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Does Your Warehouse Software Need an Upgrade?

Miebach Whitepaper 2025

Content

Even if you current WMS/WCS/WES is "working", outdated systems often carry invisible burdens.

Make your warehouse software future proof!

Introduction

A typical day in the warehouse might start with a walk-through, observing operations with a tablet or clipboard in hand. You may notice staff double-checking inventory on paper, manually correcting shipping errors, or navigating slow and outdated software interfaces. You review performance metrics, if they're available, and question why picking errors, delays, and overtime costs continue to persist.

This leads to a critical consideration: Is our warehouse software enabling efficiency, or creating bottlenecks?

Many facilities still rely on legacy Warehouse Management Systems (WMS), Warehouse Control Systems (WCS), or Warehouse Execution Systems (WES). These systems may have been suitable a decade ago, but today's dynamic environment demands more. If key indicators such as order accuracy, fulfillment speed, or inventory visibility are stagnant, or difficult to measure, it may be time to evaluate whether your current system is aligned with operational needs.

This whitepaper outlines how to assess your existing systems, identify signs of inefficiency, understand the capabilities of modern warehouse solutions, and make informed decisions about upgrades or replacements.

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Indicators That Your Current System May Be Obsolete

1. High Error Rates in Picking and Fulfillment

Frequent picking errors and customer complaints may indicate limitations in your current software. Modern systems support verification scans and optimized pick logic, essential for maintaining accuracy and customer satisfaction.

2. Shipping Delays and Throughput Constraints

Inability to ship all orders on time or extended truck dwell times may suggest your system lacks proper support for scheduling, dock management, or real-time task orchestration. These inefficiencies often stem from outdated workflows that cannot scale with demand.

3. Limited Visibility and Manual Reporting

If operational data must be extracted and analyzed manually, or if KPIs cannot be monitored in real time, your software may not support informed decision-making. Modern solutions provide dashboards and real-time analytics as standard.

4. Reliance on Workarounds and Shadow Systems

When employees depend on spreadsheets or informal methods to compensate for system gaps, it indicates misalignment. Manual workarounds increase risk and reduce productivity, especially if key processes occur outside the system.

5. Elevated Labor Costs

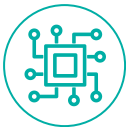
An inability to optimize task allocation, travel paths, or resource utilization often results in excessive labor hours. Additional hires or overtime to compensate for software shortcomings should raise concerns about system efficiency.

6. Inventory Inaccuracies

Frequent stock discrepancies suggest your system may lack real-time updates or robust cycle counting. These issues lead to missed sales, expedited orders, and customer dissatisfaction.

7. Incompatibility with Automation

Introducing technologies like conveyors, AGVs, or MHEs without proper integration limits ROI. Legacy systems often lack the APIs or architecture to support modern automation tools.



8. Difficulties Integrating with Other Systems

Manual imports or disconnected processes with ERP, TMS, or e-commerce platforms indicate your warehouse system is not sufficiently interoperable. These inefficiencies are not sustainable in a connected supply chain.

9. Frequent Downtime and Rigid Architecture

If routine updates or business process changes require vendor intervention or result in disruptions, your system likely lacks the flexibility necessary for modern operations.

10. Operational Disruptions Observed on the Floor

Visible inefficiencies, idle equipment, inefficient picking paths, or delayed packing, often stem from software limitations. Contingency plans like added labor or spreadsheet planning may mask, but not resolve, core issues.

Defining System Requirements Based on Business Needs

Modern warehouses need scalable and agile systems to meet evolving operational and strategic goals.

Once pain points are identified, it is essential to assess whether your current software meets your operational and strategic objectives. Modern warehouses require systems that are scalable, agile, and aligned with increasingly complex demands.

