

A stylized logo graphic consisting of a dark blue triangle pointing upwards and to the right, with a white triangle pointing downwards and to the right, creating a larger, irregular shape.

STONERIDGE CONNECT

2017 Client Conference



Making Sense of Your Options in
Warehouse Management



About the Speaker

Wendy Ring

Sr. Functional Consultant | Team Lead

Microsoft: 16 years

Total Industry Experience: 19 years

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Session Summary

Timeline

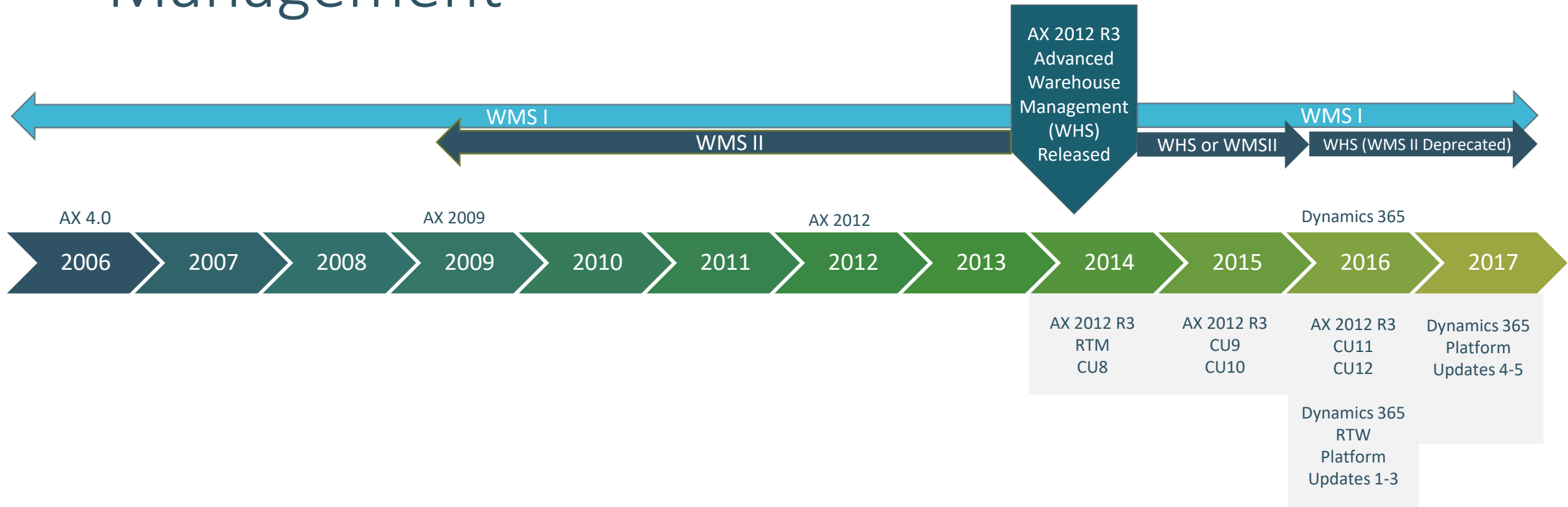
WMS and WHS
Features

Guidelines for Basic vs
Advanced Approach



***"It was someone from corporate's
idea to improve our inventory turns."***

Dynamics AX Release History and Warehouse Management



AX 2012 R3 Advanced Warehouse Management Features

Mobile device

Wave processing

Load planning

Reservation
hierarchy

Inventory status

License plates

AX 2012 R3 Advanced Warehouse Management Features

Flexible work
creation

Manual packing

Containerization

Cycle counting

Transportation
management

AX 2012 R3 - WHS Enhancements

Cumulative Update 8

- 5 Enhancements
- Batch jobs, fulfillment rate, product variants

Cumulative Update 9

- 10 Enhancements
- Work list, Put away location directive strategies, FEFO batch improvements

Cumulative Update 10

- 26 Enhancements
- Performance, split/skip put away, cancel put away, work header maximums

AX 2012 R3 - WHS Enhancements

Cumulative Update 11

- 15 Enhancements
- Multi-threading on wave execution, receive mixed source document lines

Cumulative Update 12

- 11 Enhancements
- Reverse ship confirmation, license plate merge, work creation policies for FG put away and raw material picking

Dynamics 365 for Operations – Warehousing Enhancements

AX 7.0 RTW

- 1 Enhancement
- Download a stand-alone WMDP installer

Version 1611

- 13 Enhancements
- Consignment, packing work and container grouping, short-pick reallocation

