

## Emerging Omni-Commerce Logistics Options

**May 09, 2014**

E-commerce professionals' day to day job is now to come up with the best methods of delivering Omni-Commerce solutions for consumers.

Simply put, Omni-Commerce is allowing consumers to effectively access, research and purchase your products in any manner they choose – PC, mobile, tablet, kiosk, virtual store, in-store; and then have these products delivered to them, or have them available for pick up, when and where the consumers would like. To enable this, e-tailers need to ensure that accurate and timely inventory information is available at all locations where stock is held or displayed for retail sale. This, in conjunction with the geographical proximity to the end consumer is critical for retailers' and e-tailers' ability to deliver even a basic level of satisfactory Omni-Commerce customer experience.

This white paper will not deal with the front end ordering or online technologies, but rather the logistics surrounding where product will be stocked, picked and shipped from for either delivery or pick-up by consumers.

The options explored are the major models being utilized to date:

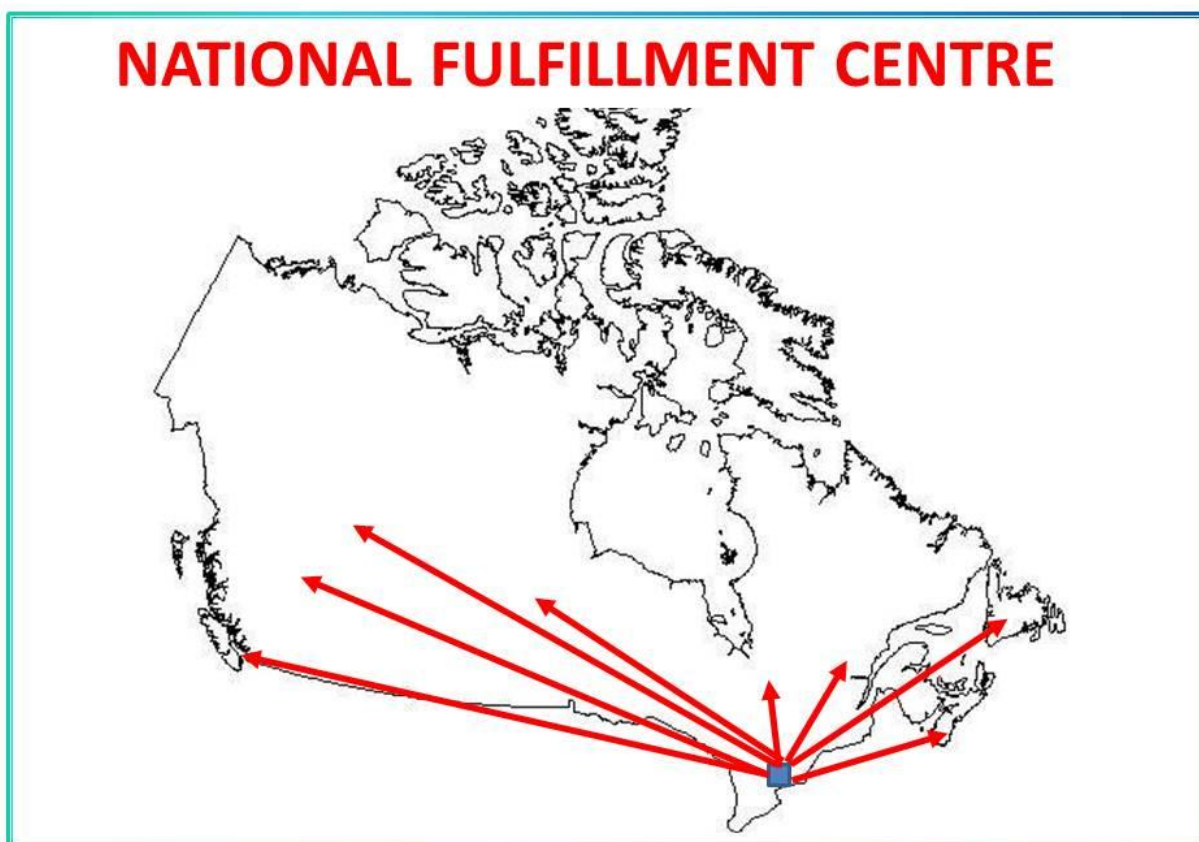
- National Fulfillment Centre
- Regional Fulfillment Centres
- Ship From Distribution Centre
- Ship From All Stores
- Regional Hub Stores
- Pick-Up Centres and/or Lockerboxes
- Drop Ship From Vendors

Each model will be briefly explained and then some of the potential advantages and disadvantages of each approach will be highlighted. It is important to note that these models are not mutually exclusive, and many retailers utilize a combination of these approaches to support online shoppers.

