

# Deploying SAP EWM or WM in your conventional or automated warehouse? Here's how to get the most out of your integration.



**Guaranteed Success.**

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# Introduction

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**As the market-leading enterprise resource planning (ERP) system, SAP has become the go-to choice for companies seeking to streamline their operational processes to gain a competitive edge. That's partly because SAP's ERP software can unite otherwise disparate data sources for timelier decision-making across procurement, manufacturing, warehousing, fulfillment, service, sales, finance, quality management and human resources groups.**

When it comes to the portion of the SAP suite specifically engineered for the warehouse and fulfillment realm, SAP's software has two offerings:

1. SAP Supply Chain Execution (SCE) Extended Warehouse Management (EWM)
2. SAP Enterprise Resource Planning (ERP) Warehouse Management (WM).

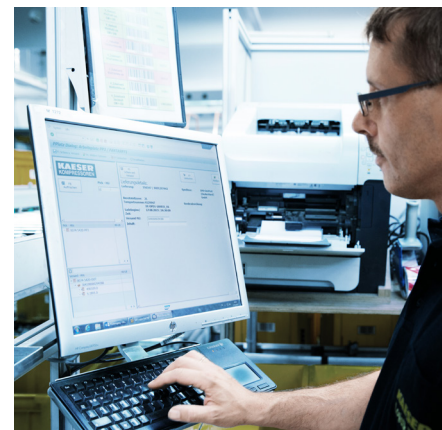
Broadly speaking, organizations might choose to implement WM if they want a more internal focus or have more basic handling processes (paper). Likewise, they may have simpler operations, are housed in small-to-medium-size facilities, or simply do not view distribution as a strategic differentiator. Companies with various automated material handling technologies in play may elect to leverage WM via an experienced software integrator/implementation expert.

Historically, EWM was deemed a better choice for large operations with extensive material handling automation, including:

- High throughput
- Large volumes
- Broad range of inventory velocities
- Complex order fulfillment processes (such as different owners of inventory cross-docking, value-added services, labor management and more)
- Multi-site reporting needs and in-depth analysis demands

More recently, EWM has expanded downward into medium-sized companies as well. By choosing an experienced deployment partner, customers can reduce risks and costs, as well as implement and improve the ROI of the system.

Some of these characteristics are particularly true for [companies deploying SAP's EWM on HANA solution](#), which can boost transaction processing speeds and handle exceptionally large volumes of data quickly for predictive analytics.



# Introduction

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There are a number of reasons why an organization's warehousing and fulfillment operations management team might choose to implement SAP EWM or SAP WM. Among them:

- Replacing or upgrading an incumbent, non-SAP warehouse management system (WMS), either homegrown or from another supplier.
- Upgrading a "best-of-breed" WMS from other vendors is just as expensive (or more expensive) than a new WMS project implementation.
- Upgrading a current SAP deployment, to EWM from WM, for example.
- Replacing the current ERP system with SAP (or implementing SAP as a first-time standard ERP).
- SAP ERP is already in use corporate-wide. For this reason, the Information Technology (IT) team has requested (or, in many cases, required) EWM or WM at the operations level for system-wide unification that's easier to support and provides a more standard upgrade path (enhanced when an organization selects both the right implementation path and knowledgeable partner for deployment).
- SAP is already in use as the corporate-wide ERP, and operations has decided that deploying EWM or WM will better align with existing IT support and upgrade availability, corporate strategy and reporting needs, as well as enhance automation integration.

Regardless of the deciding factors—or of the ultimate choice between implementing SAP EWM or SAP WM—one of the best ways to ensure maximum benefit from the deployment is to work with a reliable, proven, SAP-authorized service partner. The right integrator / implementation partner can provide strategic consultation and optimization of the deployment, ensuring you get the most out of your conventional or automated warehouse and fulfillment operation when integrating an SAP solution.

This whitepaper takes a look at the potential benefits of an optimized SAP EWM or WM deployment; key steps to ensure a smooth implementation; and the myriad ways different functional areas within a company will benefit from partnering with a qualified SAP SCE solution provider.





