

#### **MEET THE EXPERTS**

David Meyers, Senior Director, Alpine Supply Chain Solutions

Tom Stretar, VP Technology, enVista

Drew Eubank, EVP & Co-Founder, **Zion Solutions Group** 

Amit Levy, EVP Sales & Strategy, Made4net

### MADENET

The Warehouse Management System (WMS) market is currently experiencing significant growth, driven by the increasing need for efficient supply chain management and the rise of e-commerce. Companies are investing in advanced WMS solutions to enhance automation, improve inventory accuracy, increase throughput and streamline operations. The integration of technologies like AI, machine learning, and IoT is becoming more prevalent, providing enhanced data analytics and predictive capabilities. Additionally, the shift towards cloud-based WMS is gaining momentum, offering scalability, flexibility, and lower upfront costs for businesses of all sizes.

To get a better understanding of the WMS market and buying trends, we recently sat down with experts from Alpine Supply Chain Solutions, enVista, Made4net and Zion Solutions Group. We spoke in detail about the 2024 Gartner® Magic Quadrant<sup>TM</sup> for Warehouse Management Systems (WMS), what is driving investments in WMS solutions today, and the issues buyers are most concerned about. Here are eight takeaways from our conversation.

#### THE GARTNER MAGIC QUADRANT CONTINUES TO BE AN INVALUABLE RESOURCE FOR EVALUATING WAREHOUSE MANAGEMENT SYSTEMS (WMS).

The Gartner WMS Magic Quadrant continues to provide a comprehensive analysis of the top vendors in the market based on their ability to execute and completeness of vision. By offering insights into WMS vendor's strategic direction, product capabilities, and overall market performance, the report can help companies make informed decisions when selecting a WMS.

This year's report offers a consolidated view and evaluation of the Warehouse Management System software market and an easy to use side-by-side comparison of 20 top solutions on the market. Amit Levy, EVP Sales & Strategy, at Made4net proudly reports that Made4net has been named in this research for 9 years in a row. A copy of the report is available on the Made4net website.



2. THERE IS NEAR-FUNCTIONAL PARITY FOR BASIC CORE WMS CAPABILITIES ACROSS WMS PROVIDERS SO BUYERS ARE NOW PRIORITIZING NEW FEATURES AND CAPABILITIES LIKE TECHNICAL ARCHITECTURE, VENDOR VIABILITY, TCO, AND TIME TO VALUE.

All solutions included in the Magic Quadrant support essential WMS capabilities, like receiving, put-away, storing, counting, picking, packing, and shipping goods. With core WMS capabilities converging, several features and functionalities are gaining interest. The 2024 report states that, "Technical architecture as well as vendor and product viability, TCO and time to value, have become increasingly important criteria, almost on par with the importance of functionality."

Levy, agrees that users are increasingly emphasizing functionality beyond the standard WMS processes. He notes, "Users now prioritize WMS systems capable of supporting task management and task interleaving," which dynamically respond and assign tasks based on real-time needs, thus driving operational value. Another critical value driver is labor management functionality. According to Levy, basic labor tracking and KPIs are just the beginning. He highlights the demand for systems that support engineered labor standards, providing goal times and calculations for travel time. These insights into productivity and efficiency help foster a strong and motivated labor force.

Drew Eubank, EVP of Engineering and Execution at Zion Solutions Group, cites a growing trend of users automating systems and adding robotics and goods-to-person sortation. He emphasizes the importance of middleware technology that integrates various technologies into a cohesive system through supplemental software. "Businesses seek middleware that simplifies operations and reduces errors," says Eubank, adding that the right technology provides peace of mind while keeping costs low. This shift towards advanced features and seamless integration reflects the evolving priorities of WMS buyers in today's market.

## 3. ARCHITECTURE, ENGINEERING, INTEGRATION CAPABILITIES, AND ABILITY TO SCALE AND ADAPT TO COMPLEX OPERATIONAL NEEDS ARE THE PRIMARY FACTORS DRIVING INCREASED INVESTMENT IN WMS TECHNOLOGY.



