

**From the Golden Zone**

**The secrets of best-in-class distribution centers**

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Some distribution centers boast excellent performance — 99 percent-plus perfect deliveries, a productive and strongly motivated workforce, and a flexibility that anticipates any changes in the market.

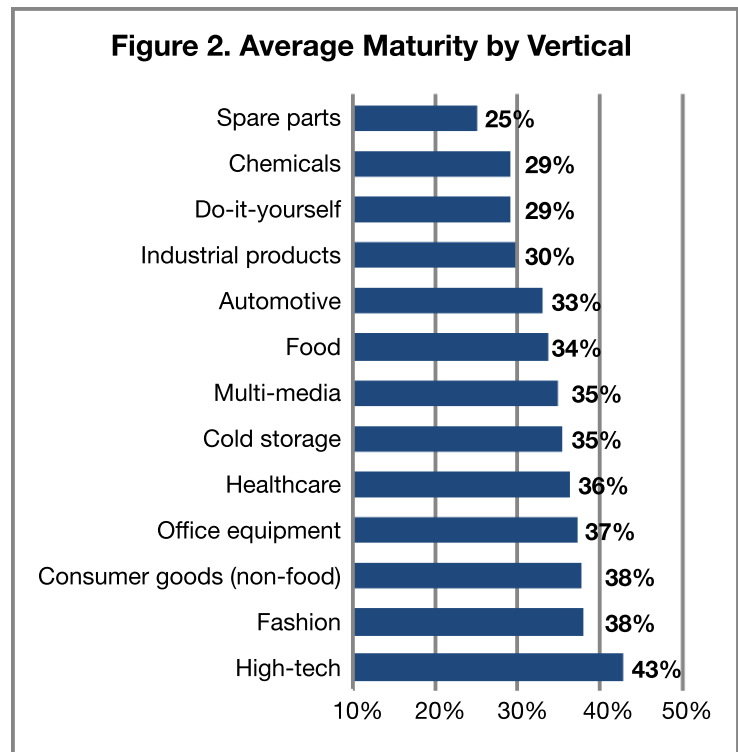
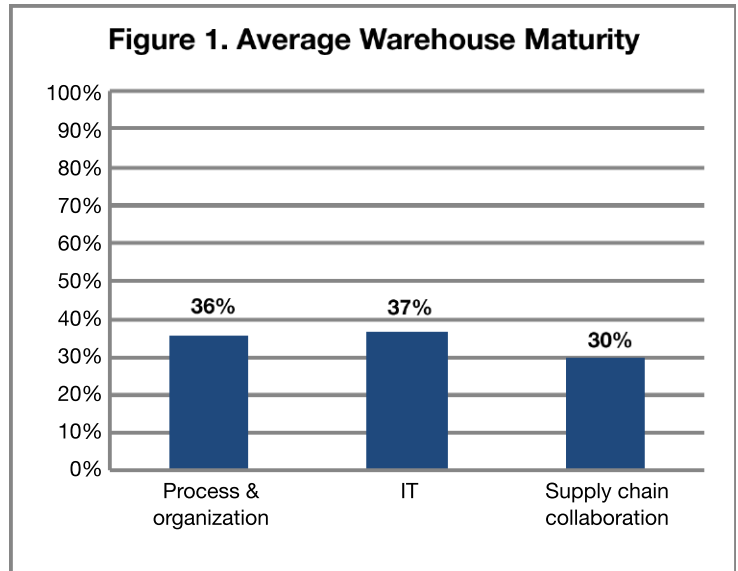
How striking is the contrast with most DCs. Performance is poor and unreliable. And staff are badly motivated and need constant attention.

In our research, we unraveled the best practices of those best-in-class operations. We incorporated these best practices in a warehouse maturity survey. Some 500 participants responded between 2008 and 2011.

Results of the survey are striking. The typical distribution center employs only one-third of the best practices in our list. We categorized the best practices along three themes: process and organization, IT, and supply chain. We see 36 percent compliance in processes and organization, 37 percent in IT, and 30 percent in supply chain (Figure 1).

One surprise is the low average score in the process and organization category. In principle, a well-structured organization lays the foundation of process and organization for subsequent innovations in IT and supply chain. Furthermore, initiatives required to optimize the internal organization, such as creating transparency and streamlining processes, are relatively easy to achieve and less costly than IT or supply chain projects.

Hence, one might expect managers to harvest this low-hanging fruit. However, the outcome of



the survey suggests otherwise. Apparently, managers have heavily invested in IT systems in recent years, thereby neglecting the basics of warehouse management. Subsequently, they find new systems are ineffective due to the immaturity of the organization.

### High-tech dominates other verticals

Looking at the maturity scores of various vertical markets, we see that the most mature are high-tech, fashion, consumer goods, and office equipment (Figure 2). These verticals have in common products with short life cycles. Consequently, companies are forced to keep limited inventory levels to avoid the risk of obsolete stock. Satisfying customers with limited inventories imposes heavy demands on logistics operations. Thus, companies in these verticals need mature logistics operations to remain competitive.

