



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



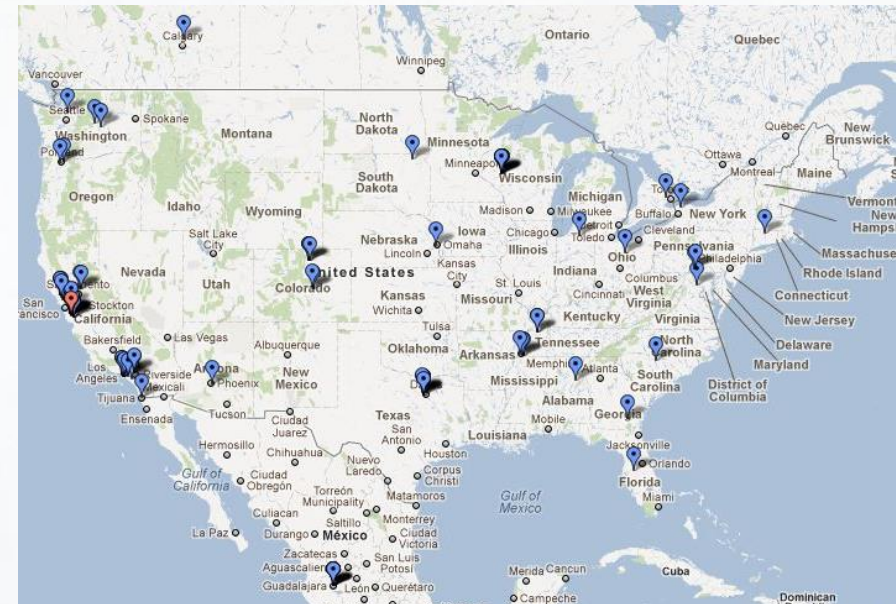
- 17+ year old privately held, Silicon Valley-based company
- Mobile computing, wireless networks, barcode and RFID specialist
- Leading data collection integrator for Oracle WMS and MSCA
- Work with Fortune 500 to start-up companies
- Customer installations worldwide
 - Over 45 sites installed with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



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





Introducing Gaea



Founded in 2007 by the architects of Oracle's Supply Chain & Project Management products. Established Oracle (Platinum) partnership

HQ in Mountain View, California, Local presence in India, Middle East, UK, Malaysia

Global presence – Clients in APAC, EMEA and NA, across multiple-industries

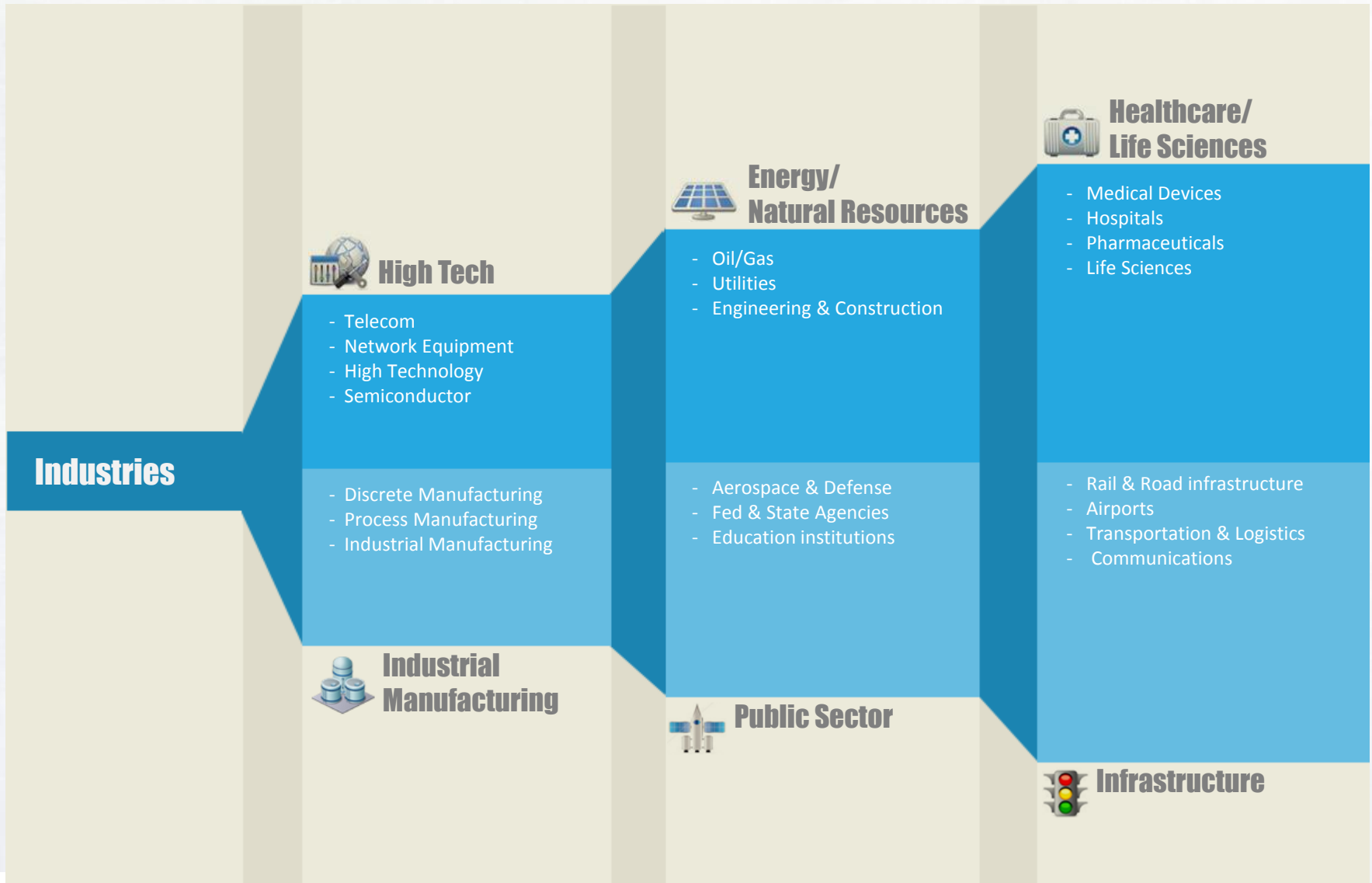
Additional Technology partnerships - Zebra/Motorola, Microsoft

