Infor WM – Turning Costs into Competitive Advantage

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CISTECH
Business Systems for Manufacturers

Agenda

- ➲ **Customer References**
- ➲ Solution Overview
- ➲ Functionality Overview
  - ⇨ Inbound Processing
  - ⇨ Inventory Management
  - ⇨ Outbound Processing
  - ⇨ Work Order Processing
  - ⇨ Event Management
  - ⇨ Labor Productivity
- ➲ Questions & Answers

Infor WM Clients

MFG / CPG

Wellmark

Applica™
Applica Incorporated

SOLO

TaylorMade®

Oral-B®

Capitol®

Candle-lite®
A Lancaster Colony Company

T-FAL

Franklin International
Adhesive Technology for a Changing World

SAINT-GOBAIN

Food & Beverage

SCHNEIDERS

New Vine
LOGISTICS INC.

Campbell's

ConAgra Foods®

Swift
Swift & Company

COSTCO

GENERAL MILLS

Kellogg's.com™

Dole
CERTIFIED ORGANIC 94011

Minute Maid
Premium
ORIGINAL

Enzymatic Therapy
What Better feels like.™

BUFFALO TRACE
DISTILLERY

High Tech

BRIGHTPOINT®

Qwest

CISCO SYSTEMS
EMPOWERING THE INTERNET GENERATION™

TESSCO
TECHNOLOGIES®

LANIER

RICOH®

asurion

Wholesale/Industrial

TR
TUCKER ROCKY
DISTRIBUTING

GraybaR
works to your advantage.™

OWENS CORNING

FERGUSON ENTERPRISES, INC.®

H.B. Fuller Company

APPLIED
Industrial Technologies®

Airgas

INGERSOLL-RAND

YAMAHA

Honeywell

3PL

MENLO
WORLDWIDE

NYK LOGISTICS
& MEGACARRIER

TLC
TOTAL
LOGISTIC
CONTROL

WSI

TMX Aerospace
A ThyssenKrupp Materials NA company

BRIGHTPOINT®

SATARIA
Distribution & Packaging, Inc.

Retail

BLOCKBUSTER

SPENCER gifts
A UNIVERSAL STUDIOS COMPANY

TIMEX

R RadioShack®

INFOR

Manufacturing Clients Profile

Candle-lite (A Lancaster Colony Company)
- Manufacturer of candles and aroma therapy
- CPG distributor – e.g. Wal-Mart
- DC in Leesburg, Ohio (North of Cincinnati)

SAINT-GOBAIN
- Abrasives division with industrial & home improvement retail distribution
- Similar customer grouping/zoning & distribution

Wellmark
- Manufacturer & distributor of pest management products
- Lot controlled environment tracking raw materials and finished goods
- Dallas, Texas

Honeywell
- Commercial & Residential Home Comfort Systems
- Inbound from Mfg Facilities
- Industrial Supplier & Home Improvement Retail Distribution
- Retail display kitting
- US site has 80 users; CN site has 15 users

H.B. Fuller Company
- Specialty Products Division in Chicago (adhesives, coatings and sealants)
- 75 User site
- Lot controlled environment

Owens Corning
- Building & Industrial Supplies
- Inbound from Mfg Facilities, outbound to diverse markets including retail
- 33 Global Sites & Growing
- Largest Newark 2MM sq ft w/ 190 users. Smallest 30K sq ft with 10 users

Efficiency Improvements

TaylorMade

→ Overall productivity improved 5 times with WMS

→ Picking productivity improved 10 times

→ Inventory write-off down to $7K of $30 million

→ Shipping errors down from 2700 -> under 100

LANIER – A RICOH COMPANY

→ Reduced inventory by 50%

→ Reduced budgets by 20%

→ Increased productivity by 33%

→ Reduced forms expense by $100,000

GraybaR – works to your advantage

→ Overall productivity improved 15-25%

→ Space utilization increased 10%

→ Inventory accuracy improved 33% to 99.9%

OWENS CORNING

→ Labor productivity

→ Improved space utilization

→ Increased inventory accuracy

→ Increased shipment accuracy

New Vine Logistics   **Applica** Applica Incorporated   **The Gillette Company**   **SCHNEIDERS**

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Best-In-Class Features

EXTENDED CAPABILITIES

Inventory Control

Labor & Task Management

Slotting

Value-Added Processing

Replenishment

Picking / Selection (RF, Paper, Voice)

