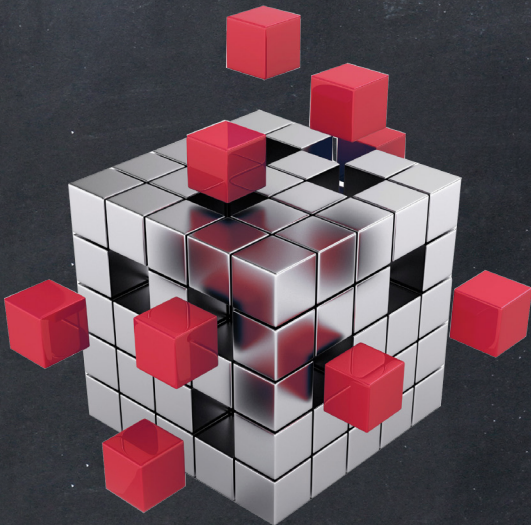


WAREHOUSE EXECUTION SYSTEMS BUYERS GUIDE

TRACE INVENTORY



BY: DAVE WILLIAMS

Director of Software and Solution Delivery
Westfalia Technologies, Inc.

www.WestfaliaUSA.com | 717.764.1115

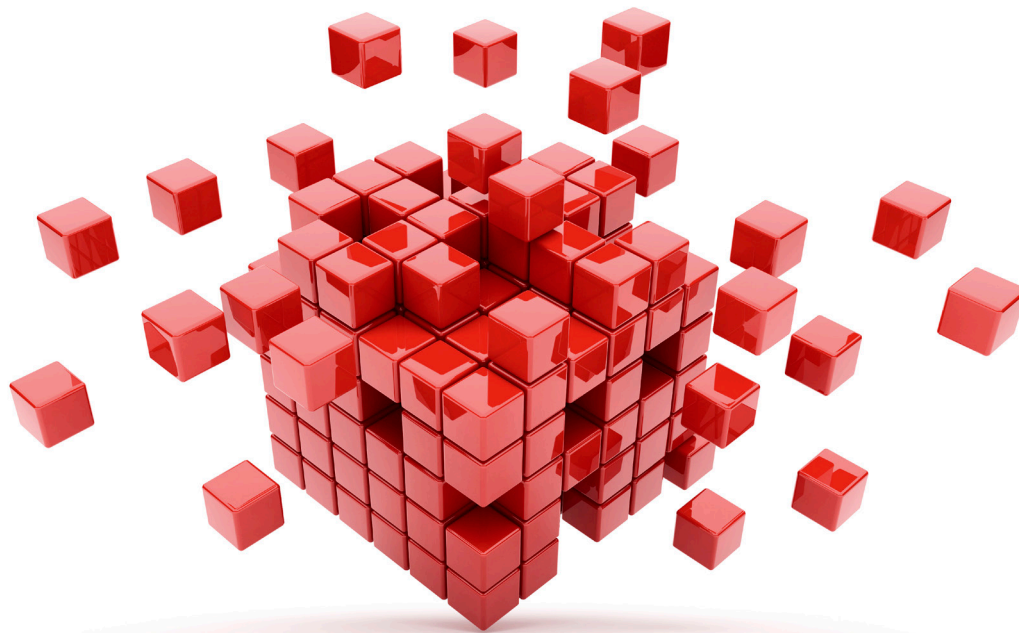
IT'S TIME TO BRANCH OUT

Warehouse inefficiencies carry significant business costs both in terms of personnel time and customer satisfaction. Delays can even translate to lost business.

New advances in technology enable warehouse operations to leverage the latest advances and be more efficient.

This technology helps to reduce overhead costs, especially in those instances where in-house staff previously maintained older technology and/or vendors have been customizing the legacy system in an attempt to keep up with new demands.

Companies today are often accustomed to using both a **warehouse management (WMS)** and a **warehouse control system (WCS)** to help move product quickly, create optimal inventory levels and improve order accuracy. Typically the WMS and WCS function as separate applications; however, in order to reap the benefits of automation, complex integration efforts are required. Valuable time and resources are often needed to support both systems and ensure that they continue effectively communicating with one another.



Ideal for organizations with increased order volumes and high throughput needs, a WES is able to receive and track product, while optimally marrying inventory to customer orders through its order fulfillment processing capabilities.

This is where a new software solution, known as a warehouse execution system (WES) comes into play. Like the conductor of an orchestra, the WES provides the overall coordination of all WMS and WCS functionality into one application – inventory management, order management, billing, workflow, and the direction of material handling equipment, such as automated storage and retrieval systems (AS/RS).

With increased emphasis being placed on automating processes within the four walls of the facility to manage inventory, software solutions such as a WES are being viewed as an important piece of the puzzle.

Referred to as the rising trend in warehouse operational management, a WES simplifies all warehouse communication and material flow within a facility.

