



NUCLEUS
RESEARCH

WMS Technology Value Matrix 2025

ANALYST

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The Bottom Line

In 2025, warehouse management technology is advancing from process execution to intelligent orchestration as organizations navigate rising costs, labor shortages, and global trade instability. Nucleus found that companies are increasingly investing in modern WMS platforms to improve visibility, labor efficiency, and automation value across their operations. Adoption continues to rise across industries such as third-party logistics, consumer goods, and food and beverage as cloud delivery, modular deployment, and lower implementation costs make modernization achievable for more organizations. Vendors are responding by embedding predictive labor planning, AI-driven reporting, and orchestration capabilities that synchronize human, robotic, and system workflows. They are also expanding through strategic partnerships and acquisitions to strengthen automation, sustainability, and logistics integration. Together, these advancements mark a shift toward connected, data-driven warehouse ecosystems that deliver measurable productivity, adaptability, and resilience throughout the supply chain.

Market Overview

The warehouse management market in 2025 reflects both maturity and transformation. Persistent cost pressures, trade instability, and evolving customer expectations are reshaping operational priorities. Companies are managing smaller, more frequent orders while absorbing higher labor and transportation expenses. Tariffs, reshoring efforts, and regional disruptions have also pushed many to hold larger inventory buffers or explore bonded warehouse options to manage duty exposure. As a result, the warehouse has become a critical node of supply chain resilience, connecting sourcing, production, and last-mile delivery in real time.

Labor shortages remain a leading constraint. Years of automation investment have not consistently delivered the expected productivity or cost improvements, particularly where processes and data remain fragmented. Organizations now want solutions that help them understand and optimize workforce performance, balance labor resources, and verify the true return from automation investments. This has driven growing demand for embedded workforce management functionality within warehouse systems, providing predictive labor forecasting, productivity tracking, and intelligent scheduling to address variability across shifts and sites.

Adoption of modern warehouse management tools continues to rise. Third-party logistics providers remain the most advanced adopters, but Nucleus has found that a growing number of consumer goods and food and beverage organizations are investing in modern WMS platforms as they modernize their supply chain operations.

In response to these operational challenges, vendors are concentrating innovation around three key priorities: labor productivity, automation integration, and intelligent decision support. Workforce management capabilities are now integrated directly within WMS platforms to help organizations better predict, plan, and measure labor performance. Automation and robotics connectivity has also accelerated, as orchestration layers unify warehouse management, execution, and control systems. This vendor-agnostic approach allows human and robotic workflows to function together, reducing idle time and improving equipment utilization. Robotics-as-a-Service models have further increased accessibility by lowering upfront capital costs.

The warehouse has evolved from a storage node into a strategic control point connecting sourcing, production, and fulfillment.

Labor shortages and inconsistent automation returns are pushing organizations to measure workforce productivity and validate where automation creates value.



Vendors are embedding predictive labor forecasting, real-time performance tracking, and AI-assisted scheduling directly within warehouse management platforms.

To support these advancements, vendors are shifting toward cloud-native, composable platforms that can be configured incrementally. Low-code frameworks make it easier to tailor workflows and integrate adjacent systems such as yard, dock, and transportation management for end-to-end execution visibility. Embedded traceability and

sustainability metrics now help organizations manage compliance and ESG reporting without the need for external systems.

Strategic partnerships and acquisitions have also accelerated innovation and ecosystem expansion. Vendors are forming alliances with automation and robotics providers to deepen hardware interoperability, with cloud infrastructure firms to scale performance, and with sustainability specialists to embed emissions and post-purchase visibility into warehouse operations. Recent acquisitions in returns management, last-mile logistics, and AI-driven analytics reflect an industry-wide effort to extend WMS beyond the four walls and deliver continuous insight from inbound to outbound flows. These collaborations underscore the shift from isolated warehouse management toward connected supply chain ecosystems.

Overall, warehouse management in 2025 is defined by convergence. Organizations are seeking measurable productivity, agility, and transparency, and vendors are responding with platforms that combine human expertise, automation, and intelligence under one connected architecture. The result is a more adaptive and data-driven warehouse that can deliver faster decisions, higher throughput, and sustainable long-term value across global supply chain networks.

The Nucleus Research Warehouse Management System Technology Value Matrix provides an assessment of the market based on how vendors deliver value to customers through the usability and functionality of their solutions (Nucleus Research x222 – Understanding the Value Matrix – August 2025). The research is intended to deliver a relevant snapshot of the WMS technology market, rather than serve as an empirical ranking of the vendors. The arrows indicate each vendor's perceived momentum, which is informed through conversations with end users, recently released capabilities, features, and other areas of investment.

Artificial intelligence is shifting from analytical support to active orchestration, driving predictive slotting, labor planning, and exception handling in real time.

Strategic partnerships and acquisitions are expanding WMS capabilities into robotics, sustainability, and last-mile logistics.

Leaders

Leaders in the WMS Technology Value Matrix include Blue Yonder, e2open, Infios, Infor, Oracle, Reply, and Tecsys.

Blue Yonder

Blue Yonder is placed as a Leader in the 2025 WMS Technology Value Matrix. Blue Yonder delivers a warehouse management system designed to support complex, multi-site operations across industries, including consumer goods, retail, manufacturing, logistics, and life

sciences. The application sits on the broader Blue Yonder Platform alongside transportation management, labor management, supply chain planning, command center, and order management. The WMS manages inbound, outbound, yard, inventory, and labor processes in a single system. It automates inbound put-away based on product type, storage strategy, and real-time workload balancing. Cross-dock workflows are built in for high-priority orders. Yard management, fully embedded in the core WMS, assigns dock doors and resources using arrival times and vehicle contents to avoid congestion. Inventory functions track stock across multiple facilities, capturing serial numbers, expiration dates, and storage locations, while enforcing user-defined rotation rules to maintain accuracy and freshness.

Outbound operations include batch and wave picking, routing, cartonization, and load building. Labor and resource capabilities include workload forecasting, task assignment, and productivity tracking. The system's microservices handle label creation and document generation for packing lists and bills of lading, removing the need for external reporting tools. Blue Yonder's warehouse tasking engine acts as an execution layer that prioritizes work in real time based on due dates, proximity, resource availability, and transportation schedules. The system adjusts priorities automatically when warehouse conditions change, such as off-schedule arrivals or order reallocation. To extend automation, Blue Yonder's vendor-agnostic Robotics Hub provides a unified interface to onboard, monitor, and optimize multiple robotic fleets. It supports live status tracking, workload balancing between human and robotic resources, and performance analytics to streamline fulfillment operations.

Recent updates and announcements include:

► **Warehouse Management Product Evolution**

Blue Yonder has significantly advanced its warehouse management capabilities through a blend of organic innovation and platform modernization. Early in 2024, enhancements to Warehouse Labor Management introduced refined machine travel modeling, factoring in vertical travel and movement restrictions like tunnels and one-way paths. These refinements delivered greater accuracy in performance analysis and resource optimization across multi-level warehouses. By 2025, Blue Yonder fully migrated its Warehouse Management System onto its cloud-native Blue Yonder Platform, providing seamless scalability, AI enablement, and zero-downtime updates. The launch of the Cognitive Solution represented a fundamental leap in adaptability, visibility, and

Blue Yonder connects inbound, outbound, yard, inventory, and labor operations within a single warehouse management environment, eliminating reliance on separate execution systems.

Blue Yonder released its Cognitive WMS, an AI-driven platform that continuously learns and optimizes slotting, replenishment, and workforce deployment.

efficiency, combining proven WMS functionality with an AI-first architecture that continuously learns and optimizes processes such as resource deployments, work assignments, replenishment, slotting and returns handling.

► **Predictive Planning and Continuous Optimization**

Predictive intelligence is embedded across the new WMS, driving machine learning-based forecasting, labor orchestration, and slotting optimization. The system leverages workload predictors, operational, and historical data to forecast labor, equipment, and asset requirements with 15-minute precision, helping warehouses balance staffing and reduce operational costs. Resource orchestration dynamically reallocates labor and automation resources based on live constraints or opportunities, while predictive task time models improve the accuracy of workload planning and execution. Continuous slotting has evolved from static planning to a data-driven process that uses ML-derived task, travel, and affinity data to automatically update item placement daily. This allows gradual, cost-efficient slotting adjustments as demand shifts, ensuring the most efficient product locations at all times.

► **Adaptable Execution Enhancements**

Blue Yonder's execution layer has been enhanced with machine learning-based task prediction, pull-driven work release, and capacity-aware warehouse execution. Advanced tour-building consolidates multiple pick lists to minimize travel time while maintaining task sequencing. Expanded returns management workflows guide warehouse associates through automated grading and disposition logic, directing returned goods for resale, liquidation, or repair. These processes are supported by analytics that track return volume, SKU-level trends, and root causes, providing actionable insights for reducing reverse logistics costs. Additional improvements to store replenishment and load building further align WMS capabilities with omnichannel and retail requirements, supporting ratio packs, garment-on-hanger handling, and automated trailer load optimization based on three-dimensional space utilization and axle constraints.

► **Unified Labor and Automation**

The WMS now unifies management of human and automated resources, ensuring seamless coordination across mixed operations. Pull-based task release methods trigger work allocation as automation capacity becomes available, maximizing utilization of robotics and mechanized systems. The resource optimization

The WMS fully transitioned to the cloud-native Blue Yonder Platform, supporting zero-downtime updates, elastic scaling, and modular microservice activation.

Blue Yonder introduced machine-learning models that forecast labor and asset requirements in 15-minute intervals, improving resource planning and throughput consistency.

engine dynamically reallocates labor to constrained areas, such as overloaded sorters, maintaining throughput balance. Warehouse Labor Management has evolved to track both human and robotic productivity metrics in a single framework, enabling unified visibility into human-robot collaboration. The Robotics Hub continues to expand prebuilt integrations and workflows with major automation vendors, standardizing deployment, and scaling automation initiatives across multiple sites.

► **Reimagined User Experience and Agentic AI**

Blue Yonder's WMS is now an AI-native solution providing agentic user experiences. Dedicated AI agents for warehouse operations, resource management, and billing continuously monitor system data, detect important patterns, and propose corrective actions or process optimizations through explainable recommendations. These agents support what-if analyses, exception monitoring, and decision automation, freeing managers from repetitive oversight tasks and elevating user focus to higher-value decision-making. The interface, built on the Blue Yonder Platform, provides a unified workspace where users can act on agent-driven insights instantly, bridging AI recommendations and operational execution in real time.

► **Cloud-Native Performance and Composable Architecture**

The transition to a fully cloud-native platform has enabled zero-downtime deployments, elastic scalability, and modular adoption through Blue Yonder's Composable Journey approach. Customers can activate microservices incrementally, tailoring deployment to their operational maturity while maintaining system stability. The platform supports advanced extensibility across data, UI, business logic, and mobile applications, allowing customers to customize workflows through low-code tools and centralized governance. Automated scaling within Azure environments ensures high performance during seasonal demand peaks, while real-time monitoring reduces administrative overhead.

