



WHITE PAPER

Overcome **The Top 4 Supply Chain Challenges**

 **tecsys**[™]

Distribution – Industry Condition

Changing business conditions carry risk. When it comes to distribution operations, the last several years have brought drastically changing requirements, and mounting operational pressures.

The steady march of ecommerce, which grew by nearly 15% last year in the U.S. , has tightened order cycle times and led to a greater number of SKUs. While the impact of serving multiple channels is most keenly felt in retail and consumer goods markets, nearly every distribution sector is dealing with heightened expectations from digital era customers.

At the same time, the economy has been in growth mode since the recession of 2008, and when combined with the need to get goods out to multiple channels, this has ramped up volumes, velocity, and DC complexity, while the need for cost control remains a priority. In fact, according to an industry report from MHI and Deloitte, the top four challenges for supply chains are 1) retaining workforce, 2) customer demands for faster response times, 3) customer demands for lower costs, and 4) increasing competitive intensity/rising customer service expectations.

Think about these changing conditions for a moment. We have more business volume, more goods to move to multiple channels, under tighter cycle times. Throw in factors like labor shortages and more stringent regulatory requirements and the pressure on warehouse operations with legacy systems is greater than ever.

These conditions have companies pondering how to meet operational pressures. Can I meet my customers accelerated delivery requirements? Can I accurately stock and fulfill customer orders without incurring additional costs? Plus, can my information technology (IT) and warehouse management system (WMS) keep up?

The reality for many companies, the pressure is so acute that they have no alternative but to get a new system. However, bringing in a new WMS carries risks. This is the situation many companies face today. They must bring in a robust WMS to keep up with changing requirements, but they must do it in a low-risk, low-cost way. All of these conditions have elevated the importance of leveraging the strengths of a robust WMS and its implementation model. Deployment needs to be rapid to fit a company's needs and ensure low total cost of ownership (TCO).

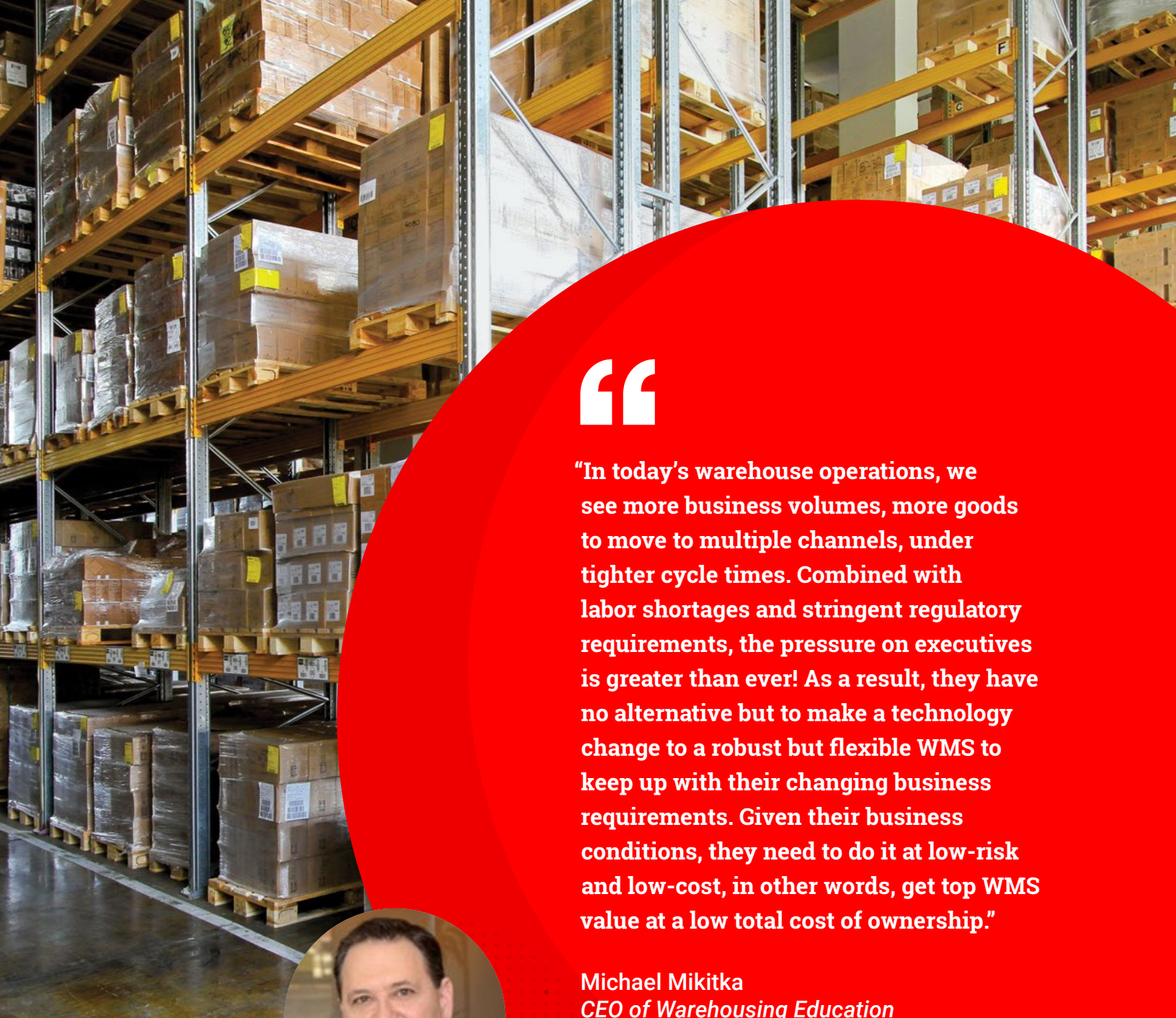
This white paper examines what makes for a high value WMS at low TCO and low-risk. It's more than methodology. It spans the full spectrum of selecting rich capabilities from a top tier WMS, to process evaluation that ties back to software configuration, to implementation acceleration tools. However, if your organization is facing severe operational issues, it needs to expand into new sites or replace older technology, then knowing what it takes to "fast track" a WMS is vital.

