

Warehouse Management Systems Continue to Expand Role in Logistics

Beyond the Distribution Center, WMS Finding Footing in Manufacturing, Retail Stores, Micro “Warehouses”

SCDigest Editorial Staff

Warehouse Management System (WMS) software applications have been around for more than two decades, really getting a market foothold in the 1990s, as the traditional concept of “warehouse” gave way to high velocity distribution center and need for much greater capabilities.

Since then, the market has seen many changes, with the WMS vendor landscape changing dramatically, especially with a raft of mergers and acquisitions since 2001, and continuous expansion of overall WMS capabilities.

Definition of “Warehouse” Expanding?

Now, the WMS market is changing in another interesting way. WMS vendors are working with customers to redefine the meaning of what the “warehouse” is that the warehouse system is managing.

For example, though WMS has been deployed in manufacturing plants for years, it was generally in the traditional finished goods storage/plant warehouse area of the factory, not in actual production operations.

That is changing. More and more companies are now deploying WMS, or something very much like it, right on the production floor to manage raw material and component inventories, control and manage the movement of work in process (WIP) inventories, and drive production line material replenishment.

Tom Kozenski, vice president of production strategy at RedPrairie, told SCDigest that more and more “manufacturers are looking for the type of control

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that a WMS can bring to the management and movement of manufacturing materials, from in-bound receiving to inventory location management to feeding the production lines.”

He noted for example that the traditional “task management” capabilities of a WMS can be ideal for directing materials movement on the shop floor.

One RedPrairie customer, a large meat producer, uses the WMS to track meat by lot ID as the beef is processed into individual cuts and boxed, maintaining control and visibility as that process creates packaged beef that is ultimately moved into the plant warehouse, with full traceability back to the original carcass.

HighJump Software is another vendor expanding its solution in similar ways. It has taken many of its WMS capabilities and added them to traditional Manufacturing Execution System (MES) functionality. The result is a product that addresses the traditional needs of the shop floor for visibility, tracking and control that MES systems can bring, and

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then adding WMS-level inventory management and material movement functions as well, including support for "e-Kanban."

Is a Retail Store also a Warehouse?

Some WMS vendors and retailers are also wondering if a "WMS" might not also be successful deployed in many retail store settings. This is particularly true as the size and scope of many retail outlets continues to expand, making inventory management and movement increasingly a challenge.

As we reported previously, outdoor products retailer Cabela's decided to take its existing WMS (from Manhattan Associates) and also deploy it in its massive stores as well to help manage backroom receipts, inventories, and store floor replenishment. (See **Cabela's Uses WMS to Drive DC Efficiency across Distribution Channels**). Manhattan Associates says that other retail customers are also interested in this type of functionality.

Mike Mayoras, CEO of RedPrairie, is thinking along similar lines. He recently noted that in looking at retail stores, "In many ways they do have some characteristics in common with warehouse operations. We're thinking some of our WMS functionality can help there."

Warehouses Everywhere?

The reality is that in many companies, especially in certain industry sectors, there is inventory in dozens, hundreds or even thousands of locations.

Consider a hotel chain that has hundreds of locations, and inventory in supply storage areas, gift shops, maintenance operations, restaurants



and maybe more. In total this could amount to a massive level of inventory across the company's operations – inventory for which there is often relatively little electronic control or central visibility.

Ditto for large hospital chains. Service parts inventory that exists at many levels of distribution, all the way down to a service person's van.

Often, companies have not put in systems that well manage those local inventories. That presents an opportunity, which WMS provider SmartTurn is attempting to capture. In addition to providing an on-demand WMS for small and medium sized traditional distribution centers, the company is also targeting these micro-warehouses – and doing so at a very affordable subscription type price per location.

"We think there is a huge amount of relatively uncontrolled inventory out there in total that presents an opportunity for us and our customers," a SmartTurn executive told SCDigest last year.

Manufacturing shop floors, retail stores, far flung "micro-warehouses" – Warehouse Management Systems are increasingly turning up in some very new and interesting places.