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Key Functional Requirements

- **Real-Time Inventory Visibility**
  The system should update stock levels instantly, supporting scanning and location accuracy across all transactions.
- **Optimized Fulfillment Processes**
  Support for advanced picking strategies, dynamic slotting, and real-time task allocation is vital to operational efficiency.
- **Automation and Robotics Integration**
  Seamless interfacing with AS/RS, conveyors, and mobile robotics maximizes return on automation investments.
- **Advanced Order and Workflow Management**
  Flexibility to handle diverse order profiles, prioritize urgent requests, and manage value-added services (VAS) is essential.
- **Labor Tracking and Planning**
  Insight into individual and team productivity supports workforce optimization and cost control.
- **Scalability**
  The system must accommodate future growth, additional facilities, order volumes, and channels, without major redesign.

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Critical Non-Functional Attributes

- **High Availability and Reliability**
  Any downtime impacts throughput. Systems should offer cloud-based or redundant architectures to minimize risk.
- **Performance and Responsiveness**
  Interfaces should load quickly, with minimal lag during high transaction periods.
- **Integration Capability**
  Modern systems should support API-based integration with ERP, e-commerce platforms, TMS, and customer portals.
- **Configurability Without Custom Code**
  Workflow changes and process rules should be manageable internally, without relying on external developers.
- **Vendor Support and Product Viability**
  Ongoing updates, active support, and a clear product roadmap are critical for long-term success.

Understanding the True Cost of Legacy Systems

Visible and Hidden Costs

While older systems may appear cost-effective on paper, the hidden costs often outweigh the perceived savings.

These include:

- **Labor inefficiencies**
- **Manual data reconciliation**
- **Delayed shipments and customer dissatisfaction**
- **High IT maintenance and support burdens**

Legacy systems may seem cheaper but carry hidden costs, customization burdens, and scalability limits .

Customization Overhead

Legacy systems frequently rely on bespoke code, making upgrades costly and complicated. In contrast, modern systems emphasize configuration over customization, reducing cost and complexity.

Under- or Over-Specification

Using a high-end system with unused features increases TCO unnecessarily. Conversely, overextending a basic system through workarounds leads to errors and low productivity. Right-sizing the system to your operation is critical.

Scalability and Risk

Older platforms often lack the agility to support growth, automation, or regulatory changes, limiting long-term competitiveness.

The Role of Supply Chain Consultants in System Upgrades

Selecting and implementing a new warehouse system is a strategic business decision, not merely an IT project. The involvement of a supply chain consultant adds value at every stage:

Key Contributions:

Independent Needs Assessment
Objective evaluation of your current state and future requirements avoids over- or under-investing.

Market Insight and Vendor Selection
Consultants bring deep knowledge of the technology landscape, helping match business needs with proven solutions.

Process Optimization and Documentation
Upgrades are an opportunity to streamline workflows and build best practices into the system from the outset.

Project Management and Change Leadership
Experienced guidance ensures timelines, budgets, and change management are handled professionally.

Cost Control and ROI Tracking
Consultants help identify hidden costs, negotiate vendor contracts, and measure post-implementation value.

Strategic Alignment and Future Readiness
Ensuring the selected platform supports future business plans, including automation, expansion, or channel diversification.

Conclusion: A Strategic Investment in Operational Excellence

If the challenges described above resonate with your operations, it is likely that your current warehouse system is not meeting the needs of a modern, competitive supply chain. The decision to upgrade should be viewed not as a cost, but as a strategic investment in resilience, productivity, and service performance.

With the right support the journey to a modern warehouse system can be structured, manageable, and ultimately transformative.

The next step is not only to ask if your software needs upgrading, but how to execute that change effectively, and who the right partners are to help you lead it with confidence.