## National Fulfillment Centre

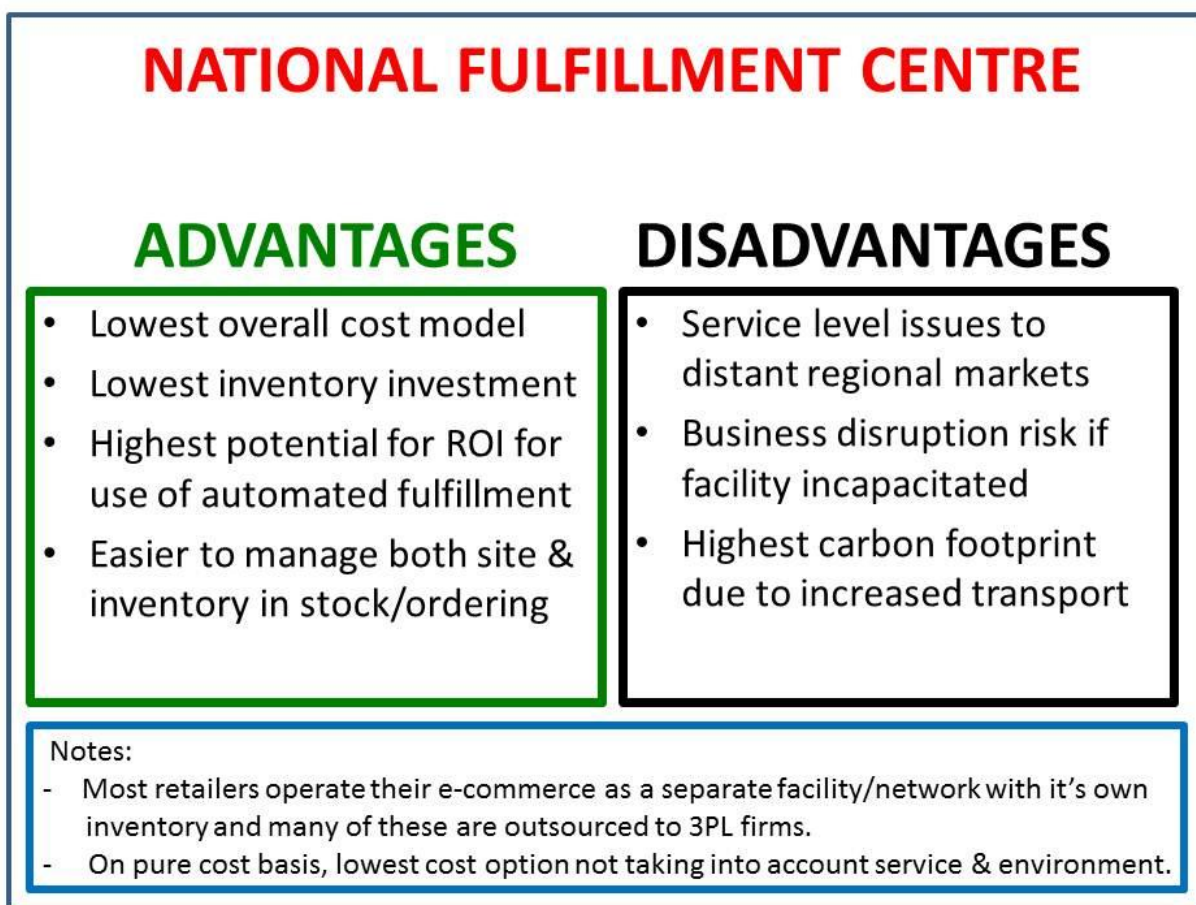
To date this has been the most widely used model where one main fulfillment centre is implemented to service the entire country. The majority of national fulfillment centres are located in eastern Canada, typically Toronto, with some in Montreal. Although, there are also some outliers with national fulfillment centres operating in Western Canada in Vancouver or Calgary.

Establishment of a national fulfillment centre is the most common way of implementing e-commerce delivery. Please see the below chart describing the advantages and disadvantages of operating a national fulfillment centre.



Almost all national fulfillment centres are run as separate operations from retailer's store distribution networks and a number of them are operated for retailers by third party logistics providers.

The majority of these national fulfillment centres are operated in a conventional manner with little or no automation, however as e-commerce volumes continue to grow, the trend towards automation will also continue to increase.

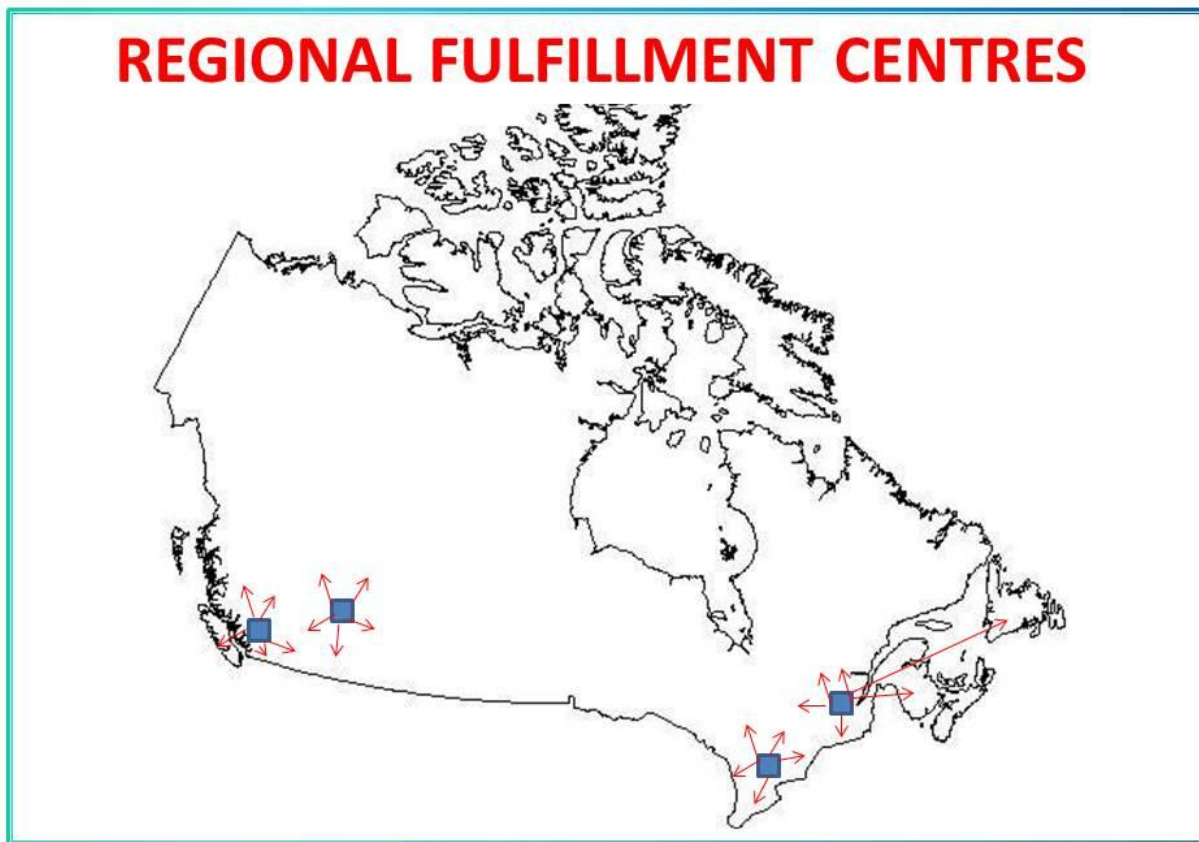


Retailers operating on a national fulfillment centre basis in Canada will typically have service level issues with customers located on the opposite end of the country. For example, retailers who have national fulfillment from the west will have service levels of 3 or 4 days or more to eastern Canada and beyond. And retailers with a national fulfillment centre in the east would have similarly delayed delivery service levels to western Canada.



