

Distribution Center Resource Planning Workflow



▷ Start

Start of the Workflow/Process.

📦 1. Fetch Available Personnel

Retrieve all active staff entries from the Human Resources data model to check availability.

📦 2. Fetch Warehouse Equipment

Retrieve entries from the Equipment data model (forklifts, pallet jacks, etc.) to check current status.

📦 3. Get Pending Shipments

Retrieve all upcoming shipment entries from the Logistics data model that require labor allocation.

🧮 4. Calculate Total Required Man-Hours

Sum the estimated handling time from all pending shipment entries to determine total labor demand.

🧮 5. Calculate Total Available Capacity

Aggregate the total working hours of all available personnel entries for the scheduled shift.



6. Calculate Labor Gap

Subtract Total Available Capacity from Total Required Man-Hours to identify if there is a deficit or surplus.

7. Create Shift Assignment Task

Create a task for the Floor Manager to assign specific personnel to the identified shipment loads.

8. Create Maintenance Task

Create a task for the Maintenance Team if equipment availability falls below a certain threshold.

9. Create Resource Plan Entry

Create a new entry in the 'Resource Plans' data model containing the finalized allocation details.

10. Update Equipment Status

Update the status of specific equipment entries to 'Reserved' for the upcoming shift.

11. Update Shipment Readiness

Update the 'Resource Allocated' boolean field in the Shipment data model entries.

12. Notify Warehouse Staff

Send an email to all assigned personnel with their shift schedule and task details.

13. Alert Logistics Manager

Send an email to the Logistics Manager if the Labor Gap calculation indicates a critical shortage.

14. Generate Daily Resource Summary

Create a summary report comparing planned vs. actual resource utilization for the day.

15. Clear Temporary Allocations

Delete temporary/draft resource plan entries once the final plan has been officially published.

End

End of the Workflow/Process.