Oracle WMS or MSCA?

Selecting the best fit for your company

Presenters:
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Todd Baggett, RedLine Solutions

RedLine Solutions

Todd Baggett, President and CEO

Introduction

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RedLine Solutions

- 17+ year old privately held, Silicon Valley-based company
- Mobile computing, wireless networks, barcode and RFID specialist
- Leading data collection integrator for Oracle WMS and MSCA
- Work with Fortune 500 to start-up companies
- Customer installations worldwide
  - Over 45 sites installed with Oracle/Symbol/Intermec
  - Skilled systems engineers
  - Providing ongoing support of installed clients
- Strong reputation for outstanding customer service

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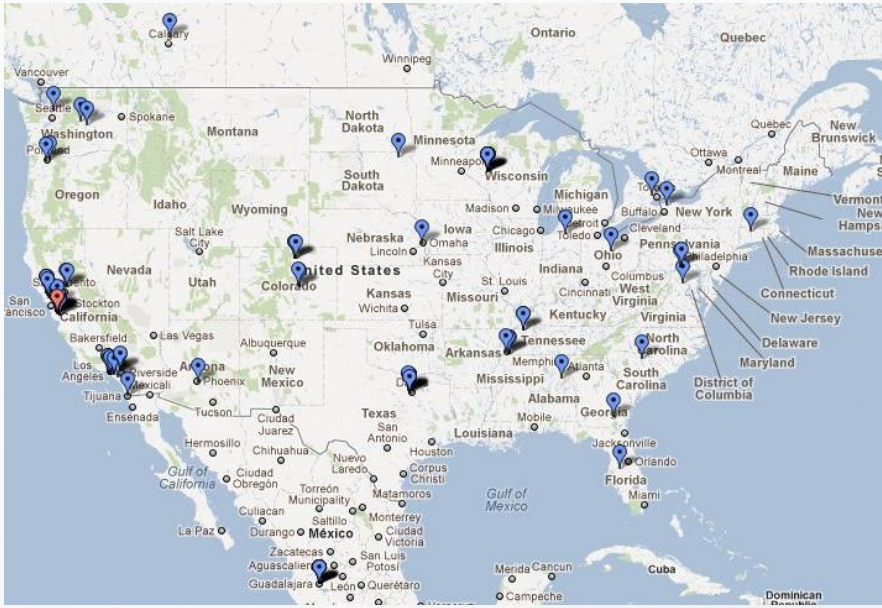
Oracle R12/11i

- Oracle R12 & 11i WMS/MSCA implementations
  - Long history integrating Oracle with Symbol and Zebra
  - Typical customers are larger with multiple sites
  - Installed customer base
    - Shutterfly
    - VeriFone
    - Agilent Technologies
    - Herbalife International
    - Greenball Corporation
    - NCH



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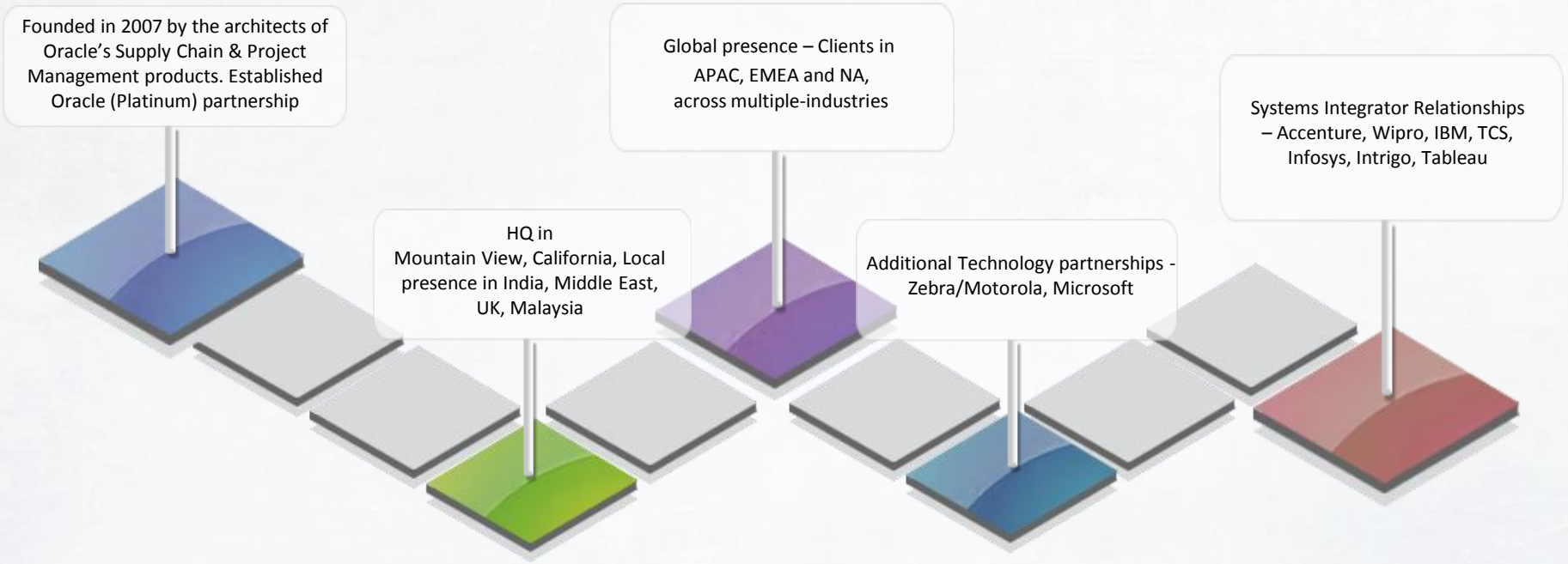
Introducing Gaea



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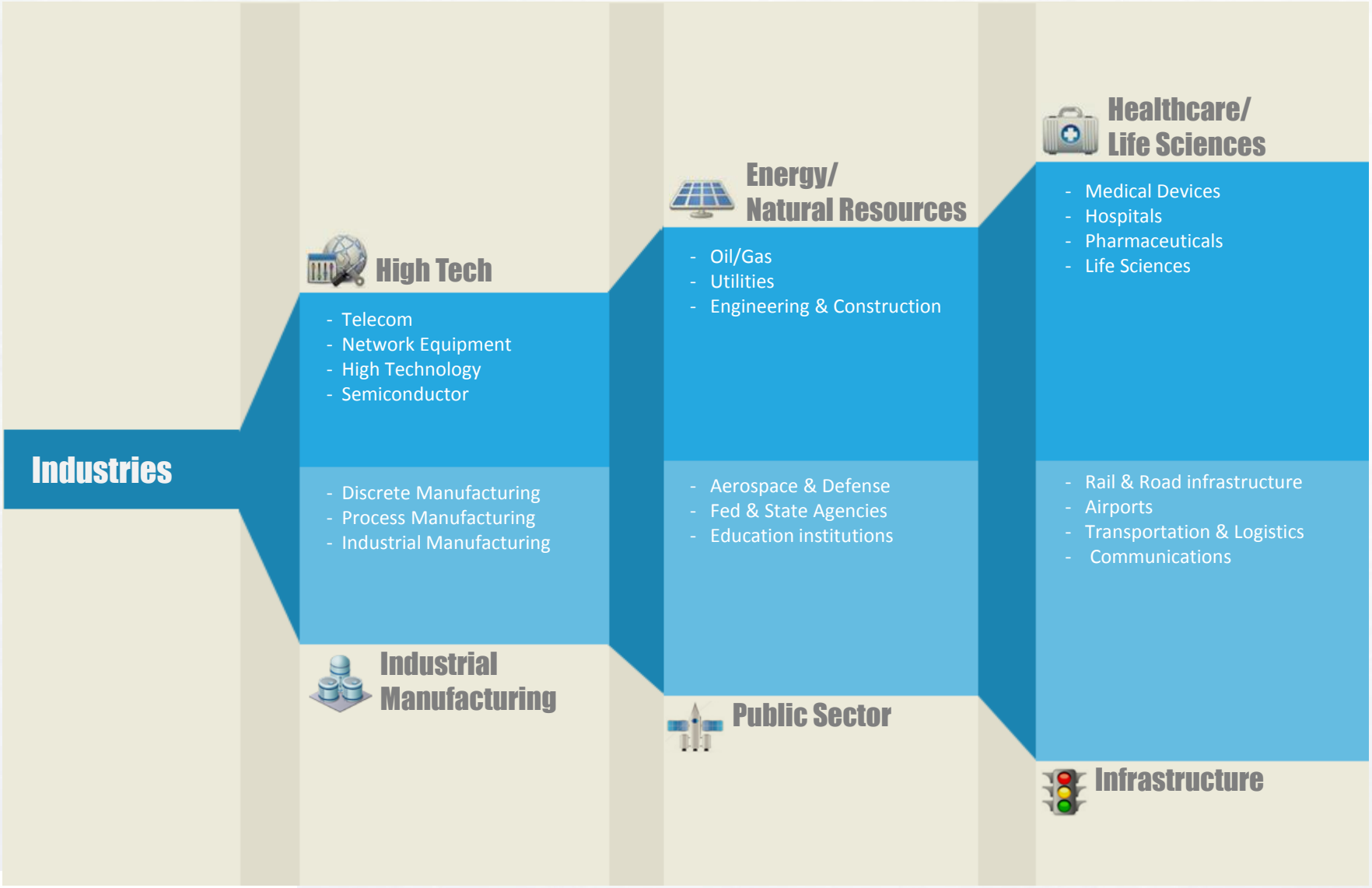
Focus Industries