Transportation Management

Shipping

Loading

Parcel Manifesting

Quality / Returns

Yard

Enterprise Event Management

Put-Away

Voice Picking

Cross-Dock / Transfers

RFID

Satellite Control

Receiving
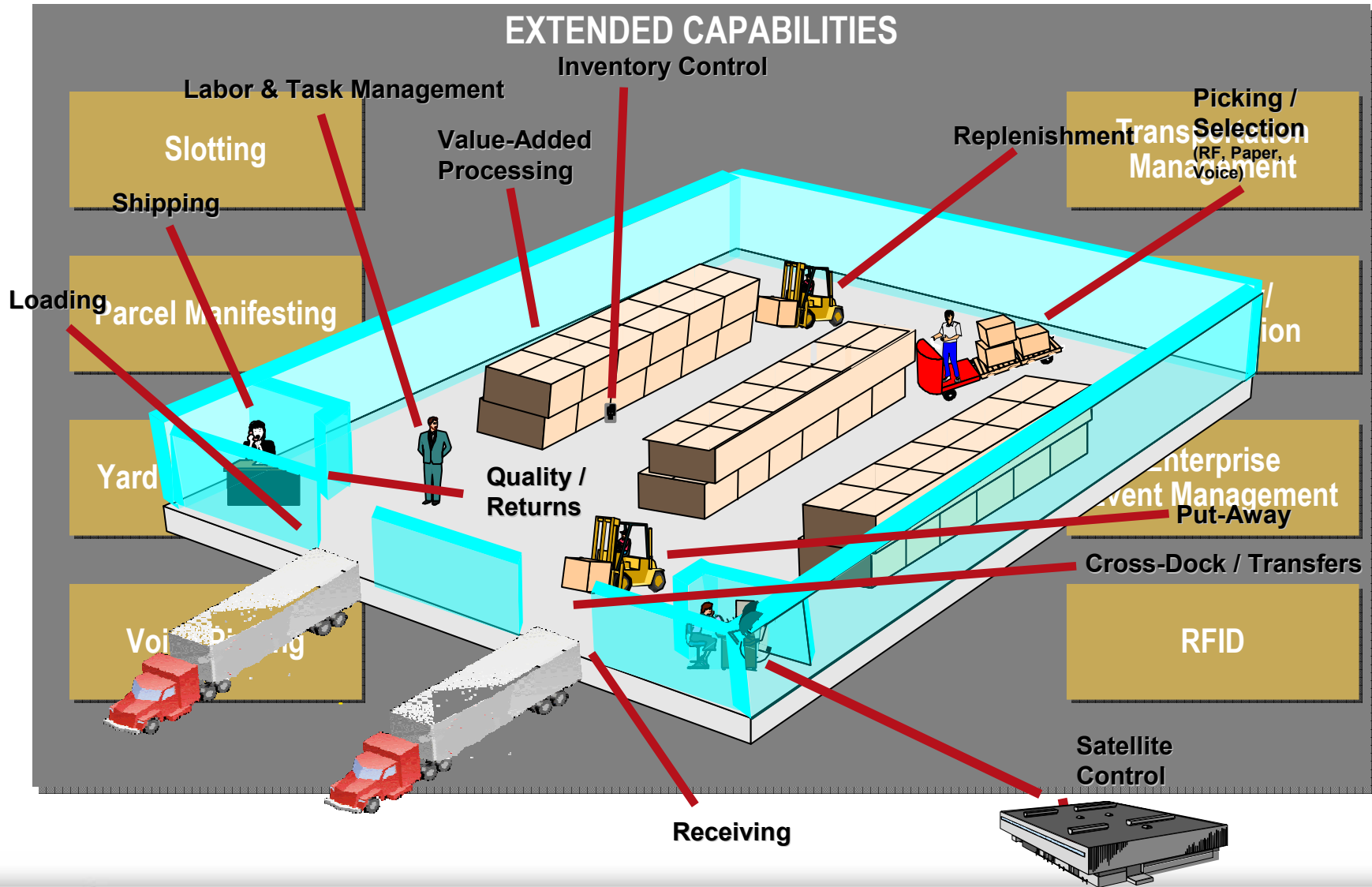
Warehouse Management Functionality
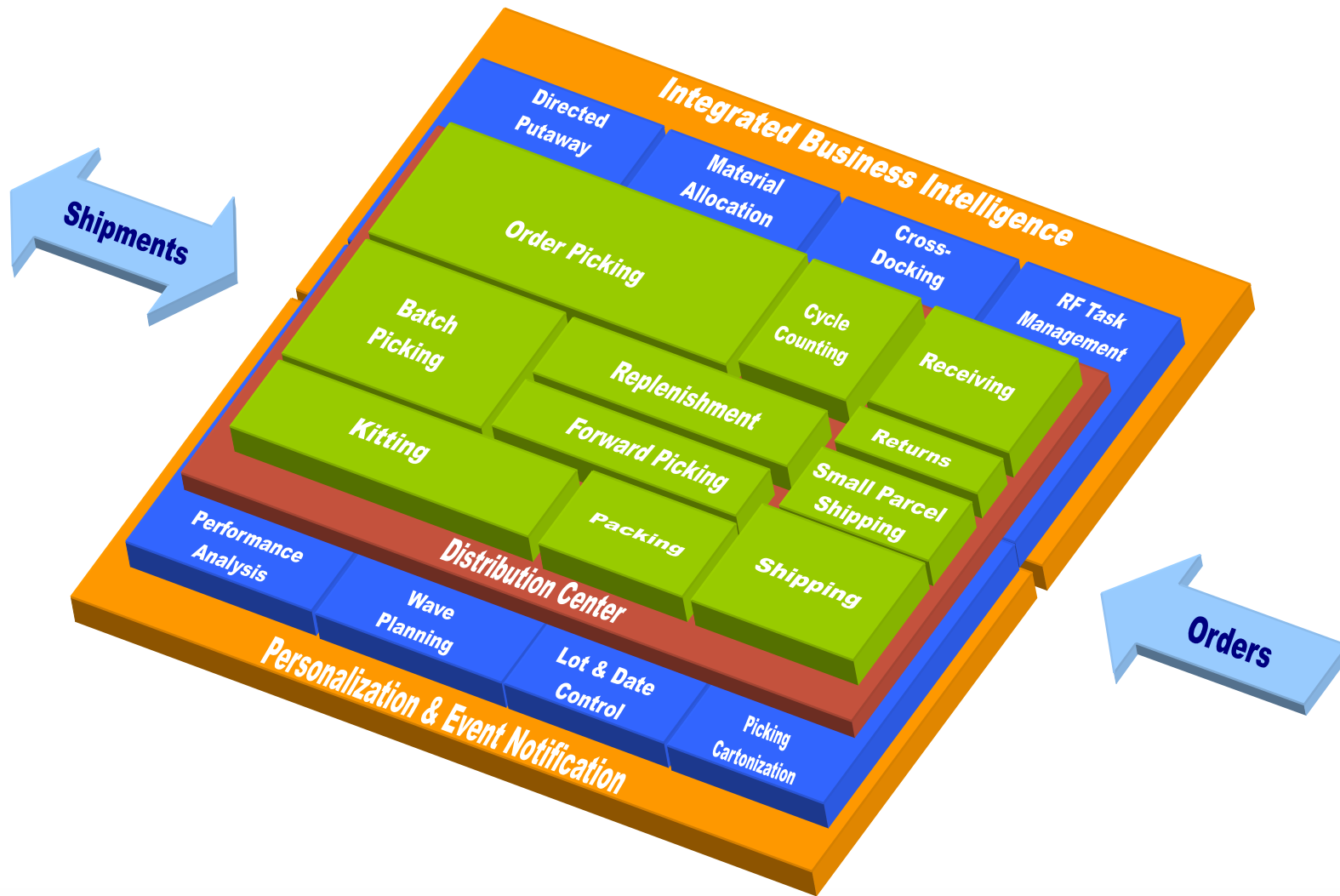
WM Architecture