► **Strategic Acquisitions and Ecosystem Expansion**

In 2025, Blue Yonder made three strategic acquisitions that broadened its WMS and logistics ecosystem: Optoro to enhance returns management, Inmar Post-Purchase Solutions (via Doddle) to expand post-purchase capabilities, and Pledge to strengthen sustainability tracking and Scope 3 emissions reporting. These acquisitions reinforce Blue Yonder's commitment to building a unified, end-to-end warehouse and fulfillment ecosystem.

Blue Yonder enhanced its user experience with agentic AI that proactively monitors warehouse operations, identifies exceptions, and suggests corrective actions directly in the workspace.

Blue Yonder strengthened its ecosystem through the acquisitions of Optoro, Inmar Post-Purchase Solutions, and Pledge, expanding its reach into returns, post-purchase, and sustainability management.

Infios

Infios, a Körber company, is positioned as a Leader in the 2025 Warehouse Management Systems Technology Value Matrix for its warehouse management capabilities within the Intelligent Supply Chain Execution Suite. The platform supports small and midsize businesses (approximately \$50M to \$200M in revenue), enterprises (\$200M and up), and third-party logistics providers operating across retail, consumer goods, food and beverage, and logistics sectors.

Within its WMS suite, Infios provides capabilities spanning warehouse, yard, and labor management; voice-directed workflows; robotic integration; and modeling and simulation tools. The solution is part of a broader suite that also includes transportation and order management functionality, enabling unified management of supply chain execution activities.

The platform is designed to adapt to different warehouse layouts, operational processes, and automation systems without requiring code changes. Core warehouse functions include receiving, put-away, inventory management, order picking, shipping, and cycle counting. Infios' modular architecture allows organizations to deploy functionality based on operational needs, while maintaining flexibility to scale or integrate additional automation technologies as business requirements evolve.

Updates over the last 12 months:

► Rebrand to Infios

In April 2025, Körber Supply Chain Software officially rebranded as Infios, a move that reflects its ambition to deliver a more unified and forward-looking brand identity. The new name is derived from the concept of infinity, symbolizing limitless opportunities and the interconnected nature of today's global marketplace. Infios positions itself as a provider of agile, intelligent, and constantly evolving intelligent supply chain execution solutions designed to adapt to the demands of a rapidly changing business environment. The company integrates order management, warehousing and fulfillment, and transportation management into a comprehensive suite, with a strong emphasis on predictive analytics, AI-driven insights, and end-to-end integration. By retaining close ties with Körber AG and continuing to leverage its consulting and automation expertise, Infios promises continuity for existing customers while setting a clearer path toward scalable and future-ready capabilities.

Infios provides warehouse, yard, and labor management within a unified supply chain execution suite that also includes transportation and order management.

Infios rebranded from Körber Supply Chain Software in 2025 to unify its warehouse, transportation, and order management products under a single platform identity.

Infor

Infor is positioned as a Leader in the 2025 Warehouse Management Systems Technology Value Matrix for its WMS platform built on the Infor OS infrastructure. The application supports both cloud and on-premises deployments and integrates natively with other Infor products, including Infor Birst for analytics and Infor Nexus for broader supply chain connectivity. Infor's WMS is used across industries such as consumer goods, aerospace and defense, automotive, manufacturing, healthcare, hospitality, energy, logistics, and distribution.

The system supports inbound, outbound, and internal warehouse workflows, including appointment scheduling, directed put-away, task interleaving, batch inventory tracking, and serial number management. Wave and order management functions allow users to configure allocation and release rules, perform unit-of-measure conversions, and manage integrated shipping across multiple fulfillment channels. Labor management capabilities are built in, enabling workload forecasting, staffing plan generation, and task assignments.

Infor WMS includes embedded analytics through Infor Birst, allowing users to monitor orders, inventory, equipment, and workforce performance through configurable dashboards. Its 3D visual analysis tools provide a digital representation of warehouse layouts for simulation and optimization. The solution also supports integration with a range of automation technologies, such as pick-to-light, put walls, conveyors, sortation systems, and robotics, ensuring synchronized workflows between human and automated operations.

Recent updates and announcements include:

► AI-Driven Enhancements

Infor WMS now leverages advanced machine learning and generative AI models to optimize key warehouse functions. Among the most impactful features is anomaly detection for slotting optimization, which improves warehouse space utilization by identifying inefficiencies in product placement. The system also includes advanced cartonization, reducing material waste and optimizing packing configurations, as well as real-time dynamic pick route optimization, which minimizes travel time through AI-calculated routing paths. In addition, Infor has embedded a digital assistant within the WMS interface, allowing users to interact with the system through natural language queries. This enables warehouse managers to ask operational questions, such as those

Infor's WMS connects inbound, outbound, and internal warehouse workflows within a unified platform that simplifies execution and coordination across facilities.

Infor WMS supports appointment scheduling, directed putaway, wave management, task interleaving, and serial and batch inventory tracking to improve process precision and throughput.

related to putaway strategies or slotting configurations, and receive actionable insights instantly, simplifying complex decision-making.

► **Integration with Infor Robotic Process Automation (RPA)**

Infor WMS now integrates with the Infor RPA suite to automate repetitive back-office and operational tasks that previously required manual intervention. For example, the system can automatically convert packing lists into inbound Advanced Shipping Notices (ASNs) or generate outbound shipment orders from predefined triggers. This integration not only accelerates transaction processing but also ensures data consistency across systems while freeing warehouse teams to focus on higher-value activities such as quality control and exception handling.

► **Cloud User Experience Improvements**

Infor has modernized the cloud user experience by introducing configuration toggles that allow customers to manage the timing and adoption of new features. This approach gives organizations greater control over when to activate specific updates based on their internal change management policies or peak season demands. By aligning innovation deployment with operational readiness, Infor enables smoother transitions and minimizes disruption during warehouse modernization efforts.

► **Extensibility and Customization**

Extensibility continues to be a core differentiator for Infor WMS. The solution now allows users to add custom functionality, modify business processes, and integrate with third-party software without altering the core application. This low-code extensibility framework supports a wide range of warehouse environments — from highly automated distribution centers to smaller operations — giving businesses the flexibility to tailor workflows, reporting structures, and automation triggers to their exact requirements while preserving upgrade compatibility.

► **Document Management Integration**

Infor has embedded Infor Document Management (IDM) into its WMS to centralize the lifecycle management of business documents. Users can store, retrieve, share, and delete operational documents, such as bills of lading, inspection reports, and compliance certificates, directly from the WMS interface. This integration ensures that critical documents are securely maintained and easily accessible during audits or investigations, reducing administrative overhead and improving traceability.

Infor enhanced its WMS with AI-driven functionality that improves slotting optimization, cartonization, and pick route efficiency while introducing a generative AI assistant for natural language queries and faster decision-making.

Infor expanded automation with the integration of Infor Robotic Process Automation, enabling repetitive tasks—such as converting packing lists into ASNs or generating outbound orders—to be executed automatically without manual input.

► Functional Enhancements

The past year also brought several functional enhancements aimed at improving precision and throughput within warehouse operations. Notable upgrades include enhanced hold lot management for aged inventory, a new shelf-life allocation strategy that prioritizes stock based on delivery date and expiration windows, and concurrent loading of multiple pallets and license plates onto trailers to improve dock efficiency. Infor has also delivered several updates to its Yard Management System, streamlining trailer movement and visibility across staging and dock areas.

Infor embedded Infor Document Management directly into WMS, centralizing document storage and retrieval for bills of lading, inspection records, and compliance certificates.

Oracle

Oracle is recognized as a Leader in the 2025 WMS Technology Value Matrix for its Oracle Fusion Cloud Warehouse Management solution. The platform serves a wide range of global enterprises across industries, including automotive, communications, healthcare, oil and gas, high-tech, retail, e-commerce, wholesale distribution, consumer goods, manufacturing, logistics services, and the public sector. Designed for multi-client, multi-site operations, Oracle Warehouse Management provides real-time visibility and control across complex distribution networks. Oracle Warehouse Management operates within the company's broader logistics management suite, which also includes Global Trade Management and Transportation Management, all part of Oracle's Supply Chain Management (SCM) application suite. The SCM portfolio spans supply chain planning, inventory management, manufacturing, order management, product lifecycle management, procurement, and analytics.

The WMS system supports end-to-end warehouse execution, including wave and task management, to optimize labor and equipment allocation while coordinating order fulfillment across multiple channels and facilities. Its AI-driven put-away logic uses market basket analysis to recommend storage locations for frequently ordered products, improving space utilization and picking efficiency. For inbound logistics, Oracle manages supplier receipts, sorting, quality checks, and value-added services, with configurable directed or suggested put-away processes. Outbound operations are supported through automated wave picking, dynamic task assignment, and built-in or integrated compliance labeling tools that streamline documentation and improve shipping accuracy.

Oracle Fusion Cloud Warehouse Management is part of Oracle's broader Logistics Management suite, which also includes transportation and global trade management.

Recent updates and announcements include:

► 25A WMS Updates

The 25A release emphasized deeper integration, enhanced automation, and AI-driven improvements. Notable updates included automatic generation of inbound LPNs and label printing to reduce manual input in inbound logistics, as well as optimization of cycle counting through warehouse automation to strengthen inventory accuracy. The release introduced improved REST APIs for label printing and background job monitoring to support greater process transparency and control. Enhancements to the AIML training data signaled Oracle's ongoing effort to improve predictive warehouse capabilities, while new API authentication lifecycles and data extraction capabilities for the Oracle Cloud Object Store streamlined system management and reporting. Collectively, these features advanced end-to-end automation across inbound, inventory, and outbound workflows, improving data accuracy and warehouse efficiency.

Oracle 25A introduced automation for inbound LPN creation, background job monitoring, and improved AIML training data for predictive warehouse operations.

► 25B WMS Updates

In 25B, Oracle WMS expanded its operational flexibility and workforce management capabilities. The release delivered new configuration options such as item-level serialization, cart compatibility checks, and support for split LPN flows, enabling more granular control over inbound and putaway activities. The system introduced item-specific UOM conversions, just-in-time replenishment, and simultaneous cycle counting, helping users improve throughput and reduce cycle time. The Redwood Mobile WMS experience advanced significantly with attachment capture, extended search functionality, and a more intuitive interface for users. Workforce management enhancements included new dashboards that visualize employee travel time, optimized clock-in and activity tracking screens, and additional scheduled jobs for workforce data. Warehouse automation also benefited from new capabilities in reserve-location cycle counting, signaling a continued move toward intelligent, sensor-driven execution.

Oracle 25B added item-level serialization, split LPN flows, and just-in-time replenishment to improve operational precision.

► 25C WMS Updates

The 25C release focused on integration depth, Redwood modernization, and broader automation capabilities. A new SCM Reconciliation Workbench was introduced to streamline cross-module data alignment, while parcel and LTL flow integrations expanded Oracle's multi-modal shipment capabilities. On the inbound side, barcode scanning and pallet putaway transactions were upgraded for speed and flexibility. Inventory operations benefited from new APIs for cycle count approval, label-rule

configuration, and purchase order interface improvements, further reducing manual steps in inventory management. Significant enhancements were made to the Redwood Mobile WMS, including camera-based scanning, expanded attachment management, and new desktop category support, making it more adaptable to device types and workflows. The release also advanced data governance with OAuth2 authentication, REST API improvements, and home-page access via Ask Oracle. Workforce dashboards gained new visualization capabilities for travel metrics, linking labor management to performance outcomes.