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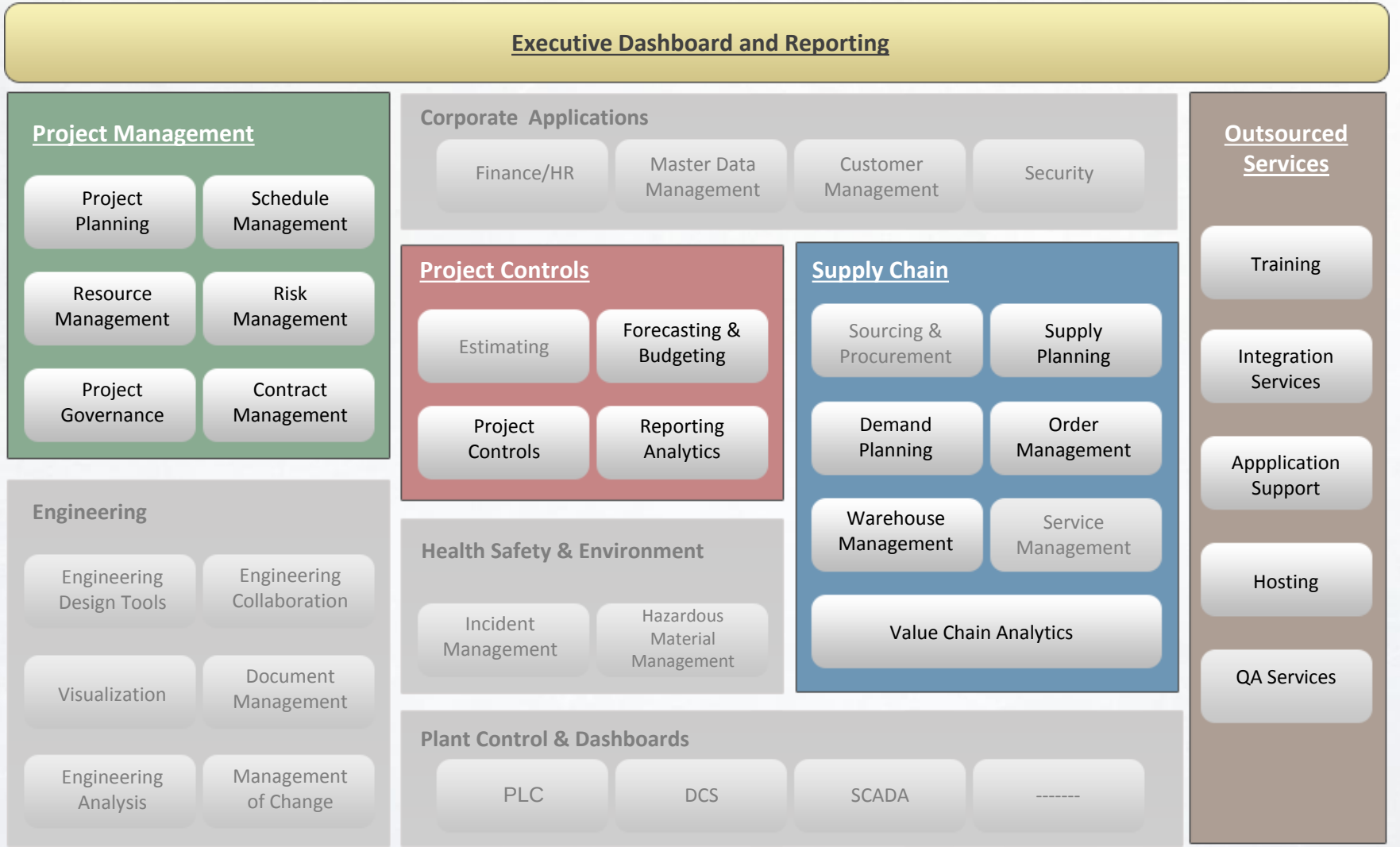
Customer Experiences

Partial List

Industry Model – Gaea's core capabilities



Project Management | Project Controls | Supply Chain | Executive Dashboards | Technical Services

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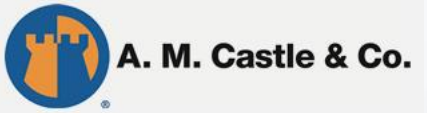
Sample Customers



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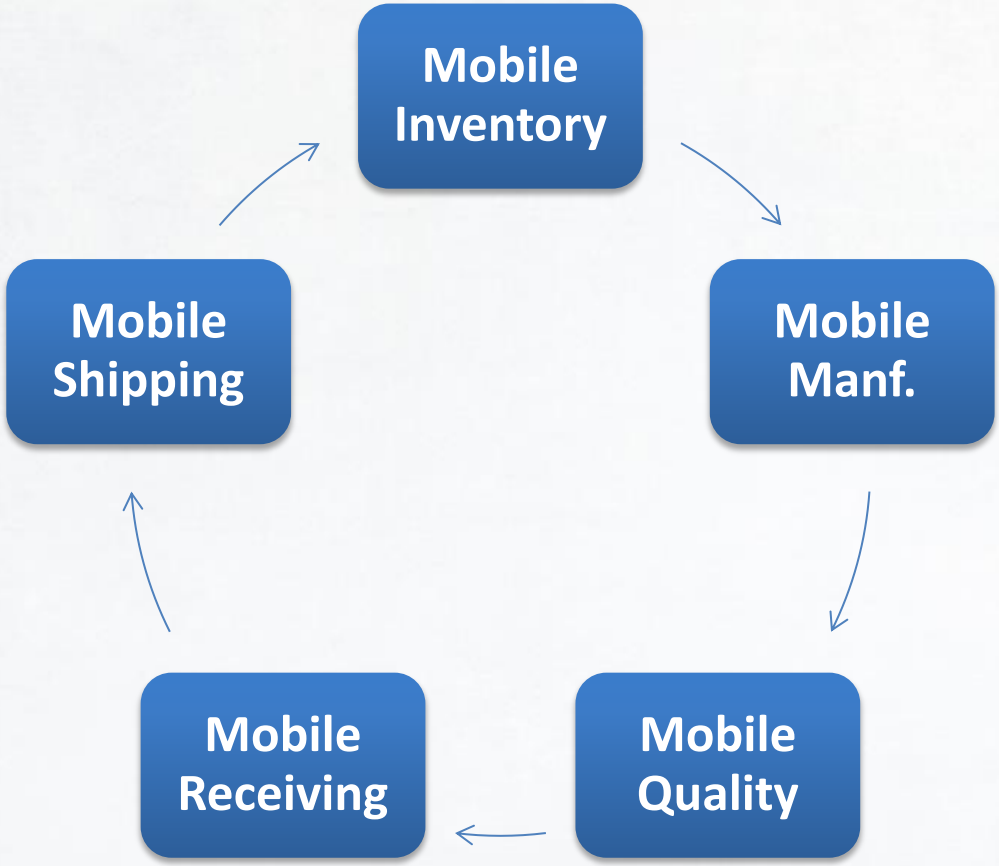
What is MSCA?

Mobile Front end for Inventory & other modules



User initiated, not system directed

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What do you get with MSCA?

Real Time Mobile Transactions

Label Printing Infrastructure

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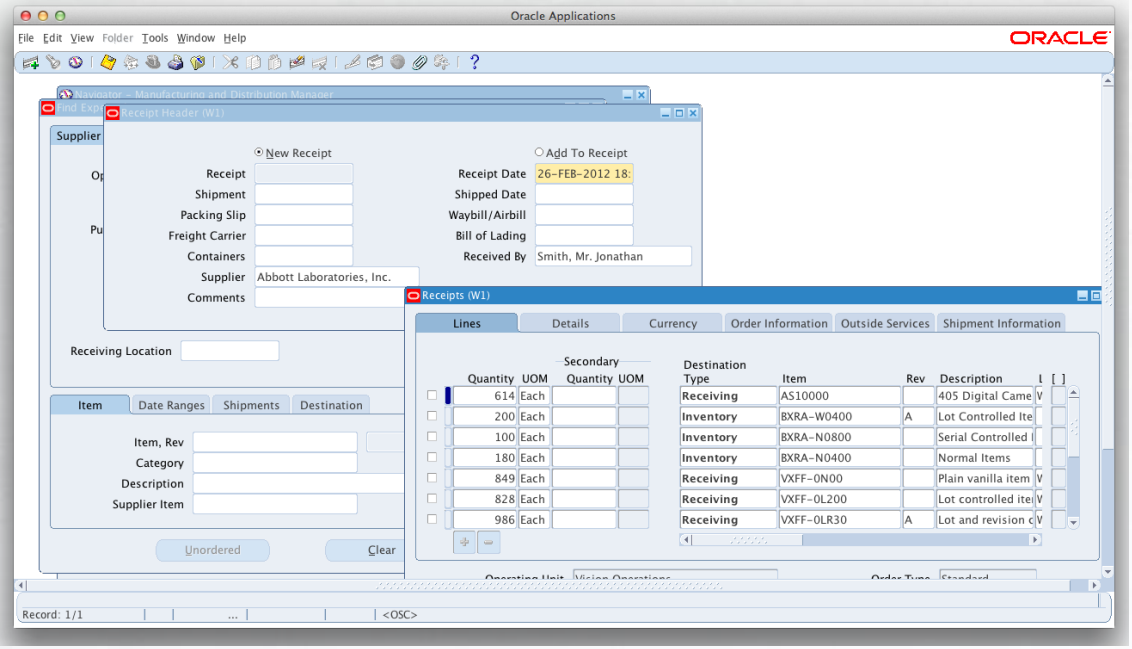
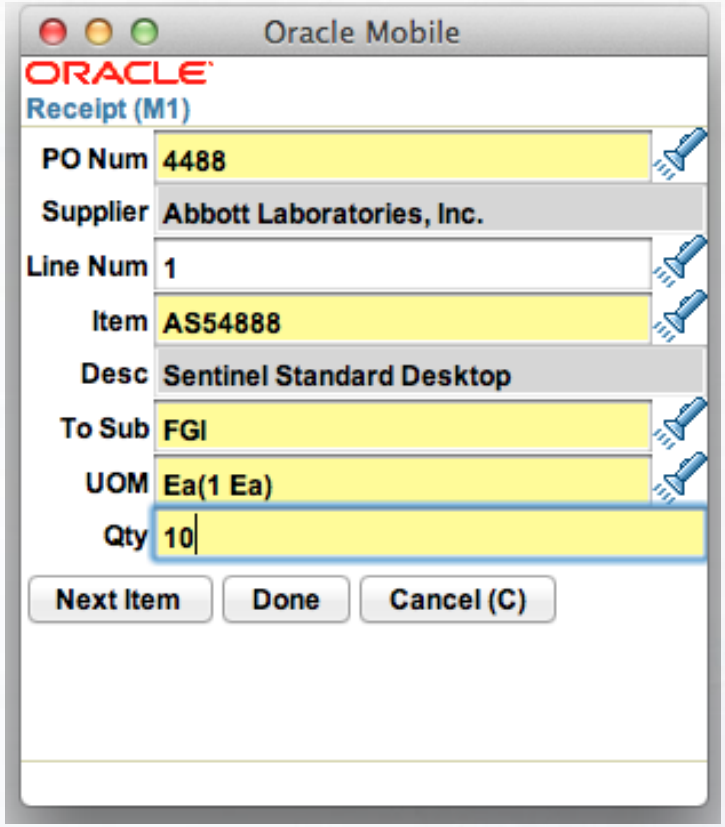
MSCA – Streamlined, scan based UI





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What do you get with WMS?

- License Plate Numbers
- Rules Engine
- Advanced Task & Resource Management
- Pick Methodologies
- Wave Planning
- Warehouse Automation
- Crossdocking
- Enhanced labeling
- Automation
- Demand based replenishment
- Express Receipts
- Cartonization

Efficient, streamlined, high throughput warehouse

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WMS – Why do I need LPNS?

What is an LPN?