Top Four Challenges For Supply Chains¹

- 1 Retaining Workforce
- 2 Customer Demands for Faster Response Times
- 3 Customer Demands for Lower Costs
- 4 Increasing Competitive Intensity

Nothing less than customer loyalty is at stake when it comes to operational errors, explains Richard Beeny, CEO of LifeScience Logistics.

"A warehouse can become the weakest link of an enterprise," he says. "If you can't flow product through a facility with speed and accuracy, then your customer experience is negatively impacted."



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“In today’s warehouse operations, we see more business volumes, more goods to move to multiple channels, under tighter cycle times. Combined with labor shortages and stringent regulatory requirements, the pressure on executives is greater than ever! As a result, they have no alternative but to make a technology change to a robust but flexible WMS to keep up with their changing business requirements. Given their business conditions, they need to do it at low-risk and low-cost, in other words, get top WMS value at a low total cost of ownership.”



Michael Mikitka
*CEO of Warehousing Education
Research Council*

Role of WMS

According to analyst firm Gartner, WMS capabilities span “receiving, put-away, stock locating, inventory management, cycle counting, task interleaving, wave planning, order allocation, order picking, replenishment, packing, shipping, labor management and automated materials-handling equipment interfaces.” WMS may also extend into areas such as slotting, value added services, kitting, parcel manifesting, and integration to radio frequency (RF) devices or voice picking technologies.

A WMS might have dozens of distinct functions—some have 100 or more. However, user companies have vastly different WMS needs. Some need multiple picking zones, picking methods and cross docking, while others just need a more basic WMS at first, with the freedom to evolve to advanced functions later.

As WMS vendors have evolved their vast WMS capabilities to meet customer needs, in many cases, implementation methodologies have stayed the same. In short, the user company sends out a request for proposal (RFP) that might have over 150 check boxes, vendors respond, an analysis is done and a solution is selected.

Traditionally, consultants from the WMS vendor or a third party firm come in to lead the implementation. They sit down with users to define needs, and begin hammering out the configuration details and developing standard operating procedures (SOPs). Testing, data validation, and functional dry runs are also part of a WMS deployment, with little use of standard tools to help accelerate these tasks. Meanwhile, the user company’s IT department needs to bring in servers, database infrastructure, and IT administrators to run and support the new system.