► 25D WMS Updates

The 25D release marked one of the most comprehensive updates in Oracle's WMS roadmap, emphasizing intelligent automation, GenAI integration, and Redwood standardization. Key highlights included predefined integration mappings across return-to-vendor, over-receipt tolerance, and expensed transfer order flows to streamline compliance. Inbound logistics gained advanced validation features, direct procurement putaway, and support for serial tracking and lock codes during receiving, improving traceability and accuracy. Inventory operations introduced the Reslotting Workbench and automated cycle count task creation via APIs, reinforcing Oracle's focus on self-driven optimization. A generative AI-powered Intelligent Wave Summary was added to outbound logistics, designed to help users dynamically plan, consolidate, and execute waves based on historical and real-time conditions. Redwood Mobile WMS continued to evolve with image capture at inbound and outbound stages, visual item displays, and mobile customizations via REST APIs. Finally, new dashboards visualized warehouse employee break and productivity metrics, reflecting Oracle's investment in labor analytics and operational transparency.

Oracle 25D added generative AI capabilities through the Intelligent Wave Summary feature for real-time wave planning and execution.

Reply

Reply is positioned as a Leader in the 2025 Warehouse Management Systems Technology Value Matrix for its LEA Reply platform, a cloud-native suite built on a microservices architecture that supports end-to-end supply chain execution. The vendor serves mid-sized to tier-one organizations across the automotive, retail, fashion, food and beverage, e-commerce, and third-party logistics sectors.

The LEA Reply Suite covers the full logistics flow from supplier to customer, as shown in the attached diagram, encompassing supplier portal, dock scheduling, yard management, warehouse management,

Reply's LEA Reply platform is a cloud-native suite built on a microservices architecture that spans supplier to customer operations.

hub and network operations, in-store picking, last-mile distribution, and drop-shipping. Built with modular deployment flexibility, the platform connects these applications with real-time analytics, optimization, and AI services such as LEA Reply GaliLEA, Visibility, and Resource Planner—allowing customers to orchestrate supply chain processes across facilities, partners, and channels.

Within this framework, LEA Reply WMS provides functionality for inbound and outbound warehouse processes, including batch and serial number tracking, FEFO-based picking, and slotting optimization driven by product dimensions, expiration dates, and historical data. The system supports configurable wave planning, batch building, and order orchestration to align fulfillment priorities with labor and equipment availability. Users can schedule workflows by rules such as worker skill level, task priority, and real-time resource status. The WMS also supports multi-order picking, dynamic task allocation, and validation-based packing and shipping. It automatically generates compliant shipping documentation, including packing slips, labels, and bills of lading, and integrates natively with automation technologies such as autonomous mobile robots, pick-to-light systems, conveyors, sorters, and robotic arms.

Recent updates and announcements include:

► **Core Process Improvements**

Recent updates have strengthened core warehouse operations by enhancing process control and traceability. The introduction of Advanced Destination Strategies allows more refined logic for put-away and replenishment activities, improving how goods are allocated within the warehouse. This feature ensures smarter destination selection based on item attributes, volume, and operational constraints, directly improving space utilization and movement efficiency.

A new Workstation Management function provides visibility into the exact locations where operators perform their tasks, capturing real-time workstation activity for better process tracking and bottleneck identification. Outbound processes have also been streamlined through optimized sorting logic, reducing manual handling and accelerating order consolidation. Furthermore, Enhanced Serial Number Management supports more complex serial number acquisition and verification scenarios, ensuring complete traceability for serialized products across inbound, storage, and outbound operations.

Reply's LEA Reply platform is a cloud-native suite built on a microservices architecture that spans supplier to customer operations.

LEA Reply enables real-time orchestration between warehouse, yard, and last-mile applications with shared analytics and optimization services.

► Intelligence and Optimization Enhancements

Reply has introduced smarter algorithms to enhance efficiency in warehouse execution. Improvements to cartonization and picking optimization enable the system to automatically determine the most efficient packaging strategy based on product dimensions and order mix. The enhanced task assignment algorithm uses intelligent load balancing to dynamically allocate work based on operator activity, distance, and capacity constraints while preventing overcrowding in high-traffic zones. Together, these capabilities improve throughput and create more balanced workloads across teams and equipment.

Reply enhanced cartonization and picking algorithms to improve load balancing and task allocation efficiency.

► AI Multi-Agent System – GaliLEA

The most transformative development in the LEA Reply WMS is the continued evolution of the GaliLEA AI Multi-Agent System, which now operates as the core intelligence layer of the platform. GaliLEA integrates multiple specialized AI agents that automate data access, decision-making, and user support.

The Natural Language Data Access Agent allows users to query operational data conversationally, while the Real-Time Dashboard Agent automatically generates visual dashboards from retrieved data. A Customer Support Agent assists users with contextual documentation searches, guided ticket creation, and resolution suggestions based on historical cases. These agents are coordinated by the Orchestrator Agent, which interprets user intent and routes requests to the most relevant AI service.

The GaliLEA AI Multi-Agent System now acts as the platform's core intelligence layer, automating data access and decision support.

A major new component, GaliLEA Dynamic Intelligence, enables customers to design and configure their own AI agents by defining data sources, behaviors, and actions. This capability allows enterprises to extend LEA Reply's intelligence architecture for specific warehouse environments, promoting adaptive automation across operations.

Tecsys

Tecsys is positioned as a Leader in the 2025 WMS Technology Value Matrix, recognized for its industry-specific WMS offerings that are built on the Tecsys Itopia Platform. The company serves midsize to large enterprises across the distribution, healthcare, life sciences, med-tech industrial, and third-party logistics sectors.

Tecsys provides an integrated suite that spans warehouse management, order management, pharmacy inventory management,

Tecsys provides industry-specific warehouse management capabilities built on the Itopia Platform.

procurement, point-of-use (POU) systems, and demand forecasting. The Itopia Platform underpins these solutions with low-code/no-code configuration tools and API-based integrations, enabling customers to tailor workflows and connect to external systems within complex operational environments.

The Elite Enterprise WMS supports a wide range of warehouse operations, including receiving, put-away, cross-docking, packing, rule-based locator management, inspection and quality assurance, inventory control, wave management, truck loading, replenishment, cycle counting, task interleaving, AI-enabled labor planning and optimization, and performance analytics.

The platform offers specialized functionality for distinct industries. In general distribution, Elite WMS optimizes intake processing, wave planning, and operational intelligence to enhance productivity and inventory accuracy. Within healthcare, the solution provides end-to-end visibility and control over hospital and clinical supply chains, supporting centralized inventory management, surgical kit preparation, and automated replenishment. It also integrates with track-and-trace systems and healthcare ERP platforms to strengthen visibility and compliance. In pharmaceutical environments, the Pharmacy Inventory Management (PIMs) module supports 340B program compliance and DSCSA regulatory tracking, ensuring traceability, safety, and reporting accuracy across pharmaceutical supply chains.

Vendor updates and announcements over the last year:

► **Resource Planning and Operational Optimization**

Tecsys expanded its warehouse resource planning and optimization capabilities by providing efficiency tools like “My Top 5” dashboard, enabling real-time visibility into performance and productivity. These features help managers monitor top operational priorities, assess workload distribution, and quickly identify potential bottlenecks. In addition, visual cluster picking has been introduced to improve multi-order fulfillment by visually grouping related picks, reducing travel time and increasing picking accuracy across high-volume operations.

► **Compliance and Visibility Enhancements**

Continuous updates to Drug Supply Chain Security Act (DSCSA) compliance ensure that Tecsys WMS remains aligned with evolving regulatory requirements, particularly for pharmaceutical and healthcare customers. The addition of electronic shelf label (ESL)

Tecsys supports midsize to large enterprises across distribution, healthcare, life sciences, and third-party logistics sectors.

Recent updates introduced the “My Top 5” dashboard to monitor key performance metrics and prioritize warehouse activities.

inventory visibility further enhances transparency by providing real-time stock updates across critical clinical storage points, ensuring traceability and compliance throughout the product lifecycle.

► **Automation and Integration Capabilities**

Tecsys has introduced a new integration platform for automation, which streamlines connectivity between WMS and warehouse automation systems. This integration framework provides plug-and-play support for automated material handling equipment, robotics, and third-party systems. Additionally, the release of out-of-the-box ERP connectors, including Oracle Fusion, Workday, and Epicor Eclipse, simplifies data synchronization across enterprise ecosystems, reducing integration timelines and improving overall data consistency.

► **Operational Intelligence and Exception Management**

The latest updates bring substitution management and allocation traceability to support more agile inventory handling and troubleshooting. These enhancements allow users to manage stock substitutions intelligently and trace allocation decisions back through the order fulfillment process, increasing accuracy and accountability. Meanwhile, alerts with embedded images have been added to improve real-time decision-making during picking operations, providing visual cues that help reduce errors and speed up issue resolution.

► **Workforce and Execution System Advancements**

Tecsys continues to evolve its Warehouse Execution System (WES), with support of a picking control tower and the introduction of the WES Work Plan, which automates staff assignment based on predefined schedules while providing visibility into shift performance and productivity metrics. This system-level enhancement enables better labor planning, improves task distribution, and ensures alignment between workforce capacity and operational demand. Tecsys has also launched a WES GenAI chatbot, being piloted with two large customers. The chatbot delivers conversational insights and real-time assistance for warehouse managers, marking a significant step toward AI-enabled human-technology collaboration in logistics.

► **AI and Healthcare Innovation**

The company's expertise and growing focus on end-to-end healthcare supply chain platform is reflected in AI-based point-of-care visibility and inventory management, which improves real-time

Tecsys added visual cluster picking to improve multi-order fulfillment accuracy and reduce travel time.

Tecsys launched a new integration platform to simplify connections between WMS and automation systems.

tracking and replenishment accuracy for clinical environments. In parallel, TecsysIQ, the company's unified data & analytics platform, now supports drug shortage management and point-of-use (POU) optimization, providing predictive insights into product availability and consumption trends.

Tecsys is piloting a GenAI chatbot for warehouse managers.

Experts

Experts in the WMS Technology Value Matrix are Deposco, Erhardt Partner Group, Hardis Group, Manhattan Associates, SAP, and Softeon.

Deposco

Deposco is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its Bright Warehouse solution. The vendor supports organizations across consumer goods, e-commerce, retail, third-party logistics, wholesale distribution, and cold chain sectors.

Bright Warehouse is part of Deposco's broader Supply Chain Execution suite, which also includes Bright Shipping for parcel and freight management, Bright Order for distributed order management, and Bright Store for in-store fulfillment and inventory operations. Together, these applications enable end-to-end fulfillment and visibility across the warehouse, retail, and delivery networks. The Bright Suite Platform serves as the foundation for Deposco's ecosystem, connecting its Supply Chain Execution, Planning, and Intelligence suites. The Supply Chain Planning suite includes Bright Forecast for demand planning, Bright Inventory for replenishment and stock optimization, and Bright Source for sourcing and purchasing management. The Supply Chain Intelligence suite provides analytics tools for shipping, operational, and executive insights across the enterprise.