- **Scaleable architecture**
  - Centralized or distributed support
  - Single architecture for browser, RF
  - Multiple warehouse support
  - Multiple language support
- **Zero-footprint**
  - Wan deployable
  - No client administration
- **Database options**
  - SQL server, Oracle, Informix
- **Platform options**
  - Windows, Unix
- **Web services**
  - Easy mass import and export
  - All transactions have associated web service
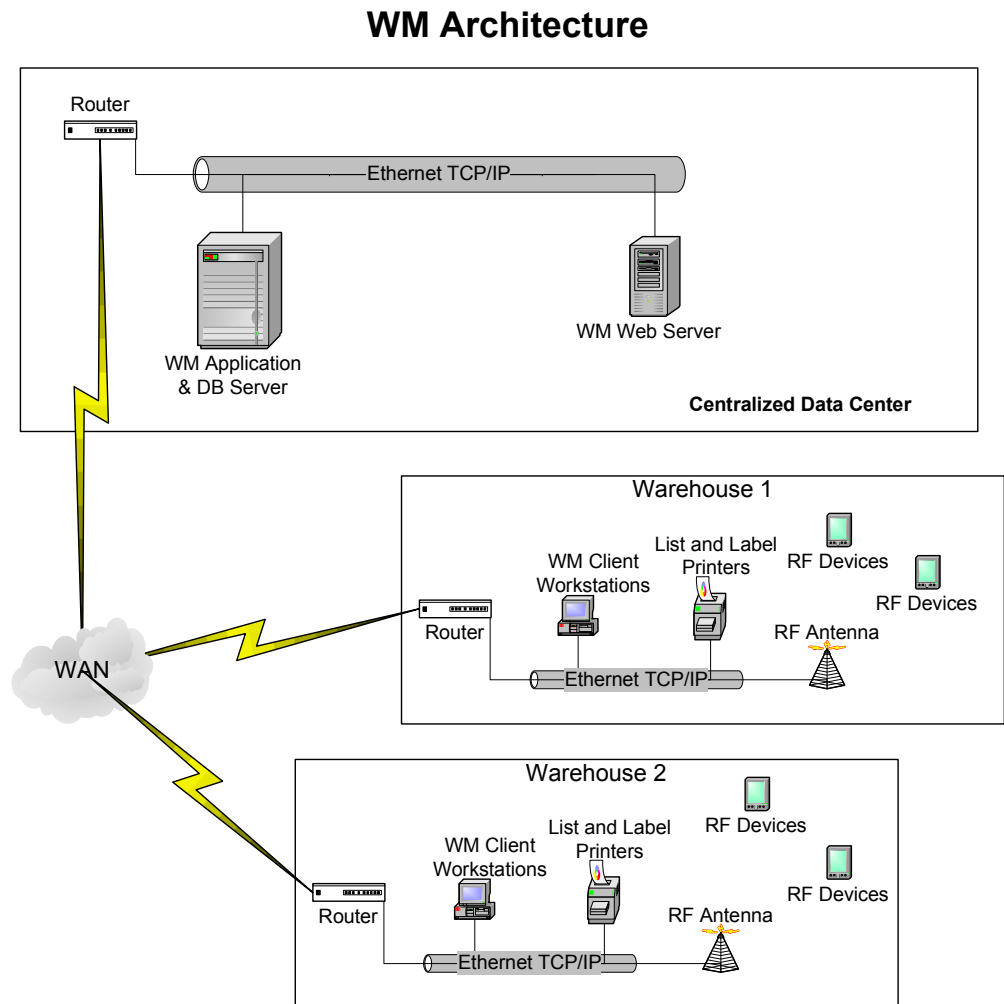
WM Architecture

