

WMS vs. Inventory Control

Do you really need a WMS system, or can you make do with the Inventory Control Module of your existing ERP system?

There is a growing trend for organizations, especially those with large warehouse facilities or that use logistics centers, to implement **warehouse management systems (WMS)** and not to rely on the built-in inventory control of their **ERP systems**. The question is “why?” What does a WMS system has that inventory control doesn’t?

The main difference in the systems is that **WMS** generates recommendations, whereas inventory control primarily registers transactions. In this way the **WMS** system itself can tell the users when to perform a certain inventory transaction in the correct amount, to the right location at the right time.

Optimization

WMS systems can help optimize the physical resources that are available to the logistic activities – in particular labor and storage space. In this way you save on labor costs, as well as maximize the space available to you, reducing the amount of space you require for the same volume of inventory. The following are some examples of how WMS optimization will improve performance:

- Recommend storage locations
 - Inventory can be managed without actually seeing the goods or the pallet, enabling storage to multi-level racks and/or depth (DOUBLE DEEP)
 - Dynamic storage allocation: there is no need to reserve a particular location for goods so you can maximize storage space for different types of inventory.
- Recommend routing for both picking and put-away tasks (put-away based on a particular logic as well as picking based on the shortest route and shortest time frame).
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- Ensure that inventory is available by inventory replenishment and efficient picking according to orders, inventory replenishment based on minimum and maximum inventory definitions, and inventory holding between warehouse tasks.
- Recommend palletizing and put-away based on the volume of goods and/or trucks.

Automation

WMS systems make extensive use of Data Collection Devices and Infrastructure such as mobile devices and bar codes, as opposed to manual data entry, thus improving existing work processes and minimizing human error.

Other advantages include:

- Shortening of data entry and verification on floor
- Elimination of manual data entry errors
- No reliance on personal knowledge or memory of warehouse personnel

Planning

WMS systems prepare work plans and schedules according to the parameters entered in the system. Once these work plans are reviewed and authorized by the manager, they can be passed on to the warehouse personnel. This enables planning and scheduling of resources without relying on human judgment.

In WMS systems there is an advanced scheduling mechanism and logic (as opposed to a report of open orders according to part, delivery date or customer, as is generally available in traditional ERP inventory control.) The planning mechanism of the WMS system consolidates processes, minimizing the work in the warehouse itself; creates picking tasks, including the splitting and consolidation of picks per order; and generates the most effective sequence for the picking process.

Management, Control and Performance Indicators

Planning, management and control of what is happening on the warehouse floor are all possible with WMS, while maintaining a day-to-day work load and schedule as well addressing unplanned activities which require an immediate solution.



WMS systems provide full transparency of the warehouse operation, from the highest level down to the performance of individual warehouse personnel. Multi-dimensional performance analysis can be done from the individual level to the activity of the warehouse as a whole, covering tasks carried out, output of pickers, expected intensity of work, planning vs. performance, etc. Using the reporting tools, you can measure the information against performance indicators that are defined in advance (for example, productivity of each warehouse worker), and even introduce incentives to the work place, such as salary bonuses based on results.

ts production/assembly quantities.