



Omni-channel point of view

Personalised fulfillment

Introduction

Flexible and personalised fulfillment is one of the key challenges organisations – not only retail – face in responding to the increase in direct-to-customer and/or online demand, and the growing channel disparity well beyond own company boundaries.

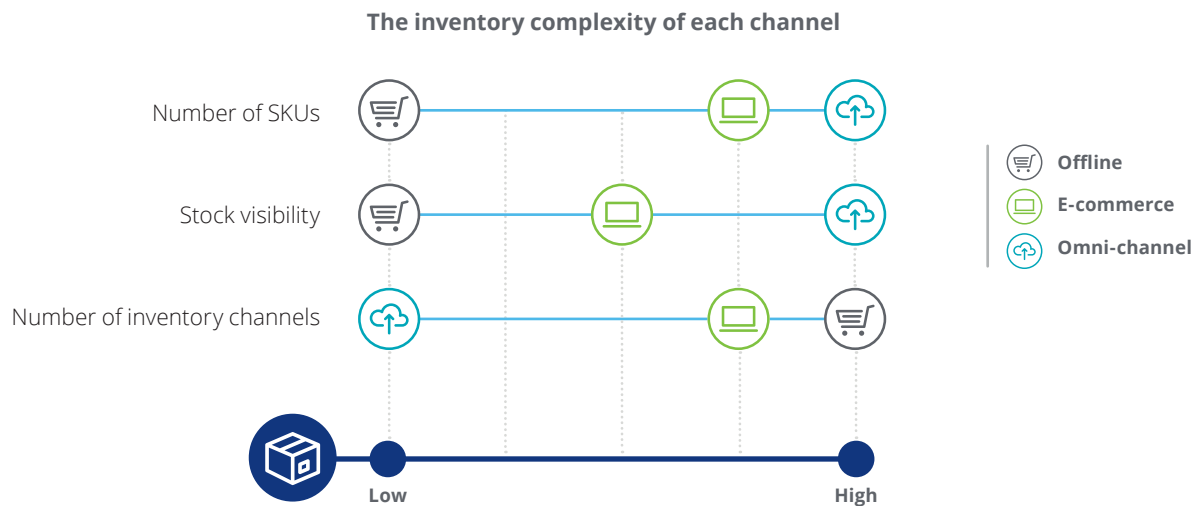
This third publication in our Omni-Channel Supply Chain Point of View series discusses the fulfillment angle of moving towards an omni-channel supply chain, as one of the five key strategic capabilities to realise this transformation successfully. From an operational perspective, the market is asking for new ways to efficiently store, prepare and ship different types of orders through an agile distribution network. Which role can and will warehouses (or stock & fulfillment nodes in a broader sense) fulfill in this omni-channel environment and how can they add to a company's value proposition through smart, lean and fast processes, personalised fulfillment, and information sharing to support cross-organisation collaboration?

The omni-channel warehousing challenge

You & me – customers – have become more demanding than ever before. The expectation of being able to order what we want, where we want and when we want has become the norm putting significant pressure on an organisation's operations. Only a responsive supply chain effectively fulfills these customer needs. From a warehousing perspective companies are challenged to step down from a traditional distribution center thinking and move towards flexible fulfillment concepts to support omni-channel demand. Flexible fulfillment refers to the capability to orchestrate different distribution flows across channels, enabling a seamless shopping experience tailored to the customer's expectations.

Setting up flexible fulfillment requires a strategic decision on the role to assign to each warehouse in the network as well as tactical directions on both the floor layout and all traditional warehouse processes. These decisions are heavily influenced by both the type of products handled and the type of orders received. An omni-channel environment is confronted with a wide variety of order types in different sizes because of the various channels offered. Responding to this variety implies to move away from a traditional warehouse setup and build flexibility and customisation into warehouse processes and operations.

Difference between traditional warehouse layout / pick & pack processes versus omni-channel processes



Moving towards flexible fulfillment

Moving away from a traditional distribution center concept towards flexible fulfillment can be facilitated through four enhancements:

1

Storage area redesign

2

Warehouse process redesign and automation

3

Leverage all nodes in the network

4

End-to-end integration and visibility

1. Storage area design

With booming direct customer demand, and more specifically online sales, there is an increased need for low volume or single unit picks. Having dedicated storage areas designed for these picks allows to efficiently and effectively fulfill the order. These storage solutions can vary from standard single unit shelves or racks to high density storage areas such as Vertical Lift Modules (VLM) or mobile storage. Single unit storage also creates opportunities to improve picking by for example storing frequent jointly ordered SKUs in adjacent storage locations to minimise the picker's travel time. Replenishment of these single unit storage areas can be facilitated through a bulk storage area that on its turn can also be leveraged for high volume order picks (e.g., pallet or carton picking). Successfully fulfilling omni-channel demand requires flexibility in the storage area setup in order to facilitate the picking process.

2. Warehouse process redesign and automation

Next to enhancing the storage area, the picking process also benefits from improvements. Online orders typically have a different profile from store or replenishment orders. The number of picks per online order is low, on average 1.2 lines per order, yet very diverse due to the high product variety. With booming online orders, the need for costly manual picking labor will increase significantly. Time and cost efficiencies can be gained through developing multi-order picking solutions. Picking errors, inherent to manual picking, are prevented through implementing pick and put to light or voice solutions. With increasing omni-channel volumes, however, manual picking can quickly become a bottleneck process due to its limited productivity ranging between 50 to 125 picks per hour. Productivity can increase significantly by implementing warehouse automation. Goods-to-man systems offer up to 800 picks per hour and a fully automated warehouse can support up to 1.200 picks per hour. While drastically reducing both manual workload and picking errors, these automated solutions do come at a high cost.

