

# Personalized Multichannel Logistics

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## How Your Distribution & Fulfillment Operations Can Overcome Key Challenges & Reap the Benefits

[www.tompkinsinc.com](http://www.tompkinsinc.com)

### A Whole New Game for Customers & Logistics

Your target customers have completed their research and are ready to purchase your product. Then comes the final step in the purchasing process - selecting the delivery method (logistics channel) that best fits their immediate needs. In today's world, whether customers realize it or not, they are driving companies to become more flexible in their logistics capabilities.

It is no longer about how you deliver the product to customers; instead, it is about how the customers **choose** to have the product delivered. The final delivery options are varied, and customers expect seamless logistics in their shopping experiences regardless of the channel. This is the reality of today's evolving world of individual, personalized logistics.

While ecommerce still only makes up about 5% of all retail sales, doubledigit growth is expected to continue through 2017, meaning more and more often, customers will choose some level of ecommerce as the preferred source. At the same time, multiple channels are often in play with customers' desires to personalize their logistics experience.

Today's consumers crave a flawless experience - the ability to order exactly what they want, when they want it, and how they want it, regardless of where they are located. To take full advantage of this, traditional retail and wholesale distribution and fulfillment centers will need to evolve into flexible, personalized distribution centers, fulfillment centers, and/or combination distribution and fulfillments centers.

It is no longer about how you deliver the product to the customer; it is now about how the customer chooses to have the product delivered.

Similarly, customers want to personalize delivery by either buying the product online or instore and picking up the product at a store or a locker, or having it delivered to their homes.

Multichannel logistics has many challenges to overcome. Traditionally, warehouse facilities are designed with the ability to efficiently serve only one channel, lacking the flexibility to

expand. They are either effective in their ability to ship cases to wholesale and retail customers, or they are effective in fulfilling smaller, mixed case shipments directly to consumers. Repurposing a single channel facility requires significant changes to be able to fill orders across multiple channels.

Flexibility is the key when transitioning to multichannel logistics. Order and shipment size are vastly different, seasonality is more volatile, cycle times are shorter, return rates are higher, and personalized value-added services are required.

Expanding a facility's capability to meet distribution and fulfillment requirements of personalized logistics across all channels is certainly not easy, but when done successfully, it can bring huge advantages.

## **Benefits of Multichannel Logistics**

Meeting customer demands for "personalized logistics" can be done via the traditional single channel facilities, or through a flexible network of multichannel facilities.

### **Multichannel Logistics Benefits**

1. Minimizing Labor Costs
2. Saving Inventory Costs
3. Consolidating IT Strategy

It is difficult to predict the optimal network solution for any multichannel retailer. In the end, it is likely that a combination of national, regional, and local fulfillment centers will be needed, as well as specialized crossdock and special service centers. However, some, if not all of these sites, will likely better serve your customers if they include cross or multichannel capabilities.

If you believe multichannel logistics may be right for your operations, the first step is to set the strategy. Customize the network strategy to meet the overall business strategy. Once the strategy is in place, the next step is to develop and design the distribution network to include distribution centers, fulfillment centers, and combination distribution/fulfillment centers, as well as the appropriate delivery systems.

This paper highlights the benefits of multichannel logistics and helps you better understand whether you should consider transitioning your facilities, and if so, how you can start developing your strategy. Benefits include: minimizing labor costs, inventory cost savings, and consolidation of the IT strategy.

### **Minimize Redundant Labor Costs**

When channels are split into multiple facilities, each operation must develop a staffing plan

to match the seasonality in its receiving and order profiles. As the typical peaks for wholesale, retail, and direct to consumer (DTC) fulfillment are often offset, this results in redundant planning, hiring, training, learning curves, and downsizing.

Since labor is typically the single biggest cost component with logistics operations, this redundancy will quickly add up.

Combined distribution and fulfillment operations minimize these redundant labor costs. Even though each channel will have its own set of challenges and unique staffing considerations, combining channels under a single roof will provide significant savings.

These savings include:

- Minimizing temporary staff buildups across multiple sites.
- Reducing redundant training across multiple sites.
- Providing a longer working opportunity for temporary staff, which creates a more favorable employee environment and allows the operation to employ higher quality staff.
- Providing a longer review of the temporary staff, which allows the operation to adjust both the quality and quantity of staff.
- Creating a bigger opportunity to use flexible volume to better smooth the peaks and valleys across channels.

Even though peak DTC shipping days tend to be more intense and more concentrated than retail or wholesale peaks, combining these operations under one roof provides a broader planning perspective.

The labor synergies of a multiple channel facility are significant, and the reduced planning and management from a centralized staffing plan provides the additional benefit of risk reduction during critical holiday periods.

