Dynamics Advanced Warehouse Management
for Microsoft Dynamics 365 Supply Chain Management
Content

1. Introduction 4
2. Dashboards & Added Value 5
3. Warehouse Processes 7
4. Picking Route Optimization & Clustering 9
5. Analyze the Past & Forecast the Future 10
A clear overview of *Open Work* and *Estimated Time To Complete*!
Dynamics Advanced Warehouse Management empowers you to gain a competitive advantage in logistics and to harvest from the Warehouse Management (WHS) module of Dynamics 365 Supply Chain Management.

Though the standard WHS module is very flexible in nature, it is still a challenge to depict processes regarded as common logistical practice. Examples are smart put-away locations, paperless cluster picking and optimal flow through the packing station.

A genuine challenge arises when trying to obtain a real-time overview of total aggregated open picking work or answer a question like: can we complete the whole order in time to meet the shipment deadline?

Dynamics Advanced Warehouse Management adds crucial business logic and reflects experience and best practices from industrial engineering and management perspective. It is packed with extensive functionality for warehouse process planning, execution, monitoring, analysis, and logistical decision support.

**Benefits**

- Overview of open work and estimated time to complete
- Smart put away strategy for optimal replenishment
- Advanced, smart paperless cluster picking
- Significantly reduce picking costs by 10-20% by picking list route optimization algorithms
- Full shipping label print support on the packing station
- Logistical ABC calculation
- Required worker capacity in the coming weeks
- Pallet space calculation, forecast and ABC optimization
Dashboards
Logistics is all about priorities. A real-time insight on the amount of actual and expected work in a warehouse is crucial for planning and prioritization of tasks. The warehouse dashboard visualizes the open lines, hours and areas without current worker activity. Per wave, the estimated completion time is displayed and the warehouse manager can monitor at one glance that all shipments will be loaded in the truck on time. On a wall-mounted screen, the current worker activity, the amount of work per work class or zone can be shown.

Value-added logistics
Adding value to your shipments is often a matter of getting the right information to the picking employee. Advanced Warehouse Management presents customer specific or order line specific text lines on a mobile device. This enables the warehouse worker to add a specific manual or to pay extra attention to certain aspects of the product. Also, purchase order line texts and RMA texts can be displayed on the mobile device, for example, to indicate the characteristics of the product to be inspected, or the reason why a product is returned.

Which cost is permitted to execute value-added logistics (VAL)? When the sales department commits to adding customer-specific labeling to the products, how can you keep track of the cost of this extra activity? Assign specified work classes to the VAL activities and Dynamics Advanced Warehouse Management provides an accurate overview of the total cost per product and per customer.
“The dashboard gives us a perfect overview. Driving distances are reduced because bulk storage advice is optimal near to the picking location”

André Nieuwenhuis | Logistical Coordinator | Jarola/Wildkamp
Smart inbound, storage and replenishment

Easy replenishment starts with bulk storage near the fixed pick location, especially for those items with a high cubic velocity. Advanced Warehouse Management can find the nearest suitable location automatically. The travel distances through the warehouse aisles are not longer than necessary.

Dynamic replenishment is added to replenish to empty locations and avoid the timing issues of too early replenishing (items do not fit on location), or too late replenishment (picker has to wait) that could burden the operation. The dynamic replenishment can be triggered by the execution of an outbound wave.

Assign optimal locations based on ABC classes

ABC classification based on logistical number of hits can be executed periodically and can be used as criteria in the location directives for finding the best storage strategy and optimal picking locations. E.g. the small, low weight high-frequency items should be stored in drawers close the to packing station, and the best storage place for heavy, low-frequency items is in the back of the warehouse at floor level.
Academic and field studies report that 60% or more of the logistical costs in a warehouse tend to be picking related.

Dynamics Advanced Warehouse Management reduces traveling distance in a warehouse by applying two heuristics that determine an alternative pick sequence: Largest gap and Aisle by Aisle. The best alternative is selected automatically. Depending on the situation, savings up to 10-20% of picking time is possible.

Cluster picking can boost the picking performance considerably. In standard WHS, the worker on the floor could view the pile of printed picking lists, and cluster a couple of picking lists on the mobile device. Dynamics Advanced Warehouse Management offers a smart solution on PC: detect best cluster candidates, create optimal clusters, and auto-assign the clusters to the workers.
Delivery performance vs transport costs

Every warehouse manager wants to avoid unnecessary transport costs caused by back-order shipments. At the same time, DIFOT (deliver order in full on time) is one of the most relevant KPI’s. Advanced warehouse management offers several release strategies to prioritize open backorder shipments or try to maximize the DIFOT score.
In Microsoft Dynamics 365 Supply Chain Management, the Warehouse management module collects a lot of data like estimated and actual time per work line. Unfortunately, this information is not easy to analyze using standard screens, and the displayed data is also not combined with other data sources such as master planning or ABC frequency.

Dynamics Advanced Warehouse Management goes beyond these limitations and combines the fore mentioned standard data with:

- Advanced logistical ABC analysis
- Inventory days (inventory turnover)
- Average cost per warehouse activity
- Planned transactions from master planning
- Average inbound and outbound capacity in the warehouse

The data relevant for the warehouse manager is visualized in Power BI within a new Microsoft Dynamics 365 work space. Now you are able to analyze the history of receiving and picking:

- Worker productivity in the course of time
- Trends in processed picking lines
- Logistical cost per customer
- Receiving issues per vendor
- Picking exceptions per item, per worker
- Benchmarking KPIs
Based on future sales orders and sales forecast, you can view: the forecasted inbound and outbound activity or the required pallet space in the coming weeks or months, slow movers on fast moving locations, fast movers or high cubic velocity items on slow moving locations or inventory days (logistical turnover) per item.

**Prerequisite**
Microsoft Dynamics 365 Supply Chain Management.
Our Dynamics Apps are sold, implemented and supported worldwide by our industry experts and strategic partners. We are happy to advise you which solution or technology is the best fit for your specific needs. Please feel free to contact us. We appreciate your interest!

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