

# APPENDIX I-10: TREND ANALYSIS – POSTPONEMENT

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## **Trend Statement**

The notion of geographic, or logistics, postponement involves building and stocking a full-line inventory at one or a limited number of strategic locations close to final markets. This practice reduces the anticipatory risk of inventory deployment and allows for product customization while retaining manufacturing economy of scale. It also improves routing flexibility for transloading.

## **Background**

In the face of a more competitive retail environment, where time to market and cost have never been more important, the ability to customize products and guarantee delivery based on customer demand is essential. Traditionally, anticipatory arrangements require inventories to be produced to final product state and deployed on the basis of business forecasts and planning. With postponement of final manufacturing, distribution and order fulfillment until the receipt of a customer order, the likelihood of erroneous manufacturing and deployment is reduced and the possibility of returns is minimized.

Geographic postponement can improve transloading efficiency. Shippers can assure availability of products because critical and high-cost inventories are maintained in a central facility or near major transloading centers. They can also delay decisions about which mode of transport to use based on time to market and cost.

## **Freight System Implications**

The adoption of geographic postponement strategies has important implications for the freight system as a whole. Facilitated by increased logistical system capability to process, transmit and deliver order requirements with a high degree of accuracy and speed, postponement strategies are able to reduce the need for advanced deployment of inventory. Because postponement introduces more flexibility to transloading, and transportation in general, the supply chain also becomes more flexible. There is less pressure to follow a strict schedule; routing and planning associated with transloading, distribution and forwarding become more flexible as well.

Postponement also reduces risk of volume and variety mix by delaying finalization of products. It improves the variety of a product line (economy of scope) by allowing more customization through flexible manufacturing. It improves lead times as manufacturers can now offer more accurate response to customer orders within the order cycle time. In terms of overall supply chain approach, postponement reduces complexity in operations while adding flexibility. Shipping smaller batches will increase transport costs but since supply chains are more interested in total costs, those costs will likely be offset by a reduction in inventory carrying costs. However, there is some amount of demand uncertainty, substantial product proliferation and a need to quickly respond to the cycle time of producing products.

One of leading online retailer company operating in the United States is utilizing aspects of different postponement strategies to compete with traditional retailers. Amazon is building fulfillment centers on the outskirts of New York, Los Angeles and San Francisco. This move by Amazon has important business implications: the corporation is positioning itself for expanded same-day and next-day service options to the nation's largest markets. In order to expand its same-day services in Baltimore, Boston, Chicago, Indianapolis, Las Vegas, New York, Philadelphia, Phoenix, Seattle and Washington, Amazon added more than 30 fulfillment centers over the last two years. The e-commerce giant even withdrew from its well-documented battle against sales tax collection in certain states, including California, in 2012. With additional fulfillment centers in key strategic locations, Amazon is ready to respond to customer orders by initiating its logistical processes on demand. In addition, Walmart is continuing to build on-line fulfillment centers and to use their unique position to facilitate customers shopping on-line, mobile (cell phone) and in stores. They are also utilizing their stores to ship online orders directly to customers. Large retailers are also creating online automatic replenishment programs – all changing consumers shopping patterns and, in turn, putting a greater demand on the logistics network.

## Planning Considerations

To ensure the wide-spread adoption of postponement strategies, cooperation between shippers and firms using transportation services is necessary. For shippers that means factoring postponement steps into transit time estimates. For the public sector, postponement means a changing demand for facilities near major urban cores as well as an increase in truck trips to private residences and commercial enterprises and from fulfillment centers.

## Resources

Bowersox, Donald J., David J. Closs, and M. Bixby. Cooper. *Supply Chain Logistics Management*. Boston, MA: McGraw-Hill/Irwin, 2007. Print.

“Overnight Sensation – How the e-tailing revolution is revolutionizing traditional sales and logistics strategies.” *Journal of Commerce*, 9/17/2012.

Deborah Catalano Ruriani, “Transloading to Maximize Cost Savings.” *Inbound Logistics*, 11/2012.