

# Electrical Appliances WMS Implementation

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PRECISION PYRAMID PRIVATE LIMITED

MARCH 2022

# Business Scenario

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- Line of Business – Electrical Appliances
- Nature of operations – Total 32000 SKUs
  - Central Warehouses (3) In-Out consists of 35 trucks per day / Around 40000 pallet positions
  - Branch/ Regional Warehouses (11) In-Out consists of 20 trucks per day / Around 10000 pallet positions
- Products are 100% barcoded (SKU Code + Quantity + Mfg Month & Year + Box Serial)
- Item Serial Nos logic built within WMS
- Quarter wise FMFO to be followed
- Oracle ERP system Integration
- One SKU One Pallet One Quarter at all Warehouses



# Challenges

01

## **Elimination of Manual Processes**

One of the biggest challenges was to move the current manual operations to a system based streamlined process, with complete track of all actions and transactions happening throughout the inward and fulfillment cycles.

02

## **Space Optimization**

Second major challenge was to proper utilization of space for storage of material. And shift ground storage locations to multi level rack storage to increase storage capacities in existing facilities.

03

## **Operations Optimization**

Third major challenge being faced was operations optimization as the existing process was completely person dependent and the output was also not up to the mark because of manual management of all processes in the warehouse.

# Solutioning – Inbound to putaway

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- Purchase Order to be created in in WMS
- Shipment arrival and Gate IN
- Scan based LPN Operation Implemented
- Capturing of MRP, Mfg Date and Expiry Date on Inward
- System suggested putaway for space optimization.
- Pick n Drop Zones
- HHT Based Operation

## System requirements

- Oracle - PYROPS integration
- Maintaining FMFO on outbound demand
- Directed putaway
- Handheld based GRN and Putaway
- Maintaining MRP and Mfg wise Inventory

# Solutioning – Outbound – pick, pack, ship

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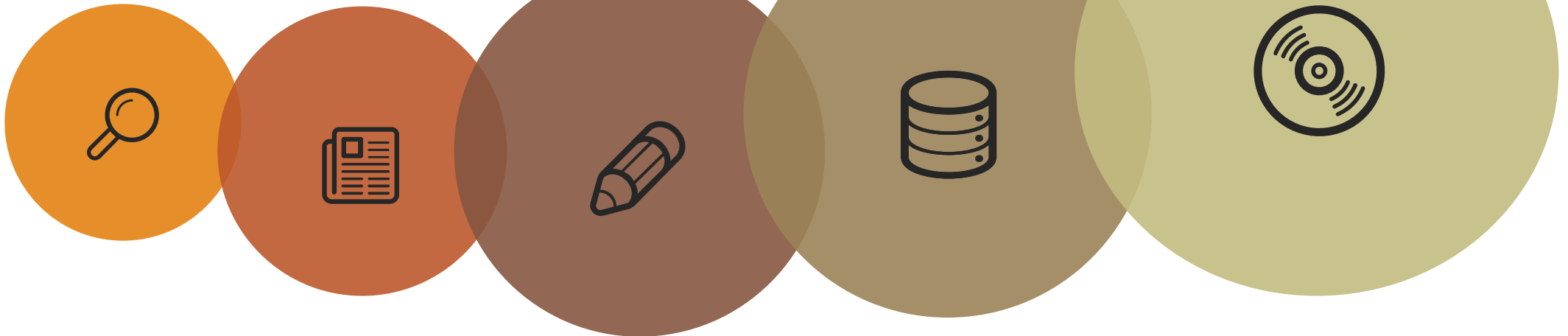
## Through warehouse

- Receive orders for warehouse picking
- Ability to run waves by route/other priorities
- Zone/Category wise picking / order picking
- Batch wise picking or FMFO based picking
- Dynamic Bin Assignments
- Lean & Order Based Replenishment
- Batch/Wave Replenishment for on the fly order fulfillment
- LPN based packing slip
- FTL & Multiple Destination Loading into same truck

## System requirements

- Oracle SO, shipment integration
- Support order wave/batch creation
- Support zone picking and allocation or support order picking

# Solutions Implemented



## **LPN Operation**

To enable complete tracking of inventory throughout the warehouse facility LPN (License Plate No) based operations were enabled.

## **Suggested Put-away**

For optimal space utilization and improve picking strategies, system suggested put-away was enabled. System suggested putaway included multiple criteria like category, space, batch, active / reserve location mapping etc

## **Pick n Drop Zones**

To reduce user movement without losing track of inventory Pick n Drop areas were enabled in the system, allowing speedy movement of material between in and out staging areas and storage area.

