

WMS providers reach beyond the four walls

Companies in the warehouse management system software space are no longer confined to the four walls of a warehouse. They are evolving and reaching out into other areas of the supply chain, providing functional and flexible tools to end users.

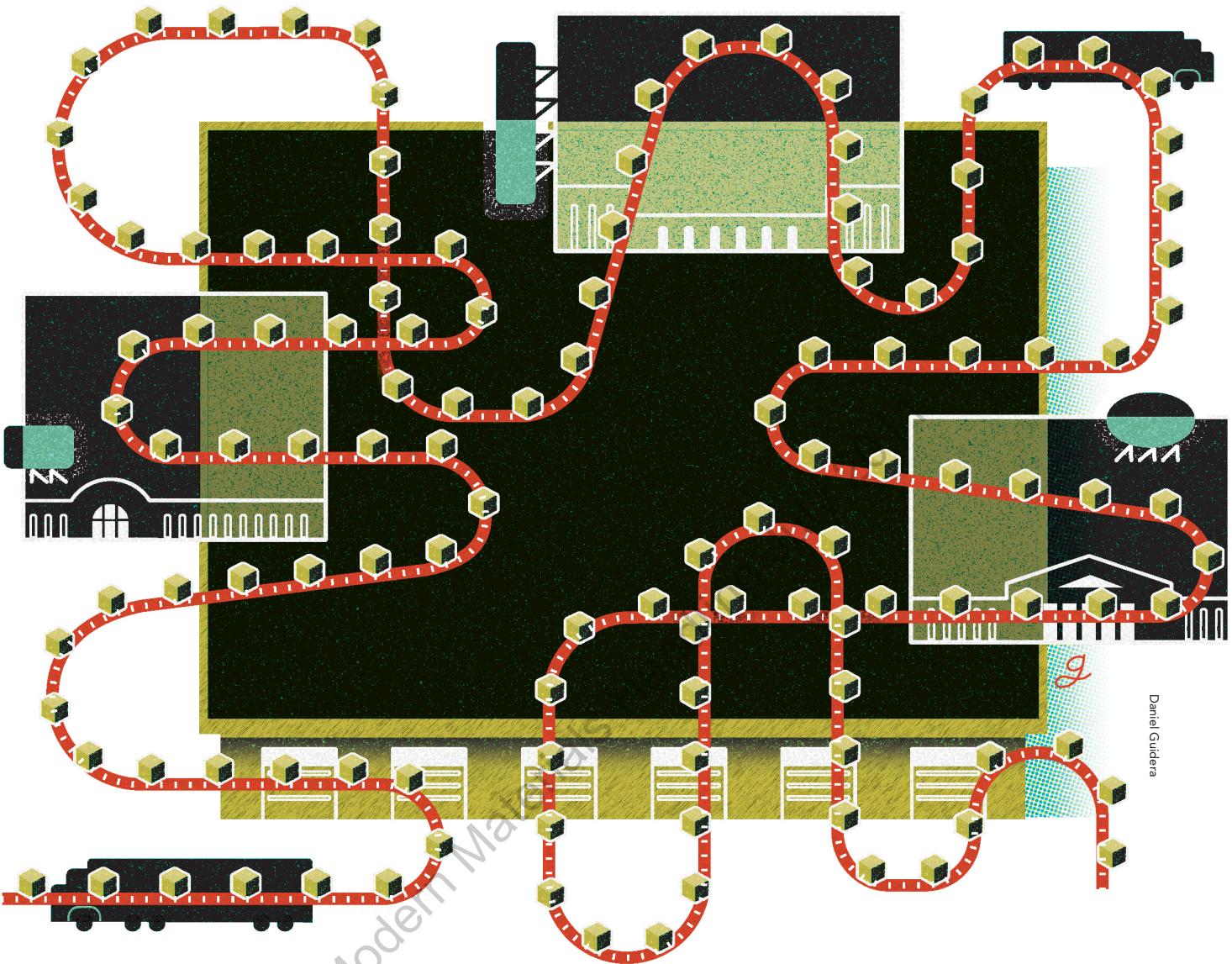
By Lorie King Rogers, Associate Editor

Charles Darwin said the key to survival is being responsive to change. And in many ways, that's also a key to being a successful software provider.