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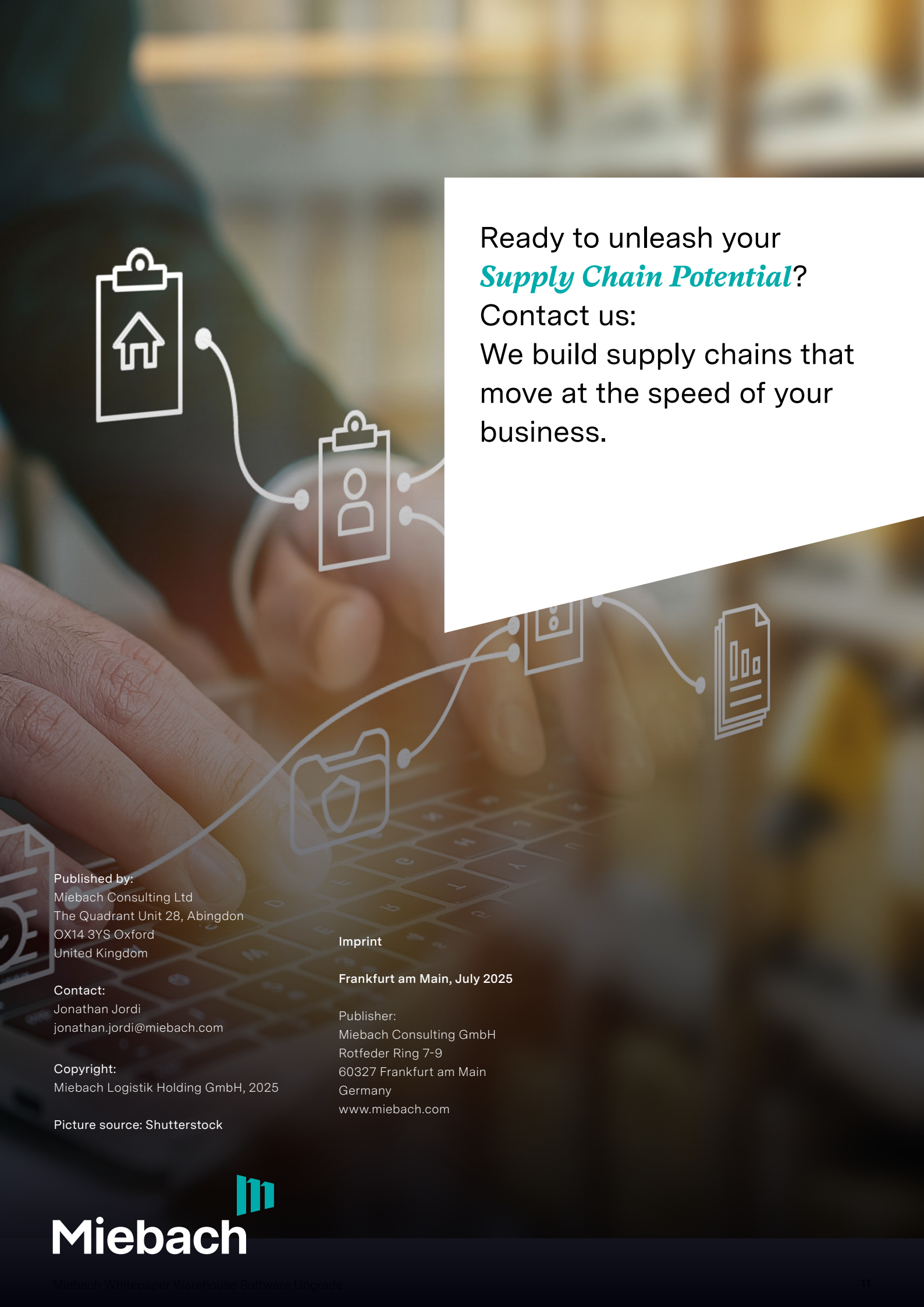
*“Would you like to get more insights on Warehouse Software Uprades and Supply Chain Transformation?
Or are you looking for a partner to support you in your supply chain project?
Please get in touch with us!”*



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Contact us:
We build supply chains that move at the speed of your business.

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