Inventory visibility provides details to online shoppers and retail location staff on the number of items that are instock and available of a certain product. This information is conveyed online to shoppers on e-commerce client portals and can also be made available on point of sale terminals and in-store kiosks. Inventory locations include stores, warehouses/distribution centers (DC), third-party logistics (3PL) firms and drop shippers.

For starters, it can eliminate disappointment as the purchaser can see if an item is in stock before placing an order.

Additionally, if the purchaser can see the item is in stock and available at a local store, it opens up the possibility of ordering online and picking up in the store. This provides a seamless omnichannel experience with flexibility. If you looked at this scenario without inventory visibility, the purchaser is free to order an out-of-stock item which results in the retailer having to cancel the order and causing the shopper to have a negative experience.



Why Is It Important?

A main challenge in providing inventory visibility is to track the stock on hand. Detailed inventory management systems may exist for the warehouse, but tracking what is on a particular shelf in one of dozens or hundreds of store locations is a significant and dynamic challenge.

Next, there are the sheer logistic challenges of tracking multiple inventory locations as inventory can reside across multiple nodes within a fulfillment network: stores, distribution centers, a distributor, a 3PL or even on a truck en route. As distributors move from a single-node to a multi-node fulfillment model, inventory visibility becomes table stakes for an optimized omnichannel experience.

Why You Need It?

When every minute of downtime could mean cost overruns, penalties and lost productivity, every transaction counts. If an item appears unavailable online — when you actually do have it in stock in your fulfillment network — the result is a lost sale that should not have happened and a negative customer experience that can affect future orders to your company.

With inventory visibility, every unit of available stock — regardless of where it is ready in your network — is made visible online to assure your customers that the product can be shipped or is ready to be picked up at a retail location.



A Key Function of Your OMS

An enterprise-level order management system (OMS) provides inventory visibility as a key function. If inventory visibility is not part of your system's capabilities, start looking for a point solution that offers it out of the box.



Order Routing

What Is Order Routing?

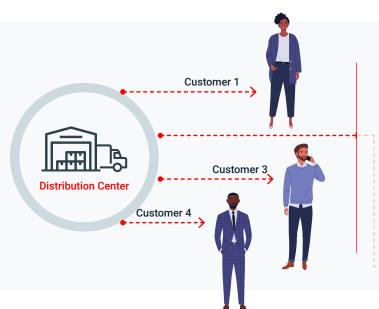
Order routing is another key function of a distributed order management system (DOM), also known as an order management system (OMS). It takes the orders that are captured from a source (e.g., an e-commerce website or purchasing portal) and then sends or routes them to a specific fulfillment location, like a retail location or a distribution center (DC). Next, an associate sees the orders on an interface and then proceeds to pick and pack. The location the system selects is based on business rules that include geographic location and inventory availability.



Types of Order Fulfillment

Before we get into more detail about order routing and why it is important to B2B e-commerce, we must understand the underlying concept behind intelligent order routing which is hyperlocal fulfillment.

Hyperlocal fulfillment is a supply chain practice where inventory is spread across multiple locations — not just one — and sourced from each location based on business rules, not least of which is geographic proximity to the final delivery location. This differs from traditional fulfillment where one warehouse stores and ships inventory for an entire geographic area.



Traditional Fulfillment

In this example, one DC fulfilling orders for all customers — regardless of their location — is a relatively straightforward operation. Orders can be sent from the source (e.g., an e-commerce website, a portal, etc.) straight to the DC into the warehouse management system (WMS) interface, enterprise resource planning (ERP) system or even just by email or fax, and then picked and packed.



Multi-node Fulfillment

With multi-node fulfillment, orders need to be routed to the optimal fulfillment node. As mentioned earlier, the criteria for routing to one location versus another can be based on its geographic location but can include the type of inventory carried at each location, whether inventory is available, the stock level of available inventory, etc. and any combination of these as well. These business rules *can* be configured in an ERP system or rudimentary order management system — but only if the rules are not overly complex and the number of orders is manageable for the system.



Hyperlocal Fulfillment / Micro-fulfillment



Now imagine if in addition to traditional distribution centers, retail locations were part of the supply chain network. That means every order placed online needs to be routed to a store to be fulfilled.