Systems Integrator Relationships – Accenture, Wipro, IBM, TCS, Infosys, Intrigo, Tableau





Focus Industries





Customer Experiences



Partial List



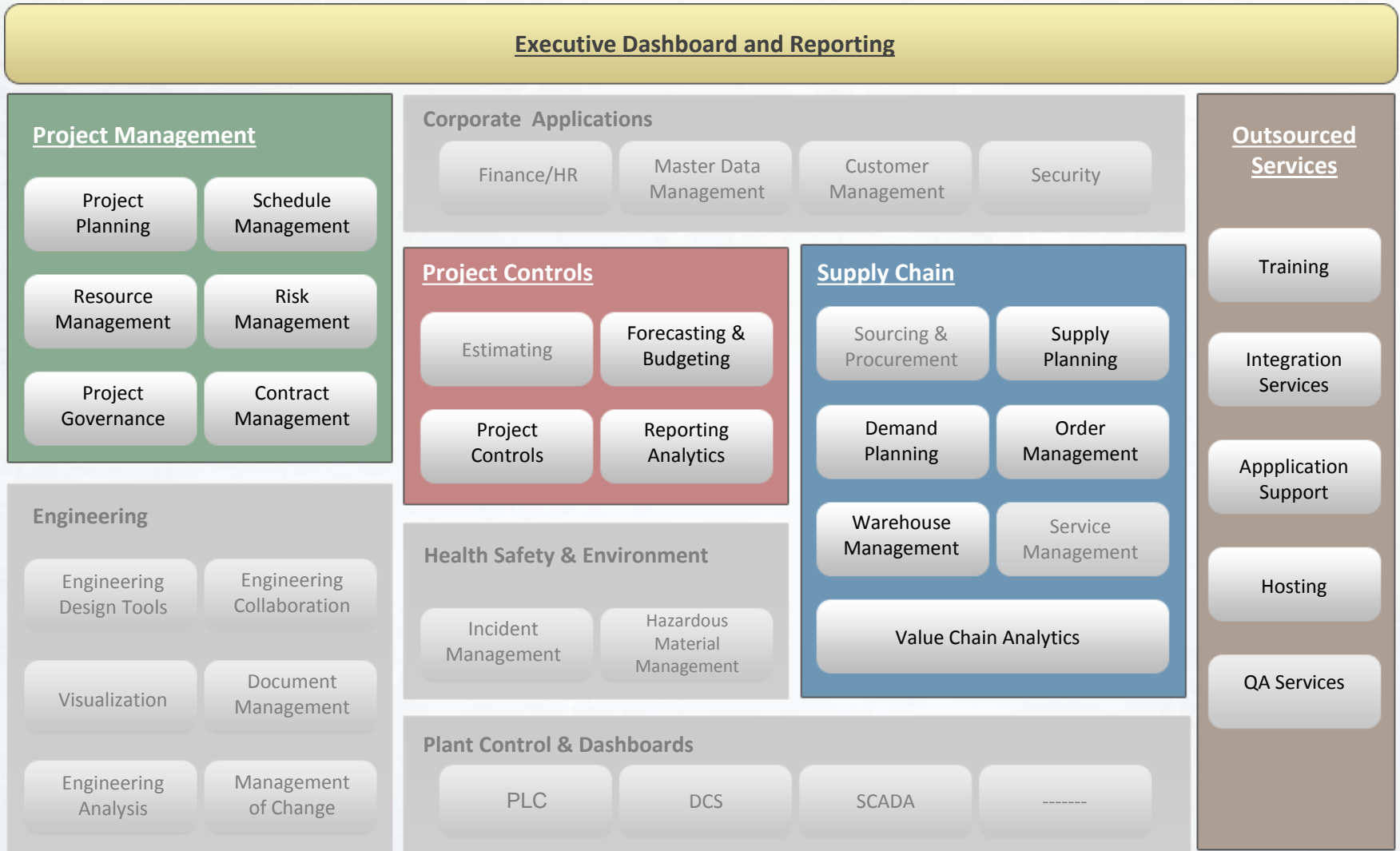
Industries

- High Tech
- Industrial Manufacturing
- Energy/Natural Resources
- Public Sector
- Health Care/Life Sciences
- Infrastructure





Industry Model – Gaea’s core capabilities



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



Sample Customers



SONY



YAHOO!