Another important contributor to picking efficiency is the assigned storage location. In many warehouses, ABC product classification is driving the put away strategy whereby high movers are grouped into the most accessible zone to reduce handling time. As a result of growing online sales, the exponentially growing inventory variety and the increased success of cross-selling, put away can be enhanced by storing products that are frequently ordered together in adjacent storage locations.

3. Leverage all nodes in the network

An organisation's distribution network typically consists of one or more nodes. Traditionally, each node fulfills one or more steps into delivering the product to the end customer ranging from picking and packing the order in the distribution center to selling it to the customer in a store. Customers, however, do not take the setup of the network and the function of the nodes into account. Their expectation is to be able to purchase, return or pick up an order at any point in the network regardless of where and how the purchase was made. While imposing significant complexity to the organisation, being able to handle orders from each node in the network is a fundamental omni-channel requirement. This implies that each node requires basic warehouse capabilities to pick, pack and deliver goods or accept returns.

4. End-to-end integration and visibility

Fulfilling demand from various channels through different nodes in the network creates a high degree of complexity and puts significant pressure on warehouse operations. However, the client expects a seamless delivery at all time and is not willing to pay for the complexity of the underlying operations. For that reason, maintaining end-to-end integration and visibility of operations is crucial to support an omni-channel strategy. Various IT solutions are available to support and overcome this challenge.

Most importantly, a Distributed Order Management (DOM) system safeguards the 1-order-to-cash principle by managing the logic of how to cost-effectively support a delivery by identifying the optimal fulfillment route throughout the entire network. The DOM ensures visibility across and integration of the end-to-end network. Next to the DOM, the Warehouse Management System (WMS) and Warehouse Control System (WCS) are critical to coordinate the various picking activities and maintain traceability of orders throughout each warehouse. Finally, integration to the Transportation Management System (TMS) ensures an effective delivery to the customer.

While having a significant cost impact, the aforementioned changes to the traditional warehouse layout and processes become indispensable to successfully compete in an omni-channel environment. Responding to today's customer's expectations does not stop with the capability of flexible fulfillment. To set themselves apart from competition, companies are spending ample time and effort in customising their order fulfillment to address specific customer needs. This move towards a personalised fulfillment approach focuses on how orders are delivered to the customer to meet and exceed their expectations.

Move towards personalised fulfillment

Nowadays customers are looking for an experience in their shopping journey and are thereby susceptible to the way goods are presented and delivered to them. Traditionally, companies created this experience in their brick and mortar stores. With booming online sales, however, companies are losing their face to face touchpoint with the customer. To avoid becoming one out of many suppliers, they rely on their supply chain and in particular their fulfillment services to personalise the way products are delivered to and perceived by the customer.

An omni-channel warehouse contributes to personalised fulfillment through customising its pick and pack processes and by offering value added services (VAS) that enhance delivery beyond delivering just a product. Picking processes can, for example, be customised to allow a breakdown of standard sales units into single components. On the packing side, customers are offered various packaging types or sizes to facilitate their receipt or production process. Value added services can range from custom labeling to product bundling.

Packaging is traditionally seen as a necessary evil but personalisation can transform the unwrapping process towards a customer experience that contributes to the overall perception of the product. A good example is the latest YouTube trend where people are recording and sharing their unboxing experience. With millions of unwrapping YouTube videos and billions of views it is clear that today's customer's focus goes beyond the product as a standalone.



Case 1: Birchbox – The value of packaging

Birchbox is a monthly subscription service that offers samples of cosmetics and beauty products in combination with an unrivalled unboxing experience that has become an instant YouTube hit. Both the package and its content change every month which makes the Birchbox arrivals eagerly anticipated. Birchbox taps into this by sending out spoilers and unboxing videos through social media. The unique boxes have become collector items thanks to their design and color themed wrapping paper. Inside the box, the customer finds a note from the company's founders with a brief explanation of the content. For convenience purposes, the box is designed to fit a standard mailbox such that there is no need for a signature on delivery. All of this contributes to an outstanding customer experience prior to actually using the products.

Moving away from a sole product focus towards an experience creates new opportunities for companies to set themselves apart from competition. More and more organisations are tapping into full-fledged services that offer a personalised shopping solution to their customers. These solutions respond to the need of convenience, customisation and experience.

Case 2: Outfittery – Personalised shopping solution

Outfittery offers a clothing shopping and styling service targeted to male customers. Customers are requested to share their sizes and clothing preferences and Outfittery takes care of the rest. For each customer a personalised box is composed consisting of a full outfit tailored to the customer's preferences. After receipt, the customer can return items which do not meet expectations. Outfittery makes shopping extremely convenient while offering a customised shopping experience.

Outro

Responding to the increased need for customer tailored services relies heavily on an organisation's supply chain. The supply chain is therefore evolving from an enabling function towards a key strategic function that contributes to competitive advantage. Personalised fulfillment is a key capability but it goes beyond the warehousing function. Another major contributor is the delivery process. A timely delivery from the most optimal point in the network is equally important to succeed in an omni-channel world. The next point of view will focus on the delivery process and how it can contribute to create a competitive advantage.

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