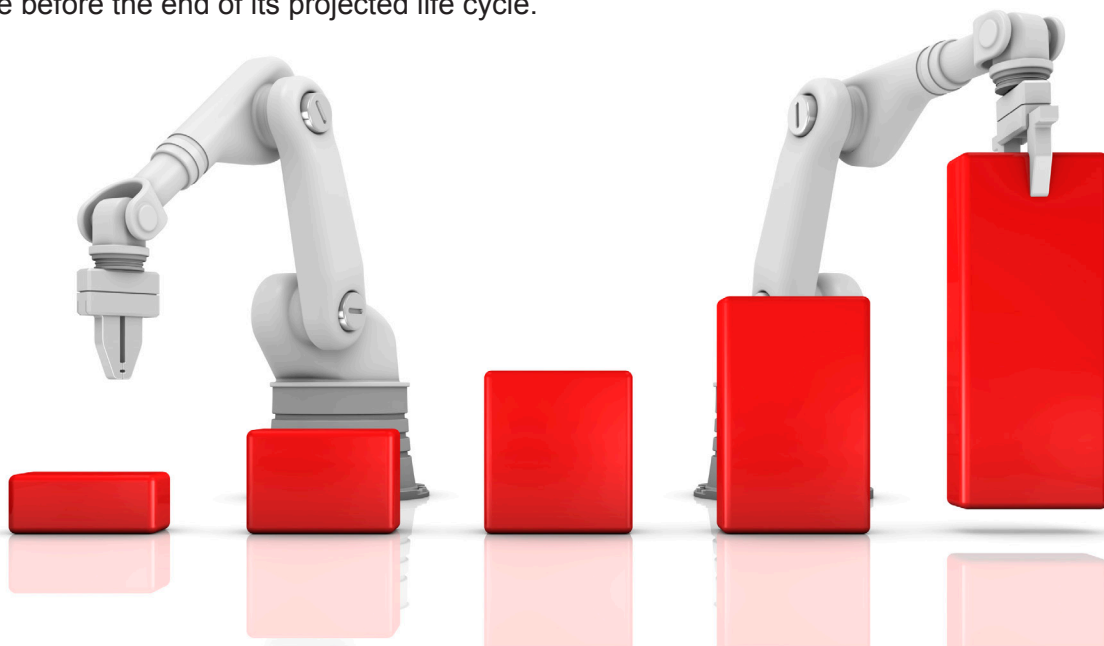


6 FACTORS TO CONSIDER WHEN INVESTING IN AUTOMATION TECHNOLOGY

With the increased emphasis on automated processes, today's manufacturers and distributors are realizing the importance of software applications in efficiently running their operations and boosting productivity.

Most experts agree that the average life cycle of a warehouse software system, such as a **warehouse execution system (WES)** is between 8 and 10 years. Of course, inefficiencies that increase staff response time, as well as the inability to incorporate new technological advances or new functional requirements within legacy systems, may signal the need to retire your software before the end of its projected life cycle.

If your current system has reached its peak or you are looking for a software solution to help automate processes, here are six factors to consider when evaluating WES solutions:



Factor #1: Software Sustainability

Sustainability is a key component when assessing software. It speaks to both the stability of the software and the vendor behind it.

Companies seeking new software applications should be mindful that there are hundreds of applications out there, but many of them may not be able to satisfy all of your specific business needs. It is important to get as much insight as possible into the functionality of the product as well as the vendor company.

Key questions to ask include:
Is the product a “one-off ”? Is it an open source software? Is it Microsoft certified? Can it support new platforms such as Android, Apple and others?

A vendor’s use of the .NET technology and C# language speaks to a desire to keep current with modern technology and to develop secure and robust applications. It is also symbolic of a future-oriented company whose application will not be moving to legacy status any time soon.

Similarly, possessing the credential of “Microsoft Gold/Silver Partner” speaks to a firm that offers an application that is keeping pace with the ever-changing technologies. It also indicates that the vendor has a closer working relationship with Microsoft, having access to new products earlier than the general marketplace and ensuring that the application supports the newest technologies.



Factor #2: Customer Support

Customer support is one of the most important — yet frequently overlooked — considerations when acquiring warehouse software. For many years, customer service was an afterthought. Today, it is a critical factor that sets companies apart. The providers that understand this will not only be around for a long time but will also enjoy repeat customer business.

Don't be afraid to ask for references and speak candidly with current vendor customers. Successful vendors know that word-of-mouth reputation is vital, and should be happy to provide you with testimonials and references.

To understand a provider's support model, start by looking at the level of **support and service** a vendor is willing to give before, during and just after product installation. Does it position itself as a partner or more like a fee-based service provider?

Review how the provider handles customer training as well. Is the vendor willing to do hands-on training? Are they willing to come on site and work with staff to not only understand the application but also how the application runs in the customer's unique environment? Evaluate the availability of support. Is the vendor always available (24/7) or only accessible on a 24/5 basis? Above all, determine whether the vendor can get you what you want when you need it — or at least provide a credible timeline for receipt. Honesty and integrity are two of the most important characteristics a vendor should possess in dealing with its customers.



Factor #3: Software Features

You should always take your business plan relative to warehouse or distribution center automation into account. Automation technology, specifically WMS, can offer a variety of features. For example, the core features of a WMS encompass areas such as: inventory management, lot or batch tracking, order processing functionality and product movement tracking.