VOLTAS LIMITED



MOTOROLA



ORACLE



blue nile



facebook



LARSEN & TOUBRO



Logitech



A. M. Castle & Co.

UPMC LIFE CHANGING MEDICINE

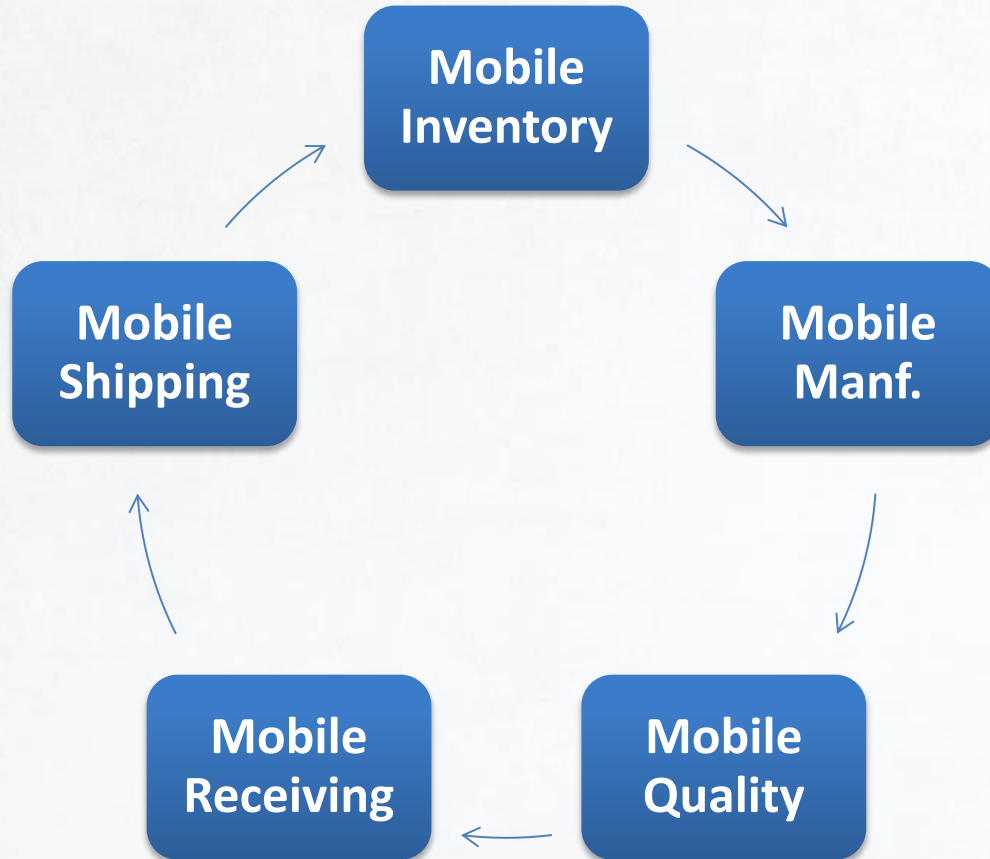


ORACLE



What is MSCA?

Mobile Front end for Inventory & other modules



User initiated, not system directed





What do you get with MSCA?



Real Time Mobile Transactions



Label Printing Infrastructure



MSCA – Streamlined, scan based UI



Oracle Applications

File Edit View Folder Tools Window Help

ORACLE

Manufacturing and Distribution Manager

Receipt Header (W1)

Supplier: Abbott Laboratories, Inc.

Receipt Date: 26-FEB-2012 18:00

Received By: Smith, Mr. Jonathan

Receiving Location: [Empty]

Quantity	UOM	Secondary Quantity	UOM	Destination Type	Item	Rev	Description
614	Each			Receiving	AS10000		405 Digital Came
200	Each			Inventory	BXRA-W0400	A	Lot Controlled Ite
100	Each			Inventory	BXRA-N0800		Serial Controlled I
180	Each			Inventory	BXRA-N0400		Normal Items
849	Each			Receiving	VXFF-0N00		Plain vanilla item
828	Each			Receiving	VXFF-0L200		Lot controlled ite
986	Each			Receiving	VXFF-0LR30	A	Lot and revision c

Record: 1/1

Oracle Mobile

ORACLE

Receipt (M1)

PO Num 4488

Supplier Abbott Laboratories, Inc.

Line Num 1

Item AS54888

Desc Sentinel Standard Desktop

To Sub FGI

UOM Ea(1 Ea)

Qty 10

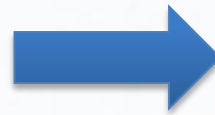
Next Item Done Cancel (C)



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



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



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



LPNs only mandatory for
Putaway & Picking

Most Forward Pick Zones
are non LPN controlled

No

You can have a mixture
of LPNs and loose
material in the same sub

Use LPNs only where
they serve a purpose



Why do I need LPNS?



Material Movement

Oracle Mobile
ORACLE®
Sub Transfer (W1)

Item	AS54888
Desc	Sentinel Standard Desktop
From Sub	BULK
Loc	B1.2.1
UOM	Ea(1 Ea)
On Hand	2
Avail Qty	2
Qty	2
To Sub	CASE
To Loc	C1.1.1
Reason	

Save/Next Done Cancel (C)

Without LPNS (MSCA/WMS)

Oracle Mobile
ORACLE®
Sub Transfer (W1)

LPN	LPN627A
To Sub	BULK
To Loc	B1.3.1
Reason	

Save/Next Done Cancel (C)

With LPNS (WMS)



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

The screenshot shows the Oracle Mobile interface for a Receipt (M1). The form contains the following fields:

PO Num	4488
Supplier	Abbott Laboratories, Inc.
Line Num	1
Item	AS54888
Desc	Sentinel Standard Desktop
To Sub	FGI
UOM	Ea(1 Ea)
Qty	10

At the bottom of the form, there are three buttons: "Next Item", "Done", and "Cancel (C)".



What's different in the inbound process?

WMS

Express Receipts

The screenshot shows a mobile application window titled "Oracle Mobile" with a sub-header "ORACLE ASN Receipt Express <W1>". The form contains four input fields: "ASN Num", "Pack Slip", "LPN", and "PO Num". Each field has a blue border and a small blue icon to its right. A "Done" button is located at the bottom left of the form.

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



Inventory Maintenance



MSCA

Oracle Mobile
ORACLE
 Cycle Counting (M1)

Name	CM15138Count
Sub	EACH
Loc	E1.1.1
Item	CM15138
Desc	Monitor - 17"
UOM	Ea(1 Ea)
Avail Qty	15
Qty	17

Buttons: Save/Next Item, Done, Cancel (C)

Cycle Counts
 Physical Counts

WMS

Oracle Mobile
ORACLE
 Cycle Counting (W1)

Name	EXCEPTION COUNT
Sub	CASE
Loc	C1.1.1
ParentLPN	LPN774A

Buttons: Detail, Summary

LPN summary counts
 Task Based Cycle Counting
 Opportunistic cycle counts



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



How is the workload balancing different?



