



# STEPLogic Warehouse Case Study

## How One Nonprofit Built a Custom WMS

ASSET STEM Education is a distributor of professional development to educators specializing in the kitting, delivery and management of hands-on curricula and leased supplies. Operating out of a 20,000 square foot facility, the company's 3,000 SKUs include equipment and consumables for science, technology, engineering and math (STEM) lessons. SKUs are assembled into at least 100 different modules, with 12 lessons in each unit.

### The need for a better way

Reverse logistics and quality control are essential to the ASSET's inventory management process. Returned kits are often received with missing, damaged or extraneous items. Previously, the system assumed that returned kits contained all components and could be used again. However, that was rarely the case and associates were often forced to "borrow" materials from one unit in order to complete another. Therefore, an accurate inventory count was impossible, causing losses in efficiencies and revenue.

The company needed to improve on

their less than 75% accuracy on inventory management and better track the deployment of goods through their life cycle. As a nonprofit

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**"Item level has been tremendous improvement to inventory," ASSET executive director, said. "One of the most important things was that the supplier always listened to the staff as they were developing. They never just gave us something and said, 'use this.' It was what we asked for and they checked at every step of the way."**

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dedicated to education, they needed a system that would fit into their unique business processes rather than having to adapt to systems on the market.

### Building STEPLogic Warehouse

ASSET called on DMLogic to develop essentially a "full-featured" WMS using STEPLogic, an apps based software development platform. The STEPLogic system is a suite of apps that works with the existing ASSET system to provide item-level tracking and management of workflows in returns, picking and packing. Instead of a large, complex single system, the ASSET approach resulted in

**STEPLogic Warehouse**, a WMS comprised of a series of personalized, integrated apps that can be maintained and changed easily and with far less investment.

By building a custom WMS, DMLogic created apps that could be applied at any time in the operation. From receiving and managing returns with tools for disposition, directed putaway using customer mapping, management of allocation of orders for fulfillment, wave management, multiple picking methods, packing and quality control and efficient shipping methods.

Additionally, since ASSET already was using an inventory system, APIs were created for optimal integration of the two systems supporting inventory management, supporting cycle and startup counts and analyzing inventory levels to determine allocation at kit, sub-assembly or component level. It was also required that the new system supported RF and mobile devices for picking, putaway and cycle counting.

### Improving Efficiencies

Using **STEPLogic Warehouse** ASSET



automating the delivery of kits.

When orders are released to the floor, the system creates a unique license plate for specific totes, each representing a module or portion thereof. One person can now pick to six totes at the same time,

is now able to implement user-set rules and location selection strategies that allow for selecting a series of locations. The company was able to implement configurable rules for directed putaway and sequential picking by location. Additionally, the system also has added advanced features like cluster-picking and planned post-picking tasks to assist in wave releasing and further

instead of six people picking to one module each. Last year the company shipped about 10,000 totes containing a total of 3.6 million eaches.

Further efficiencies showed reduced space needed for materials. The company reduced their warehouse space by 10,000 square feet while bringing materials stored off-site

back in-house. After reconfiguring the warehouse to store components instead of pallets of totes, it went from 1,000 linear feet of storage to 4,000 linear feet without breaking a wall.

With **STEPLogic Warehouse**, ASSET is able to create systemic strategies to drive efficiencies. Go live of the new system resulted in no downtime. The company executed the changeover to the new apps, while working to add all inventory to the system with no interruption. Using **STEPLogic Warehouse**, ASSET now has full control of their warehouse operations and inventory and is immediately realizing significant cost savings.

### About DMLogic

DMLogic designs, installs and supports systems to manage the inventory and warehousing of a wide range of products. From prescription drugs to auto parts, DMLogic creates a flawless flow of identification, sorting, tracking, packing, shipping and validating. The DMLogic team of seasoned consultants, supply chain professionals and system designers represents a half century of experience in inventory management. DMLogic excels at everything inside the four walls of the warehouse from process design to MHE to Warehouse Management Systems, having created more than 200 WMS solutions alone at companies large and small. DMLogic has worked with the world's leading pharmaceutical manufacturers and distributors to provide rigorous and unparalleled validation of their inventory systems. DMLogic's solutions can be found in 15 countries and more than 27 companies. For more information, visit [www.dmlogicllc.com](http://www.dmlogicllc.com)

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