Once upon a time, a typical warehouse management system (WMS) would make sure inventory was where it's supposed to be—and in the right quantities—then oversee the order fulfillment process. At the time, that was pretty good, and many WMS providers focused solely on offering that solution to its customers. But today, providers have expanded beyond WMS to offer supply chain management solutions, which suggests a larger suite of products.

“This is a funny space,” says David Landau, vice president of industry marketing for Manhattan Associates. “When I started in the 1990s, there were probably about 200 companies doing WMS. Now you can count them on one hand. Some companies were innovators and some were well managed: Those were the ones that survived,” Landau says.

This evolution of the WMS space was a topic of conversation at the



2011 Material Handling Industry of America (MHIA) Spring Meeting held recently in Charlotte, N.C. In one meeting of the supply chain execution group, John Hill, vice president of TranSystems, discussed how the WMS industry has changed. He said providers of warehouse management software used to be WMS companies, but today they are something far different, offering software that goes well beyond the four walls of a warehouse.

“In order for Tier 1 WMS providers to grow, they have to find more things to bring to the party,” says Hill. “It only makes sense for them to expand outside the four walls if they’re going to provide users with supply chain systems that provide visibility from source to consumption. That’s what’s driving large providers.”

Conceptually, providing complete visibility through the entire supply chain is not a new idea. “We only dreamed of

this 20 years ago,” says Hill. “What’s new is the collection of tools that’s available today, particularly the tools used in the collection of real-time information and the ability to share that data across multiple supply chains or supply chain-related systems.”

As the technology catches up with the concepts, end users want more than a traditional WMS, they want an integrated solution that enables them to effectively manage the flow of product across the entire supply chain.

“There has been an evolution in terms of the business processes that customers are trying to support,” says Jennifer Sherman, senior director of logistics product strategy for Oracle. “Five years ago, the holy grail would have been a WMS that could talk to transportation, but to a large extent that’s done. Customers are asking how they can leverage their platforms, and we’re talking about bringing those appli-

cations to other areas of the business.”

Here’s a look at how four of the leading supply chain software providers view the evolution of the supply chain execution space and how they are approaching their customers.

HIGHJUMP

In general, companies that were once primarily WMS companies have expanded into other areas and are repositioning themselves as supply chain management companies, explains Chad Collins, vice president of marketing for HighJump. “There’s really been an evolution from traditional distribution and logistics offerings into the broader supply chain with some form of inventory planning and moving out all the way to the store shelf,” he adds.

According to Collins, one reason for the shift is that buyers and users of these systems would prefer to get their products from a single source. Having fewer vendors makes the process easier from a technical perspective. Getting the solution from one provider means visibility of the data on a common application platform, says Collins.

This is especially important in the U.S. food and beverage sector. Being a \$2.1 trillion dollar industry with very thin profit margins, there’s a constant demand from users to find tools that efficiently manage the flow of goods while boosting the bottom line.

HighJump is responding to that demand by connecting distribution activities with in-store activities through direct store delivery, or DSD. In DSD, product is delivered directly to the retailer and merchandised by the manufacturers themselves on the retailer’s store floor.

“In food and beverage, there are suppliers that don’t ship to intermediary warehouses, they go directly to the retail store,” explains Collins. “With DSD, the manufacturer controls the entire process from product readiness through order taking, shipping and merchandising.”

There are benefits in shipping

Head to the clouds

Investing in only what you need is also the philosophy driving on-demand services, software-as-a-service (SaaS), and computing in the clouds. Whatever you call it, this IT option makes it possible for the little guys to realize big improvements.

“Small companies have the same requirements and the same levels of compliance,” explains RedPrairie’s Kozenski. “This option affords them the opportunity to access the same tools as Tier 1 users.”

Computing in a cloud reduces the cost of entry for small to mid-sized companies. Rather than customers deploying and managing software at their facility, a provider handles it for them over the Internet. Not only does this option take the hardware out of the store, it leaves administration, maintenance and upgrades to the provider with the core competency.

Small and large companies alike are seeing many benefits to computing in the clouds. In fact, HighJump’s Collins believes the majority of new installations of WMS or any other software deployments are likely to be in the clouds rather than on the premises.

directly to the store, Collins adds. From the supplier side, returns are lower, and profitability and sell through are much higher. From the retailer side, studies have shown that DSD products can be the most profitable because the supplier is responsible for the costs for delivery, inventory management and merchandising. And from the customer vantage point, it means product is where they want it, when they want it.

