



Streamlined Operations with Warehouse Management Systems

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In Which, Operations Are Streamlined with Warehouse Management Systems

Today we discuss Acumatica Distribution Edition, specifically the Warehouse Management System (WMS) portion of it and the typical benefits one can gain by implementing it. In my 20+ years of deploying WMS software, Acumatica hands down has the best out of the box warehousing module, but Acumatica ISV partners take it to the next level with specific products tailored to enhance the Acumatica experience and bring corner case functionality directly into the ERP solution.

The typical Distribution implementation covers order fulfillment processes like Pick, Pack and Ship. Hands free operations via preprinted scan sheets allow use of handheld scanners. Typical interactions are coded into the barcodes allowing for most commands (completing shipments, transferring between boxes, and removing items) to be used with the scanner. Integration with primary carriers like UPS, USPS and FedEx are available out of the box as well as with digital scales and packing labels. With device hub enabled printing to mobile printers for shipment labels, box barcodes and part labels are also convenient. Customizable notifications make it easy to update customers thru each phase of order completion. Customizable forms support pick list with serial numbers and lots, packing lists and Proforma invoices for customs filings. Set up automatic tracking on outbound packages and no before your customers when shipments are delayed. Ensure correct package sizes with calculated Volumes and Weights.

On the receiving and stocking side of the house. Acumatica supports multiple locations per part per warehouse and integrations with Inventory Management shows in stock and out of stock items across multiple warehouse facilities. Tailor made workflows enable mobile devices and scanners to perform repetitive tasks such as receiving, counting, picking and shipping. Audible and visual warnings ensure the correct part with the correct quantity is processed.

But all of this information is directly available from Acumatica's Data Sheet downloadable at the link <https://www.acumatica.com/cloud-erp-software/distribution-management/warehouse-management-system/>. The primary goal of any distribution center is to get the right part to the right customer at the right time lets see how Acumatica can help.

Inventory Management

The ideal WMS system makes tracking inventory faster, easier for the end user, and more efficient. Utilizing scanners and barcodes at the point of interaction with the bin the typical warehouse improves to a 99% accuracy rate. Every trip to the bin to count, pick, stock or return a part is a chance for error, that means the most popular products in the warehouse have the greatest probability for errors. There is a reason that Fed Ex, UPS and even USPS utilize scanning technology. Barcodes produce one error in three million scans. Coupled with lasers and QR technology that rate drops to one in 70 million entries. Every reduction in error means better visibility into having the correct part in stock either for the Sales to sell or the Purchasing department to replenish. Having that accuracy at the bin contact means that inventory is not only more accurate but also more accurate in near real time. Barcode systems typically

have a six to eighteen-month ROI. This comes from an improved labor efficiency, improved inventory efficiency, and tracking employee performance and utilization to focus the right people on the right tasks. One Logistics distribution center I worked with reported 10% improvement in efficiency and an 11.3% reduction in labor costs simply by effectively measuring performance and using the employees

Warehouse Space Utilization

Now that we know the reality of what is in stock let's talk about some other ways' WMS can help improve distribution.

Land costs are the second highest contributor to warehousing cost after labor. Storing parts efficiently per square foot with the highest moving parts nearest to operations is key. Therefore, being able to identify fast moving parts for slotting and re-slotting is also key. Acumatica's built reporting engine makes creating dashboards, metrics, and even customizing reports to identify inventory turnover groups can all improve the warehouses utilization. Movement classes and ABC codes calculated by the system further insure the high use parts are counted more frequently and located in the most efficient manner.

For example, I designate rows one to five of my racking for fast moving part type A, six to ten for fast moving part type B, ten to twenty for C, and the rest for D. Base my movement types on inventory turns and set up a scheduled job to run nightly, weekly or monthly analyzing movement changes. Have my purchase receipt document with the bin location check the current movement type vs. the location that movement type is in and flag any discrepancy. When the next part arrives on dock the receiving team is alerted that the part should be re-slotted higher or lower in the row numbering.

Furthermore, using the same simple modification of the receipt document we could have it check for back-ordered items and implement a cross-docking system where sales orders for out of stock components are identified and sent immediately to the picking process without having to be routed into our bin locations. They are immediately processed for shipment reducing labor costs and customer wait times.

Simple bin location reports when coupled with volume and weight by part number can also ensure that the next received component will fit in the bin location allocated or show where racking should be reconfigured to accommodate changes in stocking levels. For the more sophisticated warehouses full Warehouse Utilization Optimization add-ons are available from ISV partners.

Warehouse Measures

We touched on the built-in reporting engine, dashboards and metrics briefly above, but I can't stress how easy it is to create, update and modify reporting with Acumatica. The old adage of measure what matters is truly supported in this system. Focusing on measuring what is important to the customers and stock holders will ensure that your continuous improvement activities are headed in the right direction. The goal is to have happy and productive employees. When managers fail to create an environment of open and clear communication, worker throughput suffers resulting in higher turnover and waster

employee training. Consider a daily or weekly stand up meeting to focus the team on priorities and keep everyone on the same page as to departmental performance, KPIs and issues. Acumatica can help with this by displaying real-time performance numbers via a Dashboard. Remove or revamp any metrics that don't reflect reality or that are outdated with the current teams' priorities.

Some benchmark reports for warehouses include Inventory accuracy, Shipment Audit Error rates, customer complaints, on-time vs. missed or late shipments, Cross-dock items due in, cost per line (receiving, picking, shipping etc.), cycle time (receiving, put away, shipping, picking), storage utilization (volume per sq. foot), storage productivity (percent of inventory vs operations), inventory turnover, inventory to sales ratios, inventory carrying costs, Order Lead time, Flawless Order Completion rate, Out of stock or Back-order rate, first time fulfillment rates, Return to Sales ratio, and a reason for returns pareto (damaged, incorrect items, incorrect qty).

Standardization of processes and having a strong training program are also supported by the Acumatica built in help and enhanced by updating the Wikis with your company specific information. Both of which are important to keeping employees and replacing employees due to turnover.

Shipment Management

Integration with carriers FedEx, UPS and USPS is built right in. Many tier two carriers can be integrated with readily available customizations, and tier three LTL carriers are available from several ISV providers including standard VICS bills of lading.

Hidden costs abound in the shipment process. Uncalibrated or dirty scales can throw off weights causing excessive freight charges. Over and under packaging can cost in damage and time delays. With Acumatica's suggested packing mode, the system can recommend packaging, automate the printing of carrier labels and even identify specific packaging for special items. Shipping hazardous goods and need a specific box type? Overweight items requiring a crate or pallet?

With EDI solutions connect to third party systems to create ASN, advanced shipper notices, listing items in each box for customs or brokers. Transmit emails for crate orders to a third-party manufacturer when the order drops or to schedule a pick up from a carrier. Keep the customer up to date on progress with email notifications, or even texts via a Twilio customization.

I have stuck to the Acumatica Core Distribution WMS in this article only occasionally mentioning ISV native applications or connections. If an industry corner case wasn't mentioned than I strongly recommend taking a look at

<https://www.acumatica.com/extensions/?search=&selectCategory=inventory&selectSubCategory=&selectType=&selectCertification=>.