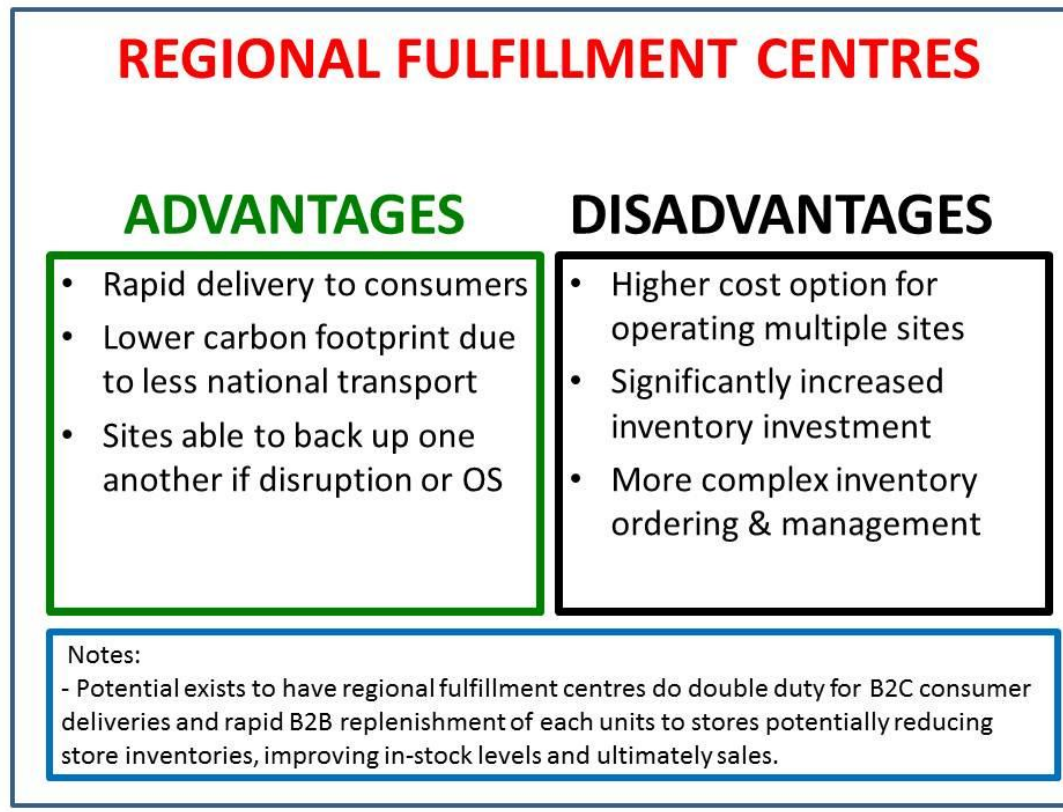
## Regional Fulfillment Centres

As customers continue to demand more rapid delivery service levels, there will be an increase in retailers utilizing multiple fulfillment centres to support the storage of product, picking, packing and delivery of e-commerce orders.



This is an area and phenomena we've been following closely and have highlighted in "[The Power of Two](#)" highlighting the related details and potential benefits of secondary or regional fulfillment centres.

The Regional Fulfillment Centres approach also has its pros and cons, as shown on the chart below.

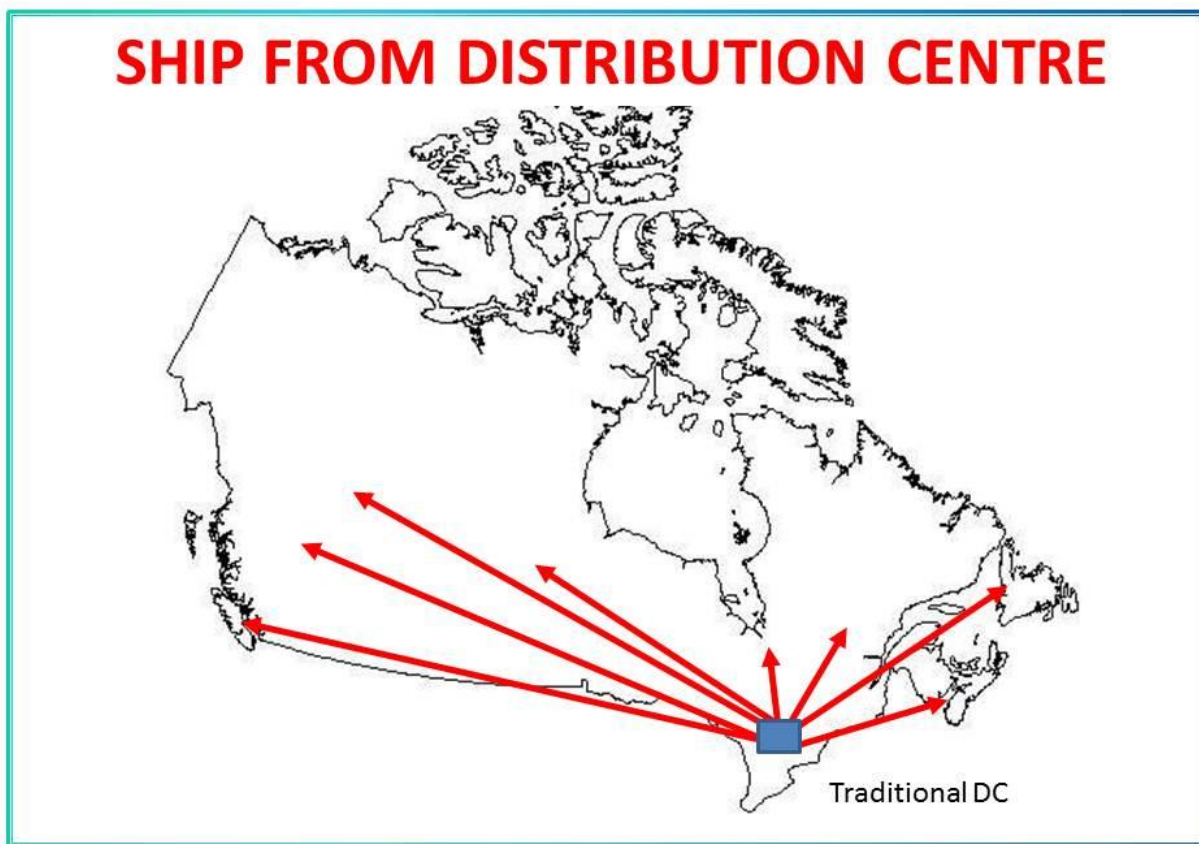


Over the last twenty plus years, logistics professionals in North America have been consolidating and centralizing their distribution and logistics networks. In a world where carbon is not considered an issue this was indeed the lowest cost, however a much higher carbon solution. Specifically, the elimination of regional DCs means much higher amounts of outbound transportation within the logistics network, which increases the carbon footprint.