The WMS market is projected to grow from USD 4.0 billion in 2024 to USD 8.6 billion by 2029, at a CAGR of 16.3%. This indicates that many companies will be seeking new WMS solutions over the next five years. The main drivers behind growing investments in WMS technology include labor challenges, cost management, the increasing complexity of omnichannel warehouses, the robustness and integration capabilities of modern WMS offerings, and the importance of scalable and flexible system architecture.

Eubank points out that "anything that comes within the four walls of a distribution center, including labor challenges, maintaining costs, and keeping cost drivers at bay will always be a main purpose for investment." He also highlights that "distribution centers are more complex nowadays and have to keep up with ever-shifting buying patterns, returns processing, and fluctuating inventory access." The evolving role of distribution centers is a significant factor driving investments in WMS technology.

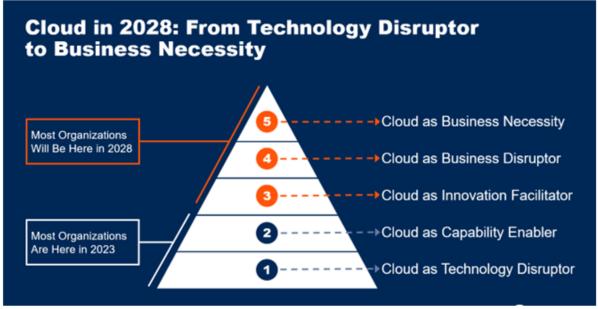
Tom Stretar, VP Technology, enVista, emphasizes the robustness of contemporary WMS solutions, noting that many vendors now offer integration software that handles all necessary data transformations. "You're not going to miss anything if it's all in-house," Stretar says, highlighting that operations seek productivity and efficiency. The peace of mind that comes from seamless system communication, reduced risks, and operational simplicity are compelling reasons for investment.

Levy underscores the importance of systems that allow users to make changes without vendor intervention. He states, "Maximum user configurability, and minimal need for additional professional services is more attractive to today's WMS buyers than ever before. The lifespan of the average WMS is 10+ years. Businesses need solutions that can grow and expand with them cost effectively."

## 4. CLOUD-BASED SOLUTIONS ARE GROWING IN POPULARITY DUE TO THEIR EASE OF ACCESSIBILITY, LOWER COSTS, AND POTENTIAL TO FOSTER INNOVATION, BUT THERE REMAINS A PLACE FOR ON-PREMISE SOLUTIONS.

Gartner predicts that by 2028, cloud computing will transition from a disruptor to an essential component for business competitiveness. Organizations are increasingly investing in cloud-based solutions, which offer benefits such as seamless integration with other platforms, scalability, and internet-based accessibility.

Figure 1. The Future of Cloud Computing Through 2028



Source: Gartner (November 2023)

Stretar highlights the growing trend, stating, "You're seeing a tremendous amount of opportunity on the technology side related to multi-tenants and using clouds and single clouds." Most of his implementations focus on helping clients move to the cloud, driven by reduced risk due to robust cybersecurity services like Amazon Web Services. David Meyers, Senior Director, Alpine Supply Chain Solutions, notes that newer entrants to the WMS market are largely assuming their services must be cloud-based. However, he mentions that feedback on cloud solutions isn't entirely positive, with concerns about updates and control over upgrades, especially during blackout times.

Despite the advantages of cloud technology, some businesses still prefer on-premise solutions. Levy observes that companies with existing IT infrastructure may find on-premise solutions more cost-effective. Additionally, regions with unreliable internet access benefit from on-premise solutions, as they offer "network stability and a lower risk of losing connectivity during a critical time." Thus, while cloud-based solutions are becoming more prevalent, on-premise solutions continue to hold relevance for certain businesses.

# 5. TODAY'S WMS BUYERS REQUIRE SOFTWARE THAT CAN BE EASILY AND QUICKLY CUSTOMIZED TO THEIR NEEDS, MAKING TECHNICAL ARCHITECTURE A KEY SYSTEM DIFFERENTIATOR.