That model would look something like what is illustrated above, with each store serving a geographic location (a zip code or group of zip codes) and multiplied to any number of locations a retailer may have.

This is where the **order routing** functionality of B2B OMS brings value to a distributor's fulfillment operation.

It enables hyperlocal fulfillment supply chain strategies. It optimizes fulfillment by sending orders to the location that will result in the most favorable outcome for the customer and retailer, depending on the service level agreement (SLA). The results: the lowest delivery cost, the fastest delivery or the highest fill rate, based on the rules you set.



Benefits of Order Routing

Order routing is about getting customer orders fulfilled as quickly and profitably as possible. That could mean employing an effective **ship-from-store** strategy by leveraging available store inventory (with **inventory visibility**) and using insights on the delivery costs associated to each fulfillment node to your advantage. It also means having the flexibility to change fulfillment priorities as business dynamics shift.



Tecsys' Omni™ OMS is a powerful order routing engine to help retailers:



Deliver faster to your customers

Route orders to the location closest to the customer for fulfillment and shipping. This minimizes shipping distance thus getting orders to your customers faster.



Reduce stockouts

Hot item? Find the location in your network that has the inventory to fulfill and ship from this location. No more disappointed customers.



Lower your carbon footprint

By fulfilling and shipping orders from the store closest to the customer, the last mile is shortened. While that means quicker and cheaper delivery, it also means less distance for the order to travel resulting in lower emissions and less congestion on the roads.



Decrease shipping costs

By fulfilling and shipping from the location closest to your customer, the delivery costs to your operations are reduced because the distance is minimized.



Enable click-and-collect

Click-and-collect, curbside pickup, buy online, pickup in-store, whatever you call it, this delivery feature is enabled by order routing. It sends the order to the store selected by the customer, to be fulfilled onsite and then picked up.



Core Features of Order Routing with Omni™ OMS

High Capacity

As order volumes grow, your OMS needs the power to handle the additional load. Tecsys' Omni™ OMS engine gives you the power to handle complex routing permutations and lets you optimize the routing to your specific business built on the Microsoft Azure™ platform. Tecsys' SaaS-native OMS is built for scalability, that means you can rest assured that as a **tried and true** engine, it can handle extreme variability and effectively manage peak order volumes.

Inventory Balancing

Tecsys' Omni™ OMS routing engine enables fulfillment locations shifting to boost inventory movement at different locations, prioritizing locations with overstock. Order routing helps you balance inventory levels across stock locations and lets you optimize fulfillment to lower shipping costs. Reduce slow-moving SKUs and boost inventory turnover across sites.

Shipment Minimization

Delivery costs are at an all-time high, which is why Tecsys' Omni™ OMS works to keep orders together whenever possible. The system fulfills from the location most likely to provide a single shipment. Conversely, you can turn off this rule when speed is the priority. As business conditions change, shipment minimization dynamically adjusts to your needs.

Key Functionality

Intelligent order routing rules.

Layered priority conditions.

Unlimited rule building.

Intuitive user interface.

Real-time order reassignment (automatic or manual).

Shipment minimization.

No programming required.





Order Consolidation

The Challenge

You've embraced B2B e-commerce and expanded your fulfillment network. All inventory locations are ready to fulfill orders, including retail locations and distribution centers.

But now there's a new challenge: some multi-item orders are resulting in multiple package shipments to customers. This is problematic from both the customer and business standpoint.

First, multiple shipments have the potential to frustrate customers — more packaging to deal with, more times answering the door and more chances for shipments to get stolen. Then, there is the harmful environmental impact as a result of the additional packaging (usually plastic) and emissions from delivery vehicles. Plus, your business margins are also negatively impacted by the additional cost associated with multiple shipments.

As courier companies deal with capacity issues and increased delivery costs¹, retailers need to find ways to reduce the number of shipments delivered to customers or end up in a losing proposition when it comes to e-commerce sales.





¹ https://www.cnn.com/2021/09/20/business/fedex-shipping-price-increase/index.html





The Solution

This is where order consolidation comes into play.

Order consolidation is an advanced order management system functionality which routes items that are situated in multiple locations (i.e., fulfillment nodes) to a central point — the store closest to the customer or store with the most merchandise — to be consolidated into one package. The package is then either shipped to the customer or the customer is notified that his/her order is ready for pick up. With order consolidation, retailers get the best of both worlds: access to inventory across the network while reducing split shipments and last mile costs.