Unique ID that identifies a pallet, carton, tote or another physical grouping of item or items

Benefits:

- Efficient movement of material
- Move multiple items/serials/lots with one scan
- Express receipts
- Better trackability
- Status control
- Reflects physical reality

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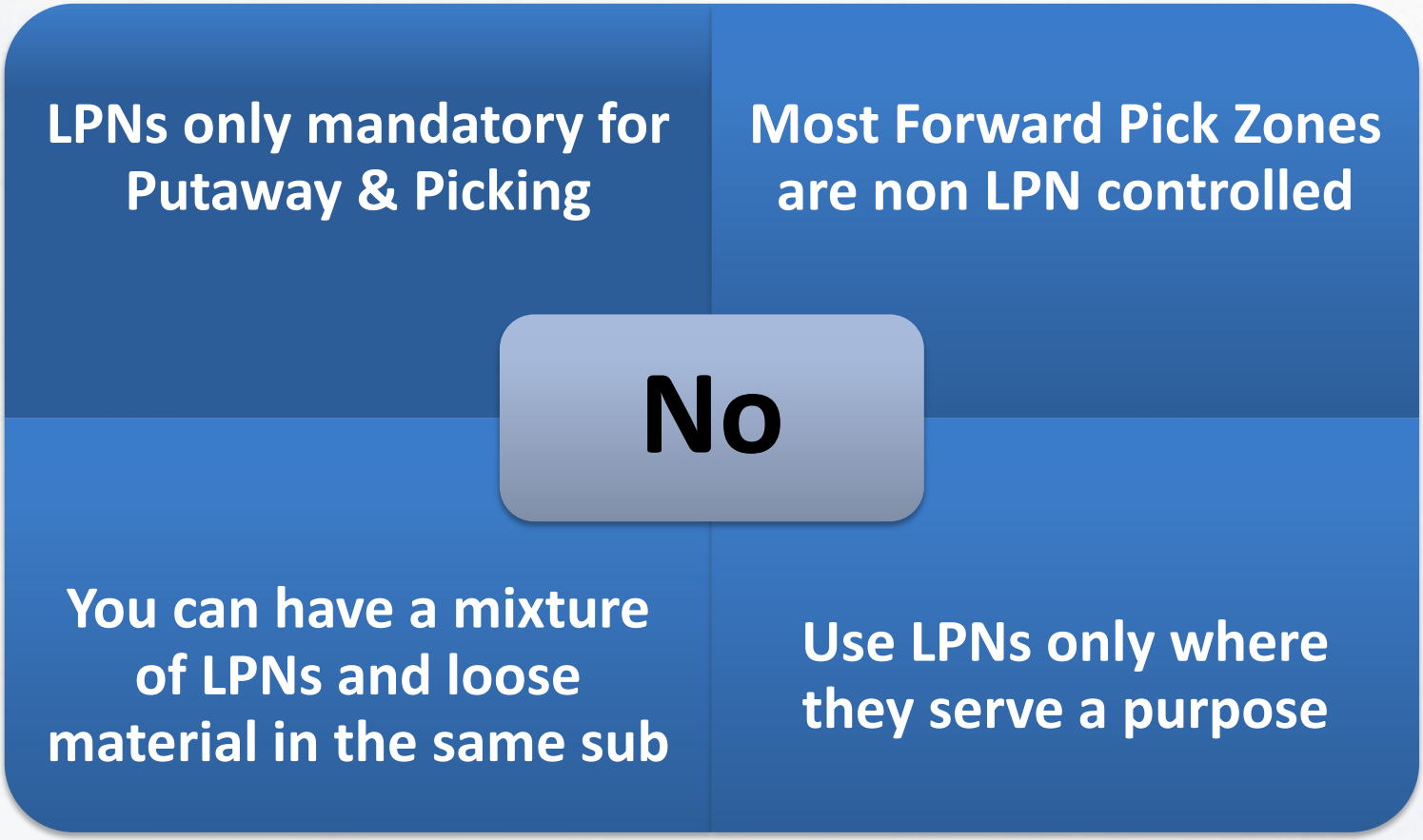
Does **everything** need to be in LPNS?



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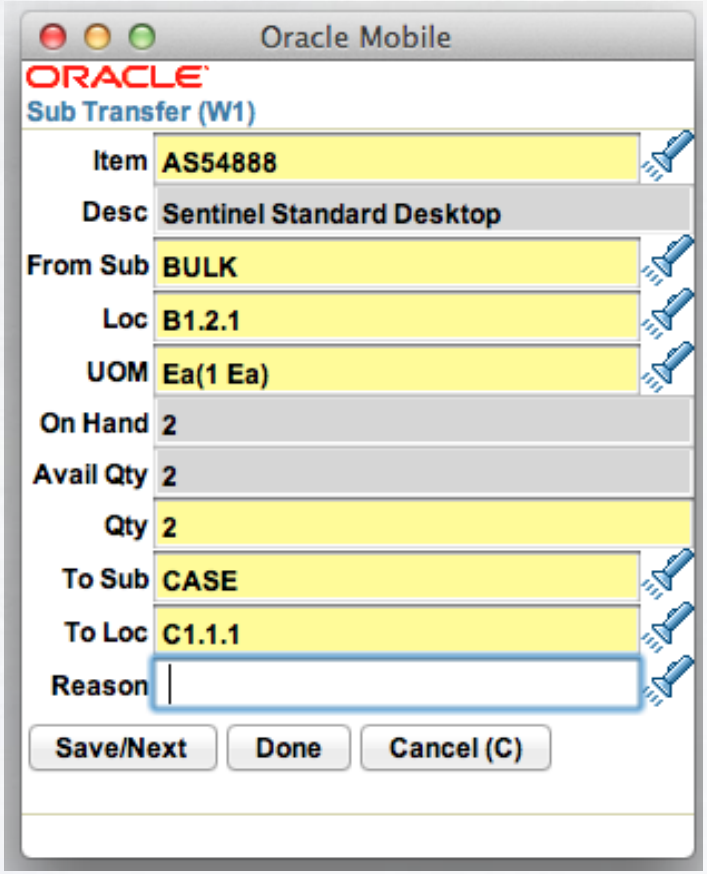
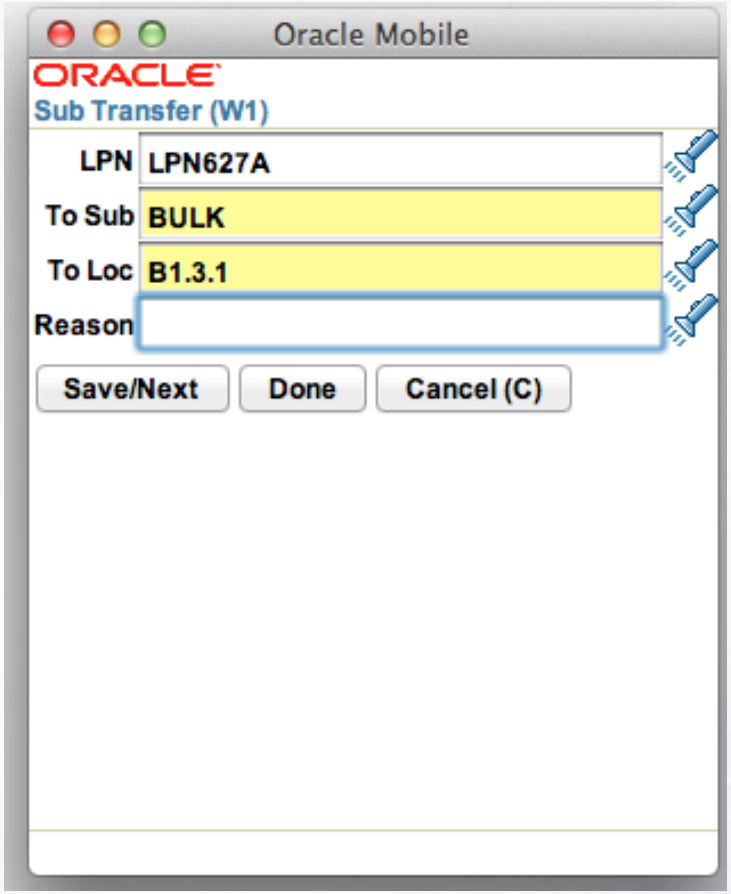
Why do I need LPNS?

Material Movement



Without LPNS (MSCA/WMS)



With LPNS (WMS)

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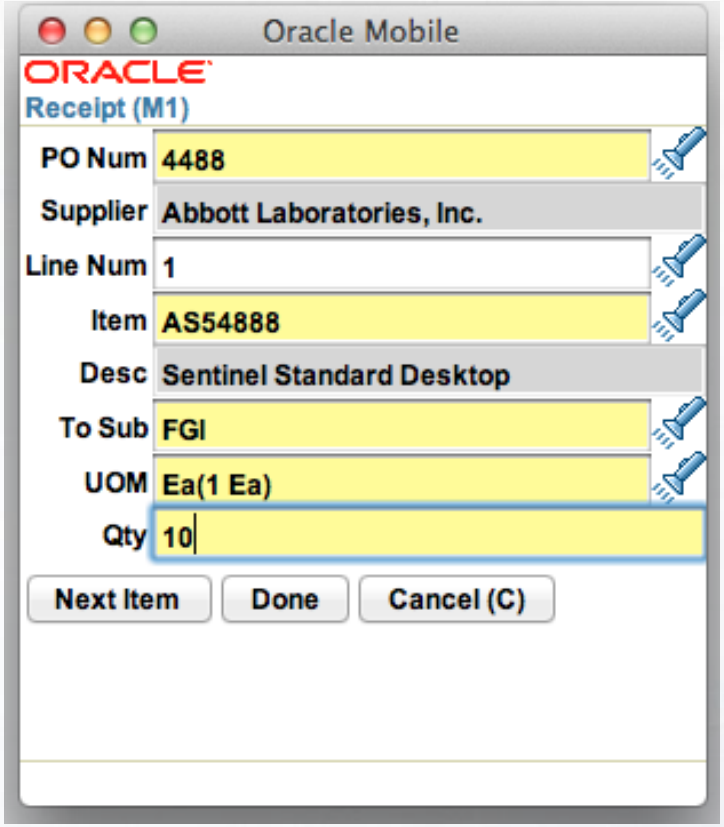
What's different in the inbound process?