## **Replenishment**

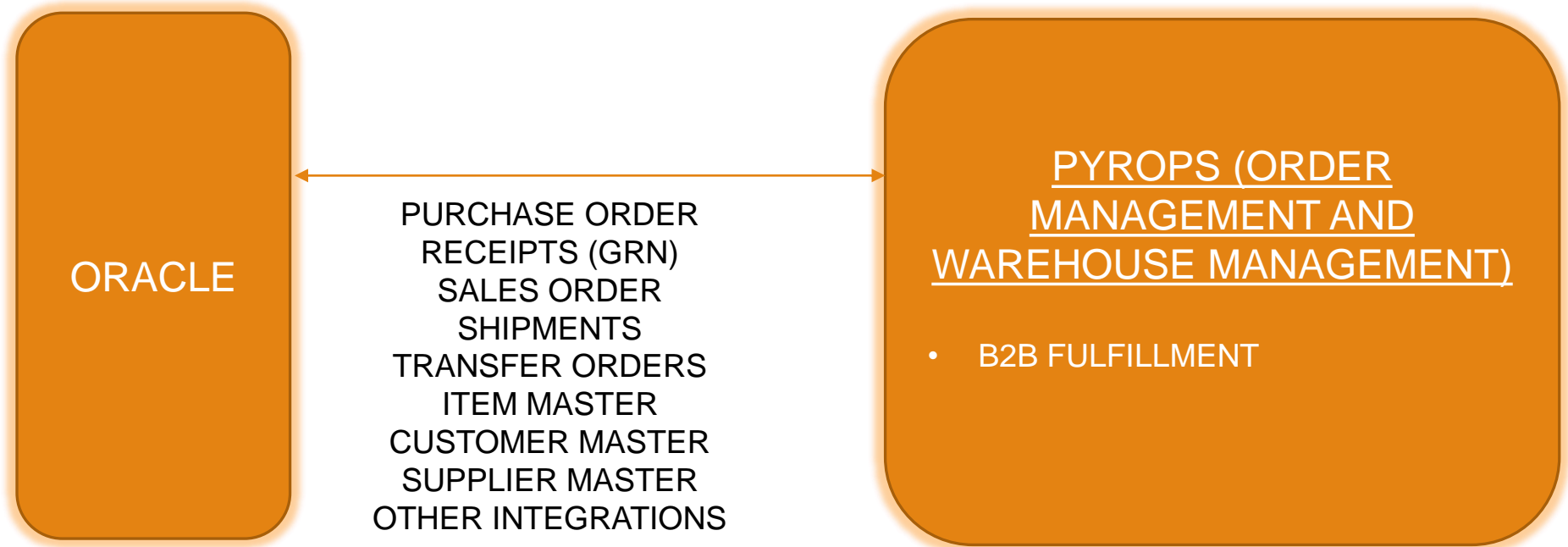
To enable faster movement of material from bulk storage areas to pick face areas, dynamic replenishment was enabled allowing users to execute picking and replenishment tasks simultaneously.

## **HHT Based Operation**

The complete operation was moved from paper to Handheld Devices to improve operational accuracy and eliminate manual errors and discrepancies.

# Solution architecture

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# High Level Benefits



## Inventory Accuracy

Implementation of the WMS lead to a very high inventory accuracy. And it also enabled proper inventory tracking throughout the warehouse eliminating discrepancies.



## Time Saving

WMS implementation led to process optimizations leading to higher output on multiple processes. This saved a lot of operations time decreasing fulfillment TAT.



## Space Utilisation

WMS implementation resulted in optimal warehouse space utilization allowing storage of more material in same storage space with better control over inventory.



## Operational Efficiency

Implementation of WMS enabled introducing new and more efficient put and pick strategies resulting in higher operational output with lesser redundancies.

# Other Highlights

## Fulfillment Priorities

Priority based fulfillments are also enabled providing user the feature of executing fulfillments as per client priorities



01

## Integrations

Close knit integration with client ERP was enabled for smoother, flawless and quick data transfer between the two systems.



02

## Dynamic Bin Assignments

Enhanced replenishment with dynamic bin assignment for unassigned SKUs enabled in system for uninterrupted fulfillments of orders.



03

## Dashboard & Reporting

Customized dashboards and reporting was provided for improved monitoring and visibility of operations to warehouse managers and higher management



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