Version 7.0.1

- 2 Enhancements
- Performance, split/skip put away, cancel put away, work

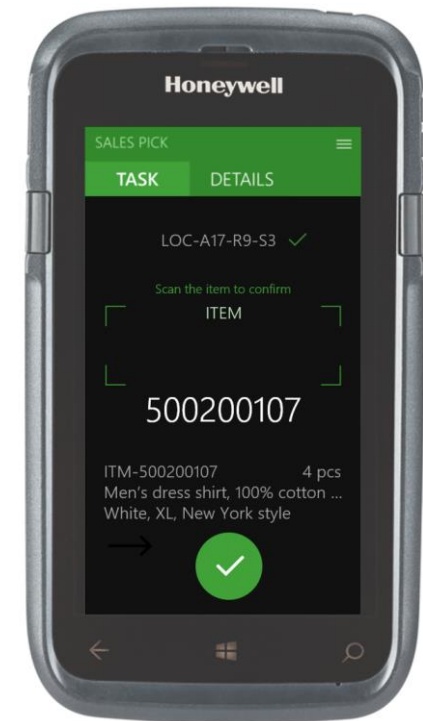
What's New in Dynamics 365 for Operations – Warehousing – Mobile

- New connection model. No need for intermediate WMDP server.
 - Enables modern devices
- Touch-friendly - UI adapted for gloves
- App for Windows 10 or Android
 - Simplified and Responsive UI
 - Dynamic scaling
 - Designed for rough environments



- ← Pre-Mobile App
- Difficult to read
 - Not touch-enabled
 - Scrolling
 - Runs in browser

- Mobile App
- Easy to read
 - Current task displayed
 - Touch-friendly
 - No scrolling