Infor WM Application Architecture
Database, Enterprise, Warehouse, Owner, Inventory

Single/Multiple Instance

Enterprise

Multiple Warehouses

Multiple Owners

Multiple Products

Multiple Lots/Serial IDs

IA,WI, MN
Warehouse
Multiple Owners
Multiple Customers
Operational Rules
Users

Single Database Instance Setup

Warehouse IA

Warehouse WI

Warehouse MN1, MN2

Multiple Database Instance Setup

WM Integration

```
                              ┌─────────────────┐
                              │    ERP/Host     │
                              └────────┬────────┘
                                       ↕
                              ┌─────────────────┐
                              │    Infor Bus    │
                              └────────┬────────┘
                                Orders, Items
                                       ↕
                                Transactions, Shipments
                              ┌─────────────────────┐
                              │  WM Interface Layer │
                              └─────────────────────┘
```

| RF Devices | Real Time Transactions → ← | Infor Warehouse Management |
| Label & Document Printers | LPN / Tags Address Labels Shipping Papers ← | |

Web Services, WMS Event Mgmt, Integrated Reporting & Performance Analysis

RF Transactions	WMS	
• Receiving, Putaway	• Receiving & Putaway	• Task Management
• Picking, Packing, Shipping	• Pallet & Lot Tracking	• Picking, Loading, Shipping
• Replenishment, Cycle count	• FIFO Movement	• Value Added Services (VAS)
• Real Time Validation	• Cycle Counting	• Forward Pick Replenishment
		• Picking Cartonization

iNfOR

User Access & Personalization
Flexibility to Meet Your Environment


Web Desktop

Web Dashboard

RF Transactions

Integrated Performance Analysis

- End user accessible
  - Super User Manageable
- Drag and drop reports
  - Grouping, cross-tabs, pivots
  - Charts
- Output to
  - Web page
  - Printer
  - PDF
  - Microsoft Office
- Embedded advanced report writer
- User designed documents
  - Packing list
  - Bill of lading
  - Manifest

- Integrated meta-data layer
  - Users do not need to know database layout
  - Consistent data element names
  - Reports easily survive upgrades
- Report scheduling and routing
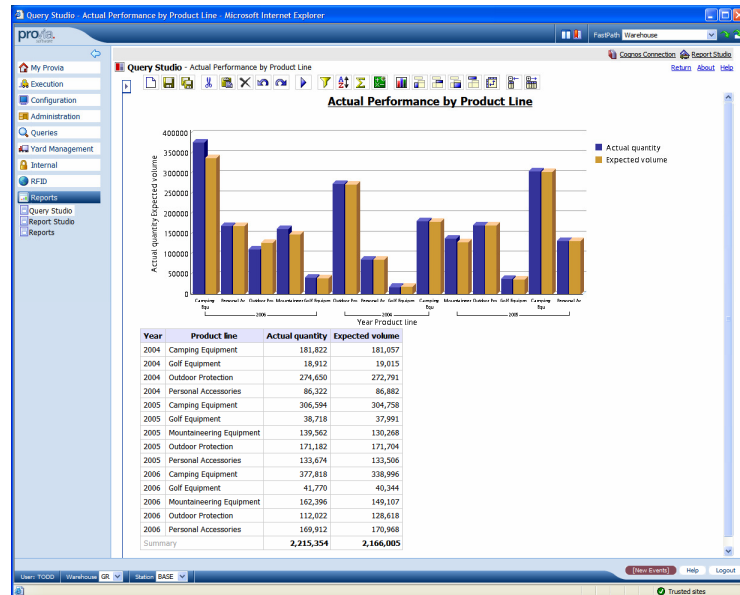
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⇨ Event Management