MSCA:

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

Release Sales Orders For Picking

Based On Rule ... Document Set []

Batch

Release Criteria

Order Shipping Inventory

Orders Order Type

Order Number Ship Set

Prior Reservations Only

Destination Type Ship-To

Customer

Item

Category Set Category

Number

Scheduled Ship Dates

From To

Requested Dates

From To

Execute Now Concurrent



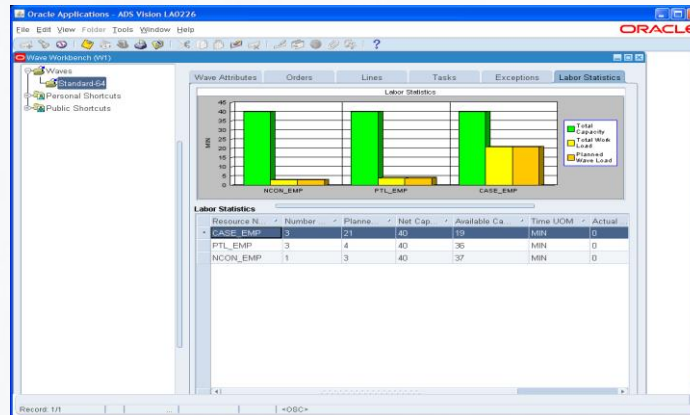
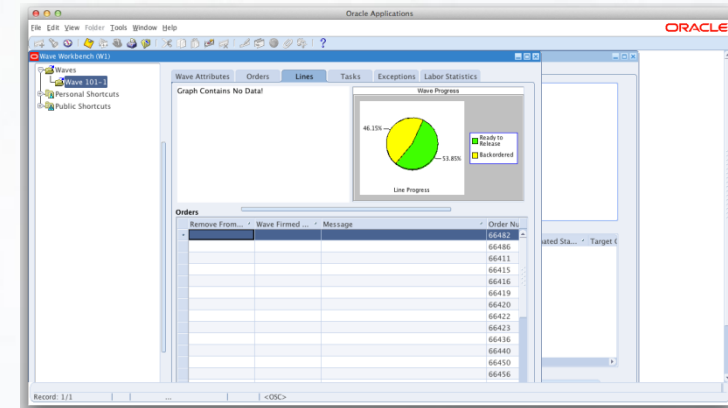
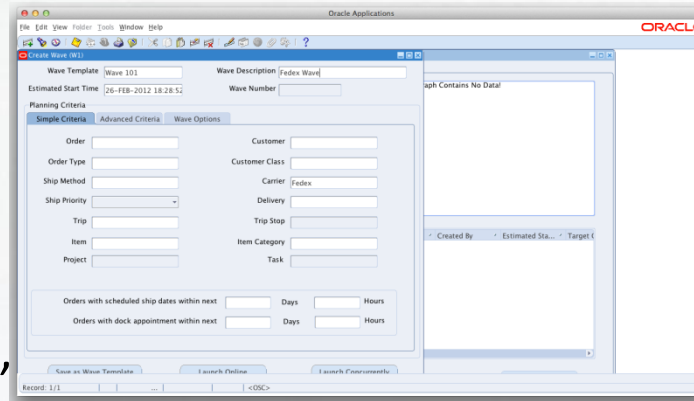
How is the workload balancing different?



WMS:

Wave Planning

- Plan, analyze, execute, monitor





Control Board

Oracle Applications

File Edit View Folder Tools Window Help

Tasks (W1)

Pl...	Transactio...	Re...	Message	Parent Lin...	Task	Status	Pri...	Transactio...	System Ta...	W...	Sourc...	Pick Mess...	Dr...	Li...
Inde...	23626080					Unrelea...		Sales order	Pick		66428	Testing For P...		1.1
Inde...	23626081					Unrelea...		Sales order	Pick		66428	Testing For P...		1.1
Inde...	23646423				39324	Loaded	110	Sales order	Pick		66434			2.1
Inde...	23648176				40342	Loaded		Sales order	Pick		66444			1.1
Inde...	23648212				43348	Loaded	3333...	Sales order	Pick		66448			1.1
Inde...	23648253				44328	Queued		Sales order	Pick		66451			1.1
Inde...	23648254				44327	Queued		Sales order	Pick		66451			1.1
Inde...	23648258				44330	Queued		Sales order	Pick		66451			1.1
Inde...	23648260				44329	Queued		Sales order	Pick		66451			1.1
Inde...	23648262					Pending		Sales order	Pick		66451			1.1
Inde...	23648264					Pending		Sales order	Pick		66451			1.1
Inde...	23648266					Pending		Sales order	Pick		66451			1.1
Inde...	23648268					Pending		Sales order	Pick		66451			1.1
Inde...	23648338					Pending		Sales order	Pick		66455			1.1
Inde...	23648340					Pending		Sales order	Pick		66455			1.1
Inde...	23648445					Pending		Sales order	Pick		66458			1.1

Add Remove Filter Manage Summarize

Tasks Exceptions Summary

Total Record Count 35

Record: 1/1



Labor Management

ORACLE Labor Management System
W1 - Kansas City Distribution

Home Logout Preferences Diagnostics

SUMMARY ANALYSIS WORKBENCH

Labor Management Summary * Choose Organization

* 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

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)

Warehouse Productivity - March, 2006										
User	Overall Rating	Total Score	Travel Rating	Travel Score	Transaction Rating	Transaction Score	Work Unit Rating	Work Unit Idle Score	Idle Rating	Idle Score
W1 - Kansas City Distribution	Excellent	8340	Excellent	4790	Excellent	3550	Excellent	8340		



MSCA - What is different in picking?

Oracle Mobile

ORACLE
Query Pickwave MO(M1)

SO Num 66394

MO Num

Pick Slip

Deliv Num

Item

Serial Triggered (S) Query (Q)

Cancel (C)



Oracle Mobile

ORACLE
MO Allocation(M1)

Item	BXRA-W0400
Confirm	BXRA-W0400
Rev	A
Confirm	A
From Sub	FGI
Confirm	FGI
To Sub	Staging1
UOM	Ea(1 Ea)
Avail Qty	87
Req Qty	2
Confirm	2
Remaining	2
Lot	S00288
Confirm	S00288

AV



WMS - What is different in picking?