What's New in Dynamics 365 for Operations – Warehousing - Power BI



Outbound performance

Inbound performance

Inventory accuracy

Shipping performance

280
Lines shipped

4,29%
Early

79,64%
On time

16,07%
Late

Shipped

13-12-2015 06-02-2017

Lines shipped in full

- ☐ Yes
☐ No

Shipments over time

● Shipped early ● Shipped on time ● Shipped late ● On time

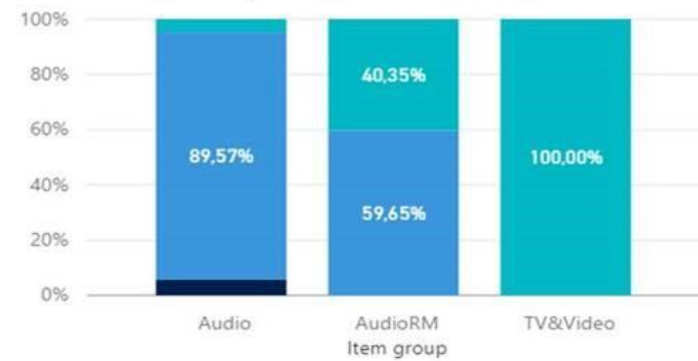


Shipped late by city



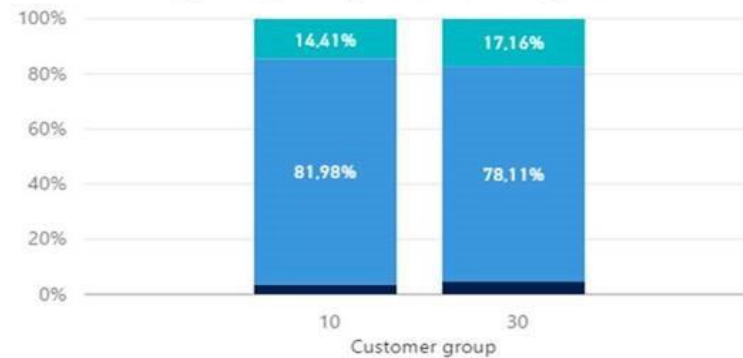
Shipped by product

● Shipped early ● Shipped on time ● Shipped late



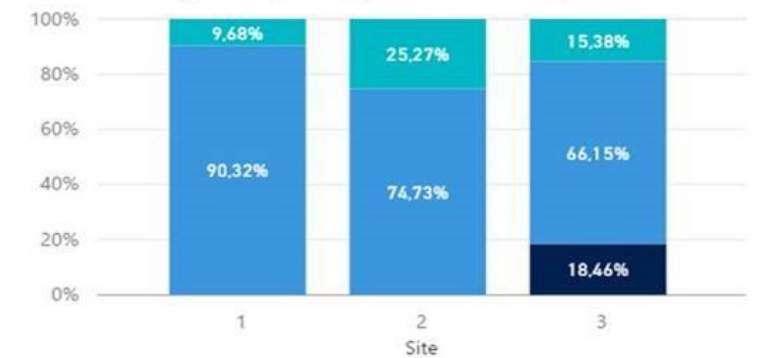
Shipped by customer

● Shipped early ● Shipped on time ● Shipped late



Shipped by site / warehouse

● Shipped early ● Shipped on time ● Shipped late



Inbound performance

142
Total put aways

3,47
Put away average time

22
Received early

114
Received on time

6
Received late

Received

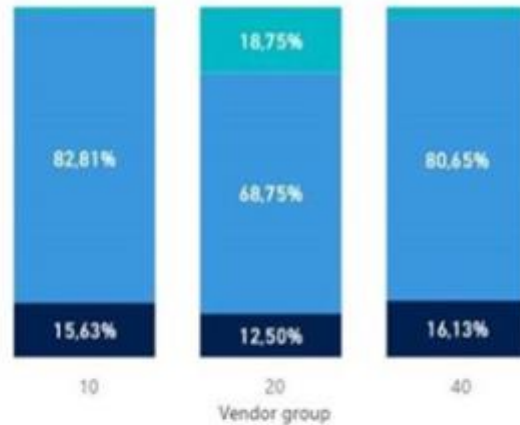
09-01-2016 21-01-2017

Warehouse

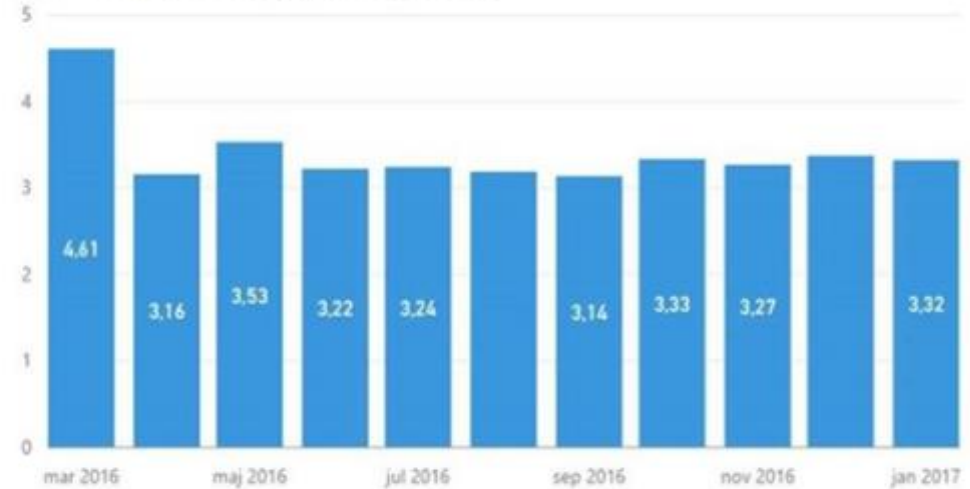
- ☐ 24
- ☐ 62
- ☐ 63

On time by vendor

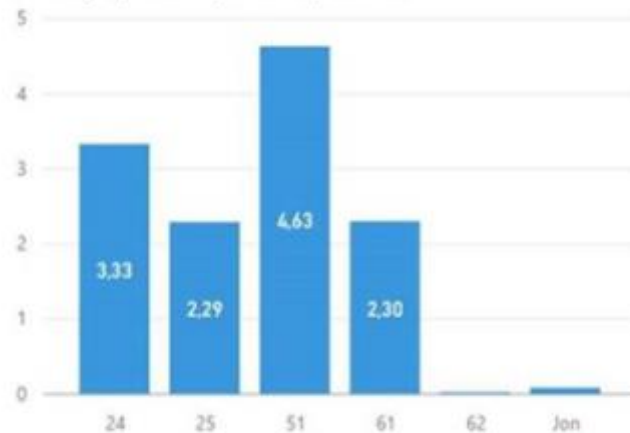
● Received early ● Received on time ● Received late



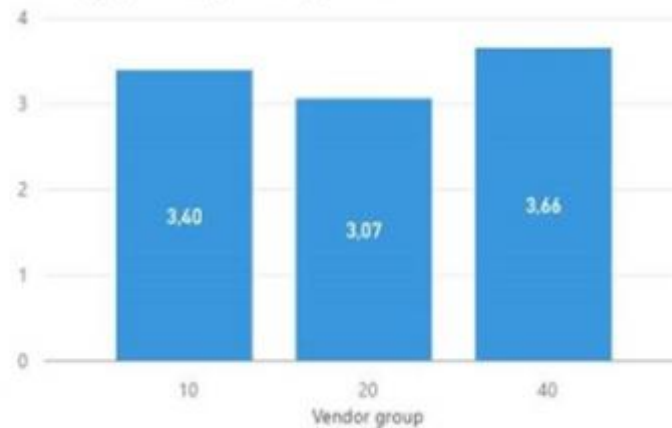
Dock to stock - average put away (hours)