# Potential Benefits of an Optimized SAP Implementation

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Simply deciding to deploy SAP EWM or WM, with or without HANA, does not guarantee a successful implementation. Further, it can be a daunting decision for a company that is not sure SAP can support their distribution operations cost effectively and at maximum efficiency.

However, the chances of success increase considerably when a company selects a solution partner with intralogistics experience: One with extensive expertise in connecting different material flow technologies to standard SAP solutions without third-party middleware as well as has extensive experience with numerous WMS and WCS implementations. The ideal integration / implementation partner will provide significant value to their customers when helping them deploy SAP solutions.

# Potential Benefits of an Optimized SAP Implementation

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The ideal SAP EWM or WM implementation will produce the following outcomes:

- Faster overall processing time and throughput for key order fulfillment operations, including receiving, putaway, replenishment, picking, value added services (VAS), packaging and shipping.
- Faster reporting and key performance indicators (KPIs) provided in real time.
- A substantial decrease in an operation's overall software and integration footprint, enabling more streamlined support, upgrades and troubleshooting.
- Faster communication within the overall solution.
- Development of Internet of Things (IoT) connectivity of (machine to machine) connections to gain operational efficiencies.
- A significant reduction in custom programmed code.
- For EWM implementations, the ability to control subordinate automated systems—such as pallet, case and/or tote automated storage and retrieval systems (AS/RS) or shuttle systems, carousels and vertical lift machines (VLMs), automatic guided vehicles (AGVs), conveyors and sortation, in-line print and apply, in-line scales, and more—by connecting these automated technologies directly to SAP warehouse management and material flow software and systems.
- Ability to process Big Data across multiple global sites with HANA, which eliminates batch processing by instead utilizing a table of memory-stored data elements for on-the-fly reporting calculated only upon request (but not maintained in long-term storage).

# Potential Benefits of an Optimized SAP Implementation

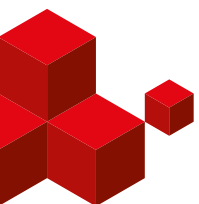
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Depending on both the application and the selected SAP solution, there may still be some limitations within the EWM or WM software, primarily revolving around streamlining user interfaces and specialized process flow optimization. Pre-configured SAP modules may not match the required dialogs for your current (or future) processes. During the blueprint stage (or later if necessary), a supply chain focused and experienced SAP integrator / implementation partner can help determine the shortfalls and create more simplified user interface dialogs without affecting—or at least minimizing the impact to—the future upgrade path.

An SCE SAP integration / implementation partner experienced in both supply chain best practice business processes and automated material handling applications will also leverage the inherent process and operational knowledge of your internal team. By incorporating insider input when streamlining operational flows within the deployment's configuration, your organization will gain the best value while getting the most out of your EWM solution (or extending the life of your SAP WM).

Further, an experienced automation supply chain partner can offer standardized solutions across your facilities, while custom tailoring each site's SAP solution to match required process flows unique to that location's (or business unit's) needs. Also, SCE-focused partners should bring a cross section of industry expertise to your project, sharing new ideas about proven deployment and configuration approaches, as well as proven, industry-specific best practices.

Regardless of whether your warehousing and fulfillment operations are deploying SAP EWM or WM as a replacement to an incumbent WMS, or updating an existing SAP solution, there are a few important actions to take in advance to ensure a smooth—and ultimately successful—implementation. These include both analysis of internal factors, as well as points of consideration when evaluating a potential partner. Some organizations choose to leverage consultants and/or integration partners to support some or all of the evaluation steps listed below to further enhance the deployment of their solution.