Oracle Mobile

ORACLE

Outbound

- 1 Discrete Picking
- 2 Order Picking
- 3 Cluster Picking
- 4 Cluster Pick by Label
- 5 Wave Picking
- 6 Pick by Label
- 7 Bulk Picking
- 8 Manifest Picking
- 9 Logout



Oracle Mobile

ORACLE

Load (L) (W1)

Loc FP.1.1

Loc/LPN FP.1.1

LPN LPN394A

Item Desc Lot controlled item

Item VXFF-0L200

UOM Ea(1 Ea)

Req Qty 1

Picked 0

Remaining 1

Load Load and Drop Attachment (A)

Exception (E) Skip Task (S)

V



Oracle Mobile

ORACLE

Drop (W1)

From LPN LPN1974A

To Sub VISFORPICK

Confirm VISFORPICK

To Loc VFP1.1.2

Confirm VFP1.1.2

Done Cancel (C)



Pick Methodologies – Wave Picking

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





Pick Methodologies - Cluster Picking

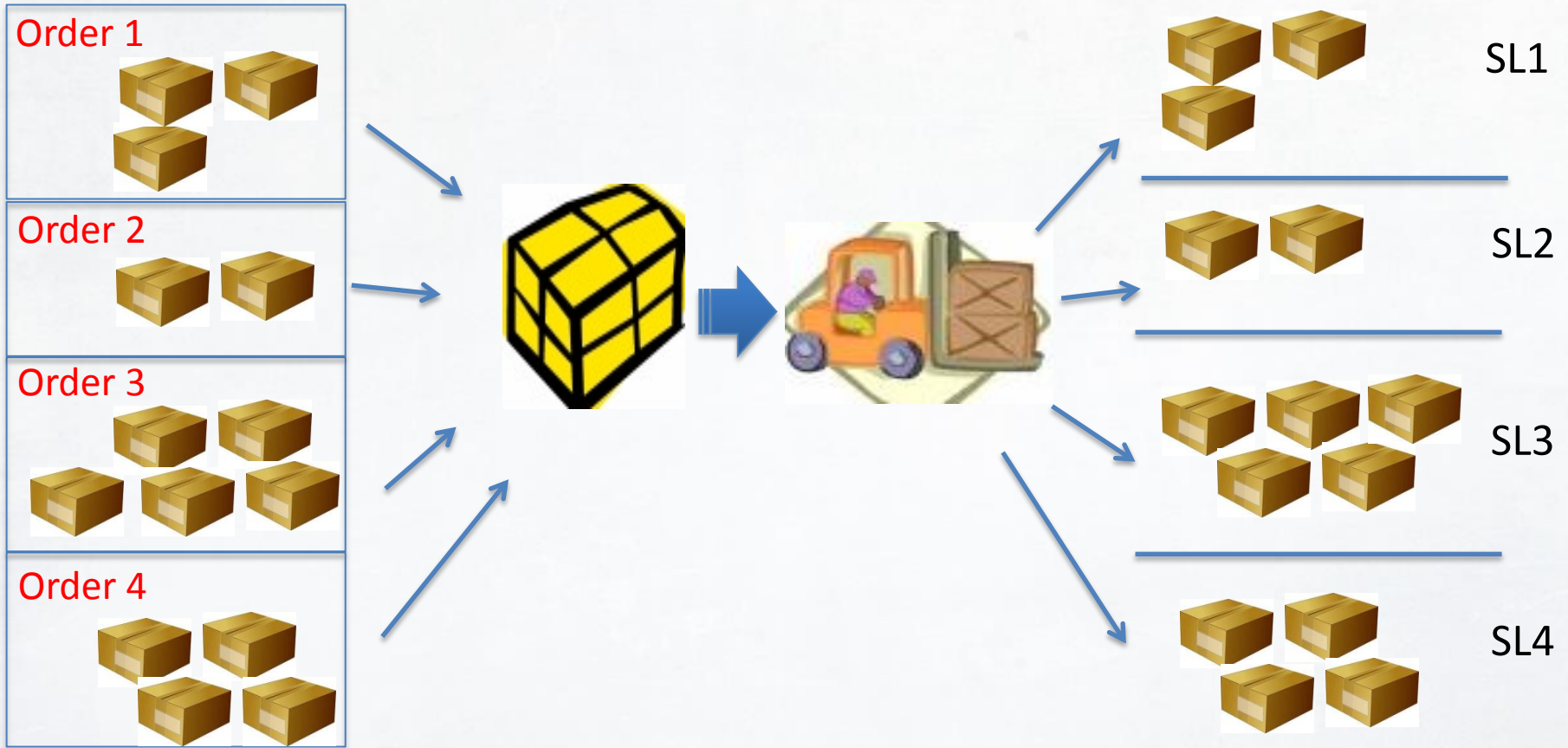


Pick & Pack multiple small orders

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



Pick Methodologies – Bulk Picking





Pick Methodologies – Pick & Pass



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



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!