⇨ Labor Productivity

➲ Questions & Answers

Inbound Process
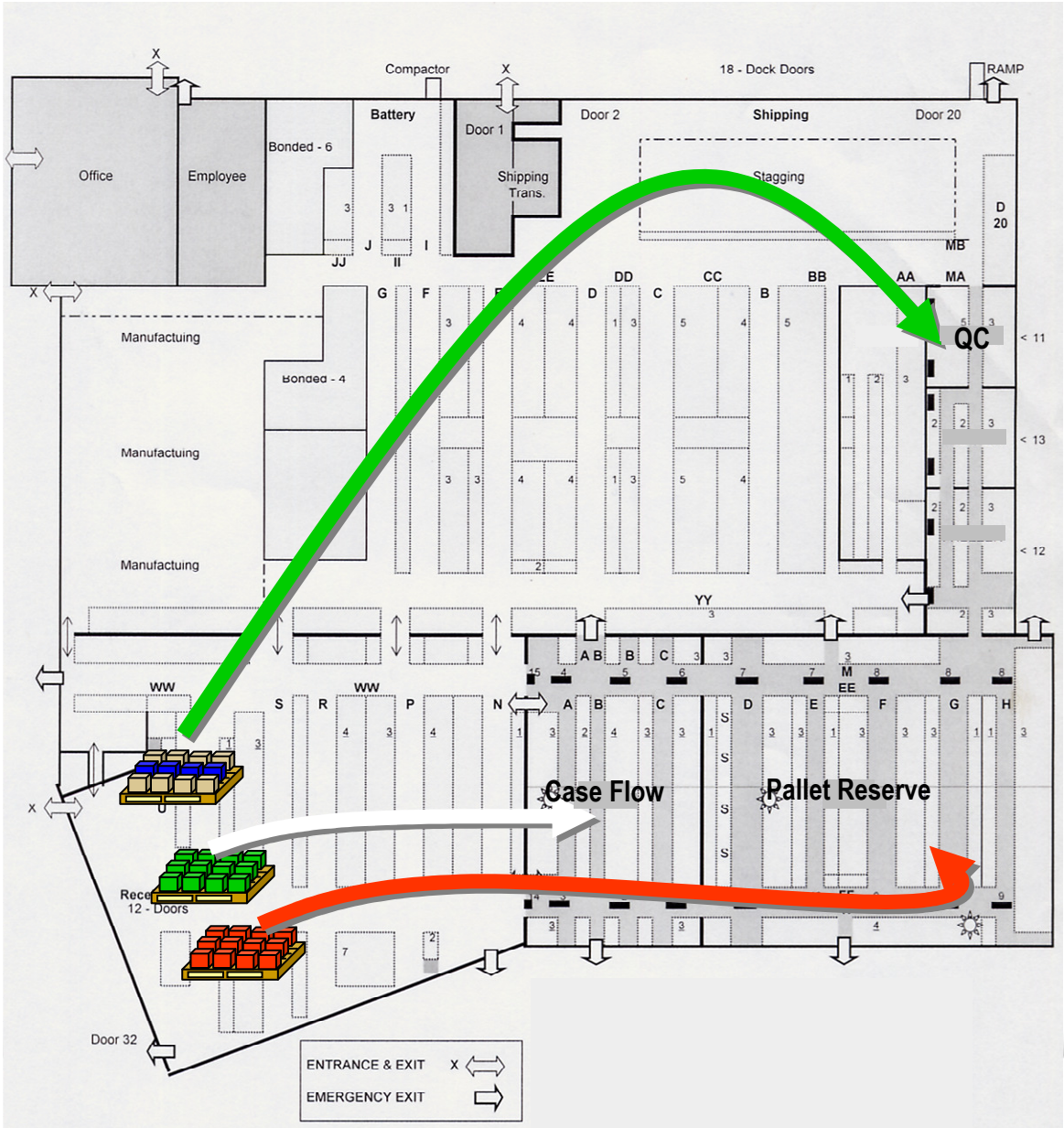
Inbound Order & ASN Creation

Visibility Workload Planning

Receive Product
RF and/or Desktop
Lot & Disposition Capture

(Mfg, ASN, PO, RMA, Blind)

Labels

Release & Putaway Work Flow
Status Driven (Damaged, Rework)
Cross Dock (Outbound or Kit Order)
Potential Cross Dock (Hot Pick)
Forward Pick Location
Dedicated Location (Fixed)
Storage Rules (Slotting/Zoning)

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  - ➪ Productivity Reporting
- ➲ Questions & Answers

Inventory Management

➲ **Inventory Attribute Tracking**

⇨ License Plate/Tag Tracking

⇨ Lot & Date Control

⇨ Ownership Tracking

⇨ Hold Status Tracking

⇨ User Defined Attributes

➲ **Full Traceability in History**

⇨ Detail of all movement by item, LPN, location, lot, serial number

⇨ Tracking of user, date, time stamps

➲ **Cycle Counting**

⇨ Real Time Updates

⇨ Automation Options

⇨ Discrepancy Triggers

⇨ Escalation

➲ **Forward Picking & Replenishment Handling**

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Dynamic Work Management
Maximizing Labor Productivity

Tasks

Permissions

Priority

Proximity
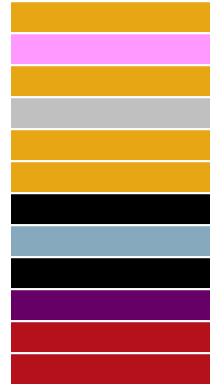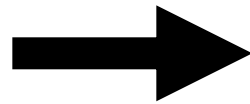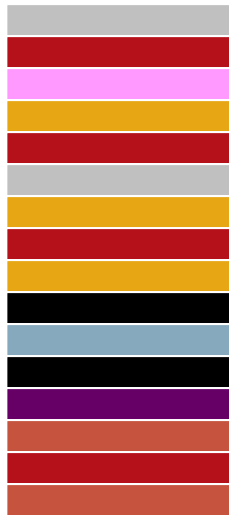
Travel path organized