Built on a unified platform architecture, Deposco's solutions share a common data model, ensuring synchronized operations across planning and execution layers. This design supports real-time collaboration between warehouse operations, transportation, and retail environments. Bright Warehouse provides capabilities for inventory management, put-away, replenishment, picking, packing, and shipping, integrating seamlessly with automation systems, carriers, and ERP platforms. Users benefit from embedded analytics, configurable workflows, and rule-based automation that adapts to dynamic warehouse conditions.

Deposco supports warehouse management across consumer goods, e-commerce, retail, third-party logistics, wholesale distribution and cold-chain sectors via its Bright Warehouse solution.

Erhardt Partner Group (EPG)

Erhardt Partner Group (EPG) is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its LFS WMS product. EPG supports mid-sized to large global organizations across industries such as automotive and spare parts, chemicals, pharmaceuticals and healthcare, electronics, retail, e-commerce and fashion, industrial manufacturing, food and beverage, and logistics services. EPG's supply chain execution portfolio extends beyond warehouse management, encompassing warehouse control (WCS), workforce management (WFM), dock management (DOCK), control tower (Timesquare), route optimization (Greenplan), contracts and billing (CnB), transportation management, and voice solutions. All these components are unified within the EPG ONE Supply Chain Execution Suite, allowing customers to manage end-to-end logistics operations from a single platform.

The LFS WMS offers comprehensive functionality that supports each stage of warehouse operations. Its retrieval processes accommodate diverse picking methods, including pick and pack, multi-order, and multi-stage picking. Advanced techniques such as path-optimized picking, pick-by-voice, RFID-enabled picking, pick-to-belt, and pick-to-carton further enhance throughput and accuracy. The packing functionality includes serial number scanning, barcode labeling, and delivery label generation, along with two-stage packing and consignment data management for complex shipment structures. Internal transport processes are optimized through automated path calculation, empty-trip avoidance, and dynamic prioritization of transport orders. In shipping, the system manages routing, pallet accounting, load-space calculation, and freight cost estimation, while integrated shipment tracking and delivery notifications enhance visibility and customer communication. EPG's warehouse and transportation modules are tightly connected, supporting route planning, telematics integration, and transit management to optimize delivery performance. The system supports multiple carriers and logistics service providers, enabling centralized control over diverse transport networks.

Operational insights are driven by LFS's extensive analytics and visualization capabilities. The platform's statistics module provides metrics for warehouse occupancy, picking times, order cycle durations, and resource utilization. It offers reach and frequency analyses, allocation overviews, and A-B-C classification, helping customers identify optimization opportunities. The graphical user interface

EPG provides the LFS WMS as part of its unified EPG ONE Supply Chain Execution Suite.

The LFS system manages inbound, outbound, and internal warehouse operations, including multi-stage and path-optimized picking workflows.

provides digital product imagery, real-time dashboards, and 3D warehouse visualizations to improve situational awareness. EPG also incorporates robust quality assurance and resource management tools. Quality assurance workflows track product status, inspection results, and user authorizations to maintain compliance and accuracy. Resource management capabilities enable better workforce and equipment planning by considering shift patterns, available resources, and vehicle schedules. Managers can compare current and projected workloads in real time to align capacity with service-level requirements. A key differentiator in EPG's portfolio is LYDIA Voice, the company's proprietary voice technology. The solution enables hands-free, headset-free warehouse communication through VoiceWear, an integrated wearable system with built-in speakers and a microphone. LYDIA Voice enhances picking accuracy, accelerates task completion, and supports multi-language voice recognition for diverse workforces.

Recent updates and announcements include:

► **Expansion of EPG ONE Suite through byways Acquisition**

EPG announced the acquisition of Berlin-based byways, a specialist in dock and yard management solutions. This acquisition integrates plug-and-play yard and dock management directly into the EPG ONE Suite, enabling real-time coordination between warehouses, carriers, suppliers, and freight forwarders. The unified platform offers greater visibility and control over logistics operations, reducing idle time, minimizing dock congestion, and improving overall resource utilization. With byways' integration, EPG delivers end-to-end operational synchronization from yard arrival to final dispatch, furthering its goal of complete supply chain transparency.

► **AI-Powered Real-Time Translation for Workforce Efficiency**

At LogiMAT 2025, EPG introduced LYDIA Live Translation, an AI-driven feature embedded in its LYDIA Voice solution that supports real-time translation across more than 40 languages. The innovation eliminates language barriers in multilingual warehouse environments by converting speech into text locally and translating it centrally to minimize latency.

In 2025, EPG expanded the EPG ONE Suite through the acquisition of byways, integrating advanced dock and yard management capabilities.

EPG introduced LYDIA Live Translation, an AI-powered feature supporting real-time translation across more than 40 languages.

Hardis Supply Chain

Hardis Supply Chain is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its Hardis WMS SaaS offering (formerly Reflex WMS). The company supports organizations across the retail, consumer packaged goods,

pharmaceutical, third-party logistics, luxury, equipment manufacturing, and e-commerce industries.

Hardis WMS is part of the broader Hardis Supply Chain Suite, which includes Hardis OMS – Supply Chain Commerce, Hardis SC Network – Supply Chain Network, a collaborative supply chain platform that connects partners and facilitates seamless collaboration across the entire logistics network, and Hardis WMS – Supply Chain Execution. Within this ecosystem, the WMS integrates with modules for order management, transportation, labor, dock scheduling, and control tower capabilities, providing a unified platform to optimize supply chain operations from factories to last-mile delivery. The platform is deployed on Google Cloud, offering scalability, data security, and high availability.

The Hardis WMS core functionality includes receiving, put-away, inventory control, picking, sorting, packing, loading, returns, traceability, slotting, and production line management. Extended capabilities support quality control, co-packing, hazardous goods handling, and voice-directed operations, as well as AI-driven vision recognition and specialized modules such as alcohol management. Hardis WMS also supports omnichannel fulfillment models, including ship-from-store, click-and-collect, drop shipping, and returns processing.

Its order and inventory management modules cover order capture, validation, allocation, and orchestration, supported by e-ATP (available-to-promise) capabilities. Hardis WMS integrates with digital commerce and logistics ecosystems, connecting to webshops, POS systems, marketplaces, brokers, logistics service providers, carriers, payment processors, and BI or ERP systems. This enables real-time synchronization between sales and warehouse execution activities.

Updates over the last 12 months:

► **Cloud Expansion and Partnerships**

Hardis WMS became the first warehouse management solution available on the Google Cloud Marketplace, marking a major milestone in cloud accessibility and procurement simplicity. This partnership allows customers to streamline deployment, take advantage of Google Cloud's scalability and security, and benefit from ongoing innovations in data analytics and artificial intelligence. The collaboration underscores Hardis Supply Chain's commitment

Hardis Supply Chain provides its WMS SaaS product, formerly Reflex WMS, as part of the broader Hardis Supply Chain Suite.

Hardis WMS integrates with transportation, labor, dock scheduling, and control tower modules to support end-to-end logistics coordination.

to aligning its WMS with leading-edge cloud ecosystems and open technology frameworks.

► **Portfolio Expansion through OMS Integration**

The acquisition of Magnus Black added an Order Management System (OMS) to Hardis Supply Chain's portfolio, enabling unified orchestration between order capture, allocation, and fulfillment. This expansion enhances end-to-end supply chain coordination, providing businesses with greater agility to manage multi-channel operations and align warehouse execution with customer demand in real time.

► **Global Expansion and Implementation Capabilities**

Hardis Supply Chain continued its international growth by establishing a U.S. subsidiary and expanding its network of implementation partners, including the integration of Tata Consultancy Services (TCS). This global reach strengthens deployment scalability and support coverage, ensuring that enterprise clients can access localized expertise and consistent service delivery across multiple regions.

► **Feature and Platform Enhancements**

The WMS platform was further enriched with new functional capabilities designed to modernize operations and improve connectivity. A new IoT connection module enables seamless integration with advanced operational technologies such as connected gloves, pick-to-light and put-to-light systems, and location beacons, driving efficiency and accuracy in warehouse workflows. Additionally, the Hardis SCNetwork platform was expanded to include collaborative claim management, complementing its existing customer portals and control tower capabilities. Upcoming modules—including Appointment Scheduling and Yard Management—are expected to further enhance visibility and cross-partner coordination within logistics ecosystems.

► **AI and Automation Investments**

Hardis Supply Chain continues to invest heavily in applied AI, developing machine learning models for waveless resource allocation, computer vision tools, and augmented reality (AR) applications embedded directly within its WMS interface. These technologies accelerate RF (radio frequency) operations, optimize labor distribution, and improve quality control through visual recognition.

Hardis' warehouse management system supports omnichannel fulfillment, including ship-from-store, click-and-collect, drop shipping, and reverse logistics.

Hardis Supply Chain expanded its portfolio through the acquisition of Magnus Black, adding a full-featured Order Management System.

Manhattan Associates

Manhattan Associates is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its Manhattan Active Warehouse Management solution. The vendor supports organizations in the consumer goods, food and beverage, manufacturing, medical and pharmaceutical, retail, wholesale, and third-party logistics industries. All Manhattan products are built on the Active Technology Platform, a cloud-native, microservices-based foundation that supports modular deployment and continuous updates. Beyond warehouse management, Manhattan delivers capabilities across omnichannel commerce, including order management, point of sale, customer service, and store fulfillment, alongside B2B commerce, supply chain execution (covering warehouse, labor, transportation, and yard management), and supply chain planning for forecasting, replenishment, allocation, and business planning.

Manhattan Active Warehouse Management is designed for complex, high-volume operations requiring advanced orchestration of people, processes, and automation. It leverages machine learning to optimize fulfillment workflows, dynamically adjust priorities, and manage resources in real time. The integrated Warehouse Execution System enables synchronization between workers, robotics, and material handling equipment to maximize throughput. Its Order Streaming technology continuously reprioritizes work assignments based on floor conditions, allowing direct-to-consumer, wholesale, and omnichannel orders to run concurrently through a unified workflow. Slotting optimization improves pick density and replenishment efficiency, while advanced wave management, batch picking, and order routing streamline outbound fulfillment. The solution also supports multi-tenant operations, allowing organizations to manage multiple brands, business units, and distribution centers within a single instance. Real-time dashboards provide complete visibility into inventory, labor, and equipment utilization. Integration with pick-to-light, put-to-light, and voice-directed technologies enhances operational precision. Native functionality extends to replenishment, yard management, and optimized load building, with customizable workflows, forms, reports, and alerts enabling alignment with specific operational requirements. The Manhattan Yard Management solution connects yard, warehouse, and transportation activities, giving real-time insight into trailer status, dock scheduling, and yard operations. Manhattan SCALE complements Active WM by delivering core warehouse management functionality for small to midsized organizations.

Manhattan Associates provides the Manhattan Active Warehouse Management solution as part of its broader Active Technology Platform.

The solution unifies warehouse, labor, transportation, and yard management within the Manhattan Active supply chain execution suite.

SAP

SAP is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its Extended Warehouse Management (EWM) solution. SAP EWM supports large global enterprises across industries such as energy, professional services, consumer goods, retail, wholesale distribution, mill and mining, industrial machinery, aerospace and defense, automotive, technology, manufacturing, life sciences, and government.

