



# The Critical Factors You Must Consider Before Upgrading Your Warehouse Management System

## **Did you know that companies such as Circuit City, Verizon, Honeywell, Sport Chalet and more than 700 others are now able to upgrade their WMS for under \$8,000\*?**

By contrast, others are spending \$400,000 or more every few years—even when they receive free software upgrades under their vendor's maintenance contract. This is because the service cost to install these upgrades and bring any customer-specific configurations and modifications forward to the latest release becomes a costly, time-consuming process.

This report will explain why traditional upgrades are so costly, and how HighJump Software, a 3M company, will empower you to break this cycle and save millions in fees over the life of your system.

### **The Decision to Upgrade Your Warehouse Management System**

To actively compete in today's ever-changing business environment, companies need a warehouse management system (WMS) with robust, adaptable functionality that can stand the test of time. This is often a central component of a comprehensive system that can supplement warehouse management operations with functionality for supply chain visibility and event management, transportation and yard management, collaborative inventory management, supplier execution enablement, data collection and RFID. Collectively, these components represent a supply chain execution (SCE) solution that can provide competitive advantage in an ever-changing business environment.

If you're like most logistics or IT managers and executives, you're probably relying on a five+ year-old WMS that requires you to pay your current provider to upgrade your system with important new features (i.e., RFID) that address your specific business requirements. You may also need to add new supply chain execution functionality but are unable to implement it with your current WMS. But the decision to upgrade is not one that can be easily made, regardless of its necessity. The upgrade process affects more than just your order-fulfillment operations. Long implementation periods and the re-development of custom code create a ripple effect throughout the organization in terms of high costs, risk to core business processes and diminished efficiency.

### **The Underlying Problem: Custom Code**

Why does such a common undertaking have to paralyze your operations and your profitability? The reason: Conventional systems contain a shortcoming in their design in that many changes can only be accomplished through switches. Anything beyond the functionality offered with these switches must be incorporated with the addition of inflexible custom coding, which doesn't carry forward with an upgrade. This custom code is added during the original system implementation to bridge the gap between the standard product and your company's unique needs. As further needs develop, more code is added. In some situations, this reaches an extreme where so many changes have been made that any new modifications become a major undertaking, effectively reducing or even paralyzing the system's ability to be altered at all. The problem with this strategy is that the system will ultimately contain haphazard functionality that is difficult to locate and document—and that might adversely impact other areas of the software application.

Continuously upgrading these types of warehouse management systems with additional code-level changes leads to a potentially disastrous spiral of exorbitant costs, extended timeframes, and a high level of system and operational risk. All previous code-based modifications have to be re-applied when the system is upgraded. For you this means a never-ending process that results in loss of competitive advantage and possibly irreparable damage to key customer relationships. At some point it becomes impossible to recognize any return on investment because the upgrade process contains nothing but negative outcomes.

\*Please note that the \$8,000 does not include reengineering of the business process, O/S upgrades, hardware upgrades, database upgrades or travel expenses.

## What You Can Expect to Gain With This Report

In this report we will examine the five critical factors every warehouse, logistics, IT and supply chain professional must consider when evaluating the decision to upgrade their existing WMS. We will also explore warehouse management and supply chain execution systems from HighJump Software, a 3M company, and discover how the adaptability of HighJump's architecture eliminates the need for custom code-based modifications and minimizes the risks associated with the typical upgrade process.

As a result, you will be able to consider the possible impact involved with these interrelated critical decision factors as you determine the best course of action for your business, whether that means upgrading your existing system or replacing it with a more adaptable, cost-effective solution.

# 1

### The Cost Factor

The simple fact that traditional warehouse management systems contain custom code is the reason they are so expensive to upgrade. A full system upgrade can push your total cost of ownership (TCO) to \$1 million or more—which can surpass the cost of implementing an entirely new system. And worse, these upgrades perpetuate an already troublesome and expensive situation.

The complexity of modifying the code means that only the vendor or vendor-certified IT consultants can undertake the type of modifications that you need to keep current with customer needs. Businesses oftentimes find themselves "held captive" by their vendors because they have no other means of altering the code. This type of work typically requires three to six months in development time, which can accrue a hefty bill from your vendor for the necessary coding, testing and debugging. Much of this is due to the fact that any previous code-based changes made to tailor the system's standard functionality to fit your particular business needs must be re-applied, re-tested and re-implemented.

Your customer service could also be negatively affected by diminished efficiency in the event of unexpected system downtime during the upgrade process. Ultimately, you could lose revenue if shipments are lost, expectations are not met and unhappy customers start exploring alternative distribution options. Worse yet, you haven't solved the root cause of this perpetual problem.