More and more, it is becoming evident that WMS systems that are not **born out of automation** tend to not interface well with their partner WCS. Remember, WMS applications deal more with the administrative tasks of a warehouse, such as managing product and its turn, life cycle and placement, whereas WCS software focuses on equipment control, storage optimization, and processes for optimal product retrieval.

Simplify your warehouse with warehouse execution systems (WES).

While a WES is able to replace WMS and WCS applications altogether, its flexibility allows for various deployment options. For those with an existing WMS looking to introduce a WCS to assist in automation, it is best to opt for a WES instead. This allows the company to continue using its familiar WMS, integrate it with the WES, and then enable the WES/WCS functionality. Alternatively, if an organization has not yet introduced automation warranting a WCS, it can still implement the WES, utilize its WMS capabilities, and then “turn on” the WCS function when needed. This allows operators to utilize a familiar user interface, reduce training time and shorten the system start-up duration.



And then there is the traceability feature...

A key feature of a WES is the traceability function. With increased government regulations, it's becoming more important that manufacturers and distributors ensure damaged or contaminated products are discovered before they have already reached the store. If not, this can cause costly, brand-damaging recalls.

As the number of recalls shows no sign of slowing down, it is up to manufacturers and distributors to take matters into their own hands by investing in automation technology to keep consumers safe and their brands intact.

Through the use of a WES, **traceability data** can indicate if damaged products are still among inventory. If this is the case, these goods can be removed before they are even shipped, ensuring that perfectly good products do not go to waste.

While quickly reacting to recalls is great, preventing them from happening in the first place is even better. This, too, is possible with WES – not only because manufacturers can identify damaged products before they leave the warehouse, but also because automation via an AS/RS increases the speed that products are moved in and out of the warehouse.

Factor #4: Cost

Cost is often a more influential factor in smaller companies seeking warehouse software than in larger firms. Yet, the benefits a system provides should always carry more weight than the price tag. Of course, all companies must account for the return on investment (ROI). Most firms consider a good investment to be one in which ROI occurs within one to five years. The return can come in many forms, including labor savings and economies available through inventory reduction. And don't forget the cost of annual software maintenance to keep your system current when evaluating investment.

With a WES, manufacturers and distributors tend to quickly uncover new areas of cost savings.

Essentially, because there is only one application to support that is specifically designed to work with automation, the organization is able to maximize the benefits of the automated systems, while also increasing inventory accuracy and reducing labor costs.



Factor #5: Consistency

In an ideal world, businesses would prefer a streamlined system to run all the logistics of warehouse operations seamlessly. Having one vendor's enterprise resource planning (ERP) system and another's WMS, and another's WCS, etc. can create issues. Yet, each application serves a unique purpose, and different organizational units possess distinct preferences and separate purchasing efforts. Therefore, the ability to integrate across all areas of the business is important.



With a WES, complex integrations are no longer necessary.

Customers need only a fraction of the valuable time and limited resources previously spent to coordinate the WMS and WCS to effectively communicate with one another. A WES also offers the flexibility of interfacing with other applications and host systems, such as: corporate ERP systems, PLCs and other automated equipment. Utilizing this integrated approach promotes consistency across the organization as everyone is using the same system. Should the need arise, individuals can be transferred from one location to another without needing to retrain them and, therefore, raising productivity.

Factor #6: Long-term supportability

Most experts estimate that annual system support costs will average between 15% and 18% of the system acquisition cost. Most companies are comfortable with this estimate because cost is not the most important factor; however, when it comes to supporting your firm, there are more important questions. “Does the software vendor want to learn about and understand my unique business?” and “How dedicated is that provider to assuring that the new application keeps pace with my business as it grows and overall advancements in technology?” are two examples.

Relative to the latter, there is a continuum of support models. On one end, there is the model where the customer is paying 15%-18% just to have questions answered. On the other, there is the support model where the vendor partners with the customer. Here, the customer can approach the vendor saying, “My business is changing, and I need to integrate with another business unit.

How easily can I bring that business on? Are you going to charge me full customization costs or are you going to partner with me and work with me?” Another factor to consider is whether or not keeping current with new technology will require undergoing a major upgrade. Most vendors offer one or two software updates a year. Anything more than that could be indicative of an unstable product, where the vendor is still growing and trying to understand what it needs to deliver.

A good support contract should enhance the original product through updates and cover any system needs the customer has throughout the contract term.

SO WHAT HAVE WE LEARNED...

Without a doubt, manufacturers and distributors who consider WES now, rather than 5 to 10 years down the road, are positioning themselves to gain an edge in the increasingly competitive global marketplace.

Ultimately, a sophisticated warehouse software system, such as a **warehouse execution system**, has the ability to help an organization utilize its automation and warehouse personnel more efficiently, deliver better storage utilization, increase inventory accuracy, improve product traceability, and allow for customizations to accommodate specific customer warehousing needs.

Although WES is a relatively new concept, it is poised to take off, especially as the need for automation continues to grow.

Software can offer all the bells and whistles in the form of hundreds of features, but in all likelihood you, the customer, will only use a few of them. If the selected few don't work well — and the vendor doesn't support them or take the time to understand your business — then it is time to look for a new option.