Putaway
Picks
Loading
Cycle counts
Replenishment

Users' role
Equipment

Users' priorities
Tasks' priorities
Orders' priorities
Interleaving

Outbound Process
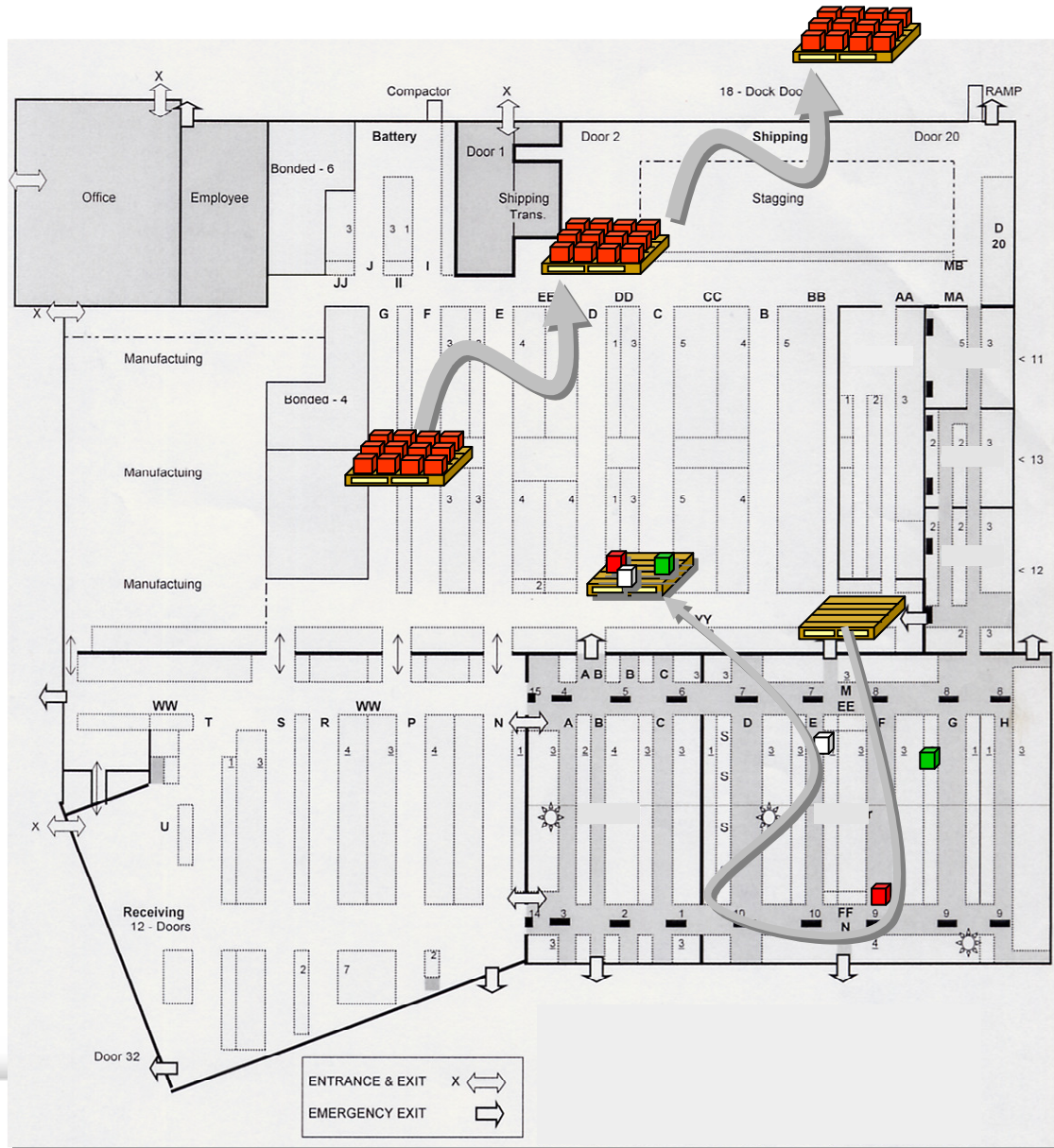
Customer Order Creation

Release, Allocate & Pre-Cartonize Orders

Pick List
Pick Labels
Pre-Manifested Labels

Picking Options
(RF, Paper, Mechanical, Label)
(by Order, Carrier, Zone, Pick & Pack)

Triggered Cycle Count Replenishment

Check Pack, Trailer Load, Paperwork & Ship Order

Address Label
BOL
Packing List
Manifest

Picking Methodologies

- **Execution Considerations**
  - RF System Directed
  - Paper
  - Label Directed
- **Pick to Pack**
  - Cartonization Rules
  - Label Directed Picking
- **Streamline Options**
  - Cluster picking
  - Palletized Picking
  - Batch picking
  - Zone picking
  - Pick by …
    - Order, shipment, carrier

PICK LIST: PC20
PRINT DATE: Thurs, Sept 29, 2001
PRINT TIME: 11:10:09

FROM LOC	PART	QTY/UOM	TO LOC	CONFM
02-04-02	M456	1 PIECE	SHIP101	____
04-03-04	J300	2 EACH	SHIP103	____
03-04-06	KP32	2 PIECE	SHIP101	____

