

the regional difference

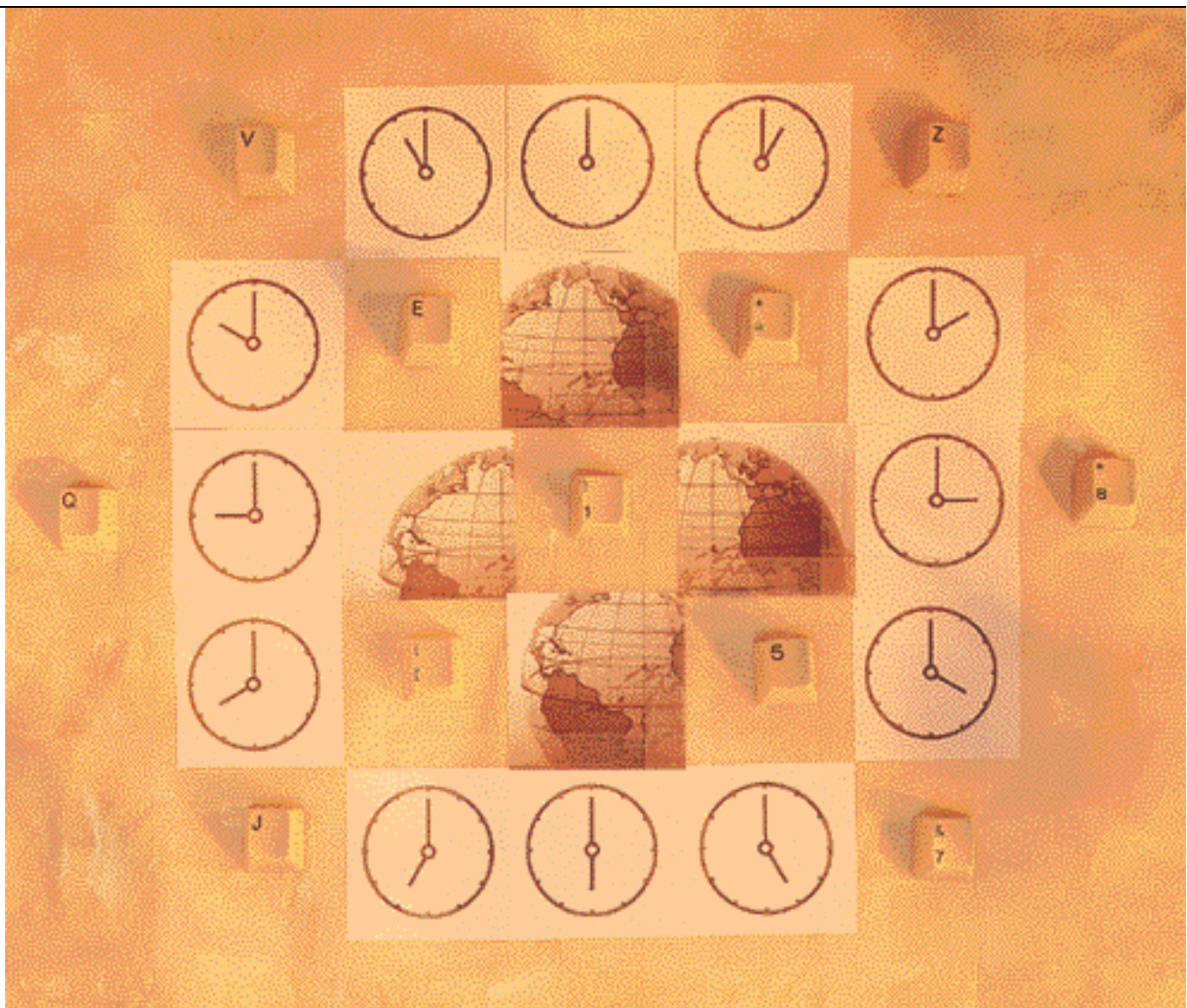
Pressure to improve customer service and in-stock rates is pushing more companies to abandon the "consolidation" model in favor of a flexible, agile network of regional distribution centers.

BY THE END OF THE 20TH CENTURY, INVENTORY HAD become about as welcome to most corporate comptrollers as a telecom analyst at an ethics convention. Though acknowledged to be a necessary evil, it was still viewed as that balance-sheet line item that tied up a lot of the corporation's cash and required a lot of expensive space to house. To tame the inventory monster, U.S. business went into overdrive, striving to keep inventories lean, operating in just-in-time (JIT) mode and consolidating distribution centers.

At least, that's what we thought. But the reality is, well, something completely different. Warehouse space actually stands at an all-time high. "Today, there's more square footage of warehouse space than at any point in U.S. history," Ted Scherck, president of the Colography Group, told a session at the annual Council of Logistics Management conference.

Scherck's assertion is corroborated by an analysis conducted by warehousing provider ProLogis of the 42 major markets in which it competes. That study showed that warehousing space increased to 3.4 billion square feet in 2002, up from some 3.1 billion two years ago. "The occupancy rate has likely declined in the last two years," says John Siebel, president and COO of North America at ProLogis, "but the gross square footage has increased."