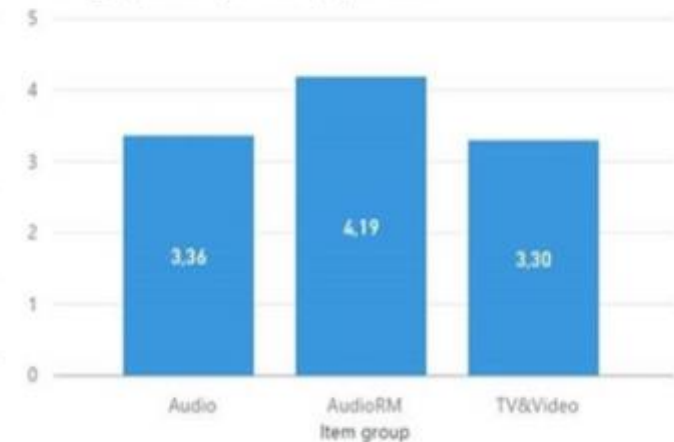
Average put away hour by worker



Average put away hour by vendor



Average put away hour by product



Location inventory accuracy

820

Total count

7,80%

Discrepancy rate

756

Count without discrepancy

64

Count with discrepancy

Locations counted

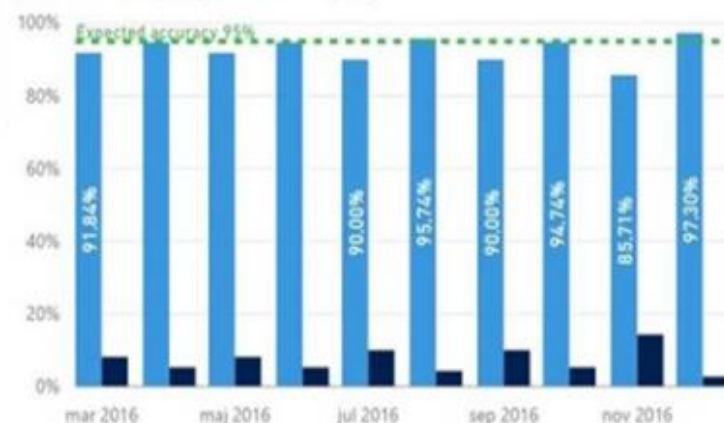
21-02-2016

15-12-2016



Items counted over time

Without discrepancy With discrepancy

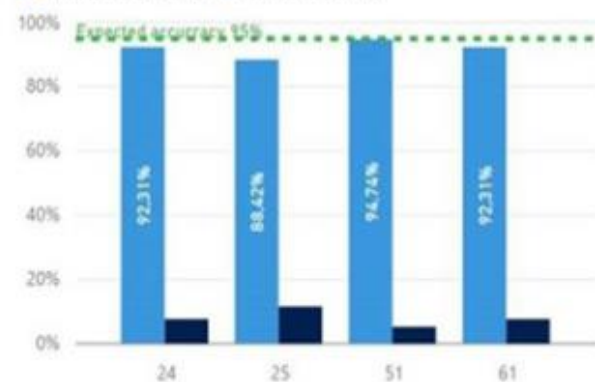


Item quantity discrepancy greater than 5%

Item number	Location id	Average	Total count	Discrepancy	Average quantity	Expected quantity	Counted quan...
A0002	BULK-001	20.00 %	140	14	4	1.540.00	1.484.00
M9215	STAGE01	25.00 %	98	14	5	1.120.00	1.050.00
A0001	FL-001	45.00 %	98	14	9	1.120.00	994.00
M9212	STAGE01	15.00 %	8	8	3	160.00	136.00