SAP EWM is a comprehensive warehouse management system designed to optimize and automate end-to-end warehouse operations. The platform supports inbound processing, including gate appointment scheduling, yard management, put-away, cross-docking, and quality inspections. Rules-based put-away strategies determine optimal storage locations by analyzing product characteristics, storage types, velocities, and capacity utilization. EWM manages stock movements such as transfers, replenishments, and re-warehousing, while outbound operations benefit from advanced picking methods, including wave, cart, batch, and zone picking, with dynamic pick-path optimization and integration with pick-by-voice systems. Packing operations include configurable packing profiles, verification, and license plate labeling. The system also streamlines shipping through unified package building, containerization, documentation, and customs handling, ensuring efficient and compliant outbound logistics.

The solution supports physical and cycle counting with real-time inventory updates and integrates directly with automation equipment for material handling. The Material Flow System (MFS) component connects EWM to automated devices such as conveyors, sorters, AS/RS systems, automated guided vehicles (AGVs), and robotic arms. Through MFS, EWM can assign robotic tasks, manage routing, and track equipment status in real time, dynamically adjusting operations based on changing warehouse conditions. Connectivity is supported through standard industrial communication protocols, including TCP/IP and MQTT, enabling interoperability with a range of automation vendors.

SAP EWM also integrates with SAP Warehouse Robotics, which eliminates proprietary dependencies by supporting multi-vendor robotics environments. This framework allows customers to manage fleets of AMRs, AGVs, and other robotic systems across facilities through standardized APIs, improving automation scalability and operational flexibility. Together, these capabilities position SAP EWM as one of the most comprehensive and technically mature warehouse management systems for large-scale, automation-intensive operations.

SAP provides the Extended Warehouse Management (EWM) system as part of its broader supply chain suite within SAP S/4HANA.

SAP EWM serves large global enterprises across industries including energy, consumer goods, manufacturing, life sciences, retail, and government.

Updates over the last 12 months:

► **Advanced Shipping and Receiving Enhancements**

SAP introduced major advancements in Advanced Shipping and Receiving (ASR) to improve coordination between warehouse and transportation activities. The introduction of cross-delivery handling units allows multiple deliveries to be packed together under defined transport conditions, optimizing freight consolidation and reducing overall logistics costs. The harmonized outbound delivery update ensures that any changes made in Logistics Execution (LE) automatically synchronize across EWM and Transportation Management (TM), maintaining consistency and reducing administrative rework.

SAP also introduced stock transport order execution for inbound processes, enabling the seamless transfer of goods between EWM and non-EWM warehouses within the same company. This visibility from sending to receiving points creates a unified, end-to-end stock movement flow. A new Cargo Ready for Loading status has been added to improve customs processing, enabling early generation of export documentation before goods are loaded—accelerating clearance and outbound workflows.

► **Integration Enhancements**

Integration remains a cornerstone of SAP's WMS strategy. Recent releases improved connectivity between EWM, Quality Management (QM), and Production Planning (PP) through features such as partial goods issue for component consumption, allowing manufacturing processes to continue even when full material quantities are unavailable. EWM/QM serial number integration enables tracking and inspection of serialized items directly within quality inspection processes, strengthening compliance and traceability.

SAP also added new configuration options to deactivate quality inspections based on movement type, providing flexibility in quality control workflows. Extended integration with SAP Batch Release Hub for Life Sciences now allows synchronized inspection and stock postings for regulated industries. Furthermore, the ability to connect SAP S/4HANA Cloud Public Edition to decentralized EWM systems introduces new hybrid deployment options, improving flexibility for organizations operating across mixed environments.

► **Artificial Intelligence in WMS**

SAP added cross-delivery handling units within Advanced Shipping and Receiving to improve freight consolidation efficiency.

Integration updates strengthened connections between EWM, QM, and PP, including serial tracking during quality inspection.

SAP is embedding AI into EWM through practical, data-driven applications rather than isolated features. The Predictive Labor Demand Planning module now uses machine learning models trained on historical picking and packing data to forecast future workforce needs. The solution projects labor hours, full-time equivalent (FTE) requirements, and workload distribution by day or week, supporting proactive labor scheduling and overtime reduction. The predictive model adapts to factory calendars and allows customers to influence forecast parameters for tailored accuracy.

Additionally, SAP is extending its Joule AI assistant into warehouse workflows. While still rolling out, Joule will soon assist users in navigating warehouse documentation, Fiori apps, and outbound processes using natural language interaction. Together, these developments illustrate SAP's broader shift toward intelligent warehouse orchestration, blending predictive analytics with AI-guided user experiences.

SAP's Joule AI assistant is being extended into warehouse workflows for natural language navigation of tasks and documents.

Softeon

Softeon is positioned as an Expert in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its comprehensive execution and enablement platform that combines warehouse management, warehouse execution, distributed order management, and AI-driven optimization capabilities. The company supports organizations across industries, including retail, third-party logistics, food and beverage, healthcare, technology and electronics, and manufacturing.

Softeon's Warehouse Management System (WMS) provides functionality for parcel management, billing, labor management, and yard management. The solution integrates with the company's Warehouse Execution System (WES), which coordinates automation and robotics alongside labor, kitting, and value-added services. This combination allows organizations to manage complex warehouse networks, balance labor variability, and optimize both manual and automated processes within a single environment. The Distributed Order Management (DOM) solution extends visibility and fulfillment control across channels and facilities, dynamically allocating inventory based on service levels, costs, and capacity. It integrates directly with Softeon's execution systems, helping organizations manage distributed fulfillment operations while maintaining synchronized order orchestration across applications and partners. Softeon also provides several enablement tools designed to simplify configuration and

Softeon provides an integrated warehouse management and execution platform that combines WMS, WES, and distributed order management into a single system.

integration. The Elastic Communicator enables workflow-based data routing and transformation across systems, while the UI Composer allows users to create custom screens tailored to specific operational roles. Pulse provides real-time visibility into devices, applications, and process flows, offering immediate insights into warehouse performance.

At the core of Softeon's innovation strategy is its SAIL framework (Softeon Artificial Intelligence Layer), an AI platform designed to accelerate deployment, enhance operational intelligence, and enable adaptive automation. SAIL Launch supports AI-assisted configuration and onboarding, while SAIL Assist embeds contextual support within the user interface. SAIL Optimize delivers real-time intelligence for workload balancing, lane shifting, and task prioritization. SAIL Reach extends AI functionality beyond Softeon's ecosystem by integrating third-party AI vendors and external data streams, allowing predictive adjustments and event-driven decision-making within the WMS.

Updates over the last 12 months:

► **Strategic Global Partnerships and Regional Expansion**

Softeon announced multiple strategic alliances to extend its presence and implementation capacity across key global markets. In the Asia-Pacific region, Softeon partnered with Extolla, a leading supply chain consultancy in Australia and New Zealand, combining Softeon's enterprise-grade WMS with Extolla's regional expertise in automation, optimization, and deployment. This collaboration supports local enterprises with end-to-end logistics capabilities and strengthens Softeon's footprint in the ANZ market.

Additionally, Softeon formed a partnership with FourPL, an Australian IT consulting firm, to deliver advanced warehouse and fulfillment solutions tailored to regional logistics demands. The partnership integrates FourPL's advisory and domain expertise with Softeon's WMS, Distributed Order Management (DOM), and visibility solutions, helping enterprises improve efficiency and adaptability amid dynamic supply chain conditions.

► **AI Updates.**

Softeon launched the Softeon AI Layer (SAIL), a major technological milestone representing the company's largest R&D investment to date. Built in collaboration with Amazon Web Services (AWS), SAIL embeds AI capabilities directly into Softeon's WMS to accelerate deployments, improve productivity, and enhance decision-making. The framework is structured around four core modules: Launch:

Softeon's WMS includes parcel management, billing, labor, and yard management features with embedded warehouse execution for robotics, automation, and labor orchestration.

The platform's AI framework, Softeon Artificial Intelligence Layer (SAIL), underpins adaptive automation, embedded assistance, and predictive optimization across all applications.

Configures and integrates AI within existing systems. Assist: Introduces embedded help and AI agents for user support. Optimize: Streamlines workflows through intelligent automation. Reach: Acts as a data layer for broader AI ecosystem connectivity.

SAIL enables Softeon customers to deploy AI in an incremental, flexible manner—linking operational data to predictive and prescriptive decision engines that improve real-time warehouse optimization.

Softeon formed a strategic partnership with Tryon Solutions to improve testing and deployment reliability through automation and validation tools.

► Implementation and Testing Strategy

To strengthen its delivery capabilities, Softeon partnered with Tryon Solutions, combining Softeon's WMS and supply chain platform with Tryon's testing and validation expertise. This partnership accelerates time-to-value for customers while reducing deployment risks, particularly in highly regulated or complex industries. By leveraging automated testing and simulation tools, organizations can ensure smooth go-lives and maintain compliance during upgrades.

► Fulfillment Expansion through Amazon Integration

Softeon further expanded its fulfillment ecosystem through integration with Amazon Shipping, allowing customers to access Amazon's logistics network directly from the Softeon WMS. This integration provides faster, more flexible shipping options, expanding delivery capabilities while improving carrier diversification and visibility across last-mile operations.

Accelerators

Accelerators in the WMS Technology Value Matrix are Made4Net, Microsoft, Nextworld, Savant Software, and Synergy Logistics.

Made4net

Made4net is positioned as an Accelerator in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its WarehouseExpert and Synapse 3PLExpert WMS products. Both are part of the SCExpert platform, a modular, service-oriented suite that integrates warehouse, labor, transportation, yard, and last-mile management under a unified architecture. The platform also provides route optimization, omnichannel fulfillment, and proof-of-delivery capabilities, creating real-time connectivity across supply chain operations.

Made4net provides two warehouse management systems, WarehouseExpert and Synapse 3PLExpert, under its modular SCExpert platform.

The SCExpert platform, as shown in the company's portfolio, integrates core execution areas such as Warehouse Management, Labor Management, Route Optimization, Yard Management, and Last-Mile Delivery, while extending connectivity to external systems such as WCS, TMS, automation equipment, and ERP systems. Built on Microsoft technology, it uses a three-tier architecture—data access, business logic, and user interface—enabling customers to configure workflows and processes with minimal coding.

WarehouseExpert serves midsized to tier-one organizations, offering end-to-end warehouse functionality from inbound receiving and put-away to picking, packing, and shipping. The system integrates seamlessly with Made4net's transportation, labor, and yard management modules, allowing unified visibility and task orchestration across the warehouse and adjacent operations. Synapse 3PLExpert is tailored for third-party logistics providers managing complex, multi-client warehouse networks. It offers real-time task optimization, multi-client billing, cross-docking, transloading, returns processing, and kitting or packaging services. The solution's reconfigurability enables adaptation to specific customer contracts and item-level requirements.

Both WMS products support integrations with ERP, financial, and e-commerce systems, as well as with material handling equipment, robotics, and automation interfaces. The platform's open architecture and modular design enable organizations to adopt additional capabilities—such as last-mile delivery, voice picking, or AI-driven analytics—at their own pace while maintaining synchronized control across the entire supply chain.