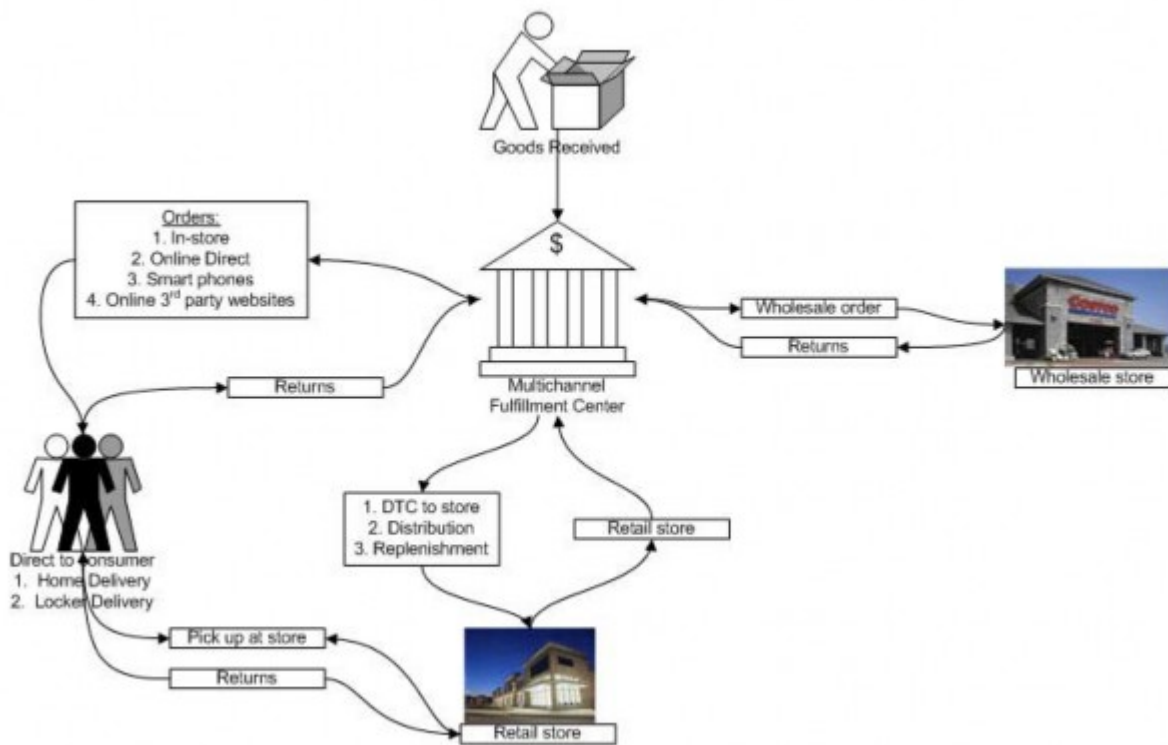


Figure 1. Illustration of Multichannel Logistics

## Cost Savings in Inventory

Separate distribution and fulfillment facilities mean separate safety stocks, hard aggregation of inventory, high interfacility inventory reallocation costs, and lack of flexibility in order filling of available inventory. Consider the following advantages and savings of personalized, multichannel logistics facilities.

- **Inventory Sharing:** Typically, inventory across channels is similar, if not identical. By aggregating inventory, the safety stock across all channels can be greatly reduced. This is especially important in the ecommerce and DTC channels, as this demand is extremely volatile. Further, inventory sharing allows you to better leverage your inventory protection strategies and priorities in fulfillment.
- **Endless Aisle:** This concept allows you to still sell items that are not in your store to your retail customers. It may not be possible to stock the proper inventory of every style, size, color, etc. at every retail store. With instore terminals, customers will have access to the depth and breadth of your entire inventory. In addition, the volume of stock keeping unit (SKU) growth may make it difficult to accommodate fulfillment of all the new SKUs. Shared inventory provides all channels with access to as many SKUs as possible and provides the opportunity to minimize expensive retail space.
- **Inventory Redistribution:** The ability to ship across multiple channels from a single point allows for reassessment of inventory strategies in the event of evolving forecasts. Even if the packaging is channelspecific, having inventory under one roof allows for a

quick conversion, so that inventory can be distributed through other channels.

It is important that the inventory be truly flexible. Even if inventory must be planned and purchased by channel, never let the channels create silos of inventory. Moreover, common inventory should never be required to become converted over to a specific channel and fulfillment zone. This would create a “warehousewithinawarehouse” effect in which inventory must be constantly rehandled and “shipped” to a forward pick bin that is dedicated to a select channel.

Truly flexible and shared inventory is the ultimate goal of any multichannel fulfillment center.

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## **Multichannel IT Strategy Benefits**

A consolidated, multichannel fulfillment center also offers the benefit of a set of consolidated IT systems. You will not have to support a set of systems that are different or heavily modified based on the purpose of each distribution center. A supply chain IT strategy developed for your multichannel facility will maximize this benefit.