MSCA

- ✓ PO
- ✓ ASN
- ✓ In-transit Shipment
- ✓ Internal Requisition
- ✓ Inter Organization
- ✓ Inspection
- ✓ RMA
- ✓ Item based
- ✗ No Putaway – Direct Delivery into Inventory



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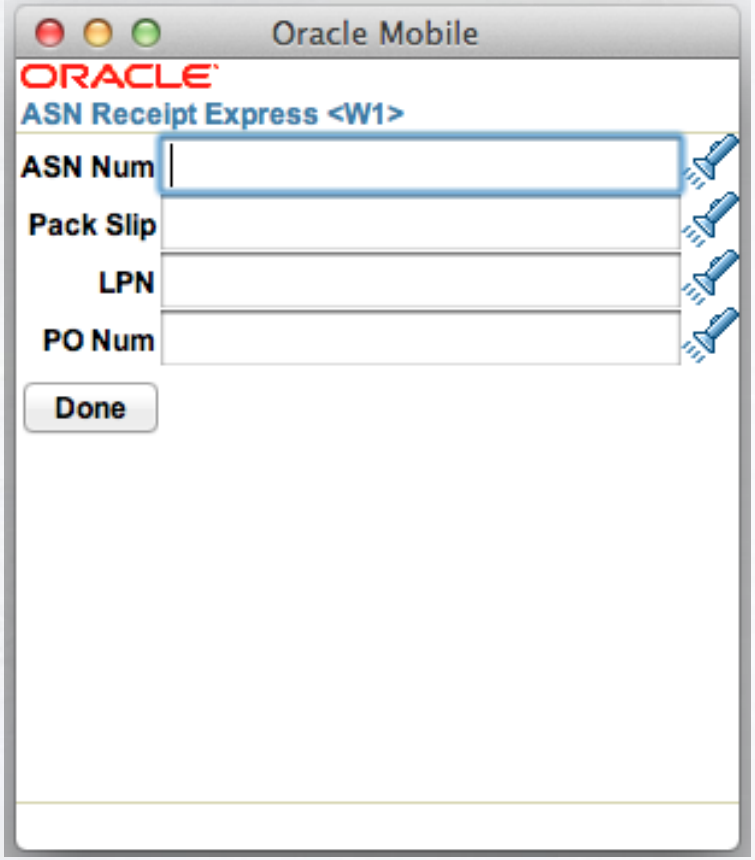
What's different in the inbound process?

WMS

Express Receipts



- ✓ System Directed Putaway
- ✓ Crossdocking
- ✓ Multi Step Inbound process

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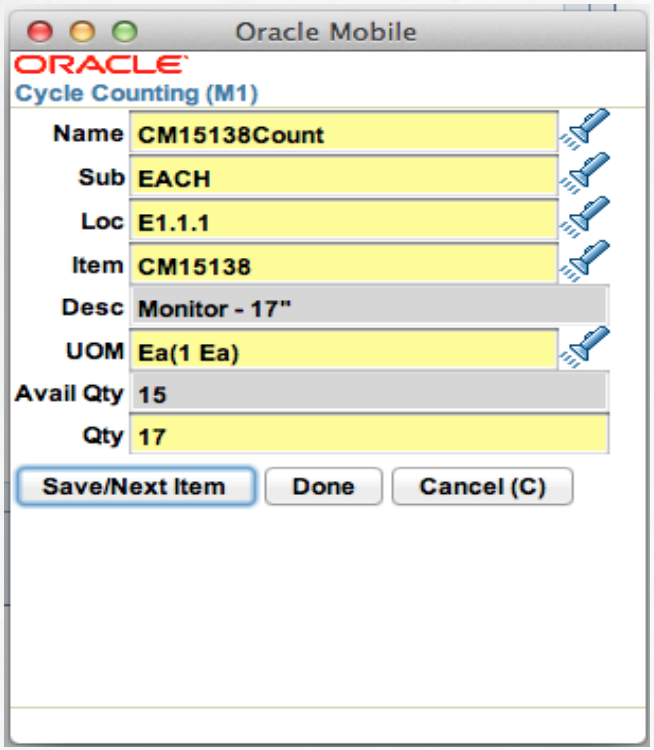
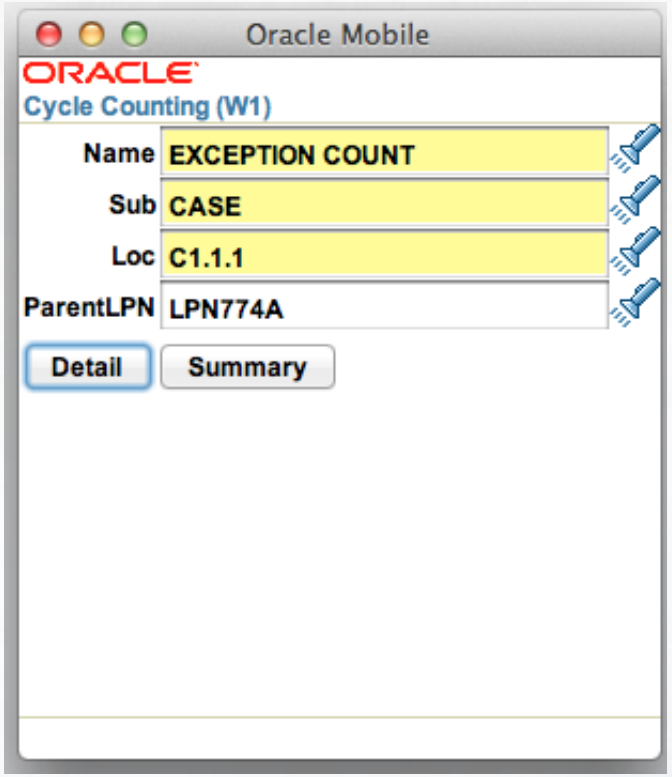
Inventory Maintenance

MSCA



Cycle Counts
Physical Counts

WMS



LPN summary counts
Task Based Cycle Counting
Opportunistic cycle counts

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What about labeling?

MSCA:

Print on demand

Print out of the box

Automated printing based on business events

WMS:

+

Label Rules – compliance labeling

Custom fields

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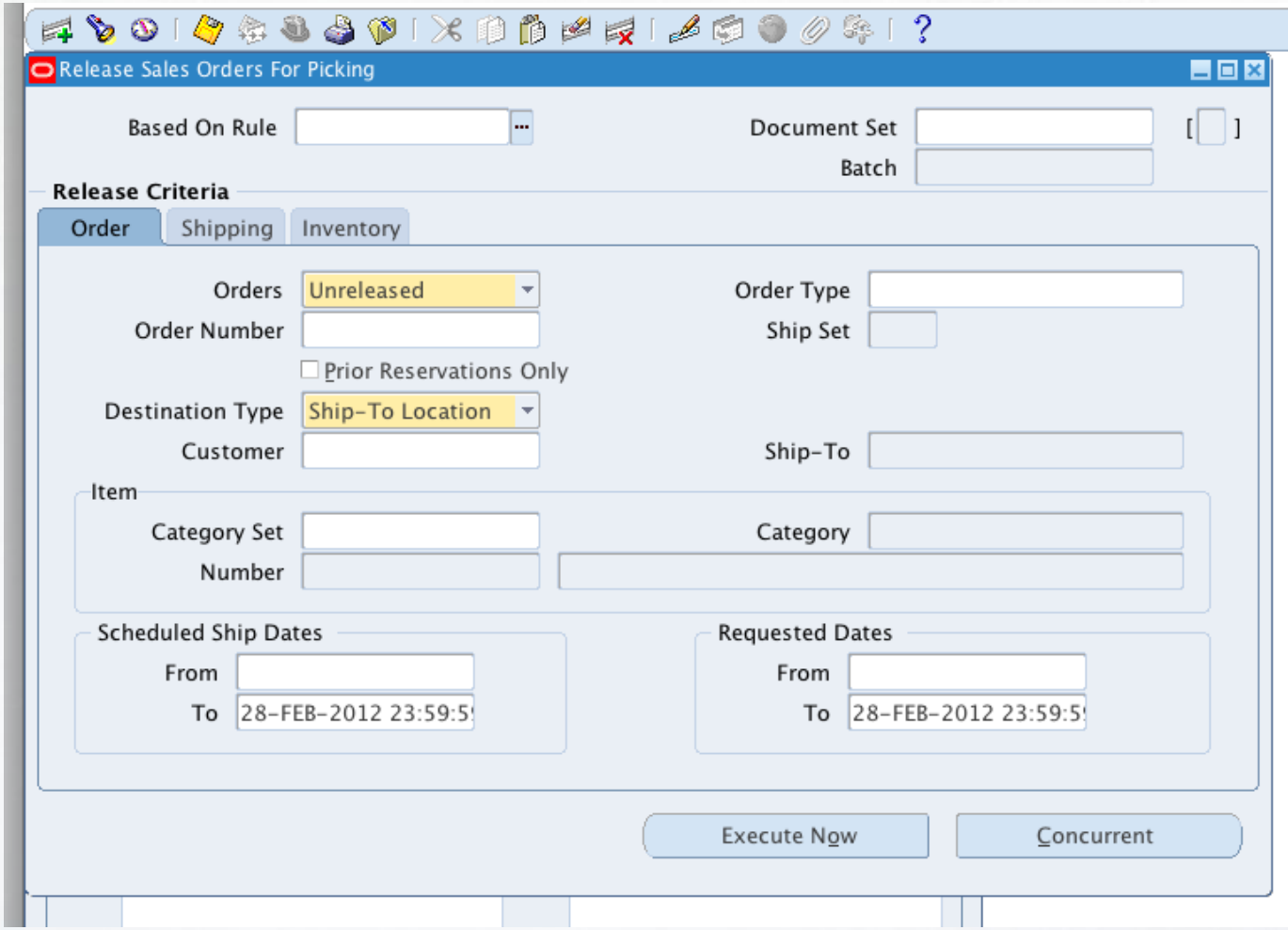
How is the workload balancing different?

MSCA:

- Standard pick release form
- Release based on customer, delivery, trip, dates etc.



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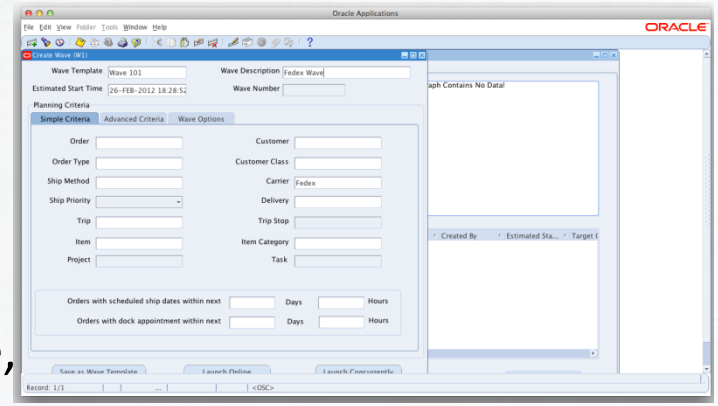
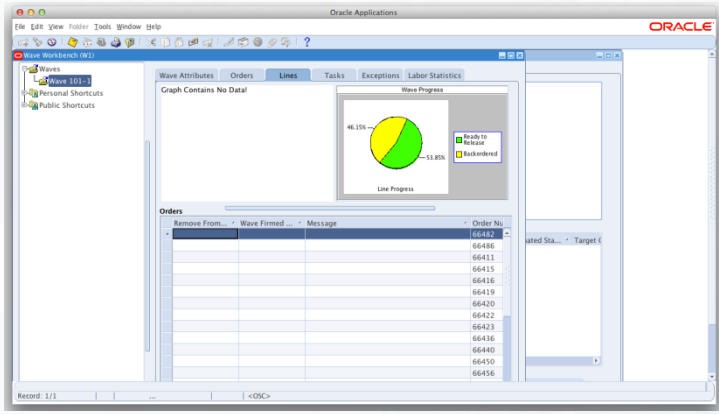
How is the workload balancing different?