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



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



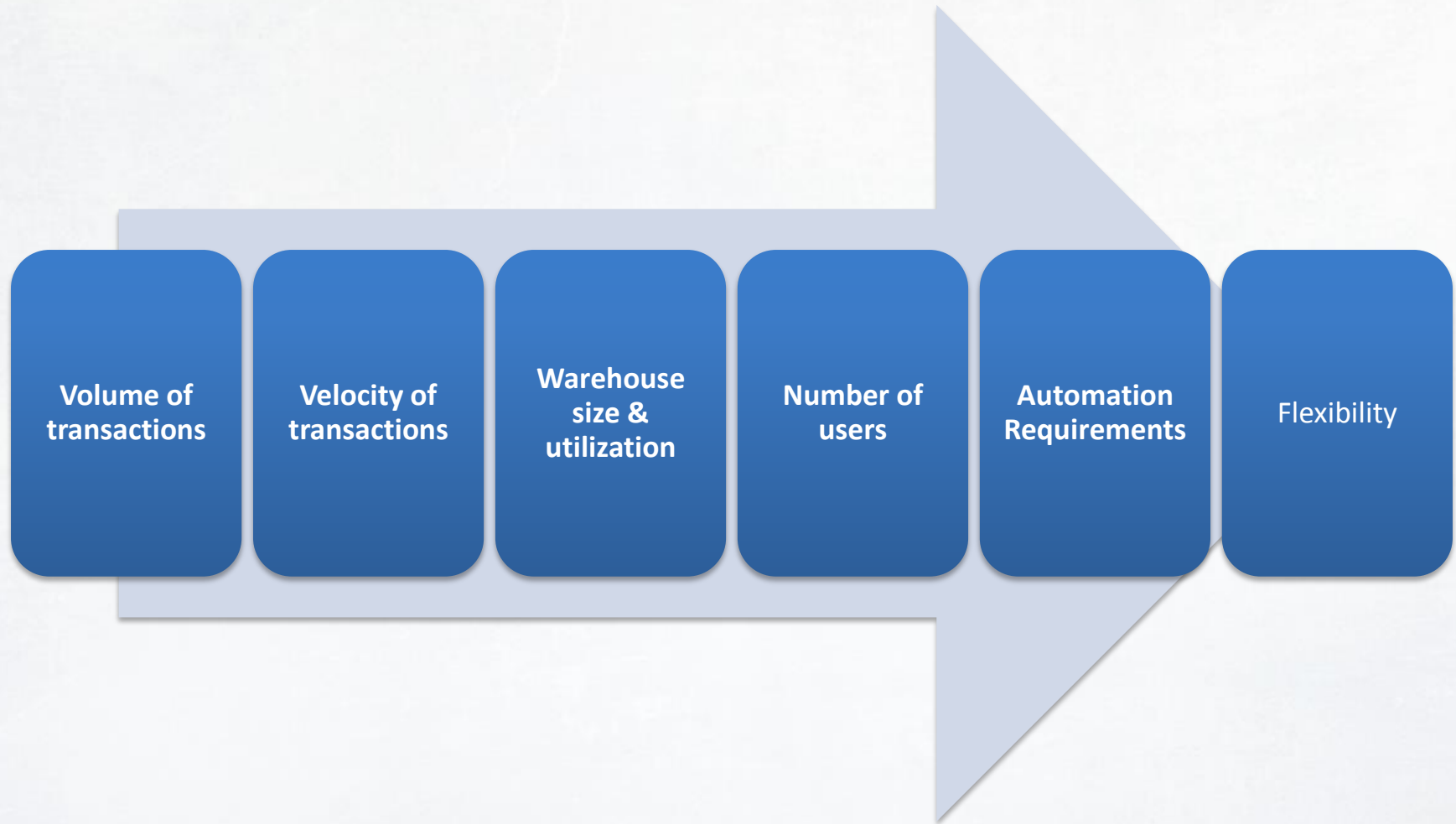
Solution Comparison Summary



	<u>Oracle WMS</u>	<u>Oracle - Mobile Supply Chain</u>
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

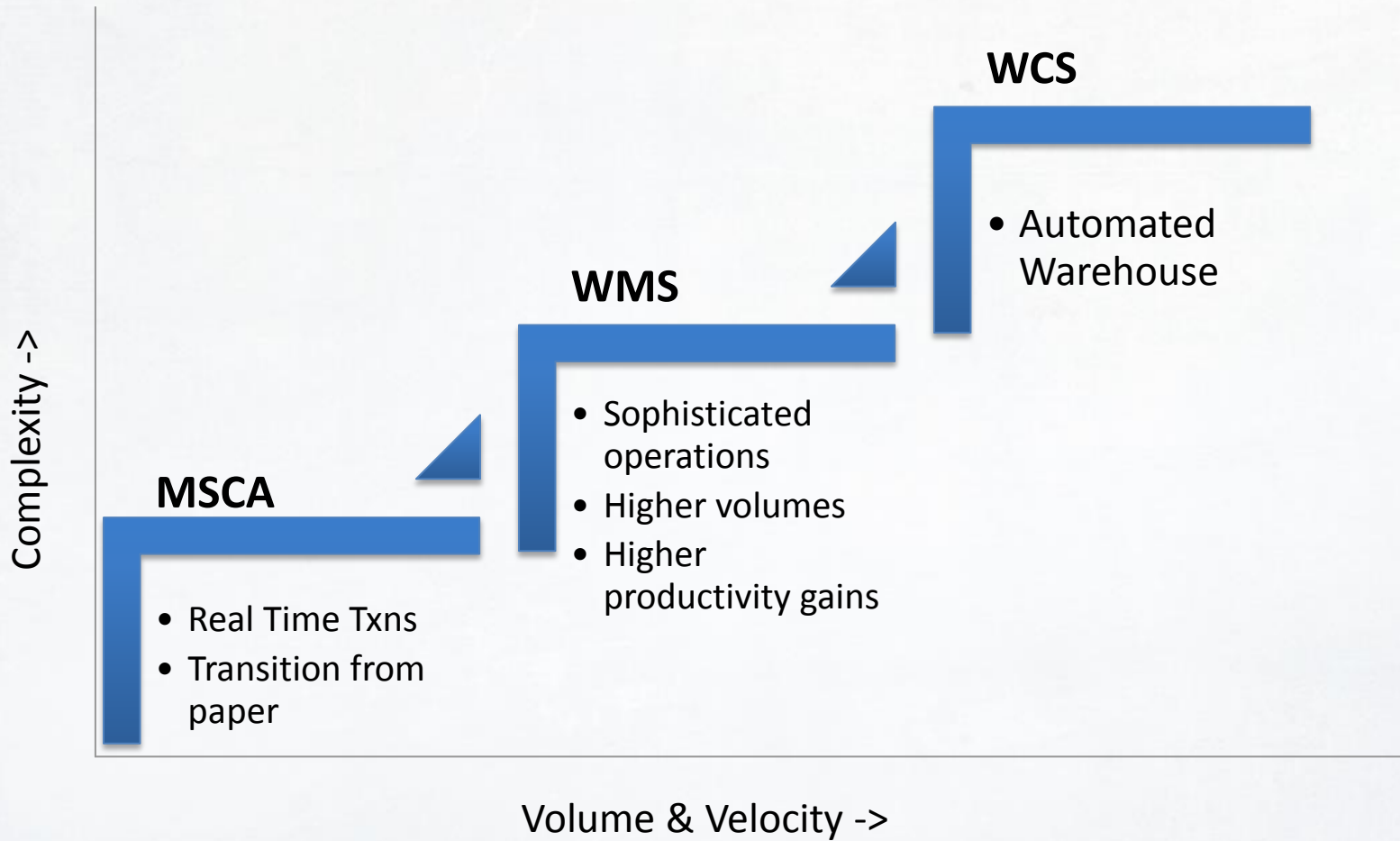


What is right for me?