Picked By: _____ Date: _____

Cartonization

- Pick multiple orders in a single pass

- WMS optimizes travel path

- Configurable container selection logic

- Optional Pre-rate containers

- Pre-print shipping labels

- System or operator directed

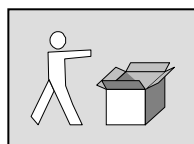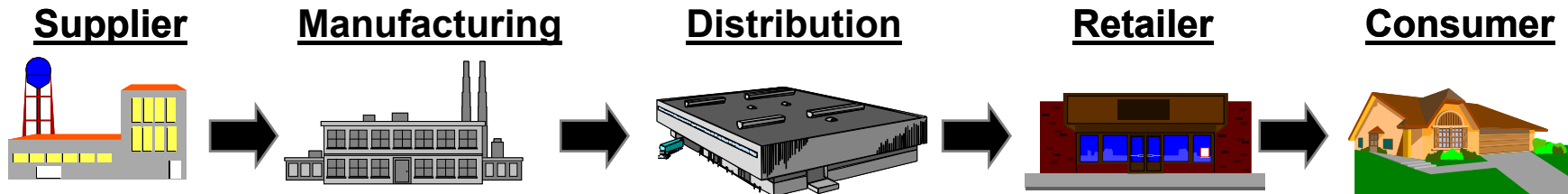# Agenda
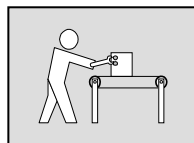
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    ⇨ Productivity Reporting

➲ Questions & Answers

Work Order Processing

Operations performed in a warehouse that add value to existing commodities or combine component commodities into finished good commodities or sub-assemblies.