Fast forward to 2014, and now carbon is becoming more and more significant a variable in business planning, and at the same time online consumers are expecting more rapid delivery. Next day seems to be becoming the new standard service, with same day or ASAP / immediate delivery the premium service. These two trends, the push to reduce carbon footprint and the expectation of rapid local delivery, seem to fit together very well, and become strong drivers for examining potential for regional fulfillment centres.

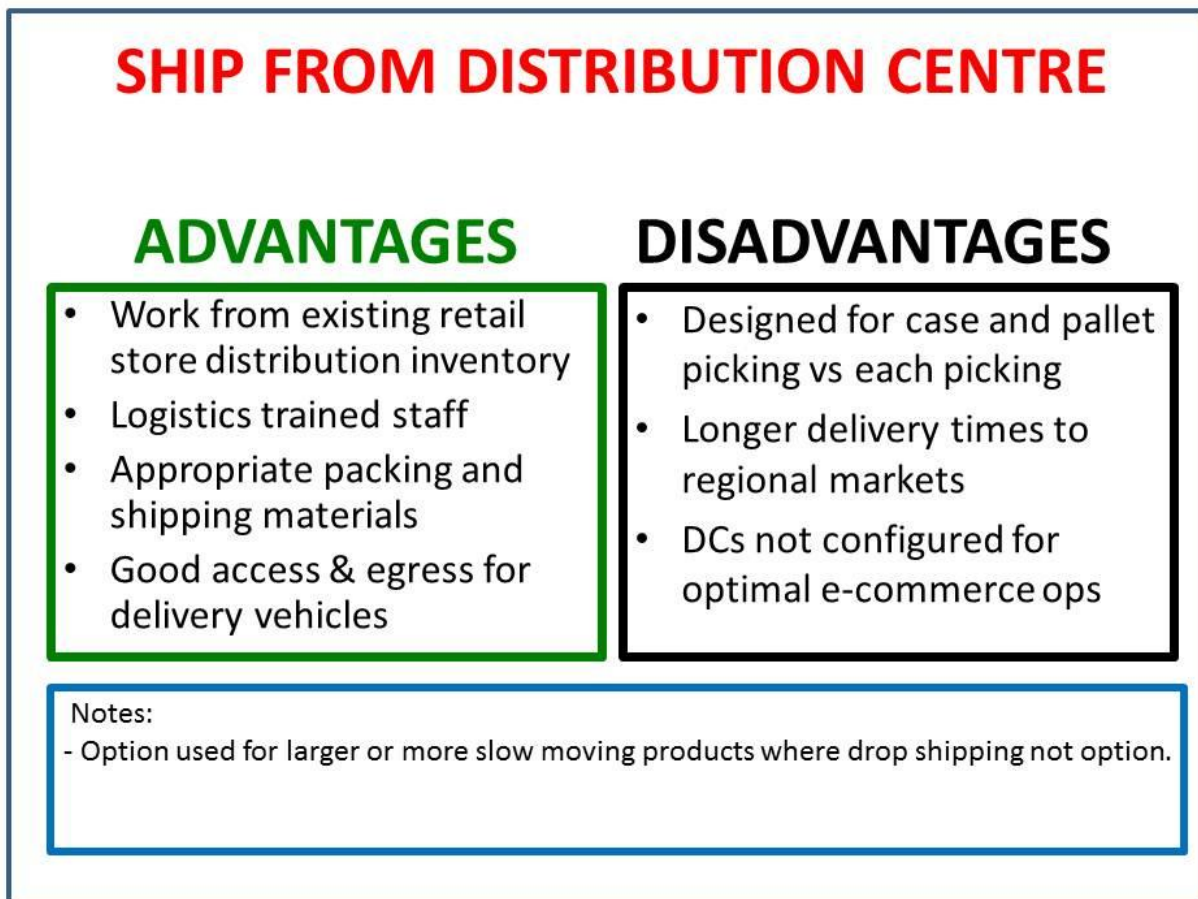
## Ship From Distribution Centre

Although not optimal, some have chosen to utilize their existing distribution centres to service e-commerce business. The idea is to leverage existing building assets, people, and inventory to support the online business. Typically we see this method applied for either large or bulky items as well as very slow moving items which wouldn't work as well in the high volume fulfillment centre model.



In most cases, traditional distribution centres are designed and utilize systems more for full case and pallet picks versus the each-picking requirements associated with e-commerce picking.

There are, of course, pros and cons to each of the omni-commerce logistics approaches that we are reviewing here, and we have developed the chart shown below to highlight a number of these points for Ship From Distribution Centres.



Of course, utilizing the same inventory of products to service multiple demand streams can be positive, and DCs have much better trained workforce, are better positioned, and have more cost effective space and access to packing materials than the model we will discuss next, Ship From Store.



## Ship From All Stores

Some retailers rather than introduce a fulfillment centre or ship from their distribution centres have decided to ship their online orders directly from the closest store to the end customer.

Although there are some specific retail scenarios where this might make sense, the Ship From Store model may not be the be all end all that people predict.

