

Will Warehouse Management System (WMS) Vendors Increase Support for Material Handling Integration?

Now is the Time for "MHE Extensibility," One Provider Says; Reducing Time, Cost and Risk for New Projects

SCDigest Editorial Staff

Even as core Warehouse Management System (WMS) solutions become more and more capable out of the box, reducing the need for customizations of core distribution center processes, the integration with material handling automation systems is generally a source of customization that adds to project cost and risk.

That could be changing, as some WMS vendors are looking to better package WMS integration with material handling systems and equipment.

At a high level, there are two types of WMS integration with material handling systems:

Direct integration between the WMS and the material handling sub-system, such as a carousel.

Integration of the WMS to a Warehouse Control System (WCS), which in turn communicates with materials handling equipment, such as a sortation system. (See [The Role of the Warehouse Control System in the DC.](#))

In many instances, both approaches are used in the same facility, with the WMS perhaps communicating with a WCS controlling conveyors and the WMS integrating directly with carousels, an Automated Storage and Retrieval System (AS/RS) or other automation sub-systems.

Rarely have either of these integrations been well-packaged. In a few cases, WMS providers have built integration to the WCS of select material handling vendors, but these have generally not been well-maintained, and usually still require some costly integration efforts. Pre-built integrations between the WMS and individual automation systems/vendors

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have been equally spotty.

But **Jeff Gantt**, a senior product manager at supply chain software vendor **Manhattan Associates**, says that situation is likely to change.

Gantt says WMS vendors such as Manhattan are working on a concept he calls MHE (Material Handling Equipment) Extensibility.

"The approach to material handling integration in the past was definitely a very customized one," Gantt told SCDigest. "Those message mappings, however, can be built natively right into the WMS. When you need to integrate with some type of automation equipment, when I need to send a message to the MHE, you pick the vendor and equipment, and the WMS selects the right data elements that are needed in that message string, the right format for that data, and what protocols are required for that specific integration."

Gantt added that this becomes a "much more MHE agnostic approach" than the industry has seen to date.

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Important Benefits to Users

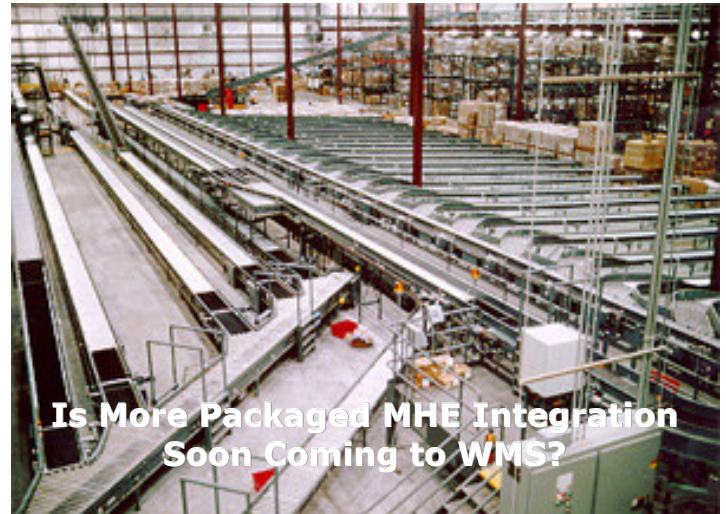
As this type of package material handling integration develops, it likely would have important benefits to companies implementing material handling system projects, according to SCDigest Materials Handling Editor Cliff Holste.

"The WMS and automation interfaces, whether they are direct or through a WCS, always add cost, time and risk to the project," Holste said, based on his more than 30 years of experience in the distribution industry.

"Even if the integration needs to be tweaked a bit for each system, if it was largely pre-built, that would have huge benefits to companies and their projects."

The approach will not be without challenges. There are dozens of potential equipment types/vendors and WCS packages in the market, as opposed to a sub-system like Voice, where there are just a few providers, and WMS vendors have successfully pre-built integrations.

The good news is those equipment and WCS systems are becoming more "open" and standards-based, easing the integration effort versus the proprietary systems of the past.



This is an area that many companies buying materials handling and WMS solutions have often not paid enough attention to in the past, Holste says, adding that it likely will become more of a focus in vendor selection in the future.

Another benefit of the evolution would be much less cost to redo automation integrations when the company upgrades its WMS version.

The success of apparel manufacturer Carole Hochman Design Group with a new WMS will be discussed in a Supply Chain Videocast this week from SCDigest. To register for the live or on-demand version, go to: [Optimizing Your Warehouse](#).