Recent updates and announcements include:

► **AI and Computer Vision Integration**

In partnership with Flymingo.ai, Made4net integrated AI-powered computer-vision technology into its WMS to provide continuous process monitoring and ensure warehouse process adherence. Using existing security camera infrastructure, the solution detects operational errors in real time and provides managers with instant visibility into workflow deviations. Early adopters, such as Abaline Supply, have reported faster issue detection and higher operational accuracy with minimal IT investment. This partnership reinforces Made4net's commitment to embedding AI directly into core warehouse processes to improve reliability and control without adding system complexity.

The SCExpert platform uses Microsoft-based, three-tier architecture that separates data access, business logic, and user interface layers, allowing configuration without extensive custom coding.

► Autonomous Drone-based Inventory Management

In partnership with Flymingo.ai, Made4net integrated AI-powered computer-vision technology into its WMS to provide continuous process monitoring and ensure warehouse process adherence. Using existing security camera infrastructure, the solution detects operational errors in real time and provides managers with instant visibility into workflow deviations. Early adopters, such as Abaline Supply, have reported faster issue detection and higher operational accuracy with minimal IT investment. This partnership reinforces Made4net's commitment to embedding AI directly into core warehouse processes to improve reliability and control without adding system complexity.

In the past year, Made4net has deepened its focus on embedded intelligence and automation through several key developments.

Microsoft

Microsoft is positioned as an Accelerator in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its Dynamics 365 Warehouse Management and Fulfillment solution. The product is part of the Dynamics 365 Supply Chain Management portfolio, which also includes modules for supply chain planning, procurement and sourcing, manufacturing and shop floor control, order management, pricing, and asset maintenance. These solutions are built on the Microsoft Azure cloud platform. Microsoft Dynamics 365 Supply Chain Management supports global enterprises across industries such as automotive, consumer goods, defense and intelligence, government, healthcare, manufacturing, retail, and telecommunications.

The Warehouse Management module enables customers to configure and optimize end-to-end warehouse operations. Core functionality includes receiving, put-away, replenishment, picking, packing, shipping, and inventory management. The system uses configurable work templates, location directives, and work pools to tailor workflows to warehouse layouts, product characteristics, and operational rules. For example, wave templates allow users to group outbound orders for batch processing, improving pick efficiency and resource utilization. Location directives apply query logic to assign optimal put-away and pick locations based on stock levels and storage constraints, while work templates define how work orders progress through warehouse operations. Dynamics 365 Warehouse Management integrates with other supply chain processes through direct linkage to source documents such as sales, purchase, transfer, and production orders. When a sales order is released, delivery requirements are automatically

Microsoft provides the Dynamics 365 Warehouse Management and Fulfillment solution as part of its Dynamics 365 Supply Chain Management portfolio, built on Microsoft Azure.

communicated to the warehouse, triggering corresponding picking and packing activities.

Additional capabilities include wave management for batch order processing, containerization for pallet-level handling, cross-docking, and integration with warehouse automation systems. The system also supports detailed inventory tracking using batch and serial numbers. The module leverages a message processor framework for asynchronous workflow execution. When key warehouse events occur, such as finalizing a packed container, a message is generated and queued for background processing by the Message Processor batch job. This design ensures that time-sensitive warehouse operations continue uninterrupted even when other integrated systems experience delays. Administrators can configure business events to trigger alerts if message processing fails, maintaining workflow reliability and visibility.

Updates over the last 12 months:

► **10.0.46 Release**

The latest release introduces significant enhancements to Advanced Quality Management through the addition of sample management capabilities. This feature allows warehouse and quality teams to define and manage sampling rules, improving precision in inspection processes and ensuring compliance with quality standards. A complementary feature enables users to link test instruments with maintainable assets through the Asset Management module, providing traceability of calibration activities and ensuring that instruments used in quality checks remain compliant and accurately maintained. These updates strengthen Microsoft's strategy of connecting warehouse operations with asset and quality management for greater operational control.

► **10.0.45 Release**

Version 10.0.45 expands the Advanced Quality Management framework introduced in earlier versions, offering deeper configuration flexibility and improved reporting. The module provides enhanced workflows for inspection execution, defect tracking, and test result documentation, allowing warehouse users to embed quality assurance directly into inventory operations. This update further bridges Microsoft's SCM quality processes with its warehousing environment, reducing rework and quality deviations.

► **10.0.44 Release**

Microsoft's WMS supports industries such as manufacturing, retail, consumer goods, automotive, healthcare, and government.

Version 10.0.46 of Microsoft WMS introduced sample management within Advanced Quality Management, improving inspection precision and regulatory compliance.

The 10.0.44 release introduces pairing of transfer order lines with sales order lines, improving order traceability and inter-warehouse coordination. This linkage allows planners to connect demand directly to transfer movements, reducing errors and improving fulfillment visibility. Additionally, a tracking dimension display enhancement for the Warehouse Management mobile app provides users greater control over how tracking dimensions such as batch or serial numbers appear under specific location settings. This increases flexibility for mobile workflows, supporting both batch-controlled and serial-controlled inventory environments.

► 10.0.43 Release

In version 10.0.43, Microsoft added a cleanup utility for work exception logs, designed to improve overall system performance by removing obsolete or redundant log entries. This feature supports database optimization, faster search operations, and smoother warehouse processing, particularly in environments managing high transaction volumes. The update aligns with Microsoft's focus on maintaining platform scalability and operational reliability as organizations expand their digital warehouse footprint.

Version 10.0.44 of Microsoft WMS improved fulfillment accuracy by pairing transfer order lines with sales order lines, enabling direct demand-to-supply linkage for inter-warehouse operations.

Nextworld

Nextworld is positioned as an Accelerator in the 2025 Warehouse Management Systems Technology Value Matrix for its Advanced Inventory suite, built on the company's no-code Enterprise Applications Platform (EAP). The solution is cloud-based, ERP-agnostic, and compatible with mobile devices, offering functionality across warehouse, manufacturing, and field inventory environments. It integrates with other enterprise systems via REST APIs, enabling organizations to consolidate and manage inventory data across multiple systems.

Within warehouse operations, the suite manages inbound and outbound processes such as receiving, put away, inspection, wave management, picking, packing, shipping, cycle counting, and bin replenishment. Field inventory management, branded as "Inventory in the Wild", extends visibility and control to remote and mobile operations, supporting field work order management, field fulfillment, and tool tracking.

For manufacturing environments, Nextworld supports materials management and shop-floor tracking, including kitting, and tool control to improve accuracy and reduce downtime. The suite also supports

Nextworld provides the Advanced Inventory suite, a cloud-based warehouse and inventory management solution built on the company's no-code EAP.

order fulfillment, asset tracking, and customer and vendor transaction management, including returns.

Core platform capabilities include workflow automation, data governance, integrations, role-based security, auditing, and reporting. Embedded analytics through Nextworld Intelligence provides operational insights and visualization tools, while the Developer Studio enables customers to configure and extend functionality without custom code.

Updates over the last 12 months:

► **Oracle JD Edwards Integration**

A new standard integration provides direct connectivity between Advanced Inventory and Oracle JD Edwards EnterpriseOne. This connection allows seamless data synchronization between ERP and inventory systems, improving transaction accuracy and reducing latency across order, replenishment, and fulfillment workflows. The integration supports bi-directional data exchange for inventory updates, ensuring users have consistent, real-time visibility into stock positions and item movements across connected systems.

► **Mobile Field Inventory Transfers**

A key innovation enables remote teams to manage inventory transfers directly from the field. The new transfer request and acceptance protocol supports mobile-to-mobile inventory movement, allowing technicians or field teams to initiate, approve, and confirm transfers between remote locations. This capability reduces administrative lag, improves accountability for offsite inventory, and enhances responsiveness in industries with distributed service or construction networks.

► **Single-Sided Orders**

Single-sided transfer functionality expands the flexibility of interfacility movements by supporting transfers between warehouses and facilities that are not managed within the Advanced Inventory ecosystem. This feature enables users to execute transfers to or from external locations, creating a more connected, end-to-end inventory network without requiring full system participation from every site. The result is greater adaptability in mixed-technology environments and improved control over third-party or partner-managed stock.

► **Wave Picking Template**

Nextworld introduced a direct integration between Advanced Inventory and Oracle JD Edwards EnterpriseOne, enabling bi-directional data exchange for order, replenishment, and fulfillment workflows.

A new mobile-to-mobile transfer protocol in Nextworld allows field teams to initiate, approve, and confirm inventory movements between remote locations.

The introduction of wave picking template scheduling enhances automation and consistency in order fulfillment. Users can now assign wave templates to scheduled jobs that automatically generate picking waves based on defined criteria such as order type, pick options, minimum and maximum line counts, and order splitting preferences. This functionality reduces manual setup effort, improves throughput, and enables continuous fulfillment operations during high-volume periods.

► **Barcoding Parsing and Data Capture**

Enhanced barcode parsing capabilities now allow the system to extract multiple key data elements, such as item numbers, lot codes, and expiration dates, from a single scan of concatenated 1D or 2D barcodes. This reduces the need for multiple scans per item, accelerating receiving, picking, and cycle counting activities while improving data accuracy. The enhancement also supports modern labeling formats used in regulated industries like pharmaceuticals and food and beverage, where traceability and compliance are critical.

Savant Software

Savant is placed as an Accelerator in the 2025 WMS Technology Value Matrix, recognized for SMB and Enterprise-level WMS within the manufacturing and distribution domains. Savant's offerings lie in its scalable approach through its WMS Lite, Pro, and Enterprise offerings, designed on a single code base, database, and UI/UX design. This architecture, controlled by a license key system, allows for a "Land and Expand" approach, enabling customers to transition into additional features as operational needs evolve. Savant Lite is a subscription-based WMS platform designed for small to mid-sized warehouses. It covers fundamental WMS functions, including License Plate Tracking, Receiving, Putaway, Inventory Management, Picking, and Shipping Manifest. The platform leverages barcode scanning and mobile technology for efficient inventory and order management, featuring user-friendly interfaces and built-in workflows that simplify operations. Savant Lite is scalable, allowing organizations to transition into a full-featured WMS as business needs evolve. Savant WMS Lite facilitates integration with ERP systems, including Acumatica and others, through REST APIs.

Savant Pro and Enterprise were created for enterprise-level organizations to meet the demanding requirements of large distribution and manufacturing entities. Its modular design allows organizations to leverage its functionality in alignment with its growth trajectory.

The introduction of single-sided transfers in Nextworld enables movement of goods between internal warehouses and external or partner-managed facilities not running Advanced Inventory.

Savant's unified code base across Lite, Pro, and Enterprise simplifies upgrades and ensures consistent performance as customers scale operations.

Modules like Container Tracking provide visibility and management of containers throughout the shipment journey. It captures important details such as container and seal numbers, carrier information, and voyage data. The RMA module streamlines the return authorization process with automated approval, validation, and material tracking workflows. Box-building algorithms optimize packaging by suggesting sizes based on order items, dimensions, and fragility, ensuring the selection of suitable boxes and minimizing errors before shipping. The Shipping Manifest feature automates the final steps of order fulfillment, managing carrier selection, rate shopping, document generation, and address validation. The ASN module streamlines the process between order fulfillment and the customer's receiving process, capturing item-level details for efficient electronic data flow upon shipment. The latest release features Savant's Truck/Pallet Builder Module.