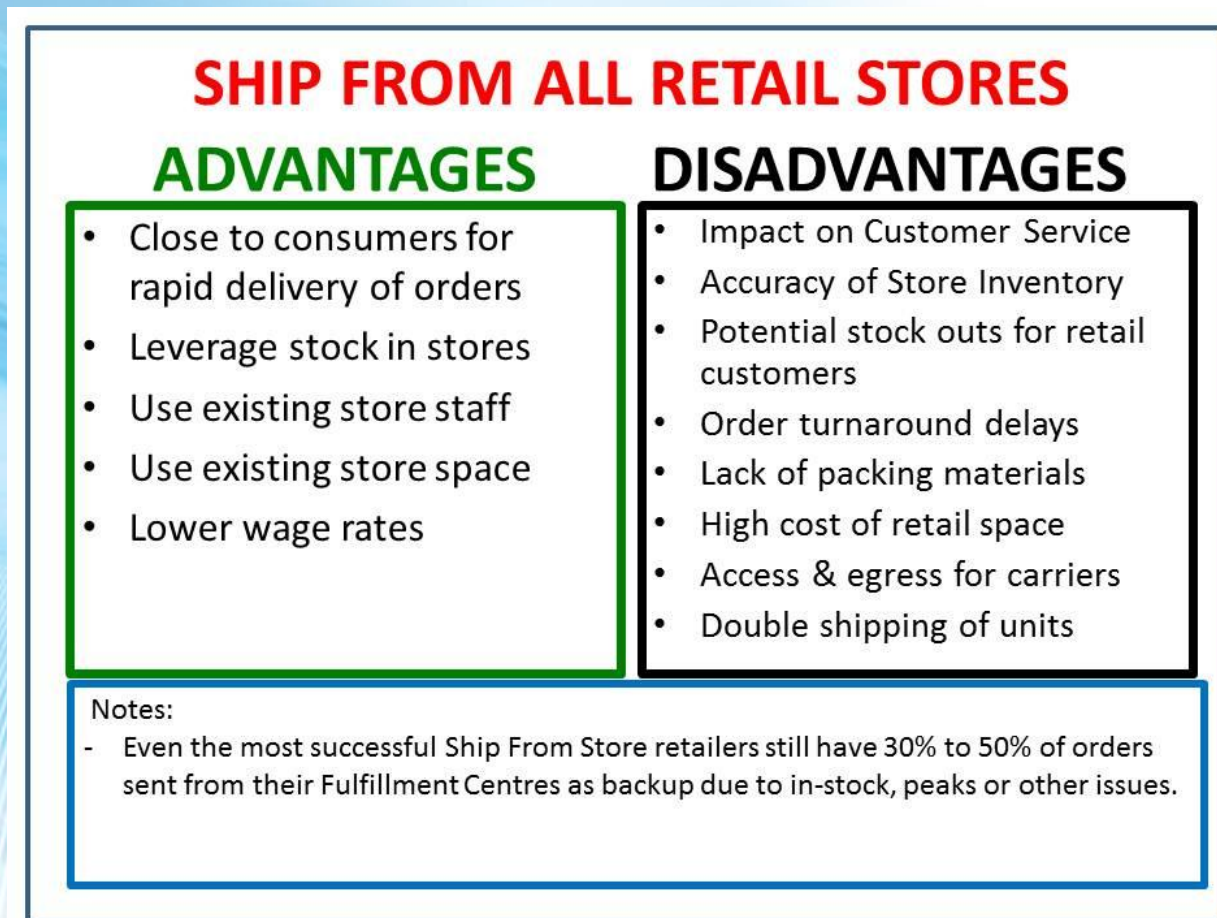


One thing that's clear from all of the retailers who're successfully using this e-commerce logistics model is that even with Ship From Store, there's still a requirement for back up fulfillment centres for 30 to 50% of their orders. Retailers implementing pure Ship From Store without such back up in place risk serious



customer service and customer experience issues which would be damaging to their e-commerce business.

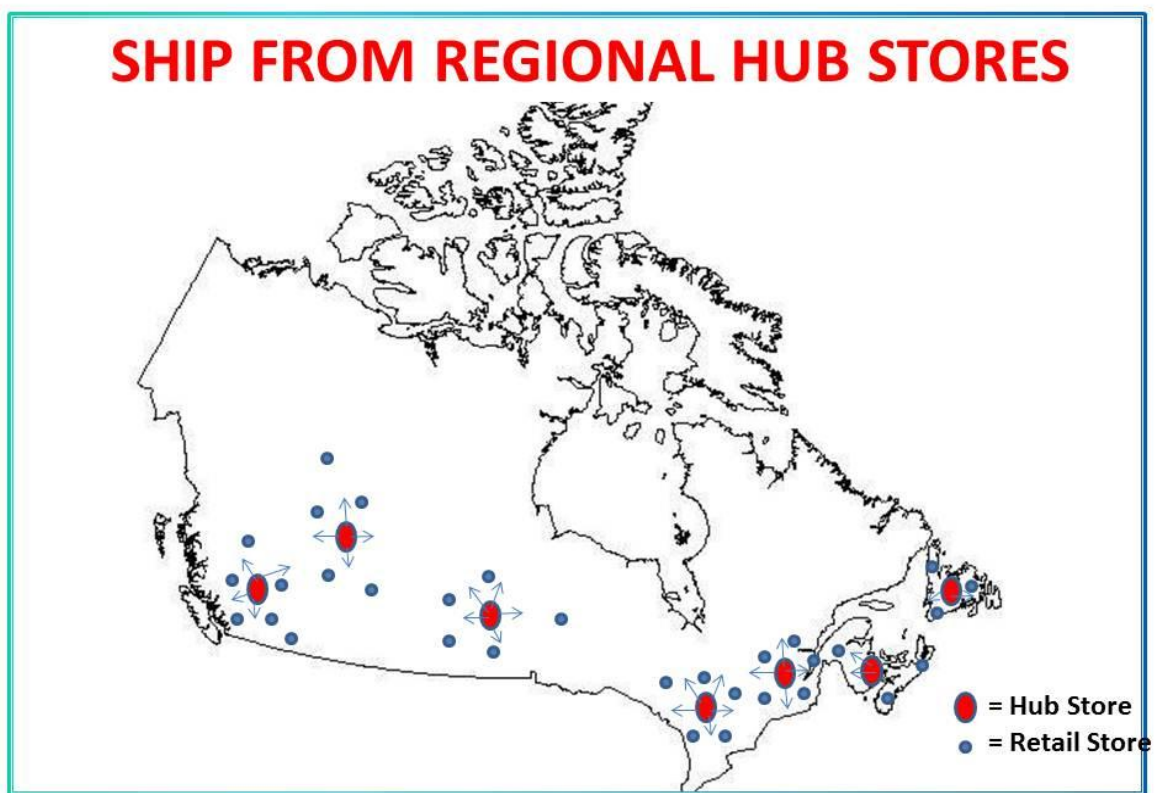
Below we've created a chart which plainly lays out the advantages and disadvantages of the Ship From All Stores method for retailers considering this option.