In short, upgrading an antiquated code-based system keeps you tied to your vendor for costly modifications.

# 2

### The Time Factor

Chances are, you're already short on time. With the speed of today's unpredictable business environment, you'd probably prefer to spend your day managing customer expectations instead of managing a lengthy upgrade to your WMS. Or perhaps the increasingly complex demands of your customers have compressed the timeframe in which you can implement the changes your business needs to increase efficiency and remain competitive.

Unfortunately, the complexity of modifying code-based processes not only requires you to wait until your vendor can schedule the appropriate resources to begin the project, but it also means that the modifications involved will likely require three to six months to implement. In some cases, the upgrade process can extend over a year due to the intricacy of altering the underlying code.

Although many vendors promise short implementation times, the actual process typically goes far beyond their estimates. This happens because business requirements are constantly changing, even while a company's system is undergoing an upgrade. Many companies find themselves in a situation where midway through the upgrade they have to make additional changes which require the vendor to rework what has just been upgraded, further delaying the completion date.

In essence, extended periods of time spent upgrading your WMS is time not spent focused on the efficient operation and continual improvement of your business.

## 3

### **The Risk Factor**

Upgrading a typical WMS can pose a variety of threats to your core business operations. Once again, the prevalence of custom coding means that these types of systems are not architected to handle change. Therefore, the difficulty involved in code modifications represents a serious risk for lost data and disrupted business due to system debugging and other testing that may lead to unexpected downtime.

In addition, upgrades made to one part of the system can have unintended effects on related functions. The likelihood of this occurring increases with the volume of custom code. Moreover, the traditional upgrade process puts business operations at risk if the upgrade cannot properly support them. Equally risky is the prospect of maintaining a WMS infrastructure that has limited to no support from the suppliers of related equipment and software.

Ultimately, the potential risk to customer relationships must be considered in the upgrade decision. Customers today demand short order cycles and high degrees of accuracy throughout the fulfillment process. Shipping mistakes and other customer service errors that can result from glitches in the upgrade process can cost you dearly in lost customers and revenue. Ironically, the upgrade process for a code-based WMS can threaten the stability of the operations and customer service it is intended to improve.

## 4

### **The Adaptability Factor**

Your present need to adapt your WMS to the changing business environment is evidence of the fundamental importance of system adaptability. Just think of the number of changes—both planned and unplanned—that have occurred in your business over the last 12 months. Evolving markets, emerging technologies such as RFID, changing customer preferences—the global economic climate advances so quickly that no software provider can predict what your business will need six months or a year from now. Therein lies the problem.

It is a serious mistake to assume that any software upgrade—no matter how comprehensive it may seem during the initial implementation—can provide all of the functionality your business will need down the road. That's why adaptability is so crucial. A system upgrade that does not meet new business requirements forces you to develop more custom code, which puts your organization at a competitive disadvantage as it diverts capital and resources away from other core business goals. As discussed in examining the cost, time and risk factors, modifying code is not an easy or risk-free task. In the end, your company will bear unnecessary expense and jeopardize operations in meeting the changing demands of your customers.

The inherent inflexibility of code-based systems prohibits you from quickly and cost-effectively reacting as your business environment changes.

# 5

## The Support Factor

Whether you require vendor support for incremental changes to your WMS, a new version upgrade, or the answers to frequent questions, the level of support your vendor provides is critical to your ability to operate efficiently. Oftentimes companies decide to postpone upgrading to the latest version of their vendor's WMS software due to the fact that their previous custom changes will need to be re-applied to the new version. Unfortunately, this is essentially foregoing an upgrade to the level of support they will receive. This occurs because the vendor's support staff is continuously trained to deal with issues pertaining to the most recent version of the software, and therefore becomes less knowledgeable about previous versions as time passes.

Similarly, delaying a potentially complex upgrade to your WMS can require you to maintain older versions of related infrastructure such as databases, operating systems and other software. Again, this means that the support personnel trained to deal with these components are focused on providing assistance for the newest versions and not those that are several years old. In some cases, support for older infrastructure is transferred from the original provider to a third-party vendor, who can then charge a premium to support organizations that elect to maintain older software and infrastructure components.

Ultimately, running on an outdated WMS not only hinders efficient operations, but also decreases the level and quality of support you receive from your vendors.