REDPRAIRIE

The shoppers’ experience is possibly the most important factor of all, says Tom Kozenski, vice president of product strategy for RedPrairie. That is especially true in today’s world where the immediate impact of communication can work for or against an operation.

The site operations inventory tool from RedPrairie helps to ensure that a customer has a positive experience by making sure the right product is at the right place at the right time.

That’s today, but back in the 1970s and 1980s Kozenski explains that WMS was a customized solution built

to an end user’s individual specifications. It connected the software to a warehouse’s materials handling devices like automated storage and retrieval systems, for example. Now, WMS providers are expanding applications out into the stores.

It’s a logical progression, Kozenski says. WMS manages three major components—inventory, labor and transportation—which happen to be the same three components in a store.

It’s not a major challenge for a WMS to manage the canned peas, says Kozenski. The challenge comes when managing more demanding products and departments. The site operations inventory tool can tackle the most complex departments of an operation like a deli counter, for example, by providing perpetual store inventory, which is especially critical when dealing with fresh food items, perishables and expiration dates.

Take a number, order a ham and swiss sandwich on rye, and the inventory management application will consume the recipe of components used to make up the order, track accurate levels of what’s in store, what’s been sold and what needs to be replenished. “As a result,” Kozenski says, “the integration of WMS with inventory management creates a lot of power for the end user.”

MANHATTAN ASSOCIATES

End users need as much power as they can get to be successful in today’s competitive marketplace. According to Manhattan’s Landau, “WMS helped get the right product to the right price under the right criteria. Most WMS were focused on being retail compliant, but never really talked about optimization.”

However, in the last few years, WMS has gone from supporting the business to enabling the business by moving out into yard and labor management efficiencies, for example. Labor

management solutions can address questions like: Can I take labor out of the process? How can I optimize the workforce? How can I grow the business without growing the bottom line?

WMS has reached a point where there's a top line and a bottom line factor.

"In the bottom line, you can only squeeze so much blood from a stone, but businesses are always asking for more," says Landau. "CFOs are asking how they can get a lower cost per unit."

One answer lies in connecting the three silos of inventory, distribution and transportation.

"All three silos are optimized individually to the hilt, but reality is that all three are inter-related and we have to look at them with a broader view. Our vision is a bigger picture of the supply chain," says Landau.

For example, retailers ordering more frequent, smaller shipments can affect all links in the supply chain, says Landau. It impacts the inventory, the labor needed to handle more shipments, and transportation with less-than-truckload shipments, all of which could affect the product's cost per unit.

So, Manhattan, once focused on order fulfillment for retailers, has expanded into supply chain planning, offering a full suite of products from

planning and execution that enable an operation to make intelligent decisions around all factors that are aligned toward the ultimate business, not just one silo.

ORACLE

"People are recognizing efficiency gains as you bring WMS to other places," says Oracle's Sherman. They've tackled the warehouse, now it's time to tackle another area.

Customer demands are certainly driving this change, but arguably the biggest single change driving the evolution of software, according to Sherman, is in buyer behavior.

Operations once required to handle store replenishment now have to replenish stores and ship individual orders to customers shopping online, from catalogues, or even ordering at the store but shipping elsewhere. The question, says Sherman, becomes: Do I have a flexible order management system framework that can understand those orders and handle the multiple fulfillment channels under one roof from the back end without interrupting the flow?

Oracle's answer is "yes." An online purchase from an individual is different than one from a retailer in terms of quantity, but Oracle's order management solution uses the same logic to process the order while recognizing and support-

ing the order's different requests.

When an order is placed, it launches the wave within the WMS solution. The system knows where the order is coming from and what it needs in terms of packing, labeling and shipping. It's the same infrastructure to take in an order, but it knows to fill it in a different way, bypassing a lot of outbound steps and dropping it in a different outbound location for shipping.

This sounds great for the big guys, but can the little guys afford it? Again, yes. Increasingly, large monoliths like Oracle are providing services to the small and mid-sized companies with plug-and-play solutions that allow a user to build on what they have or pick and choose only the components they need.

"The onus is on the vendor to prove to the little guys that the solutions can scale as up and down and to meet needs of their business process," says Sherman. □

Companies mentioned in this article

HighJump, www.highjumpsoftware.com

Manhattan Associates, www.manh.com

Oracle, www.oracle.com

RedPrairie, www.redprairie.com

TranSystems, www.transystems.com