Savant WMS extends beyond warehouse operations to support manufacturing and work-in-process (WIP) visibility directly from the shop floor. Within Acumatica environments, Savant enables the picking of materials for manufacturing orders, receipt of finished goods back into inventory, and real-time capture of movements through routing steps. Users can import or reference Acumatica manufacturing orders and perform license-plate-based material tracking throughout production. Enhanced labor-reporting options and supervisor dashboards provide visibility into work progress and material consumption, allowing managers to reconcile WIP inventory and production efficiency without relying on external spreadsheets. This integrated design helps manufacturers maintain end-to-end traceability, from raw material issues to finished goods completion, within the same WMS environment used for distribution.

Truck Builder provides a unified planning and execution workspace for outbound shipment consolidation. Supervisors can digitally construct truck and pallet configurations before scanning begins, grouping orders by route, stop, or carrier and sequencing pallets to optimize dock and delivery flow. Once the virtual plan is approved, operators scan and confirm pallets or license plates as they are physically loaded. Real-time validation enforces order and route accuracy, while visual dashboards track progression through Creation, Plan, Load, Validation, and Close/Dispatch. Upon closure, Truck Builder is native to the WMS and with Savant's Shipping Manifest to generate carrier documentation and Bills of Lading, preserving a full audit trail from plan creation to dispatch.

Savant's license key architecture allows customers to expand from Lite to Enterprise without migration, reducing implementation time and cost.

Savant's Truck Builder module provides digital planning and validation for outbound shipments, improving dock flow and delivery accuracy.

Synergy Logistics

Synergy Logistics is positioned as an Accelerator in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its SnapFulfil cloud-based warehouse management solution. The platform is built on a rules engine architecture that enables low-code and no-code configuration, allowing customers to tailor workflows to specific operational and industry requirements. Synergy Logistics supports organizations ranging from SMBs to tier-one enterprises across the retail, third-party logistics, wholesale distribution, manufacturing, food and beverage, and high-tech sectors.

SnapFulfil manages core warehouse processes, including inventory tracking, picking, packing, and shipping, while providing real-time visibility and traceability of inventory, assets, and personnel movements. The solution automates task allocation and optimizes picking paths to reduce travel time and improve efficiency. Its system-directed rules guide put-away and replenishment processes to ensure optimal stock location, and its flexible configuration allows organizations to adapt the software to different warehouse layouts and operational models. SnapFulfil also supports returns management for reverse logistics and scales easily to handle seasonal demand fluctuations.

The system's analytics platform, SnapData (powered by Tableau), provides real-time dashboards and reporting capabilities for metrics such as inventory levels, order accuracy, picking performance, and space utilization. Users can drill down into detailed operational reports for greater insight into specific areas, such as fulfillment rates or throughput efficiency.

For organizations deploying automation, Synergy Logistics offers SnapControl, a device-agnostic orchestration platform that integrates warehouse robotics with human workflows. SnapControl provides work prioritization, conversational rules, and real-time coordination between automated systems and workers to improve warehouse throughput and flexibility. The platform can operate as a standalone solution or as an extension of SnapFulfil to enhance robotics integration and warehouse automation strategies. Updates over the last 12 months:

► Automation and Orchestration

SnapFulfil expanded the capabilities of SnapControl, its warehouse execution and orchestration platform, to improve automation connectivity and process coordination. The platform now integrates with leading automation systems including 6 River Systems (Ocado

SnapFulfil is a cloud-based warehouse management system built by Synergy Logistics.

The platform supports SMBs through large enterprises across retail, 3PL, distribution, and manufacturing.

Group), Locus, GreyOrange, and others, as well as Vertical Lift Modules (VLMs) such as Kardex and Automated Storage and Retrieval Systems (ASRS) like Exotec. Additional integrations with IDC Conveyors and inline printers have streamlined material flow and labeling, enabling a unified control environment for human and robotic operations. These enhancements strengthen SnapFulfil's ability to manage diverse automation assets within a single, centralized orchestration layer.

SnapControl was expanded to integrate with automation systems including 6 River Systems, Locus, GreyOrange, and Exotec.

► **Order Management Enhancements**

Significant improvements to order management introduce new rule-based logic that directs shipments from sales orders to specific warehouses based on configurable factors such as product group, region, or shipping address. Users can now define warehouse-specific fulfillment rules—for example, allowing shortages in one facility while enforcing strict fulfillment in another—providing greater flexibility and control over distributed order execution. These updates reduce manual intervention in order allocation and improve overall service-level consistency across multi-site networks.

► **User Experience**

To enhance operational visibility and user autonomy, SnapFulfil introduced the Reveal Dashboard, a configurable interface that allows users to build and personalize dashboards without developer assistance. The new Receiving Station consolidates web-based receiving processes into a single screen for faster inbound handling, improving usability and reducing navigation time. A new visual cartonization module provides graphical nesting views that help minimize packaging waste and product damage, combining operational efficiency with sustainability benefits.

► **Shipping and Billing Improvements**

In shipping operations, SnapFulfil now offers rate shopping powered by Techship from Techdynamics, enabling users to compare carrier rates and service levels directly within the WMS. The update also includes enhancements to the 3PL Billing Module, providing more precise billing calculations and improved visibility into customer-specific rate structures. Together, these updates streamline outbound logistics and financial reconciliation for multi-client and high-volume operations.

The Reveal Dashboard introduced configurable user interfaces for personalized visibility.

► **Customization and Reporting**

SnapFulfil rolled out Stimulsoft, a robust reporting and design tool that empowers customers to create and modify their own labels,

reports, and templates. This capability enables organizations to adapt documentation, compliance forms, and performance reports without relying on external development resources, supporting faster customization and improved self-sufficiency within the system.

New shipping features include Techship rate shopping and updated 3PL billing logic

Core Providers

Core Providers in the WMS Technology Value Matrix are Logiwa, Mantis, Mecalux, NorthStar, and Vinculum.

Logiwa

Logiwa is positioned as a Core Provider in the 2025 WMS Technology Value Matrix for its Logiwa IO fulfillment management platform. The cloud-based system combines warehouse management, shipping, e-commerce, and analytics capabilities on a unified platform. Logiwa supports mid-sized organizations across North America, primarily serving consumer goods, distribution, third-party logistics, and e-commerce sectors.

Logiwa IO operates as an integrated fulfillment management system, maintaining a central database for inventory, orders, warehouse layouts, and operational data. Users access the platform through web and mobile interfaces, with barcode scanning technology enabling real-time inventory tracking across receiving, putaway, picking, packing, and shipping workflows. The system supports directed put-away, zone-based storage, cycle counting, and cross-docking operations, with rules engine capabilities to optimize storage locations based on configurable parameters such as product velocity and handling requirements. Order processing in Logiwa utilizes wave and batch picking methodologies. The platform creates picking waves using logical order groupings based on shipping cutoffs, item availability, and warehouse zones, while directing pickers through optimized paths. Cross-docking workflows redirect high-velocity products directly to shipping areas, and yard management functions track dock assignments and vehicle status based on proximity and priority.

Logiwa provides a cloud-based fulfillment management system combining warehouse management, shipping, e-commerce, and analytics on one platform.

The analytics layer provides dashboards and reporting on warehouse KPIs including inventory accuracy, order cycle times, employee productivity, and facility utilization. The system's configuration capabilities allow users to customize interfaces, define workflow rules, establish warehouse zones, and implement automation without extensive coding. Logiwa integrates with ERP, e-commerce, shipping, robotics, and EDI platforms through its partner network, which includes

SAP, NetSuite, Locus Robotics, Shipium, ShipStation, Amazon, Shopify, Pipe17, Sendflex, and eHub.

Updates over the last 12 months:

► **Pipe17 Partnership**

On March 27, 2025, Logiwa and Pipe17 announced a partnership offering an integrated solution for 3PL operations. The integration combines Logiwa's fulfillment management system with Pipe17's Order Operations platform, enabling 3PLs to onboard clients and warehouses using configurable templates and business rules. Features include multi-tenancy, segregated multi-account management, AI-powered OrderOps Agent (Pippen), and connectivity to selling channels. The solution claims 22 percent reduction in picking costs through task optimization and 25 percent faster onboarding and training. The partnership supports Radial's "Fast Track" client onboarding offering.

► **Sendflex Partnership**

In May 2025, Logiwa announced a partnership with Sendflex that integrates Sendflex's parcel transportation management system with Logiwa's fulfillment management system. This integration provides 3PLs and shippers with parcel cost optimization capabilities throughout the order-to-invoice process. The solution includes cartonization, carrier planning, label and forms design, simulation modeling, and 3PL rate markup configuration. Both platforms feature no-code business rules configuration.

► **eHub Integration**

On September 11, 2024, Logiwa announced integration with eHub, providing Logiwa IO customers access to eHub's analytics, API, and shipping rates. Features include domestic label creation, management of multiple package types and shipping services, and direct label printing from the Packing Station. The integration enables rate shopping, label creation and voiding, and end-of-day reports from a single platform.

Logiwa partnered with Pipe17 to provide an integrated 3PL solution that connects Logiwa's fulfillment system with Pipe17's Order Operations platform.

A second integration with Sendflex added parcel cost optimization, cartonization, carrier planning, and simulation modeling for 3PLs and shippers.

Mantis

Mantis is positioned as a Core Provider in the 2025 WMS Technology Value Matrix for its Warehouse Vision platform. The application is part of the Logistics Vision Suite, which includes dock and gate management, 3PL billing, parcel management, analytics, warehouse control and automation, and traceability modules. The system is built on Microsoft .NET architecture, featuring a three-tier structure

comprising user interface, business logic, and data access layers. Mantis supports mid-sized to large organizations globally across retail, third-party logistics, e-commerce, pharmaceuticals, high tech, fashion, food and beverage, distribution, and manufacturing sectors.

Warehouse Vision manages inbound and outbound warehouse operations through integrated purchase order and advance shipping notice handling, supporting both manual entry and automated import from ERP systems through its Logistics Link Manager. Inbound processing includes receiving workflows that verify arrivals against purchase orders, document discrepancies, and update order status, and receipt planning capabilities define SKU-specific receiving steps and priority levels. During receiving, the system checks for sales order shortages, picking location capacity, and stock levels to guide subsequent processes, with barcode scanning supporting receiving accuracy through labeling options at pallet, box, or item levels.

Outbound operations handle sales order management with stock allocation based on configurable rotation rules, including FIFO and LIFO methodologies, while the Stock Control module applies stock rotation and allocation rules to match inventory attributes with order requirements. The system generates optimized picking lists based on container and order specifications, supporting zone picking, batch picking, and other methodologies, with work directed to appropriate resources based on task requirements. Packing, loading, and shipping functions include automated label generation, packing list creation, and tracking through delivery. Cross-docking capabilities enable the direct transfer of items from receiving to outbound shipments for qualifying items.