Problem Solution 3PL DC 3PL Store 1 Store 2 DC Store 1 Store 2 Purchaser Purchaser

The Outcome

Increased Customer Satisfaction

Customer experience is at the center of B2B e-commerce. Order consolidation can ensure that customers receive 100% of the items they ordered as quickly and cost-effectively as possible, while keeping the number of shipments to a minimum.

Lower Carbon Footprint

Additional shipments equate to extra product packaging and transportation - packaging that ends up in the wastebasket and transportation emissions that go into the atmosphere. If your brand is moving towards sustainability, reducing packages and shipments is a great place to start.

Cost Savings

Order consolidation enables retailers to reduce the number of shipments per order, thereby providing substantial cost savings associated with packing orders, packaging and last mile delivery. With last mile costs comprising more than half of total shipping cost³ and continuing to rise, reducing the number of shipments has a direct impact on a distributor's bottom line.







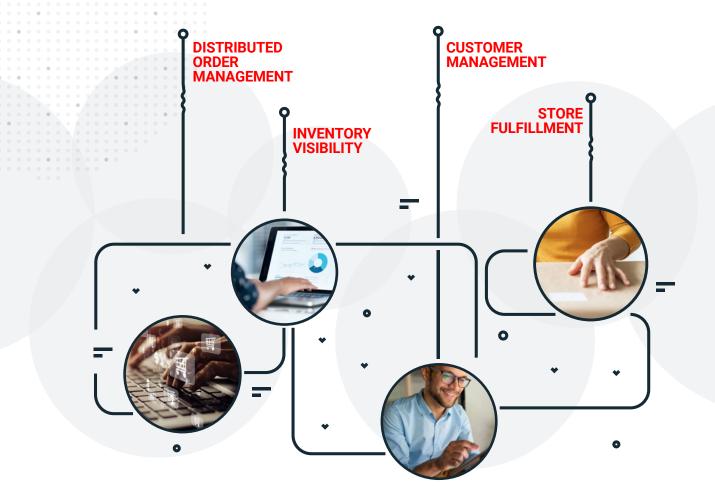
Tecsys' Omni™ OMS

Order Fulfillment Is Everything

That's where the power of an order management system comes into play.

The Wiring for Your E-commerce Fulfillment Network Tecsys' cloud-native SaaS Omni™ OMS is the central nervous system that powers B2B e-commerce.

It controls the movement of order data and goods between virtual and physical ecosystems, ensuring that both information and product are delivered to the right place and at the right time accurately, efficiently and cost-effectively.



Time to Value

With advanced features and functionality out of the box, Omni™ OMS is designed to seamlessly integrate with your existing technology stack and be up and running quickly, with minimal impact to your operation.

Developed for configurability, the system allows for feature enhancements and modifications to be done by your in-house IT team, quickly and efficiently.

A Scalable Order Management System Designed for Fulfillment

Deployed as a standalone system or part of Tecsys' Omni™ e-commerce fulfillment solutions for end-to-end retail fulfillment, Omni™ OMS breathes new life into your omnichannel or multi-node order fulfillment infrastructure.



Conclusion

Scale Your Fulfillment and Sales Channels

The future of e-commerce is shaping up to be a complex agglomeration of multiple online channels. Customers will have more shopping options than ever that go beyond a website, with marketplaces and deals sites as prime examples.

To be where your customers are requires an agile infrastructure. This means an order management system that can pivot with your business requirements and not one that ties you down.

Omni[™] OMS scales with both your front-end sales and back-end fulfillment channels as your business grows and evolves with the B2B marketplace.

About **Tecsys**

Since our founding in 1983, so much has changed in supply chain technology. But one thing has remained consistent across industries, geographies and decades — by transforming their supply chains, good organizations can become great.

Our solutions and services create clarity from operational complexity with end-to-end supply chain visibility. Our customers reduce operating costs, improve customer service and uncover optimization opportunities.

We believe that visionary organizations should have the opportunity to thrive. And they should not have to sacrifice their core values and principles as they grow. Our approach to supply chain transformation enables growing organizations to realize their aspirations.