Such a strategy should embrace:

- **Distributed Order Management System (DOM):** Inventory visibility is not just needed in the four walls of the warehouse, but also throughout the entire supply chain and down to the retail store. For today’s buyfromanywhere and shipfromanywhere environment, the DOM should allow you to set the rules and criteria of how you want to costeffectively support your customers. It should make the decisions on where to fulfill orders based on realtime inventory positions and delivery time frames.
- **Warehouse Management System (WMS):** Special consideration needs to be given to the logic used to direct picking and waving to ensure that orders are processed in the most efficient manner. The WMS must allow you to differentiate between the channels and wave them to the floor based on outbound transportation, departure time, customer priority, batching preferences, as well as other criteria. Once waved, the WMS directs the picks from the most efficient media, and then directs the orders through processing and packing based on their specific needs.
- **Warehouse Control System (WCS):** The WCS directs the cartons and orders through the material handling equipment (MHE). The WCS should be the single point of interface from the WMS to all of the material handling equipment (MHE). In fact, it is the vital link between the processing planning performed by the WMS and the actual actions taken by the equipment. It must also provide realtime updates on the status of cartons and orders back to the WMS.
- **Transportation Management Systems (TMS):** A robust TMS designed to handle

multichannel transportation selection is critical. It needs the ability to balance customer service against shipping costs. It also needs to provide realtime order status updates that can then be forwarded to customers.

## Art & Science: Facilities & Material Handling

For any multichannel fulfillment center, the major challenge revolves around developing and integrating processes and operations that are flexible enough to effectively meet all of the characteristics and requirements to deliver personalized logistics.

The goal is to develop a layout and process design in which the facilities and material handling equipment are strongly leveraged across all channels. Consider these characteristics of multiple channels that must be properly balanced to ensure that facility infrastructure and MHE are efficiently used, as well as maximizing return on investment (ROI).

Characteristics	Wholesale	Retail	Direct to Consumer
Units per Order	Highest	Medium	Lowest
Lines per Order	Highest	Medium	Lowest
Order to Fulfillment Cycle Time	One or More Weeks	Days to Weeks	Hours to Days
ValueAdded Services	Low to Medium	Medium	Potential for Highest
Returns	Lowest	Vary, But More Controllable	Highest

The larger the variability in the above characteristics, the more difficult it becomes to develop a comprehensive solution for a combined distribution and fulfillment operation.

Planning an integrated multichannel fulfillment center to deliver personalized logistics is both an art and a science. The science is developing the historical data and business strategy into a set of planning requirements. The art is evaluating the synergies across the channels and converting those requirements into flexible and efficient layout, processes, and MHE technologies.

While unique MHE technologies by site might be the preferred solution for a distribution network in which the channels are separate by site, a strong multichannel fulfillment center network strategy will leverage the multichannel synergies to minimize the overall investment.

### Key considerations for a multichannel operations design include:

- Traditionally, five to ten year planning horizons have been used; however, a three to five year planning horizon with scalable solutions is becoming more appropriate given today's dynamic ecommerce environment.

- Plan for sameday order fulfillment, since customers are demanding instant gratification.
- Automation is not a guaranteed solution, especially when you need to plan to meet the peak requirements. It may be more economical to plan to add labor, rather than make the incremental investment in an automated solution that is designed for the peak day.
- Integrated distribution/fulfillment centers will likely require a range of material handling systems technology, so do not get driven into a single process or solution. Hybrid solutions will likely be the answer.
- Multichannel distribution normally requires multiple flows within the same design to optimize productivity. Batch picking may be the best solution for single line/unit orders, while large wholesale orders may discrete order picking.
- Packing and valueadded services often become the bottleneck that slows down operations. Take special care when designing these areas.

While facilities and material handling systems can present a challenge to implementing multichannel operations, the benefits gained (including major cost savings) from an integrated distribution/fulfillment center allow your company to be competitive while staying ahead of customer requirements. Customers expect a seamless experience from all channels, and implementing an integrated, multichannel operation that puts strategy before structure is the best path.

## **How Tompkins International Can Help**

Developing a multichannel fulfillment center is a significant challenge for any organization. Tompkins has the experience and expertise to ensure that your operations and resources are maximized. Our distribution operations consultants will develop the bestpractice labor, equipment, and process strategies across all of your channels.

Our supply chain IT consultants develop the best systems approach to meet your corporate strategies. Our experts in inventory, transportation, and supply chain strategy develop the upstream and downstream capabilities to match the multichannel requirements. Finally, the Tompkins International material handling integration team will turn your seamless fulfillment plan into a reality by implementing a turnkey, multichannel fulfillment system.

Turn your seamless fulfillment plan into a reality by implementing a turn-key, multichannel fulfillment system.

We provide new solutions for operations improvement. Because highperforming supply chains are essential for revenue growth and strong operating margins, our goal is to enable client organizations to be more profitable and valuable, while also becoming more skilled, agile, and adaptive to leading practices.

Tompkins collaborates with our client teams to develop improved operations strategies,

planning, and execution of all the Mega Processes (PLAN - BUY - MAKE - MOVE - DISTRIBUTE - SELL) of supply chains, both global and domestic, and from suppliers through to end customers. Tompkins' service lines cover the supply chain strategies, processes, people, and technologies all the way through to facility designs, and material handling integrations.

We recognize that the rapidly changing marketplace requires new perspectives. Therefore, we deliver customized solutions to each client that pay back in benefits many times over financially and operationally, as well as in improved organizational capabilities. Our service promise is to work closely with clients, mitigating risks, and most importantly-doing the right things the right way.

For more information, visit our website ([www.tompkinsinc.com](http://www.tompkinsinc.com)).

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