Ship From Store is still a relatively new phenomena and as it matures new models and methods may emerge that address some of the disadvantages, at the same time capturing some its positive elements. Could the next omni-commerce logistics model, "Regional Hub Stores" be the first stage in this evolution?

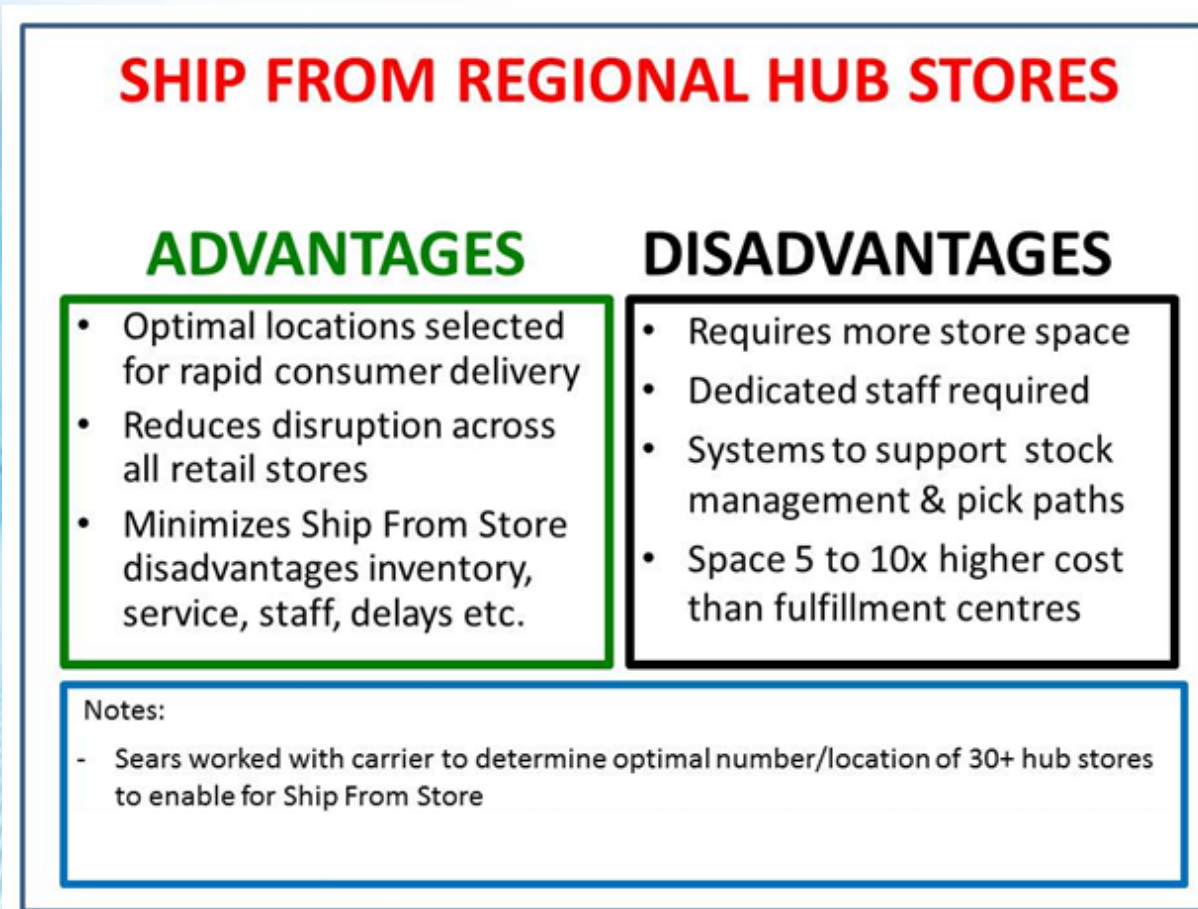
## Regional Hub Stores

Recently we have seen the emergence of Regional Hub Stores. Using all retail stores for Ship From Store, this model focuses the demand in each region on one specific store or Hub Store for e-commerce fulfillment. Not only does this methodology focus fulfillment requirements in less stores, it also simplifies the inventory search to a more manageable number of their literally 1000's of stores.



So although all of the disadvantages of the Ship From Store model are not eliminated, there are somewhat lessened and more focused. In many ways these regional hub stores are very similar to regional fulfillment centers in function, however operating within much more expensive real estate with typically much more difficult access for delivery and pick up vehicles.

The chart below highlights the advantages and disadvantages identified in association with the use of Regional Hub Stores. Clearly this approach mitigates some of the negatives associated with the Ship From All Stores model.



