**From the Golden Zone**

# Which warehousing system is right for your business?

*By Curt Barry*

Many warehouses run quite well with order management systems (OMS) or enterprise resource planning (ERP) systems. So how do you decide if you need a warehouse management system (WMS) instead of an OMS or ERP system?

To answer the question objectively, you must analyze your business needs in terms of functional requirements. Then find software and vendors that provide the best fit for your company's current and future needs.

• **Flexible process options.** As a business becomes more multichannel-oriented, product assortment and order profile changes dramatically. Moving into e-commerce has a huge impact on the warehouse because e-commerce is characterized by small orders, different outbound transportation carriers, higher returns, and kitting of unique selections. This order profile is significantly different from the pallet or carton-oriented units most warehouses handle.

The warehouse system must provide a variety of methods to manage different parts of the operation. WMSs can provide these different processes based on a given warehouse, the required functions, warehouse zone, product differentiation, and order profile.

Distribution center managers are being asked to perform multiple tasks requiring a wide variety of flexible functionality. WMS software is separated from OMS and ERP by the flexibility to manage different tasks for different divisions of the business and apply the appropriate business rules and processes.

• **Receiving.** Receiving is where the warehouse processes begin. Effective, efficient, and accurate receiving sets the watermark for the rest of the warehouse.

Advance shipping notice (ASN) functionality is standard in WMS applications. ASNs let the receiving manager schedule staff and prepare for deliveries before the truck arrives. This knowledge will speed the receiving process and improve the flow of goods to putaway.

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Receiving is where specific item information is collected or verified to be used in the item master file for other warehouse functions. Some warehouses set restrictions that require key data to be available and in the file before the receiving process can continue. This forced file maintenance can be difficult to achieve in systems other than a WMS.

• **Picking options.** One key to efficient picking in multichannel businesses is using different picking methods. Because you have product with different cube and sell through, you want flexible

picking options. Picking options in WMS packages include single order, batch, wave, cross-dock, and dynamic hot pick.

Options such as voice picking and pick-to-light have also been successfully integrated with most WMS software. One benefit of WMSs is the ability to preview the volume of orders in the queue, giving you the option to select just the volume or type of orders that you want to process. Most systems push orders to the warehouse in batches or dynamically, whereas the WMS model allows the warehouse to direct order selection as needed.

• **Production/Assembly.** In businesses that require assembly or other production processes, you need to plan and track production orders. Most WMS applications provide the ability to track production tasks and manage component inventory as well as the final assembled products. These functions can range from simple kitting to complex multi-level bills of material.

If more complex assembly or production is needed, it will often be beyond the functionality of other systems. The ability to track component inventory, plan and track labor usage, and track work order status are key functions in most WMS applications.

• **Inventory management.** WMS applications offer advantages over most other systems performing basic inventory control for tracking inventory throughout the warehousing functions and processes. With radio frequency (RF) and the use of bar coded locations and product, the ability to dynamically move inventory from one location to another and the disposition of product in real time gives a more timely and accurate picture of your inventory.

Most order management systems and enterprise resource planning systems will support basic physical or cycle counting capabilities. However, more sophisticated cycle counting is supported only through a WMS.

• **Labor tracking.** Another area where WMS packages stand out from OMS and ERP applications is labor usage and tracking. If you can't measure individual performance, you can't give feedback on how well workers are performing. WMSs capture and measure staff performance and increase awareness of performance, leading to productivity increases of as much as 10 to 15 percent. WMSs can be an important part of an incentive pay program.

WMSs also let you perform task interleaving to increase productivity by combining multiple operations within a given aisle or zone. The ability to do task interleaving has obvious efficiencies and allows for better overall performance in the warehouse.

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