Step up to the right solution





Hardware and Software to Support your Mobile Deployment



Mobile and wireless devices used with Oracle supply chain

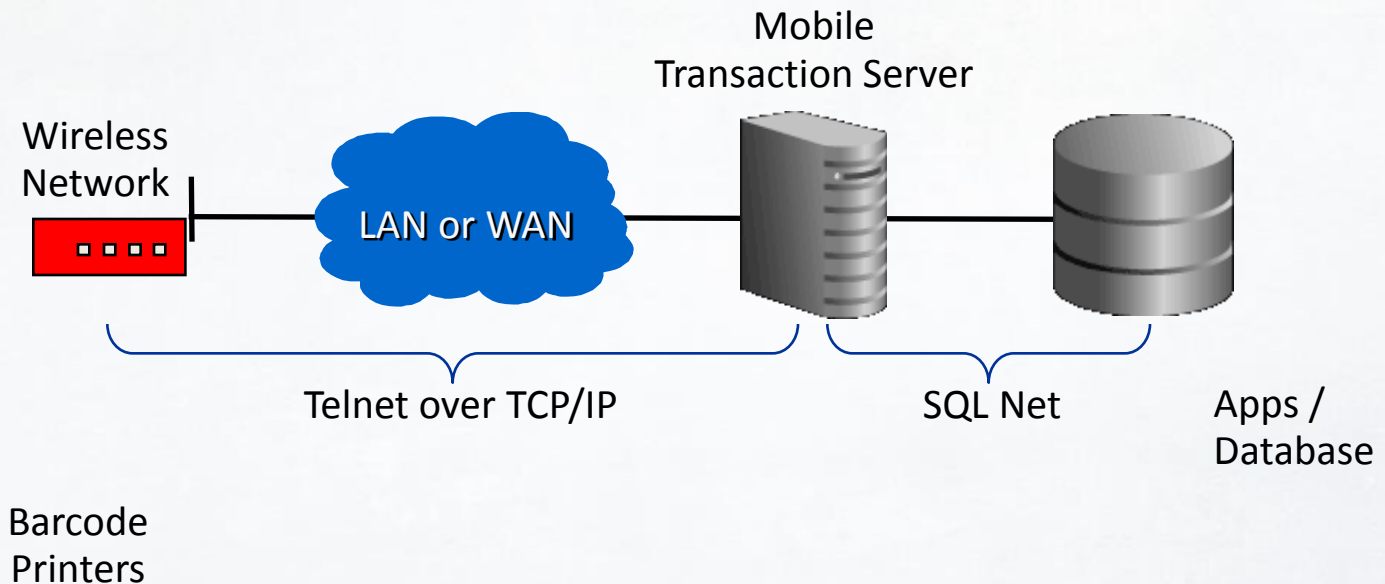




Key Items

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

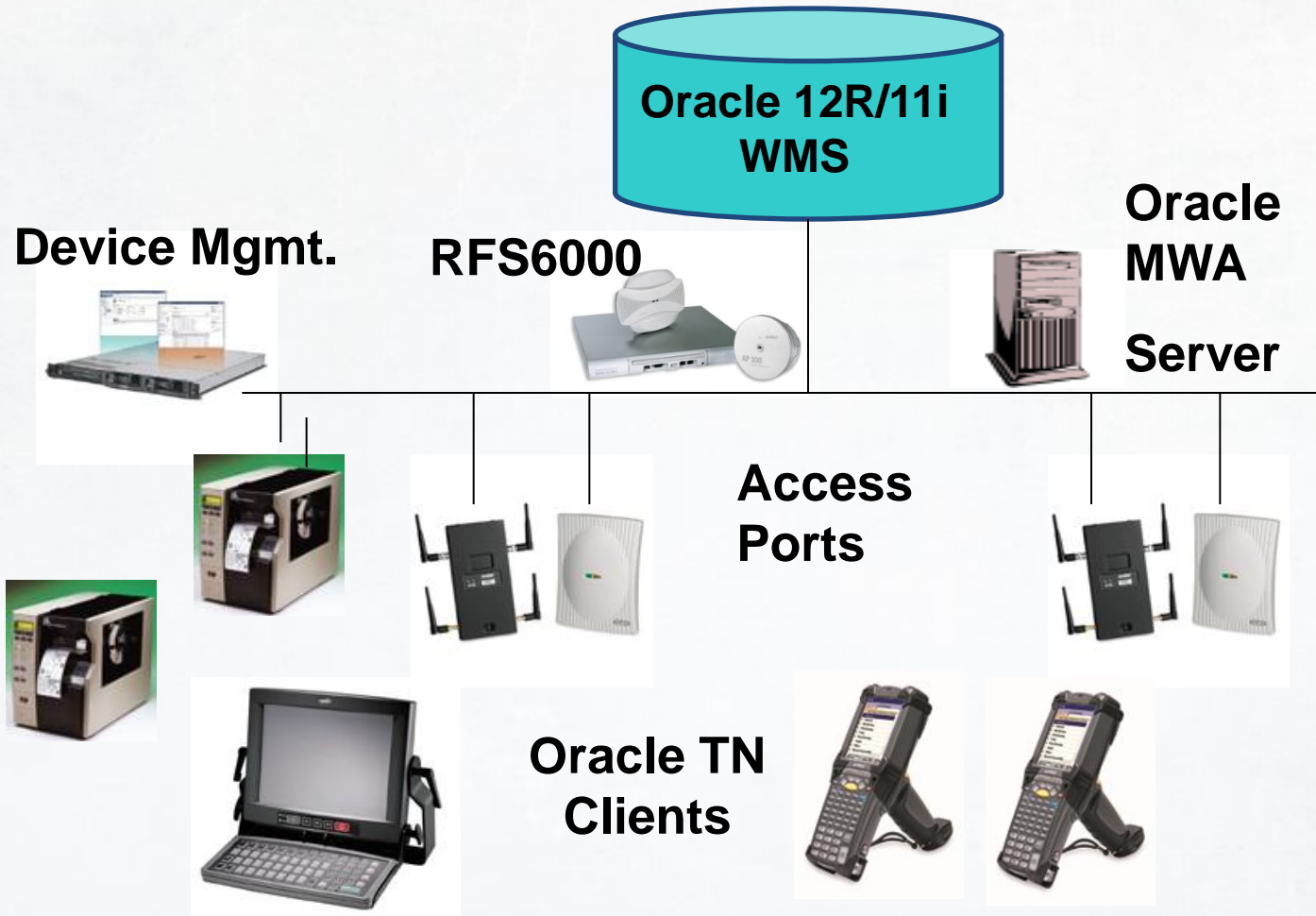
RF Devices



Barcode Printers



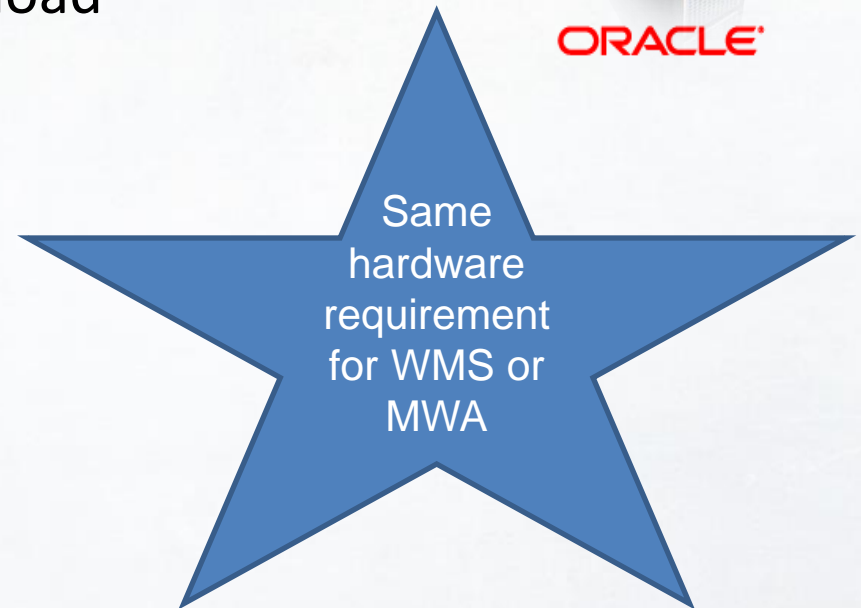
Oracle WMS/MSCA Infrastructure





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





Rugged MC92NG with built-in Telnet



Vehicle-Mount VH-10



Economy minded MC3290





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





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





- 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