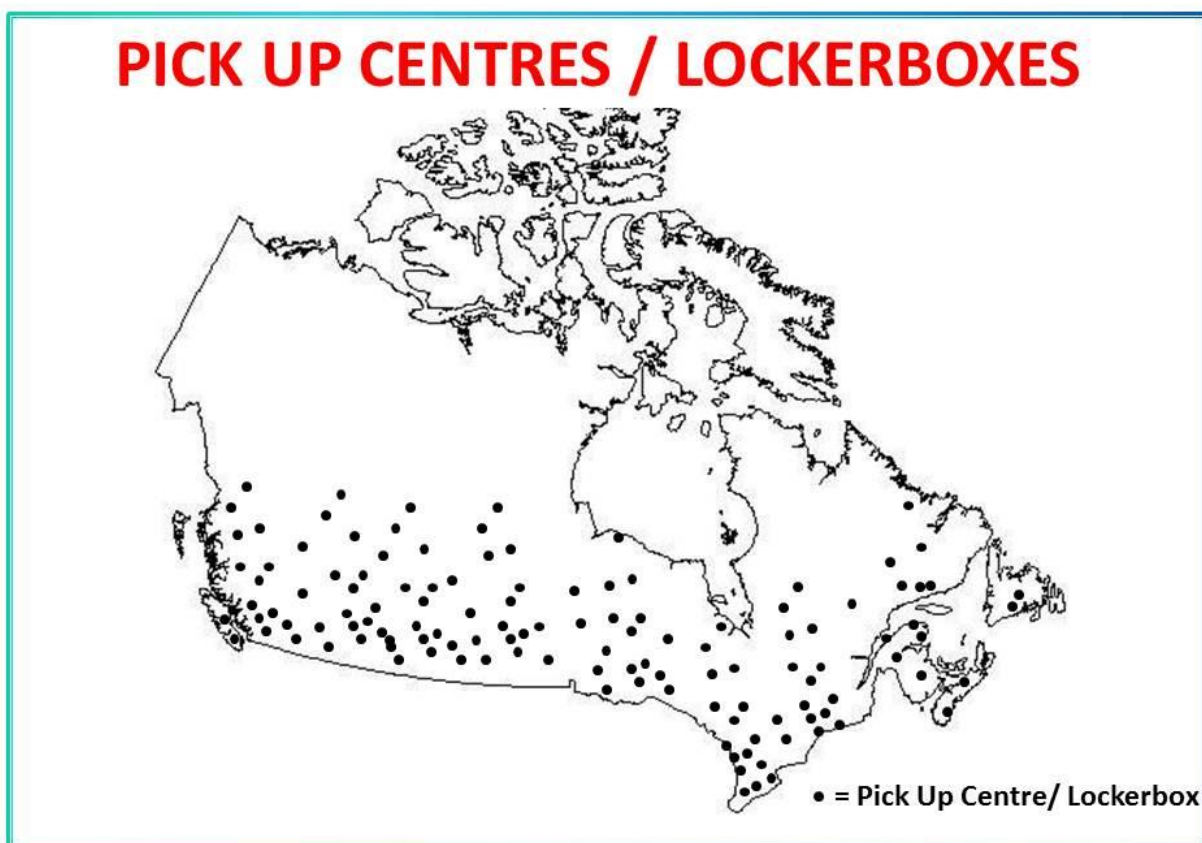
In the final analysis, we suggest that if a retail chain wants to introduce regional hub stores masquerading as fulfillment centers, why not just call a spade a spade and set up the fulfillment center in space costing 5 to 10 times less, that also happens to have much better access and egress for bringing in stock and shipping it out for consumer delivery? Secondly, why would any retailer pay the extra cost to ship a product to a store that's just going to be subsequently shipped to a consumer's home anyways?



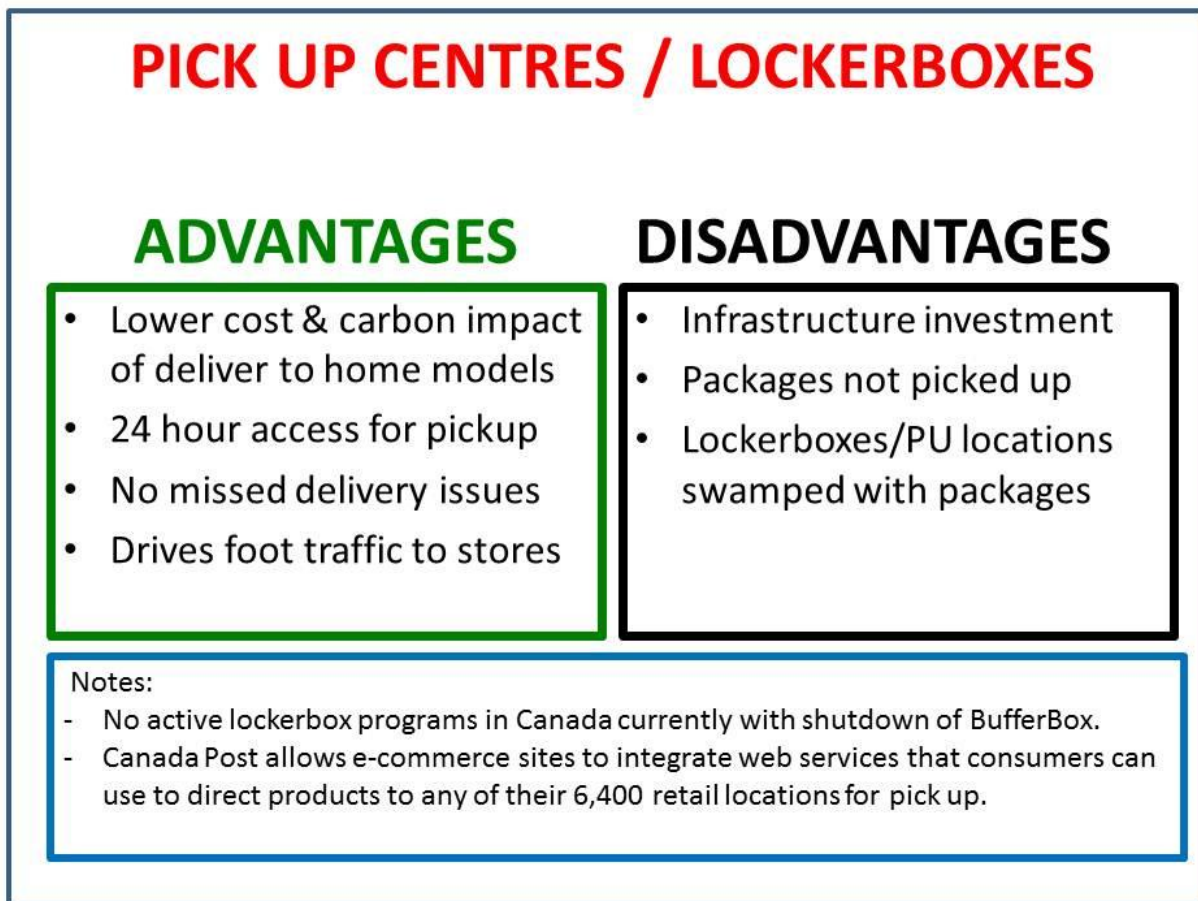
### **Pick-Up Centres and/or Lockerboxes**

One variant on traditional online delivery models is the introduction and use of Pick-Up Centres or Lockerboxes. These have been spreading in both the United States and Europe, and, other than a few retailers who've had them removed from their stores, have for the most part been well received.