# Key Steps for a Smooth SAP EWM or WM Deployment

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## Operations Evaluation

1. Develop and communicate project and business case benefits and keep them foremost as you plan, integrate and deploy your project.
2. Develop and prioritize your team's list of business, functional and technical requirements.
3. Determine and document all of your current data sources.
4. Document any software customization in your current WMS, warehouse control system (WCS), and/or automation equipment to ensure complete unification of all systems.
5. Consider your future state upon completion of the EWM or WM implementation—will your processes change? How? Map out your anticipated processes.
6. Identify the important business and operational KPIs for the system to track, and provide data to analyze the effectiveness of your operations now and in the future.
7. If you have automation equipment (or are contemplating deployment of new automated technologies), document your current processes and how they map within your current or planned automated systems.
8. Consider and document your current transaction volumes per facility area and process area, as well as plan for any future growth expected.
9. Will you be adding automation equipment, either in addition to current systems or as a new handling methodology? Be sure to account for all existing, new and planned-for-future automation investments.
10. Don't underestimate the significance and effort required of implementing change management throughout your organization—as well as with your supplier and customer base.



## Software Integrator / Implementation Partner Evaluation

1. How much expertise does the potential integrator / implementation partner have with deploying SAP EWM and WM solutions in supply chain and automation applications? Do they have global expertise?
2. How well does the software integrator / implementation expert understand your business?
3. How well does the integration / implementation company's communication style fit with your organization's style?
4. Does the provider possess the proper skillset to ensure a successful deployment for your company?



# Key Steps for a Smooth SAP EWM or WM Deployment

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5. What is the integration / implementation provider's implementation maturity? How long have they been working with SAP? Remember to consider soft and hard skillsets.
6. Does the potential software integrator / implementation expert understand (and better yet, have experience with) your application-critical requirements?
7. Are the potential software integrator / implementation supplier's proposed process flows flexible (if required by your project), and will they fit with your current or anticipated business process flows?
8. Focus scripted demos, if applicable, on critical proposed future processes to ensure they will work for your operation as anticipated prior to final selection.
9. Does the integration / implementation partner have a proven approach to guiding the building of relevant test cases, backed by a sophisticated testing methodology?
10. What is the reputation of the integrator / implementation provider? Are they known for successful deliveries and implementations? Do they help their customers realize their business case?

# Areas Where an Experienced Software Integrator/Implementation Partner Adds Value to Your SAP Deployment

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Partnering with an experienced integrator to implement and personalize your SAP EWM or WM solution will not only ensure you get the most out of your automated warehouse and fulfillment operations, but also yield value for other areas within your company.

## **Business Value**

Software integrators / implementation experts with experience in deployments throughout a variety of industries, whether the same as yours or not, can bring creative ideas and innovative solutions to your project. A supplier with a proven track record of establishing best-in-class design process practices, rapid deployment accelerators and implementation expertise can develop a solution that yields:

- Reducing logistics costs through smaller warehouse inventories and improved use of resources throughout an entire network.
- Simpler handling of complex processes through increased transparency, more effective cooperation and reliable compliance.
- Higher customer satisfaction by ensuring that the right products are in the right place at the right time.
- Achievement of shorter throughput times, higher efficiency and processing reliability, reduced inventory, increased picking speeds and improved customer order quality.
- Advisory experience and expertise with all functional capabilities of the system, specific to industry verticals, best practices and operational processes.
- Execution of a step-by-step migration during restricted or limited time frames, such as during evenings or weekends when there is planned downtime.
- Improvement in the speed and adoption of change management and user acceptance with respect to new processes and procedures as it relates to new technologies, process flows and business transformation.
- Reduced risks, by providing expertise while migrating to a new warehouse management system without impacting business operations. (Sometimes this means testing in a simulated environment, with limited actual time available for true “on-the-floor” integration testing and commissioning.)
- Enhanced ROI when deploying automated material handling equipment.