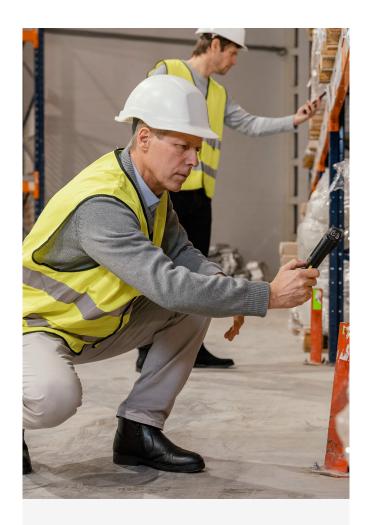
Levy emphasizes the critical importance of technical architecture in selecting a WMS. "Technical architecture is really key to a selection of any mission-critical system today and specifically in the case of a WMS," he asserts. Comparing the WMS to the brain of a human being, Levy highlights how it "controls everything that happens within the four walls" of a warehouse, synchronizing every part of the operation and adapting to various conditions.

Levy explains that the adaptability and scalability of a WMS begins with strong engineering. "If the software is built in the right way, which enables customers to make changes fast in a rather simple way without having to put too much effort into coding or needing to reach out to the vendor, in my opinion, this is a huge win," he says. This flexibility allows businesses to start with a small warehouse operation and scale up to support larger operations, higher volumes, more users, and advanced technologies.

One of the most important elements of a well-designed WMS, according to Levy, is microservices architecture. This approach involves breaking down processes into small, independent components that communicate through APIs. These microservices, such as location cubing logic or cartonization logic, can be deployed in various processes like putaway, pick planning, and packing. This modularity and flexibility are key to meeting the evolving needs of modern WMS buyers.

Stretar further elaborates on the benefits of microservices for a non-technical audience. He explains that legacy WMS required building functionality from the start to the end of the process, which involved many steps. "In the legacy WMS, when you built out the functionality, you had to build it from the start of the process generally through the end of the process," says Stretar. Now each interaction with the WMS, such as picking up the LPN and scanning it to its location, consists of microservices that can be used across various processes.

Stretar emphasizes the importance of scalability and rapid deployment enabled by microservices. "The ability to take those small little components or those microservices and build it into a technology that allows for that scaling makes for really good ability to get to faster time to value and rapid deployment," he explains. This approach allows operations to evaluate potential changes quickly and implement them rapidly, enhancing the overall efficiency and adaptability of the WMS.





#### THE ROLE OF AUTOMATION AND ROBOTICS IS EVOLVING TO MEET MARKET DEMANDS.

Labor shortages, supply chain disruptions, and demand surges are continuing to drive organizations to invest in robotics, but research indicates that more than 80% of warehouses currently have no automation at all. Automation and robotics will continue to evolve as companies continue to invest.

Levy highlights how the landscape of automation has already changed significantly, noting, "Automation is huge and everywhere you go in today's conferences or trade shows, it's all about automation. Automation is not new in warehousing though. What has changed is the variety and the complexity of these automation solutions." He explains that while traditional automation systems like goods-to-person, high-bay systems, and mini loads have been around for decades, today's solutions like AutoStore and autonomous mobile robots offer greater efficiency and flexibility.

Levy emphasizes the importance of the collaboration between various automation solutions and human resources, with the WMS serving as the orchestrator. He illustrates this with an example where picking bots and vertical lift modules (VLM) operate in different areas but need to be synchronized to deliver orders to a packing station efficiently. "The motivation is often tied to rising labor costs and a shortage in labor," he adds, indicating that automation will continue to evolve as a critical component in addressing these challenges.



Stretar adds that there is "no one size fits all when it comes to robotics," noting that Gartner has identified 34 different types of robotics suited for warehousing and manufacturing. He stresses the importance of middleware that can adapt to various robotic solutions, a necessity in environments where multiple robot brands might be used. Stretar also mentions the concept of robotics as a service, explaining that instead of a large upfront investment, businesses can now pay a monthly fee for their automation needs. "Using it as a Robot as a Service and using it as needed, that's going to be a big thing," Stretar remarks, underscoring the flexibility and scalability that modern automation solutions offer.

The integration of automation and robotics, coupled with advanced WMS, provides a robust solution to the evolving demands of the market, offering efficiency, scalability, and cost-effectiveness that traditional systems cannot match.