Supplier   **Manufacturing**   **Distribution**   **Retailer**   **Consumer**

Kitting

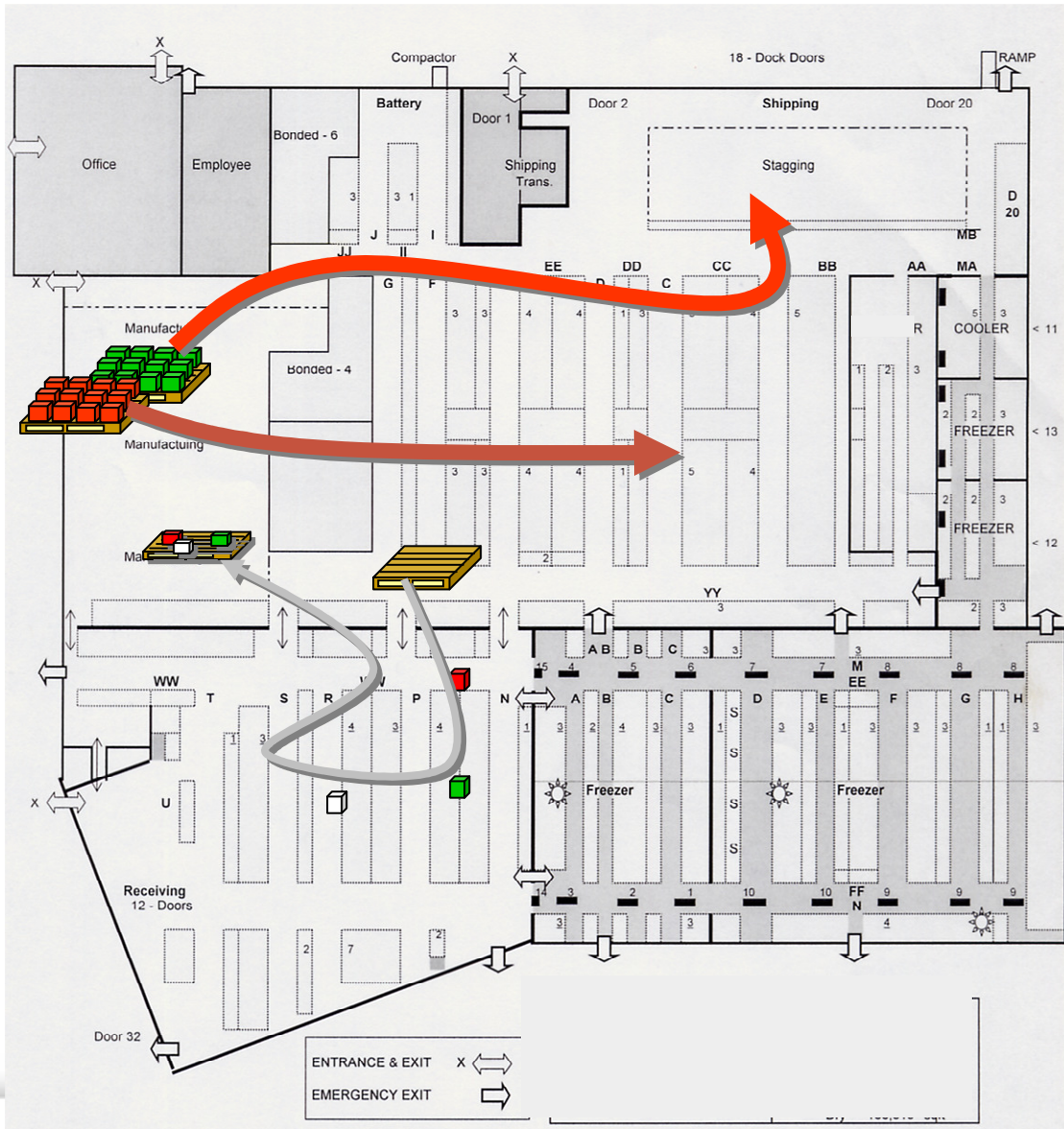**Assembly**

Value Added Services

Labeling

Refurbishing

Functionality Highlights

- *Bill of Material*

- *Work Center Definition*

- *Kit to Stock*

- *Kit to Order*

- *Automatic Component Consumption*

Work Order Process

Work Order Creation

Work Order Packet

Pick Component Items

Materials Consumption (Components)

Receive Work Order (Finished Product)
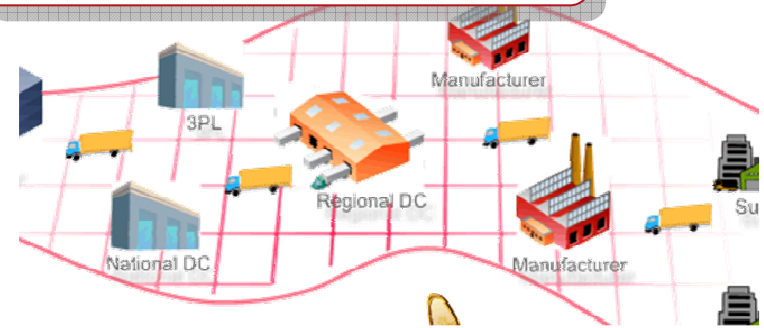
Putaway or Pick for Order

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⇨ Event Management

⇨ Labor Productivity

➲ Questions & Answers

WM Event Management

- Monitors the execution of <u>all applications</u> and <u>processes</u>

- Pre-defined, real-time "monitors"

- Intelligent alerts and messages across the community

- "Closes the loop with reporting and dashboards"

Event Management
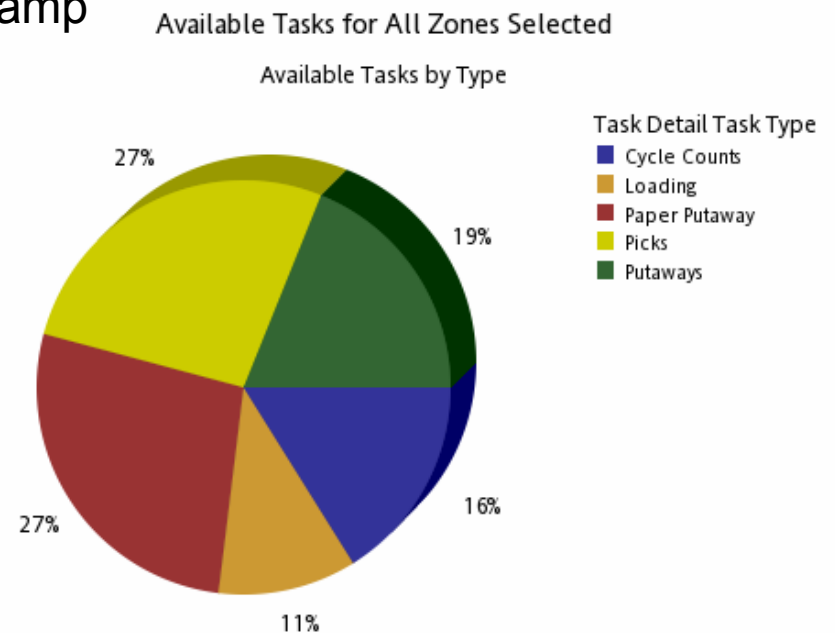

Examples

<u>Supply Chain</u>
- ASN – approaching or past
- Appointments – carrier late
- Receiving – hot item received
- Receiving – damage tracking
- Picking – pick variance
- Shipping – not shipped, late
- Inventory – reorder alert
- Inventory – large adjustment
- Inventory – product on hold

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➲ Questions & Answers

Labor Productivity

➲ Use historical information
- ⇨ All transactions & movement recorded
- ⇨ Includes users, task type, and time stamp

➲ Reporting
- ⇨ Who is working?
- ⇨ What are they doing?
- ⇨ Where are they working?
- ⇨ How much are they doing?

➲ Overall operation
- ⇨ How much by task type?
- ⇨ How many orders, lines, cases, etc.?

➲ Workforce monitoring
- ⇨ Outstanding work assignments
- ⇨ Real-time view of completed, active, unassigned

Available Tasks for All Zones Selected

Available Tasks by Type

Task Detail Task Type
- ■ Cycle Counts
- ■ Loading
- ■ Paper Putaway
- ■ Picks
- ■ Putaways

27%

19%

16%

27%

11%

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INFOR

Questions & Answers

➲ If you need more information on Infor supply chain management solutions:

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