

enVista services

Managing the Supply Chain with Microsoft Dynamics® AX



Microsoft Dynamics® AX includes broad supply chain functionality that allows businesses to manage warehouse operations, transportation and logistics, and demand forecasting.

Traditionally, enterprise resource planning (ERP) systems have been considered the primary tool used by businesses for managing financial information, manufacturing operations and inventory. Beyond that, most businesses rely on separate systems for the more specific supply chain functions, such as warehouse management systems (WMS), transportation management systems (TMS) or demand forecasting applications. However, the cost and time associated with tier-one supply chain solutions and resulting implementation requirements prevent these from being viable solutions for some companies. The good news is that advanced supply chain functionality is now available in Microsoft Dynamics® AX (Dynamics AX), enabling mid-market companies to leverage an all-in-one ERP system that offers sufficient supply chain management functionality in addition to its core ERP features.

Dynamics AX is the ideal supply chain management and ERP solution for mid-market companies looking for integrated technology that is often included as an add-on or third party module in addition to an ERP system. Dynamics AX includes broad, out-of-the-box supply chain functionality that allows businesses to manage warehouse operations, transportation and logistics and demand forecasting. To extend the value of Dynamics AX, enVista has developed several enhancements that allow companies to integrate a wide variety of third party systems, such as an

existing WMS, TMS, electronic data interchange (EDI) or e-commerce solutions.

Supply Chain Management Features in Dynamics AX

1. Warehouse Management:

The warehouse management module within Dynamics AX helps organizations provide flexibility and choice to customers. The automation of warehouse processes helps reduce operational costs, which can result in lower prices for customers. Warehouse managers gain the visibility and ability to effectively control and run put away, quality control and picking within warehouse operations.

An immediate and obvious benefit of using the inherent WMS functionality within Dynamics AX is that users can access a single source for all business data. There are three additional primary benefits of using Microsoft's integrated WMS within Dynamics AX:

- **Provide customers with choice and flexibility of delivery with agile inbound and outbound processes.** With Dynamics AX, businesses are now able to meet customer demands and fulfill outbound orders more efficiently using advanced

picking strategies. For inbound goods, users can now leverage advanced put away strategies. The advanced picking and put away strategies help to improve the tracking and tracing of goods with serial number registration and batch number support, all based on the expiration date. The Dynamics AX WMS also offers support for various other warehouse functions, such as wave picking and processing, task interleaving, cross-docking and pick/pack.

- **Lower inventory costs and improved turnover with advanced inventory allocation.** Having real-time visibility into inventory is critically important for supply chain managers. The warehouse management module provides users an accurate view of inventory with multiple cycle counting strategies, including threshold cycle counting for picking, cycle counting plans, zero quantity on hand cycle counting and ad-hoc cycle counting using filtering. Additional features for managing inventory include: inventory replenishment based on picking, min/max and transportation load-based replenishment, and segregation of inventory based on inventory status (e.g., quarantine).
- **Increase the quality of material handling with radio frequency (RF) support.** The Dynamics AX WMS supports handheld device capability out of the box, which gives warehouse workers scanning precision and enhanced performance in picking and put away processes utilizing browser-based mobile handheld RF devices. Mobile handheld device menus can be altered from within Dynamics AX, including the creation of new menus for each user or user groups, menu layout and colors, and error logs and actions.

2. Transportation Management:

Transportation management in Dynamics AX introduces global enterprise transportation planning and execution capabilities. Manufacturing, distribution and retail companies benefit from a TMS with flexibility that supports changing and growing business demands related to transportation planning, freight rate shopping, route management and automated and manual

freight reconciliation. Additional benefits of the Dynamics AX TMS include the ability to:

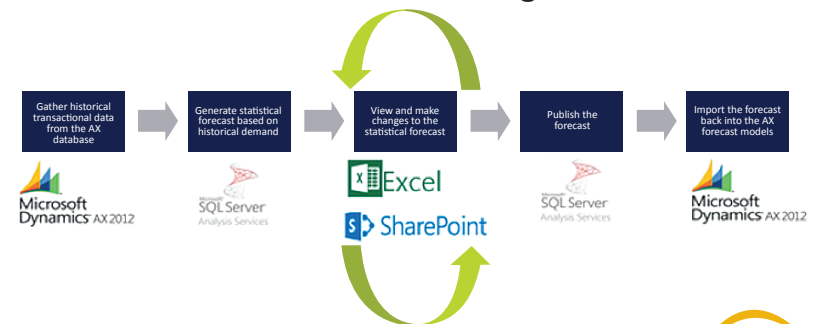
- Manage inbound/outbound shipments
- Consolidate shipments
- Schedule and manage driver appointments
- Shop freight rates based on customer constraints, fuel charges or toll charges

3. Demand Forecasting:

Dynamics AX Demand Forecasting is an agile, yet powerful tool that lets users predict demand based on historical data, adjust the predicted demand, and import the values into Dynamics AX forecast models. The tool was developed with manufacturers in mind and is therefore best suited for companies that operate within that industry. Demand forecasting provides high return on investment in a short time by taking advantage of familiar Microsoft technology. To generate the baseline forecast, Dynamics AX users can rely on the power of Microsoft SQL Server Analysis Services. To visualize the forecast, adjust the forecast, and view or create new key performance indicators, system users can leverage the extensive functionality of Microsoft Excel.

Because demand forecasting is fully integrated with Dynamics AX, there is no need for data migration and integration as long as historical transactions remain in the AX database.

Demand Forecasting Flow



“For mid-market companies looking to integrate supply chain management capabilities with ERP, Dynamics AX is the complete package and a robust alternative to integrating multiple, independent systems.”

Contact us today to learn more.



Dynamics AX users can utilize demand forecasting to predict both independent demand (from sales orders) and dependent demand (at any customer order decoupling point). Additional key features of Dynamics AX Demand Forecasting include:

- Ability to generate a statistical baseline forecast based on historical data (forecast is expressed in quantity only)
- A dynamic set of forecast dimensions
- Functionality for visualizing demand trends and adjusting the demand forecast
- Capability for removing outliers
- Ability to track the forecast accuracy with KPIs

4. Third Party Systems and Additional AX Enhancements

In some instances, Dynamics AX users might have an existing supply chain system that needs to be integrated with Dynamics AX. For these types of scenarios, enVista has developed a proprietary integration tool (called Enhanced Integration Framework, or EIF), which allows third party systems to natively integrate with Dynamics AX. EIF supports a multitude of third party systems and enVista has developed integrations for the following third party systems:

- Warehouse Management (e.g., Manhattan Associates' SCALE or HighJump WMS)
- Transportation Management (MercuryGate)
- Labor Management (enVista's LMS solution, enCompass)
- EDI (enVista's Trading Partner Management solution)
- e-commerce/Online Stores (Magento)
- Payroll Services
- Voice Picking and Pick to Light systems (Honeywell Vocollect, Lightning Pick)

The Ideal ERP and Supply Chain Management Solution

For mid-market companies looking to integrate supply chain management capabilities with ERP, Dynamics AX is the complete package and a robust alternative to integrating multiple, independent systems. Business decision makers realize immediate benefits from accessing a single source for data pertaining to financials, inventory and warehouse and transportation operations.

If your organization is considering Microsoft Dynamics AX as its ERP system of choice, an objective technology assessment and strategic IT roadmap are vital tools to determine whether the out-of-the-box supply chain management functionality in Dynamics AX will meet your business needs. From a financial investment perspective, Dynamics AX will help companies in need of supply chain management capabilities leverage a single ERP system to lower the total-cost-to-ownership, while also eliminating the need for additional third party supply chain management solutions.