### Finally, A Better Alternative!

HighJump Software, a 3M company, has taken a different approach to the traditional obstacles presented by code-based systems. Its unique architecture separates business logic from underlying code, so the system is completely adaptable to all of your current and future requirements—and any modifications you have made are unaffected by the upgrade process. Therefore, you can make your own modifications as needed—quickly, cost-effectively and with little risk to operations.

#### • *Dramatically Reduced Costs*

Some companies bite the bullet and resign themselves to the belief that all warehouse management systems, whether old or new, require the expensive and painstaking process of custom code modification every time the system must be changed. While this may be true for older, proprietary systems, HighJump's unique architecture permits changes to be made without any custom coding. In its place are powerful configuration tools that can be employed by the users themselves to accomplish "point and click" changes without requiring vendor resources. This dramatically reduces the costs of maintaining a warehouse management system on an ongoing basis. And, more importantly, it enables companies to avoid the code modification process for future upgrades—keeping total cost of ownership low.

#### • *Minimized Timeframes*

One of the key benefits of HighJump's adaptable architecture is that modifications are easy to make on an ongoing basis. This solution doesn't require your operations personnel to spend their already limited time working with your vendor to apply new functionality. Your operations team is empowered to make changes on an incremental basis in no time at all. In addition, even new system installations are performed quickly due to the fact that HighJump leads the industry in its rate of successful implementations.

- ***Mitigated Risk***

HighJump's adaptable infrastructure grows with your business, thereby mitigating many of the risks involved with typical upgrades. System downtime is minimal as upgrades are made in hours or days, not weeks or months. Because of this, your business is up and running quickly with new functionality that accurately addresses the unique needs of your business operations. Ultimately, your customer relationships will remain strong as you deliver uninterrupted service.

- ***Proven Adaptability***

While the expense and time involved in typical upgrades make frequent changes to traditional systems prohibitive, HighJump's warehouse management system can be quickly and cost-effectively adapted whenever needs change. This advanced, highly flexible system allows changes to be implemented on an incremental basis versus waiting to do massive upgrades every few years. No other system on the market can make this statement, and it's one of the reasons HighJump has more than 700 satisfied customers.

- ***Continuous Support***

HighJump's customers benefit from a full-system approach that supplements software and upgrades with training, consultation and toll-free telephone support. This support includes having the latest software version shipped directly to you on CD-ROM, which your operations team can then use to perform the upgrade in a matter of hours. HighJump's unique architecture allows all customers to receive identical upgrade packages, which enables you to update your system's underlying functionality without altering any of the modifications you may have made.

The simplicity of upgrading HighJump's solutions means that you're always running on the latest version—and you always have access to HighJump's support personnel who are completely knowledgeable about dealing with your questions and concerns. Furthermore, running the most recent version of your HighJump system enables you to keep current with new versions of related databases, operating systems and software, which improves the level of support you receive from these vendors.

## Conclusion

Responding to changing customer needs is a never-ending process. Many companies prefer to endure the pain of periodic system upgrades rather than implement an entirely new warehouse management system—an option that may not even be explored because of misconceptions about implementation costs, maintenance and complexity. Forging ahead with upgrades without looking at other options puts your company's bottom line and competitive advantage at risk.

HighJump Software's uniquely adaptable architecture provides businesses with a state-of-the-art WMS that can adapt to a changing business environment. Implementing this type of flexible system as an alternative to traditional system upgrades allows companies to position themselves to meet the customer service demands of the future—without exorbitant fees. Typical upgrades are simply too expensive, risky and time-consuming to implement as often as they are needed.

**Contact HighJump Software, a 3M company, for more information on how its adaptable solutions can offer you lower total cost of ownership, easier and more cost-effective maintenance, easier and more frequent upgrades, and other long-term benefits that will help your company remain competitive now and in the future.**

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### ***About HighJump Software, a 3M Company***

*HighJump Software, a 3M company, is the global leader in providing highly adaptable, best-of-breed supply chain execution solutions that streamline manufacturing and distribution from the point of source through consumption. HighJump's tightly integrated solutions empower operational excellence in the warehouse and optimize the flow of inventory throughout the supply chain by facilitating collaboration with customers, suppliers and trading partners. These comprehensive solutions combine robust, standard functionality; a best practices-based implementation methodology; and a uniquely adaptable architecture that facilitates fast, cost-effective system modifications. The result: the industry's lowest total cost of ownership for more than 700 satisfied customers worldwide. As part of the 3M family, HighJump leads the industry in financial strength and delivers on an unmatched commitment to innovation and quality. HighJump leverages these advantages to continually expand its solution footprint and empower operational excellence for domestic and multinational customers.*

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