The methodology is to have unattended lockerboxes similar to airport lockers, which work automatically using barcodes or codes to open for the consumer-shopper when they arrive to retrieve their order(s) at any hour of the day.



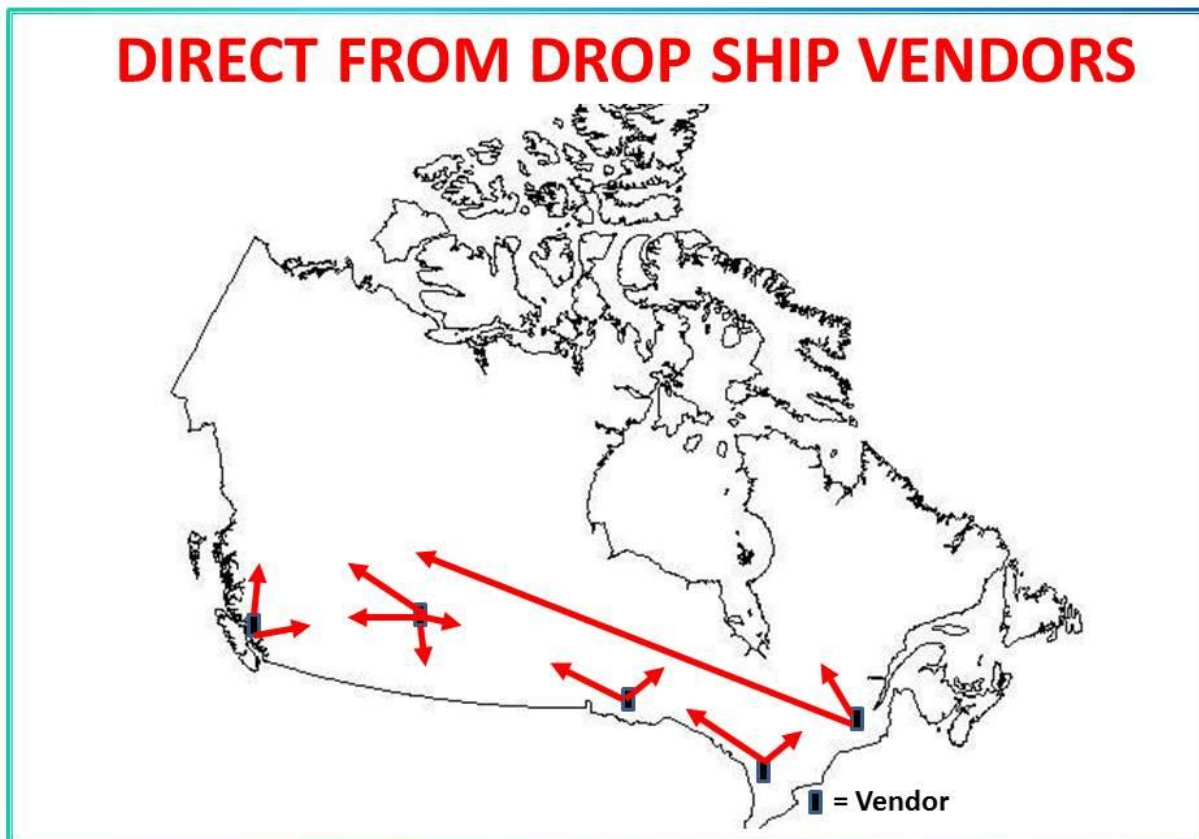
The final chart on these Omni-Commerce logistics options shares some of the pros and cons we were able to identify relative to retailers utilizing the Pick Up Centre / Lockerbox delivery methodology.



One of the benefits of this model, other than 24 hour access convenience, is that all the consumer deliveries are consolidated to one point instead of delivered direct to home individually. Some carbon benefit should be expected as consumers stop by to pick these deliveries up at the Lockerbox on their way to or from work or while already at the location for other shopping purposes.

## Drop Ship From Vendors

As many online sellers seek to expand their assortment and cover more product categories in their online offerings, they shift to an "endless aisle" model where products are listed on their site and kept in inventory at the original vendors' warehouses. As soon as a product is sold on the website, the order is passed along to the vendor who then Drop Ships the product to the end consumer.



Likewise, many retailers continue to drive inventory out of their operations to become more efficient. When it comes to a specific product, each retailer may stock the same item in several different warehouses and the vendor in their warehouse as well. One of the laws of logistics is the Square Root Law of Inventory, which basically means that the amount of inventory in the supply chain system grows geometrically based on the number of locations holding stock.



If the entire inventory is focused in vendor-held and owned locations, the duplication, triplication and more of the same item being held by multiple retailers can be reduced if not entirely eliminated.

DIRECT FROM DROP SHIP VENDORS	
ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"><li>• No inventory investment for retailer or eTailer</li><li>• Eliminates cost of handling &amp; delivery for retailer/eTailer</li><li>• Allows retailer/eTailer to offer broader assortments</li></ul>	<ul style="list-style-type: none"><li>• Most vendor's operations &amp; systems B2B focused</li><li>• Retailer/eTailer customer experience relies on vendor</li><li>• May encourage vendors to sell consumer direct in future</li></ul>
<p>Notes:</p> <ul style="list-style-type: none"><li>- New forms of close integration required to facilitate and a number of intermediaries emerging to perform these functions and bridge this functionality gap.</li></ul>	

What is the correct answer when it comes to the omni-commerce logistics strategy? Bottom line is that this answer will be different for many companies. One size will certainly not fit all, and in almost all cases, the best solution will be to utilize a combination of these solutions optimized to provide the best cost, service and customer experience to fit each retailer.

In order to determine the best combination of omni-commerce logistics components for a given retailer, the completion and analysis of the business' omni-commerce network strategy model is required.

Feel free to contact SCI Logistics to learn more about these omni-commerce logistics options or the required network strategy model development.

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