Reporting capabilities utilize SAP Crystal Reports to provide operational insights, covering inventory levels, stock movement, order fulfillment, and workforce efficiency. The Supply Chain Intelligence subsystem offers deeper analysis and customizable reporting for supply chain metrics. The platform supports automated material handling systems integration, enabling goods-to-person picking scenarios using automated storage, conveyors, and robotics in combination with voice picking functionality that allows concurrent access to picking locations across multiple technologies. The Vision-Voice-RFID picking module utilizes smart glasses with voice recognition and wearable RFID devices for piece picking, case picking, and sorting operations.

Mantis provides the Warehouse Vision WMS, part of its broader Logistics Vision Suite that also includes dock and gate management, 3PL billing, parcel management, analytics, warehouse control, automation, and traceability modules.

The platform is built on Microsoft .NET architecture with a three-tier design encompassing user interface, business logic, and data access layers.

Mecalux

Mecalux is positioned as a Core Provider in the 2025 WMS Technology Value Matrix for its Easy WMS product, available in cloud-based and on-premises deployment models. The company offers three versions of the platform: Lite for training and educational purposes, Enterprise for manual warehouse environments, and Robotics for operations requiring automation integration. Mecalux provides solutions and advanced modules for distributed order management, multi-carrier shipping, labor management, slotting optimization, 3PL operations, manufacturing, store fulfillment, and pallet integrations, alongside products and services spanning from racking and shelving manufacturing to automated material handling equipment and warehouse design consulting. Mecalux supports small and mid-sized organizations across consumer electronics, retail, industrial manufacturing, chemical and pharmaceutical, third-party logistics, automotive and auto parts, and food and beverage sectors, with a partner network including Microsoft, Oracle, SAP, Zebra, and MySQL, and utilizes Microsoft Azure for cloud deployments.

Easy WMS manages core warehouse operations including receiving, cross-docking, putaway, replenishment, inventory management, picking and packing, shipping, and supply chain analytics. The receiving function verifies incoming stock, captures product details, assigns docks and staging areas, and supports labeling, quality inspection, and inventory blocking when necessary, while cross-docking capabilities route goods directly to outbound orders or position them near outbound docks for rapid access. Putaway optimization assigns storage locations based on product type, turnover rates, and designated storage areas while supporting detailed slotting strategies and location management, and replenishment capabilities maintain picking zone stock levels by automatically moving items based on defined minimum and maximum thresholds. Inventory management enables real-time control through flexible counting methods including blind, informed, and guided counts with inventory comparison capabilities to ensure accuracy. Picking and packing processes are optimized through task assignments and picking strategies such as order grouping and path optimization, with support for packing list generation, manual order splitting, and labeling functionality. Shipping management handles outbound order tracking, route planning, vehicle loading, and shipping documentation, while supply chain analytics transform warehouse data into actionable insights through customizable dashboards displaying KPIs such as fill rate, picking accuracy, and space utilization.

Mecalux offers Easy WMS, available in cloud and on-premises deployments, with three editions: Lite for training, Enterprise for manual operations, and Robotics for automation-intensive environments.

The company supports small and mid-sized businesses across industries such as consumer electronics, retail, manufacturing, chemicals, pharmaceuticals, 3PL, automotive, and food and beverage.

Recent updates and announcements include:

► **GenAI Integration into Easy WMS**

In March 2025, Mecalux integrated generative artificial intelligence into Easy WMS, enabling users to interact with the software through a conversational chat interface in seven languages. The integration allows users to query warehouse data, generate KPI dashboards, create downloadable reports, design custom views, and execute specific actions such as releasing urgent orders or unblocking aisles through natural language commands.

► **Autonomous Robots**

In March 2024, Mecalux unveiled a line of autonomous mobile robots, including the AMR 100 for boxes and packages, AMR 600 capable of moving loads up to 600 kg, and AMR 1500 designed for loads up to 1,500 kg. These vehicles navigate warehouses independently using onboard software and operate alongside human workers.

► **3D Automated Pallet Shuffle**

In March 2024, Mecalux launched the 3D Automated Pallet Shuttle, featuring multi-directional electric shuttles that move autonomously through storage channels and change levels independently without requiring additional material handling vehicles. This high-density storage solution increases warehouse capacity, productivity, and operational flexibility.

Mecalux integrated generative AI into Easy WMS, introducing a multilingual conversational interface that enables users to generate dashboards, reports, and actions through natural language commands.

NorthStar

NorthStar is positioned as a Core Provider in the 2025 Warehouse Management Systems Technology Value Matrix, recognized for its warehouse management system designed to optimize warehouse operations and streamline inventory management. The vendor primarily supports small and mid-sized organizations across North America within the manufacturing, third-party logistics, wholesale distribution, food and beverage, and e-commerce industries.

The NorthStar Automation Platform provides functionality for real-time warehouse visibility, automated inventory allocation, and configurable warehouse workflows. The system automatically allocates inventory to work orders and sales orders while allowing users to lock specific inventory to kits or customer orders, improving fulfillment accuracy. Its zone-based warehouse configuration supports businesses handling diverse product ranges and complex delivery requirements. Users can define storage areas and workflows according to business rules, product

NorthStar provides a warehouse management platform designed to optimize operations and improve inventory visibility for small and mid-sized organizations across North America.

attributes, and access permissions, supporting key warehouse activities such as receiving, put-away, picking, packing, and shipping. NorthStar's SnapShot and KPI dashboards provide real-time insight into operational performance, enabling users to monitor warehouse activity, measure productivity, and identify bottlenecks, 24-7. The platform supports traceability through lot tracking, unit-of-measure conversions, and repacking capabilities, while load management, vendor management, wave creation, and reporting tools further enhance operational control. Its mobile application extends functionality to handheld devices, enabling barcode-driven transactions and mobile oversight of warehouse processes. The Pack Order module simplifies order preparation and shipment, ensuring streamlined fulfillment across operations.

The platform integrates Vertical Lift Modules (VLMs) to automate the picking and packing process, helping organizations improve throughput and space utilization. Through REST APIs, NorthStar connects to a range of enterprise and operational systems, including ERP, e-commerce, and carrier networks. Supported integrations include vendors and platforms such as Zebra Technologies, Voxware, EDI, DHL, UPS, USPS, FedEx, Amazon, eBay, Magento, Microsoft Dynamics, Sage, and Oracle NetSuite, and any open 3rd party software

Updates over the last 12 months:

► **New PO Module**

A PO module, allowing for a complete standalone WMS providing the ability to produce and manage purchase orders, sales orders, work orders and 3PL billing, all as part of the WMS.

► **Asset Management Module**

An asset-management module, that now allows to track both consumable inventory to a jobsite, but now also assets like equipment and tools. Service type customers have total control per a check-in / check-out functionality on their equipment that also allows to apply a rental charge if applicable.

► **AI Updates**

AI-enabled, uses artificial intelligence and machine learning to automate processes, optimize workflows, and enhance real-time decision-making in a warehouse.

The solution supports industries such as manufacturing, 3PL, wholesale distribution, food and beverage, and e-commerce.

NorthStar introduced a Purchase Order module, expanding its WMS into a standalone system capable of managing purchase orders, sales orders, work orders, and 3PL billing within a unified interface.

Vinculum

Vinculum is positioned as a Core Provider in the 2025 WMS Technology Value Matrix, recognized for its Vin WMS product. The company supports organizations across retail, e-commerce, third-party logistics, consumer goods, healthcare, fashion, and food and beverage industries. Vinculum's warehouse management solution forms part of its broader multi-application ecosystem, which includes Vin PIM for product information management, Vin OMS for order management, Vin OMNI for online and offline retail management, and Vin RECO for payment reconciliation. Together, these modules enable customers to unify product, order, and inventory data across omnichannel environments.

Vin WMS centralizes fulfillment and inventory processes for both B2B and B2C operations. It automates replenishment based on real-time order data, ensuring consistent stock availability and synchronized inventory across multiple warehouses and channels. The platform integrates directly with clients' ERP systems, e-commerce storefronts, and over 50 last-mile transporters to streamline order fulfillment and delivery coordination. Its Multiple Order Allocation and Soft Blocking functionality ensures accurate stock visibility and prevents over-commitment of inventory across sales channels. The system's warehouse setup features configurable zones, bins, and lots, allowing customers to adapt layouts to specific operational needs. Built-in 3PL billing and contract management capabilities simplify logistics partner onboarding, track service-level terms, and automate invoicing. Reverse logistics functionality supports vendor and customer returns, managing pickup, inspection, and restocking processes.

Vinculum's analytics and reporting tools provide preconfigured and customizable dashboards to monitor warehouse performance, inventory turnover, and return metrics. Through its integrations with major web stores, online marketplaces, logistics partners, and enterprise systems—including Shopify, Amazon, Flipkart, DHL, FedEx, SAP, and Oracle NetSuite—the platform extends visibility across the end-to-end fulfillment lifecycle.

Updates over the last 12 months:

► Unified Inventory Management

Vinculum enhanced its OMS–WMS integration to consolidate stock across webstores, marketplaces, third-party logistics providers, and ERP systems into a single, real-time pool of inventory. Previously, inventory was updated in silos by channel or warehouse, often

Vinculum delivers the Vin WMS solution as part of its broader ecosystem that includes Vin PIM, Vin OMS, Vin OMNI, and Vin RECO.

The company supports organizations in retail, e-commerce, 3PL, consumer goods, healthcare, fashion, and food and beverage.

leading to mismatches and overselling. The new unified model gives organizations an accurate, centralized view of stock availability, improving order fill rates, reducing cancellations, and delivering a consistent omnichannel experience for customers.

► **Advanced Analytics and Reporting**

The company introduced enhanced analytics capabilities, including a detailed inventory ledger, 3D warehouse visualization dashboards, and AI-powered anomaly detection pilots. These updates transition reporting from static, transaction-level data toward predictive and actionable insights. Retailers can now forecast demand, detect irregularities, and optimize replenishment strategies proactively. The improvements help reduce stockouts, shrinkage, and working capital inefficiencies while accelerating operational decision-making.

► **AI Updates**

Vinculum rolled out new AI and machine learning features, including SLA prediction, transporter ranking, and returns forecasting, alongside integrations for automation technologies such as Pick-to-Light, Smart Cart, and robotics orchestration. These tools allow customers to evolve toward predictive, autonomous operations with faster fulfillment cycles, improved SLA adherence, and lower cost-to-serve. The result is a more agile, future-ready warehouse environment that adapts easily to robotics and omnichannel growth.

► **Extended Warehouse Execution Capabilities**

Recent functional upgrades extend the core WMS with order-line level picklist tagging, zone-based picking, LPN-to-LPN putaway, enforced barcode validations, and standardized inbound and returns workflows. These improvements streamline execution in high-volume, high-SKU environments, reducing manual interventions and improving accuracy. Customers report greater productivity, fewer errors, smoother exception handling, and lower operational costs due to the enhanced process automation and compliance-ready design.

Vinculum enhanced its OMS–WMS integration to unify inventory across webstores, marketplaces, 3PLs, and ERP systems, providing a single real-time view of stock and improving fulfillment accuracy.

The company introduced advanced analytics capabilities, including AI-driven anomaly detection and 3D warehouse visualization, to transition reporting from static metrics to predictive insights.