- 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

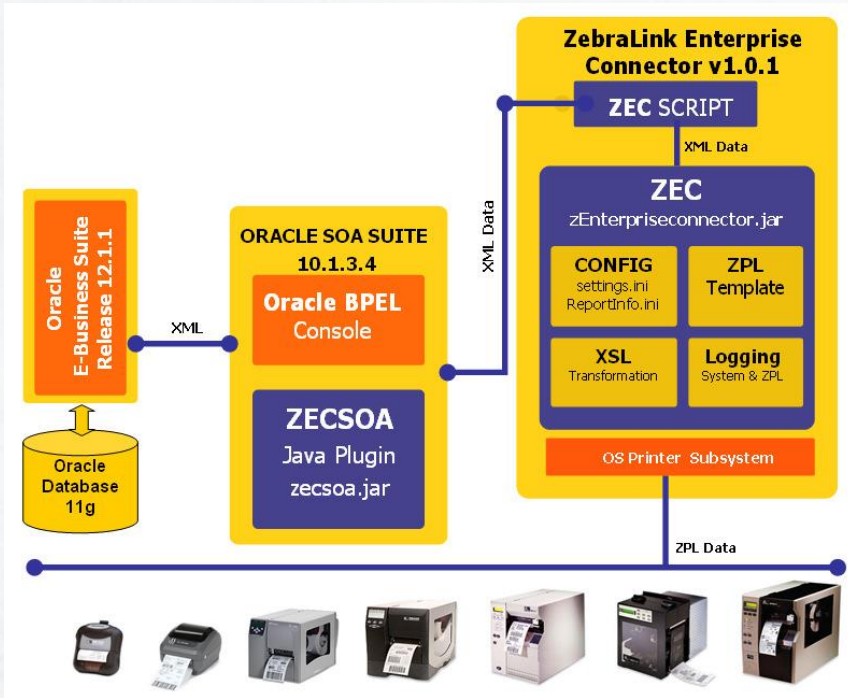




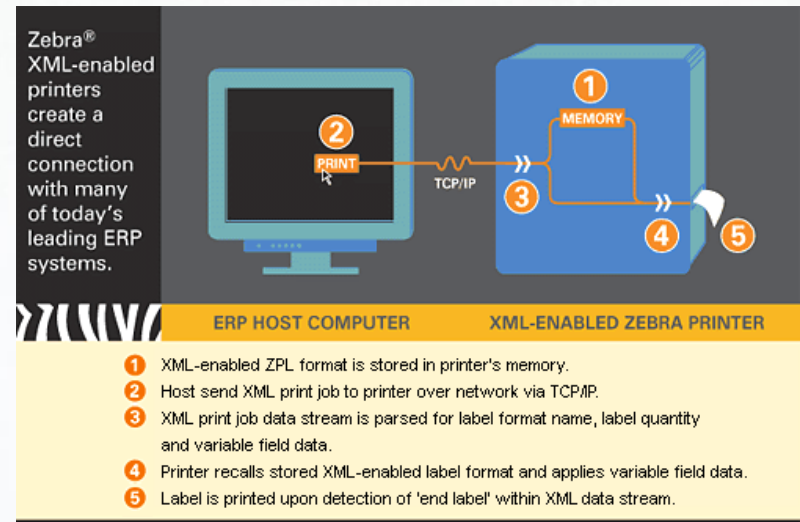
- Uses BI Publisher
- XML data strings
- Automated label printing triggered by specific business events
- Rules-based framework for label selection (WMS)
- Direct printing to XML enabled printers as well as through print servers (ZEC, Loftware, etc.)



Enterprise Print Server



XML Printer and Design Software





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



ORACLE®

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





Strategic Partners



MOTOROLA
SOLUTIONS

Mobile Solutions Channel Partner





Q&A



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