## **Organizational Value**

Bringing in an experienced software integrator can help smooth the transition from the previous system to the new one in a variety of ways, including:

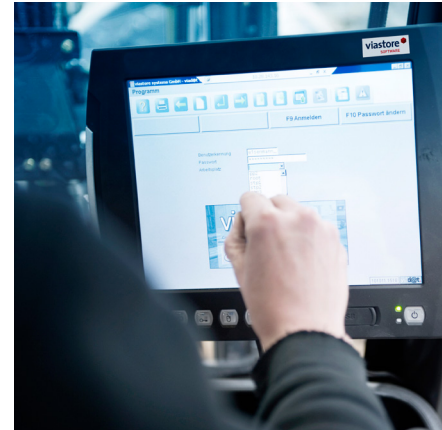
- Implementation of transitional change management processes to increase stakeholder, as well as end user commitment to the new system and processes.
- Prior to the blueprinting process, an integrator can help set realistic expectations with all internal stakeholders to avoid unnecessary enhancements, budget overruns, and sometimes even derailed implementations.
- Acting as both mentor and trusted advisor in support of execution of associate and user training, as well as supporting users as they explore the new system’s functionality before and after blueprinting phase.
- Offering a “train the trainer” approach—focused particularly on the management team—to ensure a smooth transition into the new process flow, with an emphasis on user adoption to maximize familiarity and comfort with the new system.
- Testing and simulation to ensure the new system interfaces properly and handles exceptions deftly prior to launch to minimize the potential for operational disruptions.

# Areas Where an Experienced Software Integrator/Implementation Partner Adds Value to Your SAP Deployment

## IT Value

The ideal SAP EWM or WM integrator can ensure your application meets all corporate IT requirements, as well as improve the solution's overall stability and speed in a variety of ways, including:

- Improved, advanced and optimized integration of a broad range of external third-party systems, including automated equipment, order finishing and labeling technologies, and more.
- Providing cost-conscious customizations of SAP software where required, as well as mapping the software to match your business processes. This also encompasses an analysis and recommendation about the value of customizing the SAP software to match your current process, or if altering your process to match the software is a more efficient way to execute.
- Making modifications that do not impact your future upgrade path while supporting your current or future processes (as mapped). These can include minimizing the number of screens required for a certain process, such as receiving, packing and shipping, or limiting the number of input and communication options available to associates, reducing the chance of errors.
- Testing and simulation to ensure the new software interfaces properly at all levels of system interaction prior to launch to reduce the chance of incompatibility or communication errors.
- Elimination of islands of automation through better integration with and between various equipment types, regardless of brand or supplier, for better data and operations management.



## CONCLUSION

With our combination of WMS/WCS/WES implementations, automation solutions expertise, supply chain experience and software offerings, viastore provides well-founded and technology-neutral SAP consultation to operations in a broad range of industries. Our solutions can help you achieve shorter throughput times, higher efficiency and processing reliability, reduced inventory, increased picking speeds and improved customer order quality.

For more information about how we can help you realize the most benefit from your SAP EWM or SAP WM solution—or integrate your SAP solution in an automated or semi-automated warehouse—please contact John Clark at [j.clark@viastore.com](mailto:j.clark@viastore.com) or 616-977-3950.

### INTRALOGISTICS SYSTEMS

- Consulting and System Design
- AS/RS
- Modernization
- Stacker Cranes
- Shuttle Systems
- Services

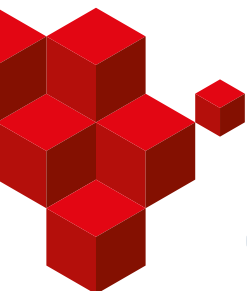
### INTRALOGISTICS SOFTWARE

- viadat WMS Suite
- SAP Logistics Solutions

### INTRALOGISTICS SERVICES

- 24/7/365 Hotline
- Maintenance
- Spare Parts

For over 40 years, **viastore** ([us.viastore.com](http://us.viastore.com)) has been a leading international provider of automated material handling system and software solutions including AS/RS (automated storage and retrieval systems) and conveyor systems, warehouse and distribution systems software (WMS, WCS, WES), and integrated SAP Supply Chain Execution Solutions. The company employs over 470 people worldwide and has annual sales of over \$140 million.



## Guaranteed Success.

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