

# LEVERAGING TECHNOLOGY

USING ASSET VISIBILITY TO DRIVE OPERATIONAL EFFECTIVENESS



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Whirlpool Corporation is the number one major appliance manufacturer in the world, with approximately \$21 billion in annual sales, 97,000 employees and 70 manufacturing and technology research centers in 2015.



























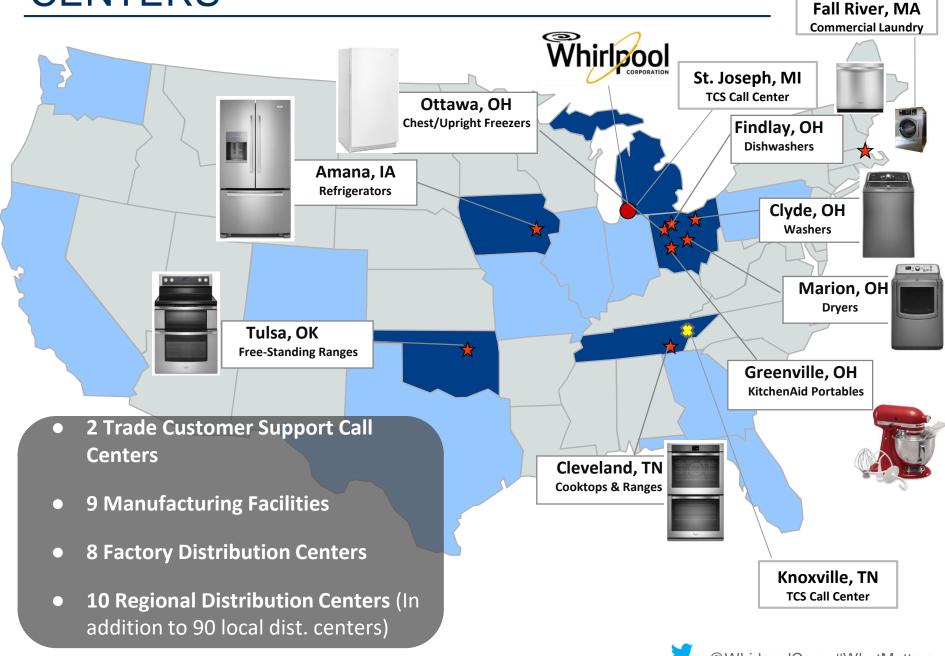






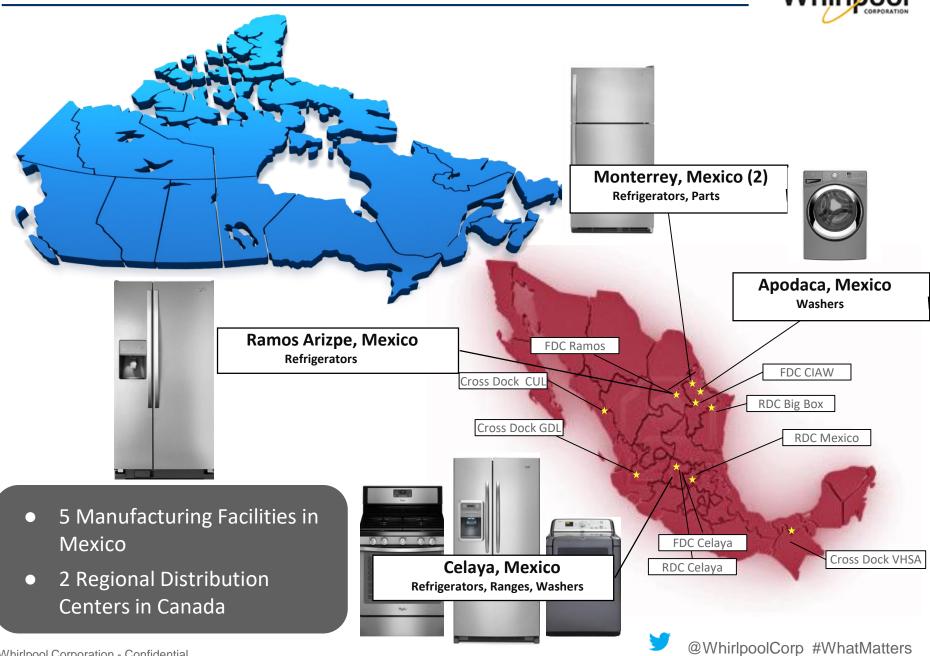


# **CENTERS**



# **DISTRIBUTION**





# **ARCHITECTURE**



- □ Aged equipment
- ☐ Absence of device standardization
  - Multiple OEMs
- ☐ Rising repair costs, parts shortages
- ☐ Fragmented technology
- Lack of internal expertise
- No productivity or utilization metrics
- No clear visibility of the overall health of the system



Total overhaul of our mobile computing and RF device infrastructure needed

# THE PTERODACTYL PROJECT



#### **Hardware Replacement**

- □ Correct mix
- Correct quantity
- □ Standardized equipment
- Latest technology

### **System Monitoring & Operational Visibility**

- Utilization
- Uptime
- Labor productivity
- ☐ Reporting / KPIs
- ☐ Remote software updates

#### **Third-Party Expertise**

Development and support



Project replaced all computers & scanning devices in North America

# POST-AUDIT LESSONS LEARNED



#### **Hardware Replacement**

□ Apply "reality" to each site's requests in terms of device mix and quantity

# **System Monitoring & Operational Visibility**

- ☐ Remote updates
- Utilization

#### **Third-Party Expertise**

- Development cycle time cut by 55%
- □ Repair costs much more favorable by using a non-OEM repair facility, up to 65%





Tracking & monitoring each asset: Improved cycle time, costs & productivity

# Next Steps... The RFID Landscape



#### **RFID for Asset Tracking**

- □ Forklift Fleet
- ☐ Yard Management
- Machines and Tooling

#### **Finished Goods Inventories**

- In-warehouse inventories
- Network views
- Quality hold containment
- After sale support and service
- Post Consumer statistics



Enabling Total Life Cycle Tracking and Visibility



# **ALISON JONES**

# JOIN THE CONVERSATION

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