SupplyChainDigest™
Your First Stop for Supply Chain Information

As New Data Collection Technology Emerge, Warehouse Management Systems Begin to Change Integration Approach

Whatever You Call It, Non-Traditional TMS Models Starting to Gain Traction

SCDigest Editorial Staff

As we have discussed many times in Supply Chain Digest, after a number of years of relatively modest advances in the basic approach to data collection in the distribution center, a range of new technologies and thinking is suddenly making the action there quite interesting again (See SCDigest's **Advanced Order Picking Systems Resources** page.)

That evolution is now adding to the traditional choice of Radio Frequency terminal technology, RFID and the mixing of two or more of those technologies in a "multi-modal" use case – for example, voice direction of picking activity combined with RFID confirmation of picked cartons on to a pallet.

To make all that work, however, Warehouse Management Systems will have to get increasingly sophisticated as well, and embrace a more unified approach to multiple data collection and picking subsystems. That's true whether the WMS is a commercial package or home grown/legacy system that is being maintained and enhanced internally.

Progress has already been made. For example, over the past few years, most WMS providers have worked with voice system providers to develop direct integration between the voice terminals and the WMS, rather than the more "interfaced" solutions that characterized the earlier years of the market. That is one important step down the path.

Put Down the RFT, and Just Pick Up the Voice Terminal?

The ultimate trend will be for WMS systems to have a single integration approach regardless of underlying data collection or related technology, providing total flexibility and consistency in how the systems are initially deployed or changed over time.

The ultimate trend will be for WMS systems to have a single integration approach regardless of underlying data collection or related technology, providing total flexibility and consistency in how the systems are initially deployed or changed over time.

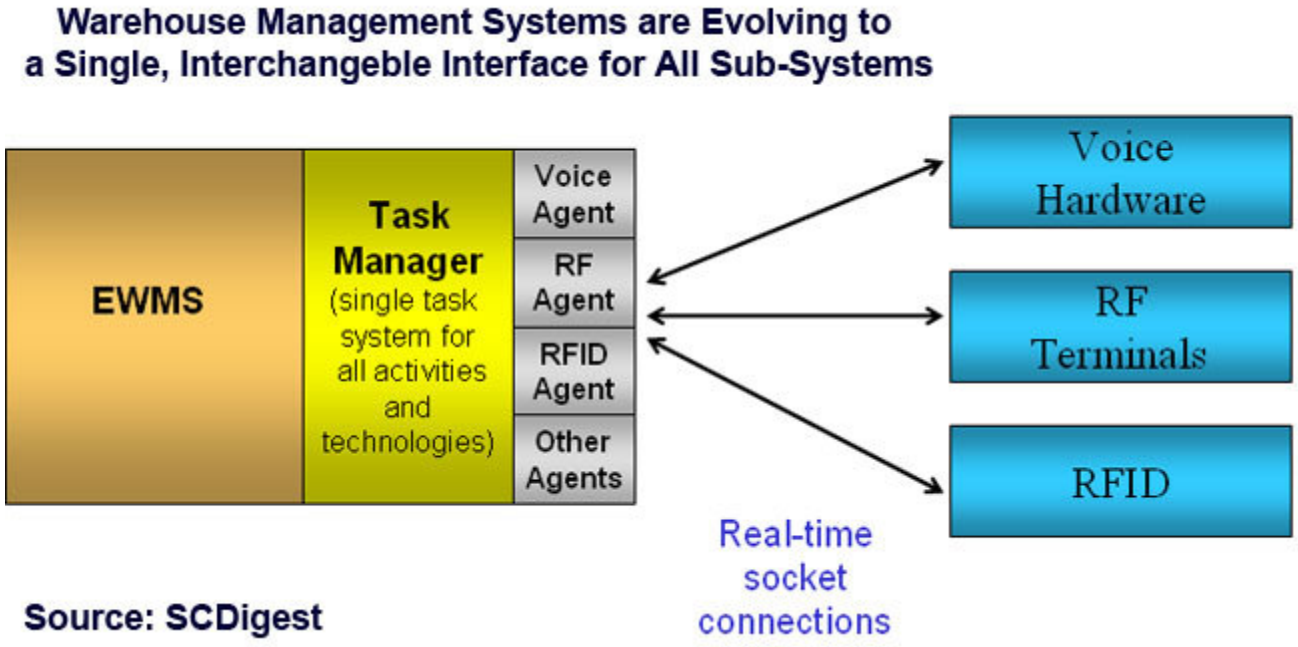
That means, for example, that the "task management" engine in the WMS, which controls the logic and communication of work assignments to the floor, would be agnostic to the underlying data collection technology, as shown in the graphic on the next page.

Gana Govind, president of supply chain execution software company **Softeon**, says that would mean an operator in the middle of a picking task should literally be able to put down a Radio Frequency Terminal, pick up a Voice terminal, sign on, and begin working .

Govind says many of his customers could do that today. While that may seem like an extreme example, there are some very practical applications for this kind of flexibility.

"Maybe your adding temporary labor, some of whom don't speak English well, and you don't want

As New Data Collection Technology Emerge, Warehouse Management Systems Begin to Change Integration Approach (Con't)



to add them to the voice picking process," he said. "Those workers could use traditional RF. Or you might need to move workers from one area of the DC to another for a period, and you don't have additional voice terminals available, but they do have RF devices. You could have some workers picking cases with voice and others with RF side by side to meet peak volumes."

Cliff Holste, Supply Chain Digest's Materials Handling Editor, says that kind of flexibility is also important to devising the right picking approach for different SKU groupings.

"Companies are also going to "multi-modal" in terms of having different picking strategies for different SKUs and areas of the DC," Holste said. "That will involve decisions about physical layout, storage modes, automation, etc., but also will require WMS support and potentially different data collection tools in each area. You would want maximum flexibility to not have to worry about whether the WMS can support the optimal data collection choice say when you reconfigure picking strategies based on changes to the business."