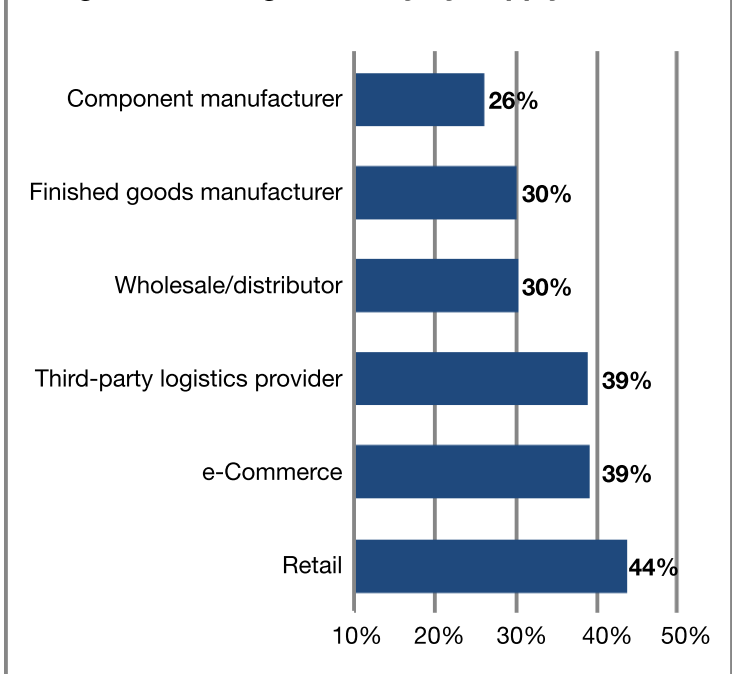
On the other end of the scale are the least mature verticals: do-it-yourself products, chemicals, and spare parts. Contrary to the mature verticals, these businesses sell products with long life cycles. As such, they experience less pressure on their logistics operations.

Looking at the results by position in the supply chain, we see retail DCs are the most mature, followed by e-commerce operations and third-party logistics providers. The least mature distribution centers are typically found at manufacturers (Figure 3).

As such, companies tend to have increasingly mature DCs once we move from upstream to downstream in the supply chain. At the end of the supply chain, where companies deliver to end-customers, logistics operations typically are more complex due to broad product ranges and small, frequent orders. Moreover, their out-of-stock risks are more serious.

For example, if a retail DC can't supply its stores, this rapidly leads to empty shelves and lost sales. For upstream companies this is less crucial. Their products are held by companies downstream in the supply chain, which serve as buffers for their supply interruptions. Hence, if supply is disrupted upstream, there may still be sufficient inventory in the supply chain to serve demand so

**Figure 3. Average Maturity by Supply Position**



that end-customers do not immediately have to face out-of-stocks.

Another reason for the maturity gap between upstream and downstream companies lies in the fact that manufacturers traditionally have higher profit margins than retailers. This implies that cost efficiency is more relevant at the end of the supply chain. We can conclude that logistics complexity, out-of-stock risks, and smaller profit margins mean that downstream companies in the supply chain need more mature distribution centers in order to be competitive in their markets.

### 55 percent of distribution centers are weak link

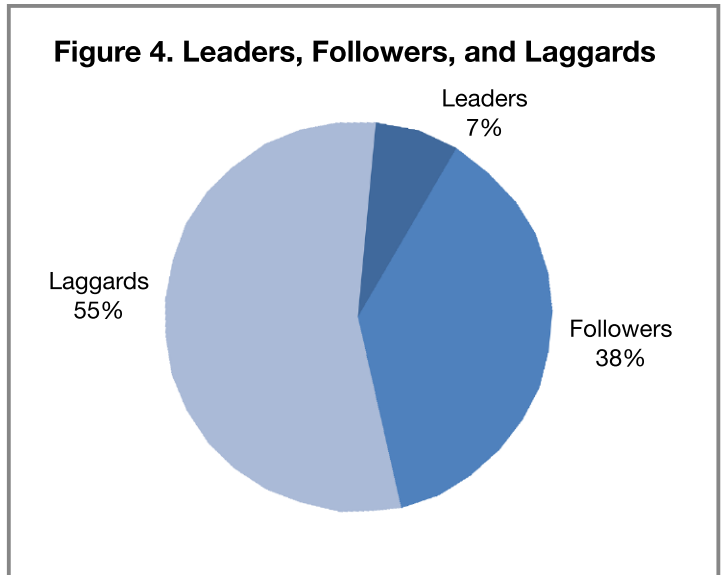
Next, we compare the leaders and laggards across all participants. We distributed the participants into three segments:

- Leaders with mature operations who adopted at least two-thirds of best practices.
- Followers who adopted between one-third and two-thirds of best practices.
- Laggards with immature operations who adopted less than one-third of best practices.

More than 50 percent of DCs are laggards, according to our definitions. Warehouse operations in this segment are a weak link in their supply chains. Next, we see a large group of followers, who constitute almost 40 percent of the total. These DCs achieve adequate performance levels and managers have a grip on the operation.

Finally, there is a small group of leaders, comprising just 7 percent of DCs. These operations have outstanding performance levels and strongly contribute to the competitive strength of the company.

Excellent warehouse performance helps companies create competitive advantage by reducing logistics costs, by increasing internal and external customer service levels, and by aligning business activities. Our research identifies that DCs can save 20 percent on average by adopting further best practices in processes, IT, and collaboration. Contact: Dutch consultant, educator, and author Jeroen van den Berg describes his new approach to warehouse optimization



in the book *Highly Competitive Warehouse Management*. He can be reached at +31-344-607-334 or [info@bcwm.net](mailto:info@bcwm.net). Want to know the maturity of your distribution center? Visit [www.DistributionGroup.com/warehouse\\_maturity\\_scan.php](http://www.DistributionGroup.com/warehouse_maturity_scan.php) and fill out the warehouse maturity scan. **DCM**