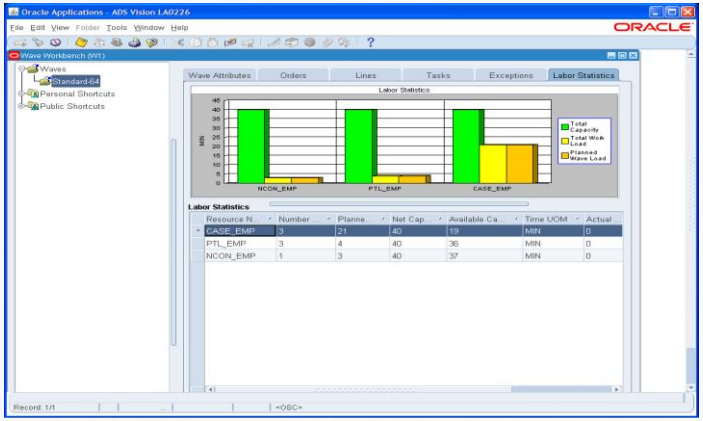
WMS:

Wave Planning

- Plan, analyze, execute, monitor







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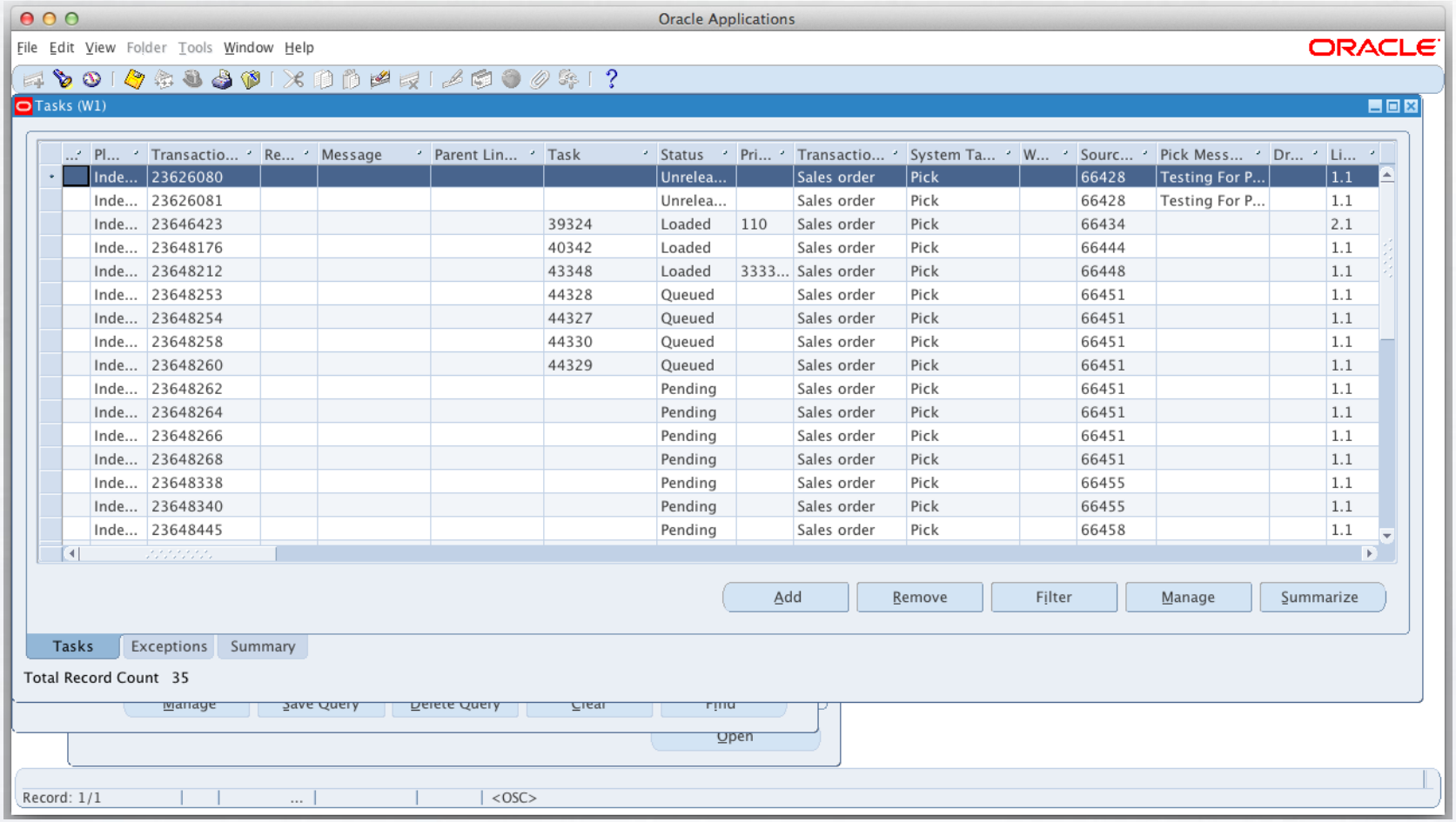
WMS – How can I manage tasks & resources?

Control Board



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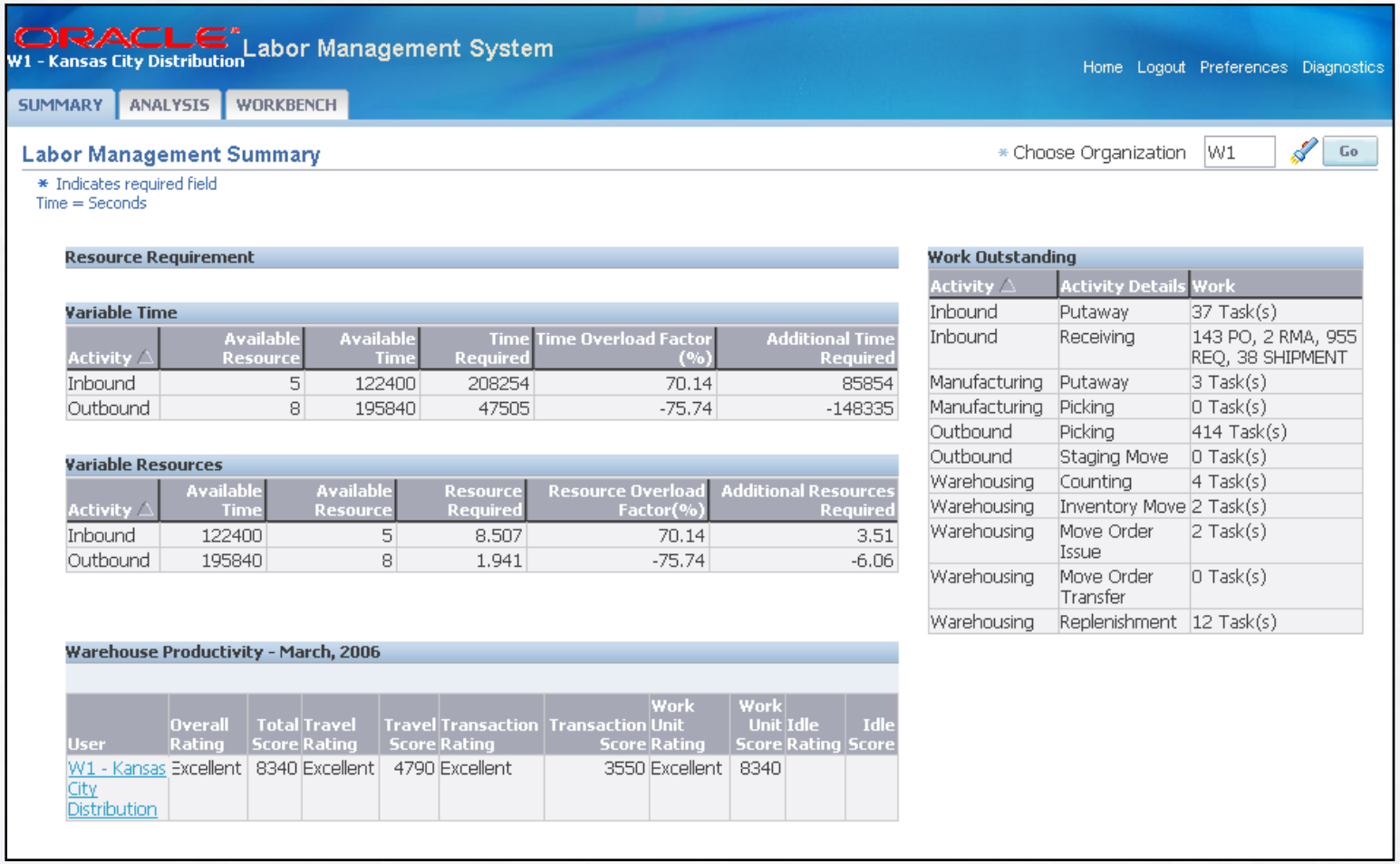
WMS – How can I manage tasks & resources?

Labor Management



ORACLE Labor Management System

W1 - Kansas City Distribution

Home Logout Preferences Diagnostics

SUMMARY | ANALYSIS | WORKBENCH

Labor Management Summary

* Choose Organization W1 Go

* Indicates required field

Time = Seconds

Resource Requirement

Variable Time

Activity	Available Resource	Available Time	Time Required	Time Overload Factor (%)	Additional Time Required
Inbound	5	122400	208254	70.14	85854
Outbound	8	195840	47505	-75.74	-148335

Variable Resources

Activity	Available Time	Available Resource	Resource Required	Resource Overload Factor(%)	Additional Resources Required
Inbound	122400	5	8.507	70.14	3.51
Outbound	195840	8	1.941	-75.74	-6.06

Warehouse Productivity - March, 2006

User	Overall Rating	Total Score	Travel Rating	Travel Score	Transaction Rating	Transaction Score	Work Unit Rating	Work Unit Score	Idle Rating	Idle Score
W1 - Kansas City Distribution	Excellent	8340	Excellent	4790	Excellent	3550	Excellent	8340		

Work Outstanding

Activity	Activity Details	Work
Inbound	Putaway	37 Task(s)
Inbound	Receiving	143 PO, 2 RMA, 955 REQ, 38 SHIPMENT
Manufacturing	Putaway	3 Task(s)
Manufacturing	Picking	0 Task(s)
Outbound	Picking	414 Task(s)
Outbound	Staging Move	0 Task(s)
Warehousing	Counting	4 Task(s)
Warehousing	Inventory Move	2 Task(s)
Warehousing	Move Order Issue	2 Task(s)
Warehousing	Move Order Transfer	0 Task(s)
Warehousing	Replenishment	12 Task(s)

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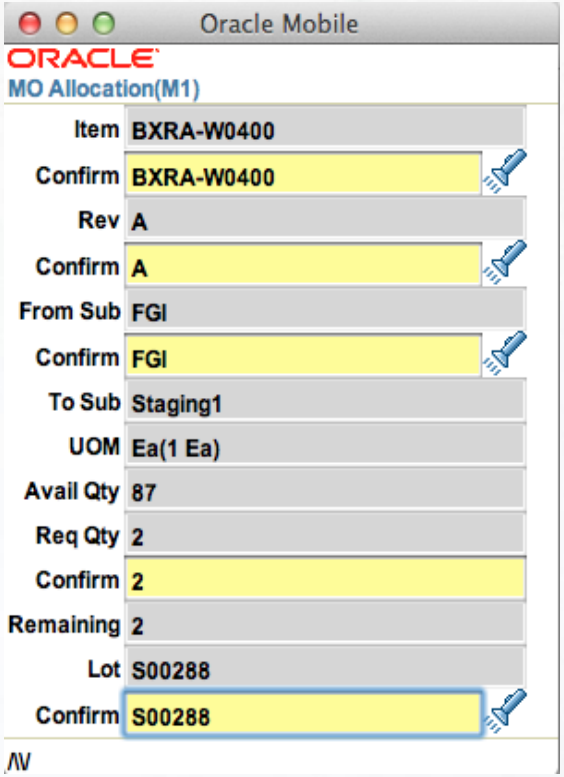
MSCA - What is different in picking?