However, as both Levy and Stretar point out, robots will not completely replace people. "Robots and any other automation component of an operation, they don't get tired, they don't need a break, they don't need time off, they just keep working," Levy notes. But he adds, "We'll always have people within the operation and there will be more collaboration between people and robots and then robots and robots."

### 7. RECOGNIZING WHEN IT'S TIME TO TRANSITION TO A NEW WMS IS CRUCIAL FOR MAINTAINING OPERATIONAL EFFICIENCY AND GROWTH.

Common drivers for a new WMS investment include the inability of the current system to scale with growing demand, the need to support omnichannel strategies, rising internal maintenance costs without performance improvements, and outdated technology. Eubank shares, "If your current system can't scale to help you meet your customers where they're at, it's time to look into it." Additionally, when internal costs of maintaining the existing system keep increasing without any performance gains, it suggests that the technology might be outdated or sunsetting. Eubank advises, "If your internal costs to maintain the system you have today keep growing without any end in sight, it's time to start looking for a new system."

Meyers adds that strategic factors like corporate mergers can also necessitate a WMS change. He shares an example where merging companies had unique technology stacks and diverse distribution networks, and standardizing their WMS was projected to yield significant savings. He also emphasizes the importance of staying technologically relevant to attract and retain employees, warning, "If you're still banging away on a Green Screen and managing your operation with printed reports, you might want to up your game with solutions that provide real-time visibility and dashboards that present actionable information."

#### 8. A WMS IS A MAJOR INVESTMENT THAT REQUIRES A LOT OF DUE DILIGENCE.

Selecting the right WMS is a pivotal decision that can define your company's success for the next decade or more. Given the complexity of such a choice, there is a lot of due diligence that must go into the process, including determining the cost and potential ROI. When it comes to the cost of a WMS, that number can vary widely depending on the complexity and needs of different organizations. According to Stretar, the pricing structure typically includes two main components: software licensing and implementation services.

For software licensing, depending on what vendor you're going to go with, "Their cost per user from that SaaS side could be in the couple thousand dollars per user." On the implementation side, which covers the cost of integrations with other systems like TMS or ERP, essential employee training, and ongoing support and maintenance, the costs generally fall between \$500k and \$1 million. Additionally, the final price may vary based on organizational needs, such as whether the business is an e-commerce company with multiple channels or a third-party logistics provider with simpler requirements. As Stretar concludes, "You've got to do some due diligence there to understand all the variables."

#### Ready to learn more about WMS Trends?

If you'd like to learn more about the 2024 Gartner® Magic Quadrant™ for Warehouse Management Systems and key WMS Market trends, here are the next steps to take:

- 1. Watch the Webinar: Hear everything our experts had to say about this year's report and top trends.
- 2. Access the 2024 Magic Quadrant for WMS: Get a comparative analysis of key players in the WMS market and insights into their strategic direction, product capabilities, and overall market performance.
- 3. Connect with Experts: Reach out to us and the firms and panelists featured in the webinar and this paper with questions about your upcoming projects. Our expertise can be invaluable to your initiatives!

#### **About Made4net**

Made4net is a leading global provider of best-in-class, cloud-based supply chain execution and warehouse management solutions for organizations of all sizes to improve the speed and efficiency of their supply chain. Synapse 3PLExpert 3PL WMS is used by over 100 leading 3PLs to manage their dynamic operations with thousands of users.

Made4net's end-to-end SCExpert™ platform offers a robust WMS solution that enables real-time inventory visibility, labor management, and equipment productivity with performance analytics that drive faster, more accurate order fulfillment and improved supply chain efficiency. In addition to the best-of-breed WMS, the platform offers integrated yard management, dynamic route management, proof of delivery, and warehouse automation solutions that deliver a true supply chain convergence. Made4net is proud to be recognized by analysts and industry experts as a global leader in warehouse management software, including the **Gartner Magic Quadrant for Warehouse Management Systems**.

For more information, visit www.made4net.com.

#### Disclaimer:

Gartner, Magic Quadrant for Warehouse Management Systems, Simon Tunstall, Dwight Klappich, Rishabh Narang, Federica Stufano, May 2, 2024.

GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, and MAGIC QUADRANT is a registered trademark of Gartner, Inc. and/or its affiliates and are used herein with permission. All rights reserved.

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.