Today’s Class: WMS in the Cloud
Speakers

Thomas Goldsby
Professor
James A. Haslam, II Chair of Logistics
The University of Tennessee Knoxville

Scott Brask
Vice President Cloud and Security Operations
Supply Chain Master Class: Warehouse Technology Excellence

Why are we here? What are we trying to accomplish?

Class Schedule:
• July 14: 10 Critical Capabilities of a WMS
• July 16: WMS in the Cloud
• July 21: Getting your ROI in an Enterprise or SMB WMS Implementation
• July 23: From production to last mile delivery: WMS as the integration point
• July 28: From a Manual to a Fully Automated Warehouse

Master Class Series – On-Demand
• Addressing Labor Challenges
• Cold Storage Trends
Housekeeping

• All phone lines are muted

• Recording of today’s class and slides will be emailed to you within 48 hours

Questions:
• Ask questions during today’s class in the GoToWebinar Questions window
• Questions will be addressed at the end of today’s class or we will follow up with questions via email after class

Handout: Safety in the cloud: Cloud vs. in-house security

Poll Question: What percentage of your applications have you migrated to the cloud?
The Wonderful World of WMS

Manufacturer

Customer Places an order

Order management system communicates to WMS

Warehouse Management System (WMS)

<table>
<thead>
<tr>
<th>Receiving</th>
<th>Order Picking</th>
<th>Verification</th>
<th>Shipping</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Confirms receipt</td>
<td>• Prioritizes orders</td>
<td>• Uses bar code scanning</td>
<td>• Suggests shipping route</td>
</tr>
<tr>
<td>• Create putaway label</td>
<td>• Prints pick tickets for best sequence</td>
<td>• Prints labels for shipping contents</td>
<td>• Creates shipping documents</td>
</tr>
<tr>
<td>• Directs stock to active reserve location</td>
<td>• Prints labels for packing operations</td>
<td></td>
<td>• Calculates shipping cost</td>
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Retailer

WMS sends advanced shipping notice (ASN) as product is shipped.
By one estimate, the global WMS market is US$2.4 billion in 2020 – and holding steady in most sectors despite the pandemic.

It is expected to increase by 16.0% CAGR between 2020 and 2025, more than doubling to US$5.1 billion in 2025.

While the US, UK, Germany, China, and Japan will maintain market prominence, considerable growth is expected throughout the world.

The on-cloud WMS market is expected to grow by 28.7% CAGR, 2020 – 2025.

Data Source: MarketsandMarkets Research (July 2020)
## A Quick Comparison

<table>
<thead>
<tr>
<th>On-Premise WMS</th>
<th>Cloud-Based WMS</th>
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<tbody>
<tr>
<td>Larger, up-front capital expenditure.</td>
<td>Predictably, low monthly cost.</td>
</tr>
<tr>
<td>Pay resource to design and install servers.</td>
<td>Professionally certified architecture.</td>
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<tr>
<td>Lengthy deployment time.</td>
<td>Servers deployed within 15 days.</td>
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<tr>
<td>Continue to pay for hardware upgrades and vendor support contracts.</td>
<td>All included.</td>
</tr>
<tr>
<td>Pay to increase capacity and refresh hardware.</td>
<td>Hardware refresh is covered as part of monthly fee.</td>
</tr>
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Source: HighJump WMS in the Cloud
Cloud Overview

Why customers are moving their workload:

- OpEx vs Capex
- Consolidated Security
- Operational Focus/Competitiveness
- Compliance
- Resiliency
- Work From Anywhere
- Flexibility
Why customers are moving their WMS workload

- Availability/Scalability
- Performance
- Security
- Recovery & Supportability
- Reusability & Portability
- Testability

WMS Cloud Overview
Cloud Deeper Dive

OpEx vs Capex
- Ability to operationalize costs that ties closer to the benefit the software provides
- More flexible to the commitment to use the solution

Consolidated security
- Leverage the expertise of a large organization for security vs. specialist in house.
- A jumpstart of best practices

Operational focus/competitiveness
- Gives the ability to focus on the benefit of the solution vs how it operates
- Develop business plans to further benefit
## Cloud Deeper Dive Part 2

### Compliance
- SOC1, SOC2, SOC3, ISO, HIPPA, Fed Ramp

### Resiliency
- Data center resiliency at a cost effective ways
- High Availability

### Work from Anywhere
- Cloud can be extended to anywhere
- You don’t need to open your infrastructure to the public

### Flexibility
- Scale up or down
- Smaller time commitment to a product or vendor
Cloud WMS Deeper Dive Part 1

**Availability/Scalability**
- How does the solution scale to support business fluctuations
- How many 9s can I get based on potential downtime and its costs

**Performance**
- How do I get predictable process speeds to support consistent operations
- Give the ability to have predictable order fulfillment

**Security**
- How is my customers data being kept safe from bad actors
- How do I keep users access to a granular permissions or least privilege concept
Cloud WMS Deeper Dive Part 2

**Recovery and supportability**
- How does the solution fit with the business continuity objectives
- How easy is it to recover from an event
- When there are issues how easy is it to recover and get to the root cause.

**Reusability/portability**
- How easy is it to make changes to support the ever changing supply chain complexities
- How can changes be discreet in size to ensure no impact to already successful processes

**Testability**
- How easy is it to test changes to support business needs
Questions & Discussion
Getting your ROI in an Enterprise or SMB WMS Implementation

With budgetary decisions facing more scrutiny than ever making a determination on your technology ecosystem and spend has never been more important. A Warehouse Management System purchase and implementation is one of the largest projects many businesses will ever face.

Join Jackson Bilbrey on Tuesday, July 21 to learn more about getting the most out of your WMS Implementation and how to achieve the greatest ROI for your business.

Contributor:

Jackson Bilbrey, Vice President of Professional Services at Körber Supply Chain