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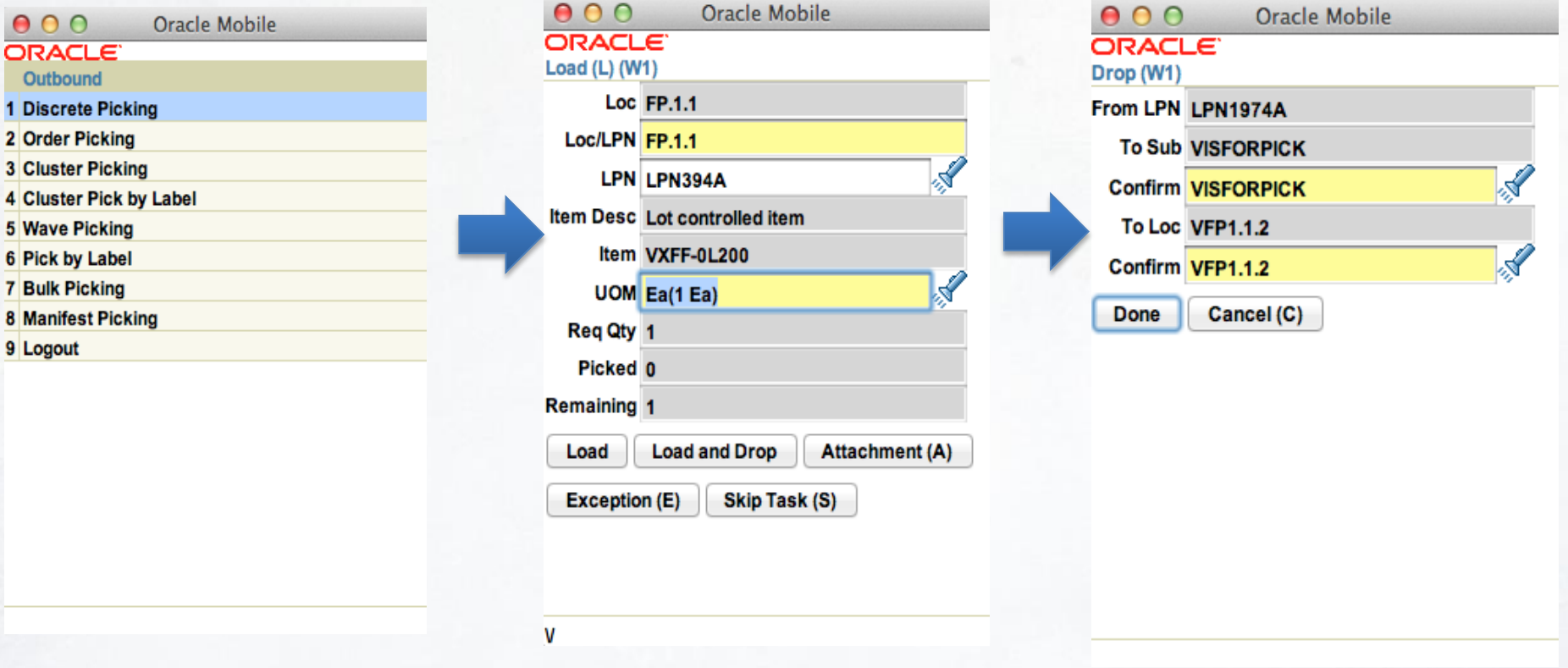
WMS - What is different in picking?



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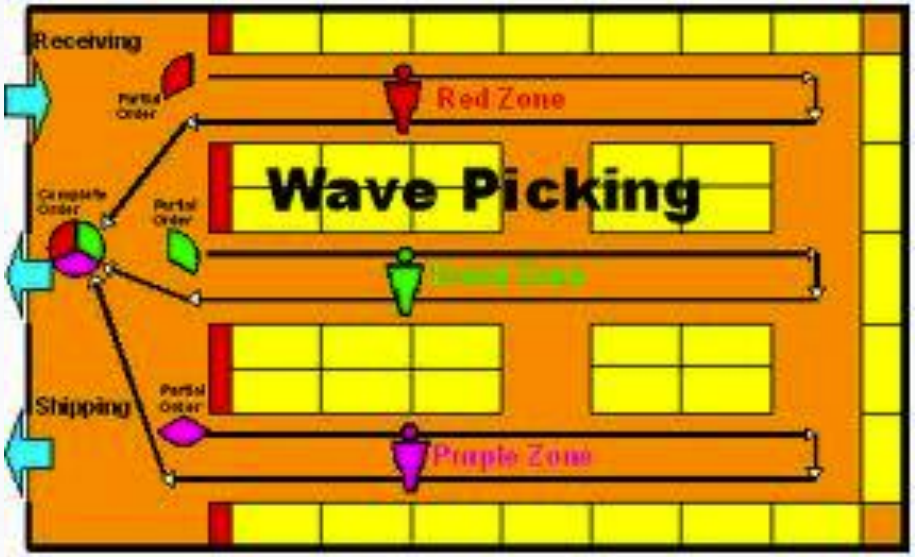
WMS – How can I improve picking efficiencies?

Pick Methodologies – Wave Picking

- Multiple people picking the same orders
- Efficient pick path routing
- Consolidation of orders at staging



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WMS – How can I improve picking efficiencies?

Pick Methodologies - Cluster Picking

Pick & Pack multiple small orders

- Large number of orders of average volume needs to picked
- Pick area is large and travel time is a concern

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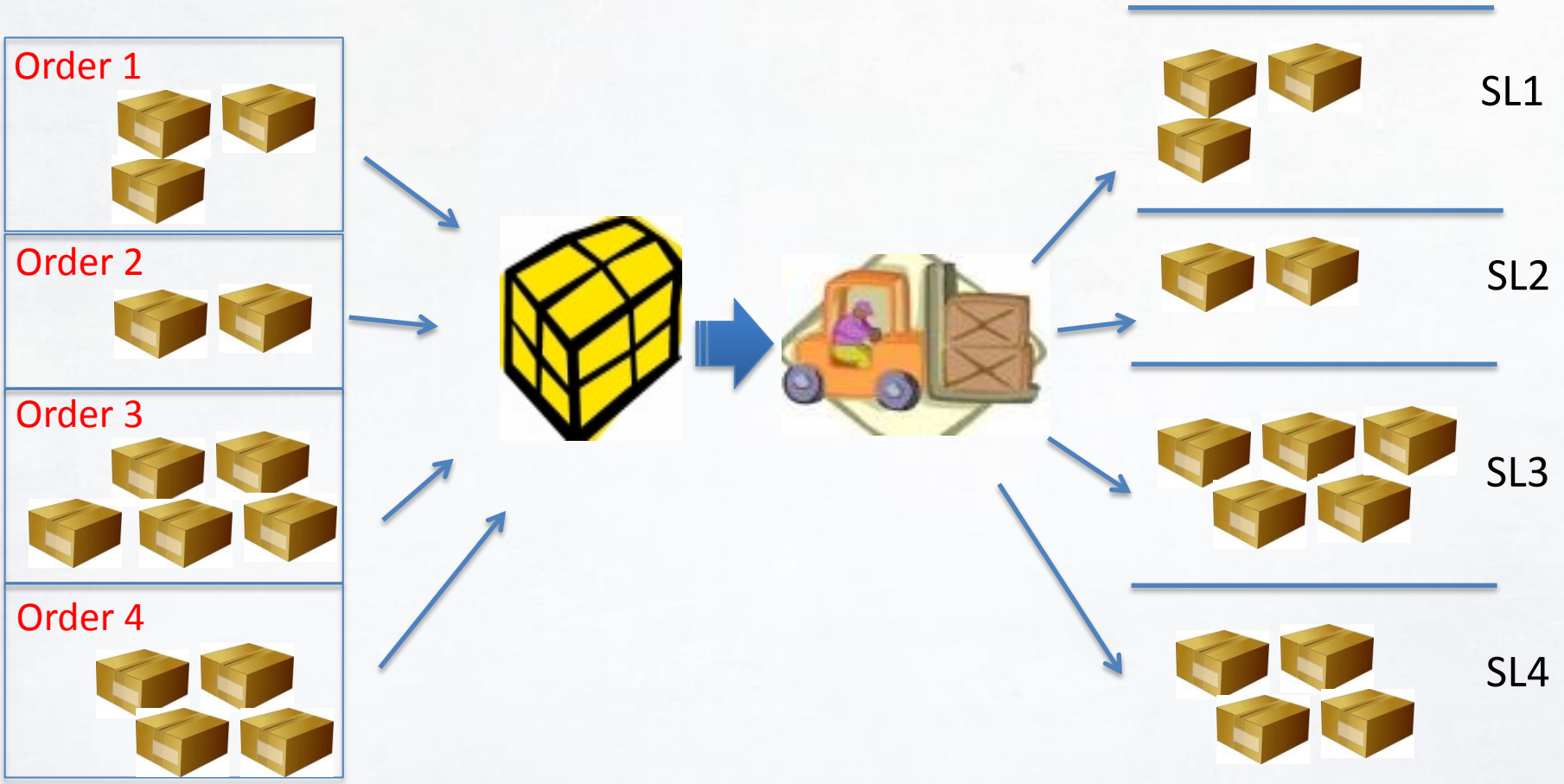
WMS – How can I improve picking efficiencies?

