



The evolution of retail distribution

In the past 70 years, retail supply chains have evolved to meet changing customer needs. The results: a better match of supply and demand, faster time-to-market and lower costs. Eric Matusiak of RSM Richter Consulting Inc walks us through the evolution.

The dominant trend in retail distribution in recent decades has been the dramatic increase in retailers' control of the supply chain. And one emerging concept—direct store delivery (DSD)—promises to be the trend of the future.

The evolution of retail supply chains can be broadly divided into three phases:

1920s to 1980s: Vendors and wholesalers control the supply chain

In this phase, retailers ordered merchandise from vendors or wholesalers who shipped to the retailer's distribution centre (DC). Often case sizes and counts were set by the vendor and did not reflect store needs or customer demand. At the DC the retailer opened, sorted and redistributed 50 to 90 percent of the cases. The process was effective, but required significant labour to handle the broken case picks and space to store inventory for five to 10 days to complete the cycle.

1980s to 1990s: Vendors accept responsibility for sorting and packing

Demanding customers, increased competition and a renewed focus on inventory costs forced companies to adopt new practices. "Just-in-time" and "lean inventory" emerged as leading schools of thought. Retailers worked with vendors to create case packs or "pre-packs" that were allocated to appropriate stores without having to be opened. Many of these cases were cross-docked at the retailer's DC, reducing labour and storage space and improving the responsiveness to demand at the store level. Broken case picks were reduced to 30 percent or less of total outbound cases.

2000 to now: Retailers push DC tasks onto manufacturers

New material handling technologies and supply chain/enterprise software lead the charge in squeezing out costs and adding efficiencies into the supply chain. Retailers take advantage of improved vendor packaging flexibility and the emergence of sophisticated third-party logistics companies (3PLs) to shift the responsibility for

store distribution further back into the supply chain. Emerging concepts such as direct store delivery promise further supply chain improvements.

Direct Store Delivery

DSD (or DT" for "direct-to-store") is not new; it has been in use in the grocery and convenience retail segments for a number of years. Vendors using DSD include Coca-Cola, Frito-Lay and Sara Lee. In DSD, a vendor, possibly co-operating with a 3PL partner, assumes responsibility for replenishing stores with merchandise thus bypassing a retailer's DC. Some large non-food retailers have also implemented DSD. Home Depot's stores, for example, receive 60 percent of their merchandise via DSD.

Advancements in technology and 3PL capabilities are making it possible for many more soft and hard goods retailers to implement DSD. DSD can provide operational improvements, including faster replenishment by reducing the time from manufacturer to store and improved fill rates, reducing the need for special orders or inter-store transfers.

Cost savings can be realized from: reduced transportation costs—both inbound to DCs and outbound to stores; reduced handling costs at DCs; reduced or deferred capital costs; decreasing the need to build or expand DCs and decreased inventory carrying costs.

In addition, revenue increases can be realized through higher margins due to reduced markdowns, especially on time-sensitive merchandise and by way of increased sales thanks to a reduction in stock-outs.

Companies can also achieve strategic improvements because they can focus management, labour and financial resources on core competencies such as buying and merchandising.

Case study

While benefits vary based on the type and size of retailer, the following example illustrates a potential annual profit improvement of more than \$750,000 for a mid-sized Canadian apparel retailer. Let's assume the company has 100 stores and two DCs. It sells fashion and basic apparel, mostly sourced directly from offshore vendors. Annual sales are \$100 million and the target DSD implementation is 50 percent of the merchandise. See chart on next page.

DSD is not necessarily right for every retailer, or for every merchandise category. The following steps can help a retailer make an informed decision regarding DSD.

1. Consider DSD in the larger context of your strategy. Are you planning to source more globally? Are you planning to expand and want to avoid the costs of a new DC or DC expansion? How important is supply chain management compared to your other functions and competencies?
2. Have a clear understanding of your current supply chain, including variable and fixed operating costs, hidden costs such as emergency shipments and excessive markdowns, and performance metrics such as replenish-

Potential Net Benefits			
Item	Assumption	Net Saving / Benefit	Impact
Time from receipt at North American port to store	7 to 10 days	10% to 30%	1 to 3 day improvement in replenishment cycle time
Inbound freight to DCs	\$1 million per year	2% to 4% ¹	\$ 30,000
Handling at DCs	\$2 million per year	10% to 20% ²	\$300,000
Outbound freight from DCs to stores	\$2 million per year	2% to 4% ¹	\$ 60,000
Revenue	-	1% to 2% of sales	\$375,000 ³
Total Potential Profit Impact (per year)			\$765,000

¹ Net savings are predicated on the vendor/3PL being able to provide this service at a lower cost compared to the retailer.

² Based on a reduction in variable DC costs offset by charges from the vendor/3PL to provide DSD services.

³ Based on 1.5% sales increase on 50% of merchandise with a 50% gross margin.

ment cycle times and stock-outs.

- Determine merchandise categories that could benefit from DSD. Likely candidates will exhibit time sensitivity due to seasonality or changing trends, predictable allocations to stores, and/or high unit value.
- Verify your vendors' capabilities. Are they currently providing DSD services to other customers or will they need to collaborate with a 3PL? Does the 3PL have experience with similar retailers or merchandise categories?
- During contract negotiations, ensure the responsibilities of the retailer and the vendor/3PL are clearly defined. How is store replenishment triggered? What are the extra costs to support emergency deliveries or handle returns? What system integration is required between the vendor/3PL and retailer?
- Include performance targets in the contract including penalties and/or bonuses, and monitor them on a regular basis.

DSD is poised to support further evolution of retailers' supply chains and provide business improvements. However, DSD is a strategic decision that involves careful analysis of costs and benefits. Strategic selection of the right vendor/3PL partners and continued monitoring of financial and operational metrics can help ensure retailers realize the benefits of DSD. **MM&D**

Eric Matusiak can be reached at ematusiak@rsmrichter.com.



RSM Richter
Audit. Tax. Advisory.

Real solutions for the retail world.
RSM Richter | Management Consultants

www.rsmrichter.com
Toronto | Calgary | Montreal