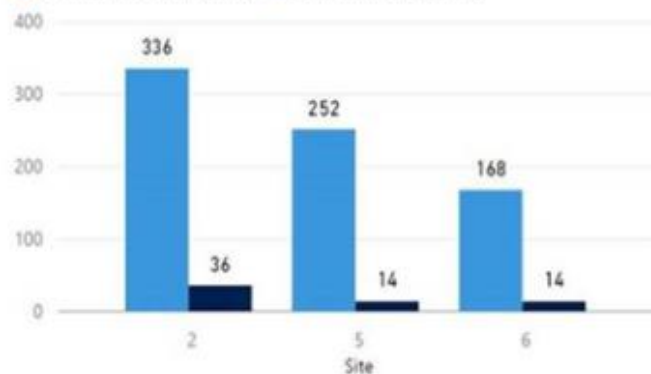
Item count by worker

Without discrepancy With discrepancy

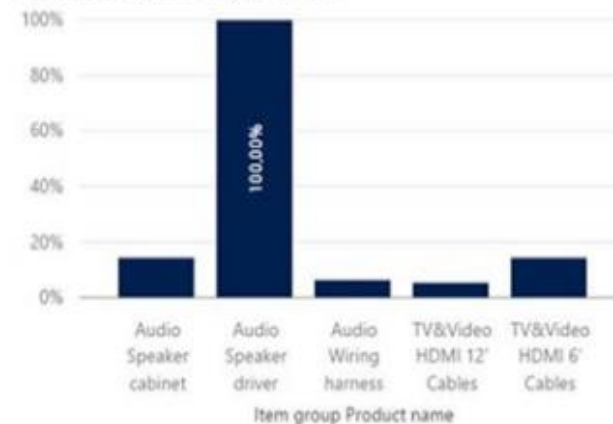


Item count by site / warehouse

Count without discrepancy Count with discrepancy



Discrepancy rate by product



Demo

Basic vs Advanced Capabilities

Capability	WMSI (Basic)	WMSII	WHS (Advanced)
Integrated bar code scanning	No - ISV solution	No - ISV solution	Yes – App or device with browser
License plates	No	Yes - Pallet IDs	Yes
Advanced transportation requirements	No	No	Yes-Load planning workbench
On-hand calculation per location	Yes – after posting (paper driven)		Yes – Real time, mobile device driven
Multiple item locations per item	No		Yes
Stocking limit	Yes (Min Max Coverage)	Yes - (Max. pallets)	Yes (Location stocking limits or volumetrics)
Zones	No	Yes-Store zones, Store areas	Yes
Location directives	No	Yes-Warehouse items (Picking location, refill requirements)	Yes-Flexible rules for pick from-put to
Work templates	No	Yes-Shipment templates, Outbound rules	Yes-Used to create work; pick/put pairs, work breaks
Reservation strategies	No-always all dimensions	No-always all dimensions	Yes-Site, warehouse, inventory status, license plate, batch, serial number

Capabilities - Outbound

Outbound	WMSI	WHS
System directed replenishment, pick, movement	No (only one pick location)	Yes (Location, pick face, forward pick locator)
Replenishment	No – Not complete	Yes - Min Max – batch job Yes - Wave demand
Counting	Paper registration Journal posting	Yes – Mobile Spot counting Yes – Mobile Threshold cycle counting
Cycle Counting	Yes	Cycle count plans
Inventory Status	No	Yes - Configurable with blocking
Task tracking	No	Yes – Warehouse worker is User location Work list pages

Capabilities - Outbound

Outbound	WMSI	WHS
Cross-docking	Yes – incomplete	Yes
Task interleaving	No	<ul style="list-style-type: none">• Pick when a shortage: create pick work – demand replenish work – resume pick work• Change equipment: Put pallet in "Pick and drop" location at end of each aisle - pass the work to a forklift who completes the put-away; reverse for pick to replenishment• Pick - short-pick - spot count – adjust out- put-away• Pick – threshold driven count – put-away• Group tasks – using work group (e.g.10 pick-puts; when grouped becomes 10 picks one put)

Capabilities - Inbound

Inbound	WMSI	WHS
Item arrival journal	Yes	No
Receive – Put away	Journal posting driven	Mobile – PO receiving Mobile – License Plate receiving Mobile - Load receiving 1-step and 2-step put away

Guidelines for Advanced vs Basic Approach

- Complex order waving, picking, packing and shipping
- Integrated out-of-the-box mobile device
- Palletized inventory
- Advanced load and transportation planning
- Inventory status
- Containerization
- Enhanced counting capabilities

Resources

[Stoneridge Software Blog](#)

[Introduction to Dynamics 365 for Operations](#)

[Dynamics 365 Help Wiki](#)

[Introducing the new Warehouse Management and Transportation Management modules in Dynamics AX 2012 R3](#)

[Supply Chain Management in Dynamics AX](#)

[Dynamics AX Manufacturing R&D Blog](#)

[Vanya Kashperuk's Blog](#)

[OrganicAX - Lachlan Cash](#)

Questions?

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