

# widen the scope for smart site selection

When choosing a site for a new DC, you have to think about what works best for the network, not the node. The key: a holistic network design approach.

YOUR COMPANY HAS JUST ASKED YOU TO look at building a new DC. Never mind the reason—it could be a push to reduce overall transportation costs, boost inventory velocity, or accommodate business growth.

Before you stick a pin in the map and begin contacting the local chambers of commerce about available sites in industrial parks, you need to pause and reflect on the network implications. Today, supply chains span the globe. Third-party logistics companies are ubiquitous, customers are fluid, and markets can shift in the blink of an eye.

You need a robust network, not a perfect site. Although the boss has told

you to look into New Jersey, the optimal location from the standpoint of network transportation flows and customer service could require that the next DC be built in Pennsylvania, Maryland or Virginia—even as far away as Georgia. Put another way—you have to think about what works best for the network, not the node.

## Think big picture

Nowadays site selection begins with network design. In the past, companies would choose a new warehouse location to serve a specific territory or even a single big customer, but that's just not our world anymore. Markets and customers shift rapidly. Business across the globe runs at a faster clock speed. And change has become constant.

Start the network design process by examining how existing facilities currently meet customer requirements. Does the existing warehouse (or group of warehouses) have the ability to ship to key customers within their delivery timetables at an economical cost? If you're constantly forced to make expedited shipments or if there are no other low-cost transportation options available, then take this opportunity to find a location that might lower your freight spending. Your warehouse location should take advantage of multiple modes of transportation to preserve flexibility in shipping and to promote carrier competition.

Next factor in how the business will be growing in the next five years. Take into account any long-term plans that might alter the mix of products and the concomitant impact on shipping method and delivery as well as storage requirements. For instance, if your company plans to market more products overseas or source more goods and components from international suppliers, then your new DC will require proximity to an international gateway like a seaport or major airport.

Don't just focus on your own operation, however. Be sure to give some thought to what

your customers or suppliers are doing. You don't want to add a new warehouse to lower transportation costs only to find that your customers will be expecting deliveries in another region of the country or even the globe.

Keep in mind that the one-size-fits-all approach isn't the only approach when it comes to warehousing. If your company has a range of products and some call for specific storage requirements, say cold storage, then it might be worth designating the new warehouse to carry just this one product line for all customers nationwide. That way, special equipment could be limited to one facility and the training and resources to handle that equipment confined to one workforce.

In looking ahead, it's important to think about reverse logistics. Maybe the new warehouse should be the designated returns facility that handles all goods being sent back to the distribution center regardless of origin. Setting up a warehouse for special handling or, as discussed earlier, to hold special products may change the anticipated locale for the new warehouse and the network design.

Of course, all those considerations beg the question: Are your current warehouses in the right location? If outbound or inbound flows are imbalanced, causing strain on one facility or higher transportation spends from current locations, then the chance to construct a new warehouse may be your opportunity to correct design flaws in the network.

Finally, give some thought to what the competitors are doing. If the new warehouse will merely match a competitor's system, it might be worth assembling your solution in a way to make the value proposition of your distribution network more unique. Can the new warehouse be the place that handles special packaging requirements, for instance? Or can it be the site for light or final assembly?

## Use software tools

Once you've drawn up a list of considerations, use modeling software to determine the optimal geographic location for the new warehouse. There are a number of easy-to-use software applications on the market for what-if scenarios and analysis. These packages allow supply chain professionals to approach site selection in the context of ongoing network design, rather than a one-time, one-off decision.

According to the Boston-based research firm AMR, some of the vendors that offer these types of applications are LogicTools, PeopleSoft, i2 Technologies, Insight, Logility, Manugistics, Optiant and SSA (the old CAPS product). There are also site selection consultants and warehouse facility design firms in the marketplace who bring the appropriate software to bear as a part of their service. Whether you buy the software yourself or utilize it from another party, solve the network problem, and then think about the specifics of site selection.

Once you've picked a locale for the warehouse, then it's time to employ all the traditional tenets of site selection. Conduct an initial screening of the targeted area and draw up a list of possible sites. Nothing beats first-hand reconnaissance. Do site visits, but maintain a low profile. Be sure to check out zoning and other legal requirements to ensure that the building can be constructed or retrofitted to meet your space and power needs. Investigate the local labor rates. Make sure the site offers the infrastructure to meet transportation requirements; if you want to make rail or intermodal shipments, the building must have a rail spur nearby. Don't forget to look at traffic flows and congestion, which is becoming a bigger impediment to shipping every year. Once the homework is done, narrow the list of possible sites. Finally, negotiate with local officials to gain incentives or tax breaks for a facility that will become an area employer.

## Network design savings

When done properly, network design can yield significant savings and provide a competitive advantage for the company. Digital storage products maker Imation reconfigured its distribution network to meet its retail customers' increasing demands for unique packaging, promotional items and value packs. Today, Imation is reportedly offering more than 7,500 product options while achieving a 30-percent point increase in customer service and a 20-percent decrease in inventories. That shows the power of a network distribution approach.

Given the potential gains and savings from employing a network design approach to site selection, any company considering the addition of one or more distribution centers should undertake a thorough review of the distribution system implications with an eye toward savings and improvements. Bricks and mortar are just an anchor, so make sure that you're dropping anchor in the right place.

Finally, a network design approach on your part shows senior management that you're a strategic thinker. Do it right, and you will be heard in the boardroom. □