Today’s feature laden WMS suites traditional implementation involves an extensive amount of work to configure the software, develop SOPs, and get the IT infrastructure ready to run. If the user company isn’t careful about “scope creep,” a WMS implementation can spiral into a massive project. Other alternatives, such as selecting a simpler, “WMS light” solution for small-to-midsized warehouses might not be attractive for companies who foresee increased operations complexity over the long term.

Fast-track priorities

The best approach to gaining the capabilities of a robust WMS without the risk of a complex deployment is the unique ability to select only those features needed initially along with a rapid implementation methodology supported by a full set of tools. A subscription-based Cloud model also speeds up implementation and improves TCO.

Consider these essential WMS-related challenges:

Robust Functionality

Because of operational pressures such as ecommerce picking, or such needs as value-added services, many organizations don't want to settle for a bare-bones WMS. They want a full function WMS, even if all the capabilities won't be tapped from the start.

Fortunately, new approaches to process evaluation that tie back to WMS configuration help make rapid adoption of a top tier WMS possible, and best practices that enable unique operational processes to deliver high performance. Ideally, these evaluations should tie back to how the vendor's software is configured. This process evaluation approach is key to rolling out robust WMS functionality with minimal time and complexity.

Additionally, this evaluation approach is a way to leverage the knowhow that a WMS vendor's consultants have learned from decades of experience.

Quick Onboarding

While process evaluation is central to quick onboarding, so is proper scoping of the top functional requirements; only what is needed from the rich WMS capabilities is earmarked for the fast tracking deployment using simple software tools to speed up the scoping process. Some WMS vendors have developed questionnaires and simple software tools to speed up the scoping process.

The ease-of-use of the WMS and the quality of the training tools can undoubtedly help get a system up and running quickly. A Cloud solution delivery model significantly reduces the IT burdens of bringing in a WMS. Finally, some WMS vendors offer tools that assist with cleansing data from legacy or host systems, as well as interface tools that help test and validate that data is in the correct format. It is wise to dig down into the tools and utilities a vendor has to support quick onboarding.

Think of best practice models as way of embedding cumulative know-how into a WMS, explains Mark Hawksley, Tecsys VP of Global Services, Europe.

“With rapid implementation methodology, it’s possible to package all of a vendor’s experience and know-how into a blueprint that will work, and which delivers what is essentially a working system to the user organization,” he says. “So rapid implementation methods and tools should lower risk, while reducing the burden on the user organization.”

Fast-track priorities

No Capital Outlay

Order fulfillment and distribution are becoming increasingly important to the competitive edge of many organizations, but most warehouse operations are highly cost conscious.

Fortunately, a number of WMS vendors now offer Cloud-based deployment. This eliminates the need for the additional data center infrastructure and IT staff with special knowledge of the WMS. However, some vendors might only be offering “Cloud-hosted” WMS with license fees and maintenance costs part of a more traditional licensing agreement. For those distribution organizations wanting to fully minimize upfront costs should seek out a vendor who can offer a robust WMS under a subscription model that fold in all major costs into a monthly fee.

Low-Risk Deployment

Risk in a WMS implementation can stem from the high investment, long deployment cycle and ineffective use of the solution after it goes live. These negative outcomes must be avoided.

A whole range of rapid implementation tools for a robust WMS should help accelerate deployments. These accelerators should include:

- Tools to scope key WMS capabilities immediately needed by operations.
- Detailed, documented SOPs for standard functions.
- Data cleansing tools, to ensure that data from host systems are consistent, accurate, and readable.
- Interface test functions to verify that data from an order management or ERP system flows through easily to the WMS.
- WMS feature validation that direct users to confirm that a process is operationally feasible, such as asking users to validate item and pick location.
- Defined and documented user acceptance tests to follow during dry runs and training to ensure that the system is used properly.
- Checklists to ease operational challenges, such as collaborating with trading partners to smooth the flow of orders around the go live period.

Taken together, these accelerator tools support a rapid WMS implementation in a way that eliminates much of the painstaking work typically involved. The cumulative effect is to shave months from traditional implementations.

“WMS implementations often struggle or fail due to poor data quality,” explains Hawksley. “A WMS is controlling physical elements including people, fixed and mobile equipment, and materials in real time. Get the setup wrong, and you very quickly get into difficulties, so it’s important to ensure that the system has high quality data and that system directives are operationally sound.”