Pick Methodologies – Bulk Picking



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WMS – How can I improve picking efficiencies?

Pick Methodologies – Pick & Pass

- ‘Bucket Brigade’
- People segregated by zones
- Cartonization – pack as you pick
- High volume, small order picking

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WMS – What can I do with the Rules Engine?

Putaway	Optimize warehouse storage
Pick	Allocate per customer and business requirements
Task Types	Assign tasks to appropriate resources
Labels	Compliance labeling
Cost Groups	Assign ownership automatically
Operation Plans	Model multi step inbound flows

No customizations required!

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MSCA – What benefits can I expect?

- Reduction in labor costs
- Reduced shrinkage
- Reduction in data entry time
- Reduction in inventory levels
- Reduction in errors
- Reduction in turnaround time
- Improved customer satisfaction

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WMS - What benefits can I expect?

- All the benefits of MSCA
- Better efficiencies
- Better Warehouse space utilization
- More throughput
- Increased Productivity
- Increased Flexibility
- Reduced inventory levels
- Reduced labor costs

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Solution Comparison Summary

	Oracle WMS	Oracle - Mobile Supply Chain
LPNs	Yes	No
Ability to integrate with Barcode Scanners	Yes	Yes
Rules Engine	Yes	No
Task & Resource Management	Yes	No
Material Status Control	Advanced	Basic
Inventory/Lot/Serial Tracking Feature	Advanced	Yes
Labeling	Advanced	Yes
Integration Costs	N/A	N/A
Infrastructure costs	Similar	Similar
Locator Control	Mandatory	Optional
Implementation Duration	Higher	Lower

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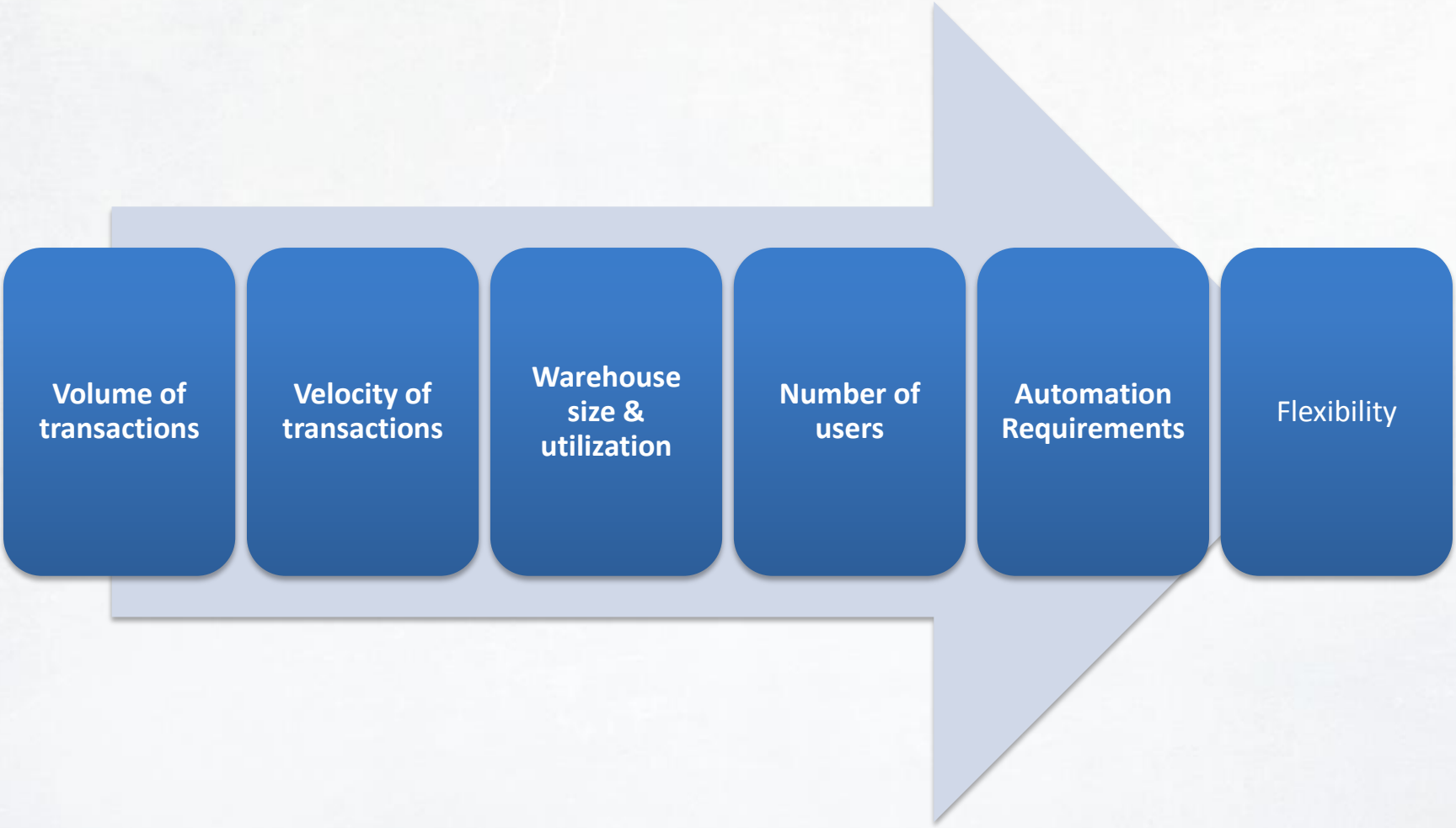
What is right for me?



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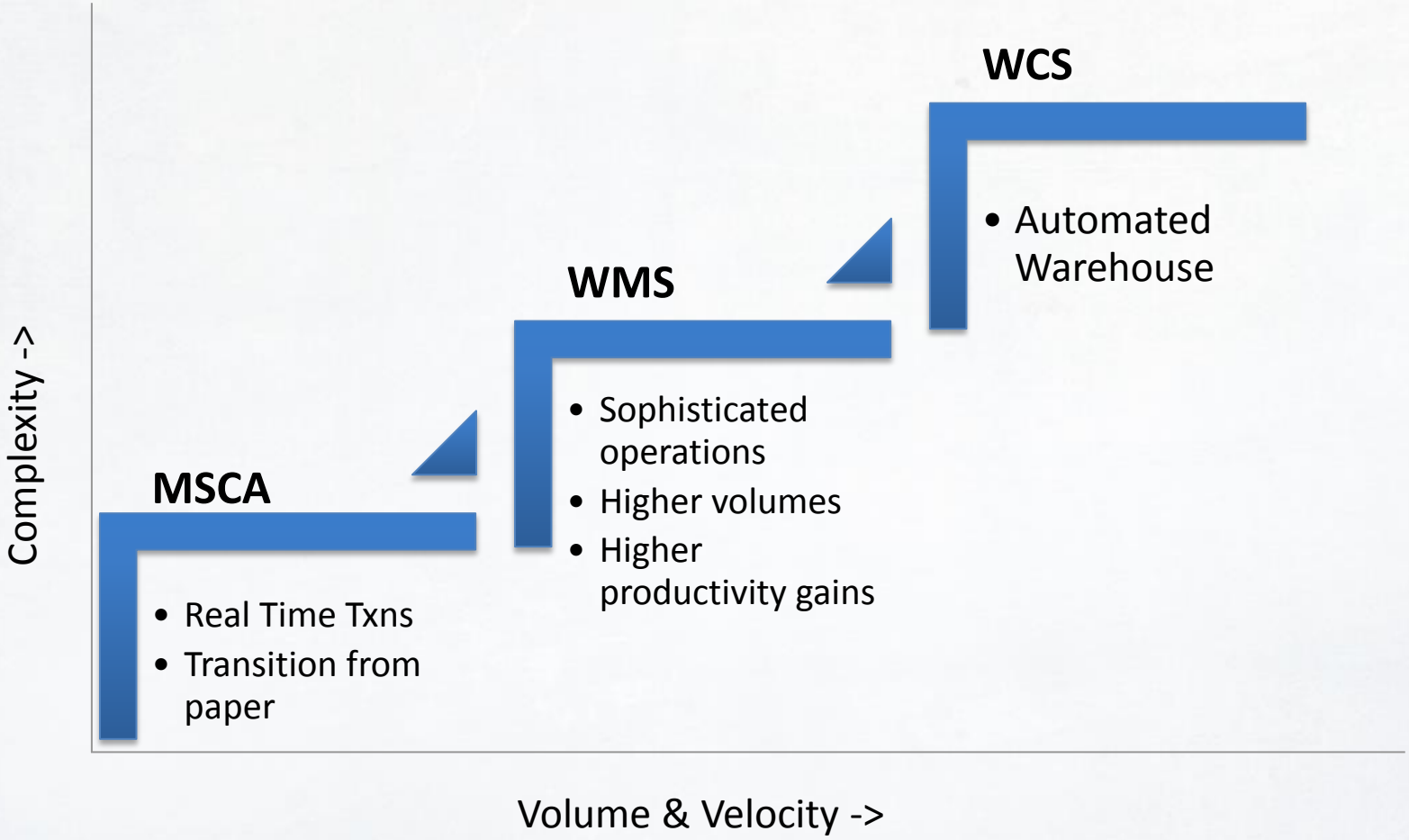
Step up to the right solution



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Hardware and Software to Support your Mobile Deployment

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Mobile and wireless devices used with Oracle supply chain

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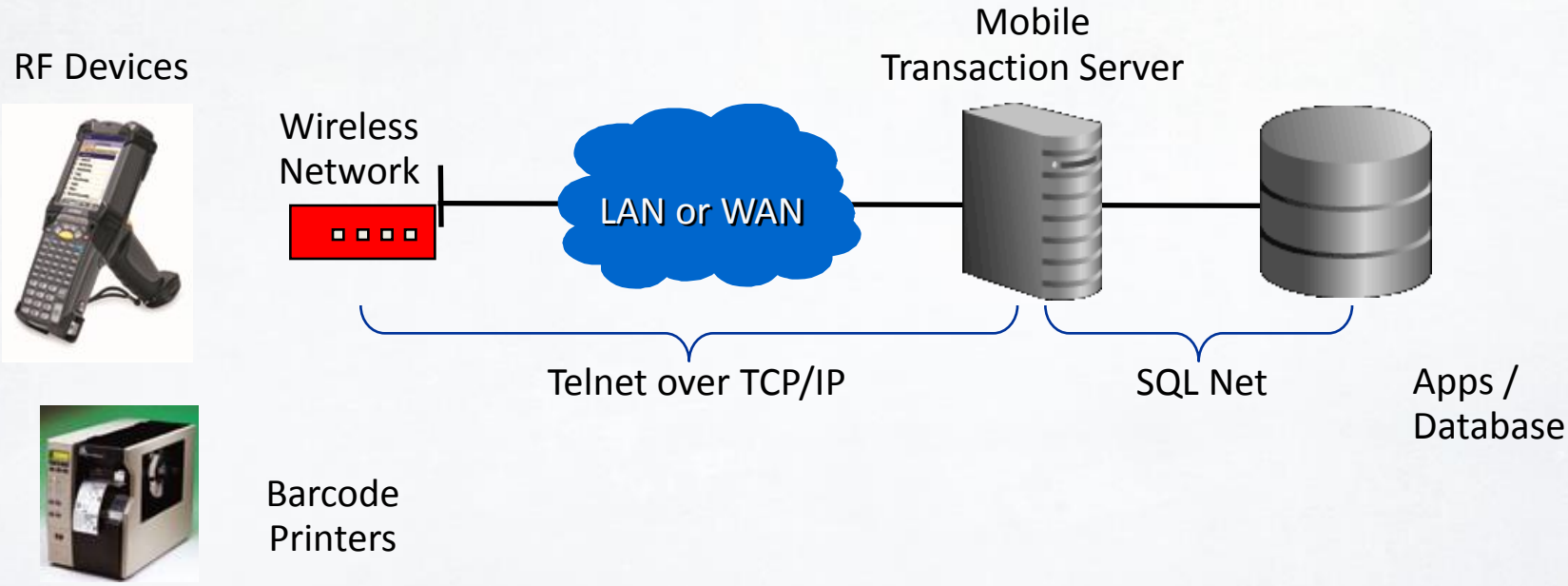
Basic Overview

