



NUCLEUS
RESEARCH

ROI Case Study: Savant WMS at an International industrial parts distributor

ROI: 204%
Payback: 6.0 Months

ANALYST

Charles A. Brennan

The Bottom Line

This international industrial parts distributor achieved an ROI of 204 percent with a payback period of 6.0 months after modernizing its warehouse management processes through the implementation of Savant WMS. The implementation drove a \$405,000 annual avoidance of headcount costs through more efficient warehouse processes that maximized existing headcount productivity, \$63,784.72 in annual time savings for warehouse managers from automated order waving and batching functionality. It reduced WMS software costs by \$24,000 over a three-year period. Additional benefits include enhanced supply chain management and improved employee morale. Nucleus typically found that customers realize more value when leveraging a WMS with native connectivity to ERP, as it ensures seamless data flow, reduces integration complexities, and minimizes disruptions during ERP upgrades. In the distributor's case, Savant's strong integration with Acumatica ERP was key in maintaining system stability while optimizing warehouse efficiency and cost savings.

The Company

This International industrial parts distributor provides tools and equipment for automotive, industrial manufacturing, agricultural, and marine organizations. The organization distributes products across Canada to retailers and resellers through three distribution centers nationwide. The vendor provides products such as air system components, automatic brake adjusters, axels, drivetrain parts, engine accessories, fenders and flaps, seals and bearings, tanker parts, tire chains, water pumps, and wire and cables to customers. The organization generates around \$25M in revenue and employs approximately 40 individuals.

The organization avoided \$405,000 in additional headcount costs annually by improving warehouse efficiency with Savant WMS.

The Challenges

Before the parts distributors deployed Savant WMS, the organization relied on a partially implemented WMS that only handled receiving, while all other warehouse processes were performed manually. This led to significant inefficiencies, including inventory inaccuracies and frequent errors in picking and packing. Training new employees was also challenging; they had to learn complex localization requirements without system-driven guidance. The lack of ERP integration resulted in invoice discrepancies, forcing the company to rely heavily on manual data entry, introducing additional errors and delays. The organization needed a WMS to automate processes beyond receiving, reduce dependency on manual workflows, and support batch processing to streamline operations and improve efficiency.

Savant WMS reduced software costs by \$24,000 over three years while expanding system functionality.

The Strategy

To overhaul its manual warehouse operations and address key inefficiencies, The organization sought a WMS solution that seamlessly integrates with its Acumatica ERP, supports batch processing, and automates invoice handling. Additionally, the company required core WMS functionalities such as optimized pick-and-pack recommendations based on product locations, localization support, and full receiving capabilities within the system. Given these requirements, the distributor evaluated multiple vendors, including Acumatica's native WMS, Savant, and Körber. However, Acumatica's WMS was still in its early stages, lacking the depth of functionality and customization needed, while Körber presented integration challenges with Acumatica at the time.

Selecting a WMS with strong ERP integration reduces IT overhead and simplifies system updates.

Ultimately, the organization selected Savant WMS due to its established partnership with Acumatica, strong customization capabilities, and

product aligned with its operational needs. During vendor discussions, Savant's consultants demonstrated a deep understanding of the distributor's business processes and how to translate those requirements into WMS functionality. The company also valued Savant's personalized approach, as those pitching the solution were directly involved in implementation, ensuring continuity and a clear understanding of project goals. Implementation was carried out in two phases: the initial deployment took approximately eight months, going live in November 2018, followed by a second implementation after a business merger, which was completed in six months. By 2021, the organization had fully transitioned to Savant WMS.

Automating order waving and batching saved 15 hours per week per warehouse manager, totaling 780 hours annually per manager.

Primary Benefits

The implementation of Savant WMS delivered multiple benefits, including efficiency gains, reduced software costs, enhanced supply chain management, and improved employee morale.

Increased operational efficiency

Savant WMS reduced manual workloads at the organization, particularly in order processing, leading to measurable cost savings and productivity improvements. Before implementation, each warehouse manager across three distribution centers spent two to four hours per day manually handling order waving and batching. With Savant's auto-waving and batching functionality, these tasks are fully automated, saving 15 hours per week per warehouse manager or 780 hours annually per manager. At an hourly rate of \$45.43 per hour, this efficiency translated into \$63,784.72 in annual savings, allowing warehouse managers to focus more on strategic initiatives.

Beyond order processing, Savant optimized replenishment, putaway, and returns management, enabling the organization to scale operations without adding extra staff. Without Savant, the company would have needed six additional warehouse associates and two analysts to support growth. The automated replenishment system ensures products are staged before order waves, reducing unnecessary forklift movements and improving safety. Savant's cart putaway functionality directs employees to the next item in the picking sequence, minimizing unnecessary travel. Additionally, automated returns processing transformed a previously manual, multi-step workflow into an efficient system, allowing returns to be handled like standard orders. These efficiency gains allowed the distributor to avoid \$405,000 in additional headcount costs.