Fast-track priorities

Minimal Resource Allocation

Certainly, a Cloud-based subscription model takes the data center chores for a WMS deployment completely off the table. However, another big save for human resources comes from the rapid implementation methods like proper scoping, best practice process flows, and deployment-ready SOPs.

Adopting best practices can save enormous amounts of staff time versus hand-crafting every function, such as how to set up pick locations, cycle counts, or execute inventory adjustments. Customers can still add their own business perspective to select processes identified during scoping, but the key to cutting time from a WMS project is to fully leverage the rapid implementation methods and tools.

Ease of Use

Part of any WMS deployment methodology is the training phase. To the extent that the WMS is intuitive, the time and effort needed for this phase can be reduced. Fortunately, innovative WMSs now offer visual cues that help warehouse associates more effectively and accurately carry out tasks like picking. For example, when the pick quantity changes from the norm, a number icon can flash to show the exception condition. They can also insert product, package images and highlight a serial number onto a device screen, helping precisely identify the right item. Ease-of-use also comes from other aspects of a WMS, including preconfigured SOPs and other best practice content.

Secure Access from Anywhere

A Cloud-deployed WMS allows access to functions, dashboards, and data from anywhere on any device. This makes it possible for warehouse managers to easily monitor operations, or customer service managers, supply chain executives and others to drill down into inventory availability or performance metrics.

While there are certain industries that are predisposed to on-site deployment, there is a growing trust in the level of security that major Cloud infrastructure vendors can provide.

WMS providers typically work with Cloud services providers to offer Cloud WMS to customers. Major providers of Cloud data center infrastructure have deep expertise in security, including data partitioning. According to one recent survey of cyber security professionals, respondent's perception of Cloud security is improving as cloud applications mature.

Most companies who run DCs also want a common WMS platform for all sites. Using a rapid implementation methodology, a company with dozens of warehouses and perhaps two or three WMSs can use a fast track deployment as a proof of concept for broader rollout. Having one WMS can significantly cut overall and maintenance costs, and eliminates the need for additional internal resources and expertise in comparison to running multiple incompatible systems.

With major Cloud data center providers able to concentrate enormous resources on security, the emerging thinking is—let the major Cloud providers concentrate on Cloud data center security, allowing enterprises to focus on fulfillment.

The keys to **success**

There are multiple reasons why many companies are in need of a new WMS today. Some are opening new sites to serve new markets, or have expanded via acquisition. Many are still paper-based, while others are finding their legacy systems can't keep up with Omni-channel requirements. The solution for these situations is a robust WMS, scoped to their unique needs, deployed under an end-to-end fast track methodology and supported by a full set of tools.

By following a rapid implementation methodology with a full set of predefined process flows, and tools, distribution organizations deploying WMS can gain high value and exponentially decrease time and cost. They can get a top-tier system running in weeks, not months, start gaining value, and still have the option of installing more features at a later time.

A rapid implementation methodology might not be the best fit for all organizations. For some heavily automated facilities in which a WMS has to interact with the sophisticated materials handling equipment in a granular way, a more traditional deployment with custom services around automation integration might be necessary. But for many warehouses struggling with error-prone legacy systems, the fast-track approach can bring the benefits of a top tier WMS with less cost, time, and risk than previously possible. It's also an ideal approach for smaller or midsized warehouse operations with evolving needs, or a large enterprise with many warehouses seeking to quickly deploy a top tier WMS as a proof-of-concept, then roll it out enterprise-wide.

Before facing additional operational challenges, the next step for decision makers is to ask vendors for a robust WMS that can be scoped to meet their immediate needs, paired with the right set of tools outlined in this white paper, to make fast track WMS a reality!

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About **Tecsys**

Since our founding in 1983, so much has changed in supply chain technology. But one thing has remained consistent across industries, geographies and decades – by transforming their supply chains, good organizations can become great.

Our solutions and services create clarity from operational complexity with end-to-end supply chain visibility. Our customers reduce operating costs, improve customer service and uncover optimization opportunities.

We believe that visionary organizations should have the opportunity to thrive. And they should not have to sacrifice their core values and principles as they grow. Our approach to supply chain transformation enables growing organizations to realize their aspirations.



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