Key Items

- MWA server
- Wireless infrastructure and security management
- Mobile devices and device management
- Barcode printers & software



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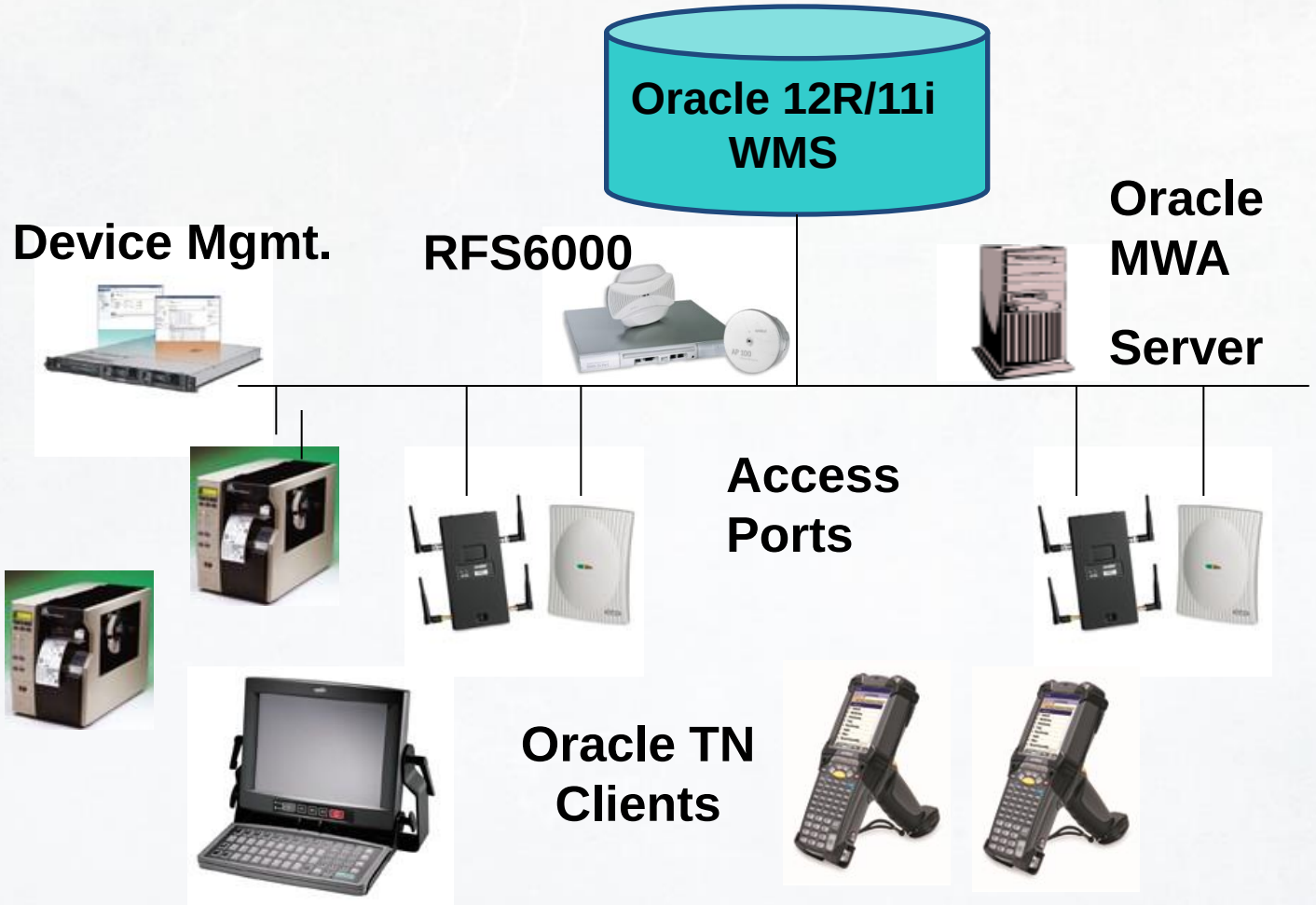
Oracle WMS/MSCA Infrastructure



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MWA Server

What does it do?

- Mobile wireless application server
- Connects mobile devices to application
- Scalable architecture with built in load balancing capabilities using MWA dispatcher
- Telnet and GUI clients

Same hardware requirement for WMS or MWA

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Mobile Computers

Rugged MC92NG with built-in Telnet

Vehicle-Mount

VH-10

Economy minded MC3290

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Durability Specs, MC9XXX

- 6 foot drop to concrete
  - Operating:
    - Color (-10° to 50° C)
    - Mono (-25° to 50° C)
- IP64 sealing
- 2000 one-meter tumbles

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Oracle Telnet vs. GUI

Feature	Telnet	GUI
User Interface	Character Based	Visual Form
Max WIFI Security	Yes	No
Speed	Faster	Slower
Our Config. Time	3 hrs	16 hrs

Hours listed are one time set up of mobile clients

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Wireless Network

- Switch / controller based architecture
  - Allows for redundancy
  - Browser-based configuration console
  - The access points provide WIFI to devices
  - Optional wireless network security intrusion detection
  - Site Survey is basis for site specific wireless requirements

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Wireless Device Management Software

- Provides central console for device management
- Helpdesk tool for remote users
- Insures devices have
  - Same local settings
  - Same programs
  - Same configuration for wireless network
  - Remote desktop support

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Barcode Printing with Oracle

- Uses BI Publisher
- XML data strings
- Automated label printing triggered by specific business events
- Rules-based framework for label selection (WMS)
- Direct printing to XML enabled printers as well as through print servers (ZEC, Loftware, etc.)

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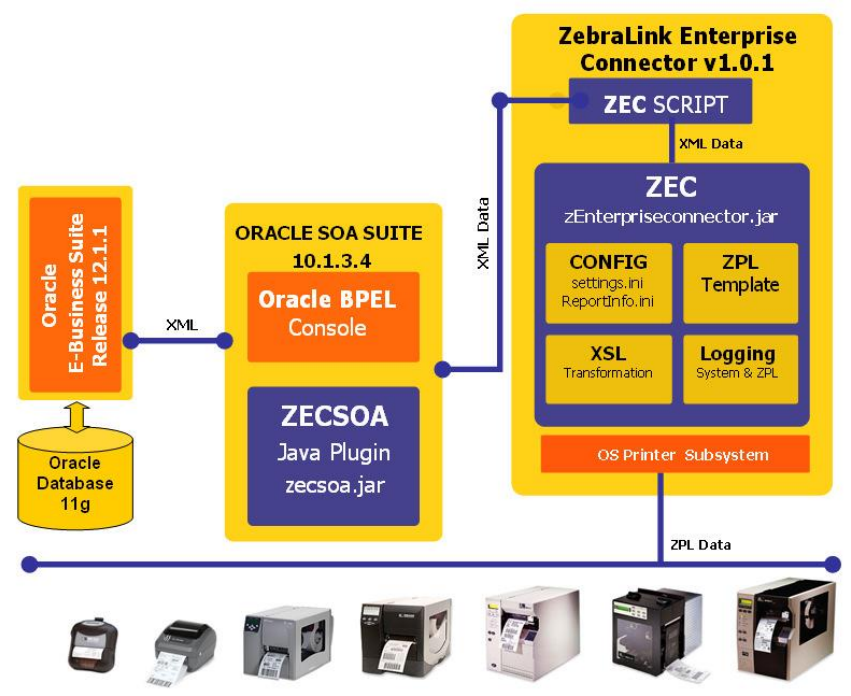
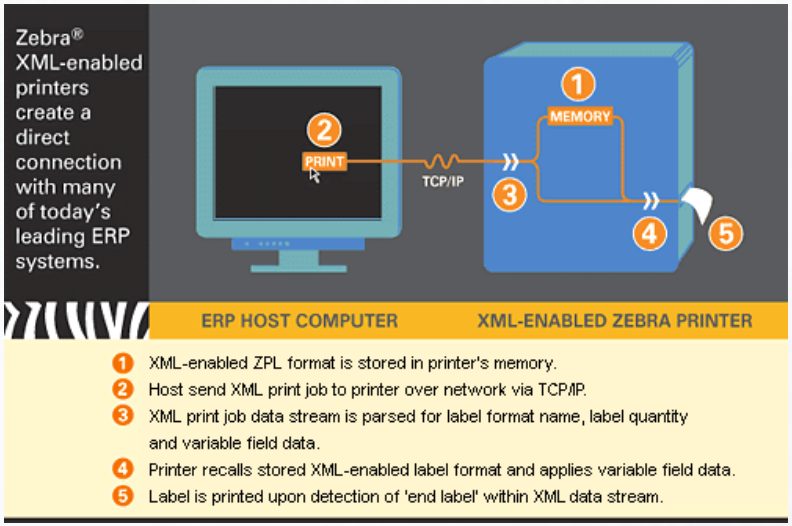
Oracle Barcode Printing Options

Enterprise Print Server



XML Printer and Design Software



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Oracle Barcode Print Vendors & Options

Vendors	XML Printer and Design Software	Enterprise Print Server
Zebra	Yes	Yes- ZEC
BarTender	Yes	Yes
Loftware	Yes	Yes-Oracle Connector
Other	Yes	General Print Server

Method	XML Printer and Design Software	Enterprise Print Server
Number of Sites	1	Multiple
Number of unique Labels per print job	Under 50	Over 50
Number of Printers	1-10	Over 10
Set Up Time	Less	More

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- RedLine Solutions helps you mobilize your Oracle R12 E-business Suite implementations

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Q&A

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