Reduced software costs

Switching to Savant saved the organization \$24,000 on software costs over three years while giving them more functionality. Their previous WMS was only used for receiving, and under a SaaS model, it would have been 25 percent more expensive than Savant. By making the switch, the distributor spent less on software and gained access to a full WMS product that improved efficiency across warehouse operations.

Enhanced supply chain management

Savant WMS provided the organization with greater control over its supply chain by improving inventory accuracy and order fulfillment processes. With more precise tracking of on-shelf inventory, the company significantly reduced placement errors, ensuring that stock was always where it needed to be. This accuracy helped streamline warehouse operations and minimize disruptions caused by miscounted or misplaced items. Additionally, Savant's integration with Acumatica ERP enabled the distributor to batch multiple sales orders together, optimizing shipments and reducing the likelihood of shipping errors. These enhancements allowed smoother supply chain operations, improving order accuracy and warehouse efficiency.

Improved employee morale

Savant WMS helped boost morale by eliminating tedious manual warehouse tasks, allowing employees to focus on more meaningful work. Administrative staff, who previously spent hours daily on repetitive processes, saw a major improvement in their daily workload. With better accuracy and smoother workflows, frustration levels dropped, and the team became more productive. The organization also shared some cost savings with employees through bonuses and improved benefits, further increasing job satisfaction. As a result, turnover rates remained low, helping the company avoid the time and expense of constantly replacing employees.

Key Cost Areas

The largest cost associated with the distributor's deployment was the subscription fee for Savant WMS. Additional expenses included \$25,000 in pre-implementation service costs, \$150,000 in personnel costs for executing the deployment, and ongoing consulting fees of \$10,000 per year to support continued optimization and system improvements.

By eliminating tedious manual tasks and improving workflows, Savant WMS boosted employee morale, reduced frustration, and helped the distributor maintain low turnover rates.

Lessons Learned

One of the key takeaways from the organization's WMS implementation was the importance of detailed process design before deployment. A clearly defined WMS workflow and input from subject matter experts ensured that all operational needs were addressed. Additionally, rigorous testing in a sandbox environment was critical to identifying potential issues before going live. The distributor validated system performance under actual operational conditions by stress-testing "a day in the life" scenarios, preventing disruptions, and ensuring a smooth transition.

Another major lesson was the value of working with a mid-sized software vendor with strong ERP partnerships. Partnering with a vendor like Savant, which had an established integration with Acumatica ERP, made system updates and maintenance much more manageable. Because of this seamless connection, ERP upgrades did not require additional work to maintain WMS compatibility. Overall, the organization found that choosing the right vendor, testing thoroughly, and having a well-defined implementation plan were critical to a successful WMS deployment.

Calculating the ROI

Nucleus Research analyzed the costs of software, hardware, personnel, professional services, and user training over three years to quantify the organization's total investment in Savant WMS.

Direct benefits quantified included eliminating software costs associated with the organization's prior WMS solution and avoiding headcount costs.

Indirect benefits include improved employee morale, enhanced supply chain management, and time savings from automated processes for the organization's employees. Time savings are multiplied by a correction factor and an hourly rate for warehouse managers (of \$45.43 per hour) to account for the inefficient transfer of time between time saved and additional time spent working.

A clearly defined WMS process before implementation helped align system capabilities with business needs.

Thorough pre-implementation testing ensured a smooth transition and minimized disruptions during deployment.

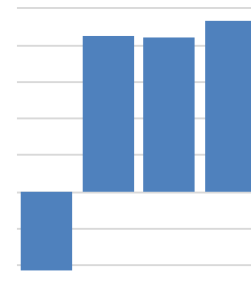
Detailed Analysis

Benefits	Pre-start	Year 1	Year 2	Year 3
Direct	0	415,000	413,000	411,000
Indirect	0	63,784	63,784	63,784
Total	0	478,784	476,784	474,784

Time to Value
6.0 Months

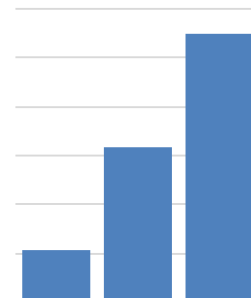
Costs	Pre-start	Year 1	Year 2	Year 3
Software	40,000	42,000	44,000	0
Hardware	0	0	0	0
Consulting	25,000	10,000	10,000	10,000
Personnel	150,000	0	0	0
Training	0	0	0	0
Other	0	0	0	0
Total	215,000	52,000	54,000	10,000

Net Cash Flows



Net Benefit	Pre-start	Year 1	Year 2	Year 3
Net	(215,000)	426,784	422,784	464,784
Cumulative	(215,000)	211,784	634,567	1,099,351

Cumulative Benefit



Financial Calculations

Annual ROI	204%
Payback (months)	6.0
Benefit to cost ratio	4.3 : 1
Net Present Value (NPV)	512,898
Average Annual Cost of Ownership	110,333
Average Annual Benefit	476,784
3-Year IRR	191%

In the first three years
the project returns 4.3
for every 1 invested.