The hard truth is that although inventory reduction receives a lot of lip service, inventory levels in many industries have stayed the same or increased over the long term. That trend is particularly evident with finished goods. "Management has cleaned up [its] production and ordering processes for raw materials, but [it has] less control of finished goods," says Jim



Ginter, professor of marketing at Ohio State University's Max Fisher College. Ginter, who headed up a study that examined various types of inventories across major industries over a 20-year period ending in 1999, adds that the apparel, grocery and medical products industries, in particular, recorded inventory increases. By contrast, real decreases were found in finished-goods inventories for electronics and computers, due in large part to the supply chain model made famous by Dell.

Also contributing to the more-not-less inventory phenomenon may be the proliferation of product varieties offered in recent years. Plus, vendor-managed inventory, JIT and other drives to improve the supply chain management process at many companies have, as Ginter puts it, placed "power increasingly downstream, at the retail level, nearer to the customer." This means inventory gets thrown back upstream. And it has to be warehoused somewhere.

When "pull" is the trigger

Another development that is helping kick regional warehousing into high gear is the growing popularity of "pull" demand chains, whereby stock replenishment is triggered by consumer demand (i.e., sales) rather than, say, manufacturers' promotions. It's pretty much a given that if this model is to succeed, inventories need to be maintained close to their point of sale—which typically means in regional warehouses.

One company that has adopted this strategy is Best Buy, the nation's largest consumer electronics retailer. Best Buy has gone to great lengths to minimize its response time when a need is defined at the store. "If we had a great day of sales," says Chas Scheiderer, Best Buy's senior vice president of logistics, "we need to get products back on the shelf."

Although it's a national retailer, Best Buy relies heavily on regional distribution, distributing products to stores from six general merchandise DCs (distribution centers) around the

country, with an additional East Coast facility slated to open in the first half of this year. These facilities all support the continually expanding roster of Best Buy stores—there were 538 at press time—as well as the Musicland group of stores, which include Sam Goody, Suncoast and Media Play. Best Buy distributes media such as CDs and DVDs from a dedicated entertainment facility in the Midwest. In addition, it operates several other DCs that are dedicated to large-ticket items such as appliances and big-screen TVs where deliveries are cross-docked, moving swiftly to stores or directly to customers.

To guarantee the best possible ground service, Best Buy uses a dedicated fleet through a long-term agreement with a truckload (TL) carrier that picks up shipments from vendors and delivers products to the stores on a twice-weekly basis with room to tweak deliveries as needed. It also uses contract carriers as needed or in select markets on a regular basis.



STOCK IN TRADE: E-TAILER AMAZON.COM USES SOPHISTICATED MATHEMATICAL MODELING TO DETERMINE WHICH OF ITS SIX REGIONAL WAREHOUSES SHOULD HOUSE ITEMS LIKE THESE TRADE BOOKS.

Going postal

Another high-profile company that has become a convert to regional distribution is Amazon.com. As a renegade dot-com startup in the mid 1990s, Amazon.com used one Seattle-area facility to serve the country as the first online bookseller.

Over the last few years, however, as its business model has morphed from that of a dot-com fulfillment company to that of a giant retailer, Amazon.com invested in state-of-the-art DCs and boosted its product mix. The company now sells not only books, but also apparel, toys, electronics and even hardware, whether via marketing agreements, partnerships or acquisition.

Today, six Amazon.com DCs dot the country, including a large facility in Nevada and two in Kentucky. (Amazon.com shuttered its Seattle DC in early 2001.) “We try to perform mathematical modeling to determine which are the fastest-moving products and which DCs those products should be in,” says Carrie Peters, an Amazon.com spokeswoman.

“All DCs are located close to airports or transportation hubs,” Peters adds, which allows the e-tailer to ship items within 24 hours of order receipt. It makes no guarantees, but most items are received by the customer within two to three days via its carrier partners UPS and the U.S. Postal Service (or via FedEx if the customer requests premium delivery service).

Down the road

The shift toward regional distribution has implications for the trucking industry as well. An analysis by the Colography Group reveals that shippers are pulling back on their use of long-haul less-than-truckload (LTL) moves. Though the long-haul segment is experiencing only moderate average

annual growth and intermediate-distance moves of 600 to 1,800 miles are actually declining, short-haul LTL moves of 600 miles or less (in one-way movements) are seeing high growth rates.

At the same time, companies are moving consolidated or truckload shipments along longer-haul routes, according to year-over-year trend data from a study conducted annually among several hundred large shippers by the University of Tennessee, Georgia Southern University and Cap Gemini Ernst & Young. Mary Holcomb, associate professor of logistics at the University of Tennessee, suggests that improved supply chain management, primarily stemming from the use of transportation planning and load optimization software, is driving the trend. Another contributing factor may well be the increased use of third-party logistics providers (3PLs), which are masters of load consolidation.

Ultimately, Scherck of Colography Group sees more companies developing what he calls “an optimal mix of strategically located inventory and short-haul distribution.” He cites the example of a large home-products retailer that keeps fewer windows and doors in stock than it used to. But that doesn’t mean it has cut back on its use of warehousing space. Instead, it relies on direct shipments from its DC to the consignee. “It’s true that efficient supply chains change the number, location and physical layout of storage space,” Scherck notes, “but this does not mean that storage space goes away.” □

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