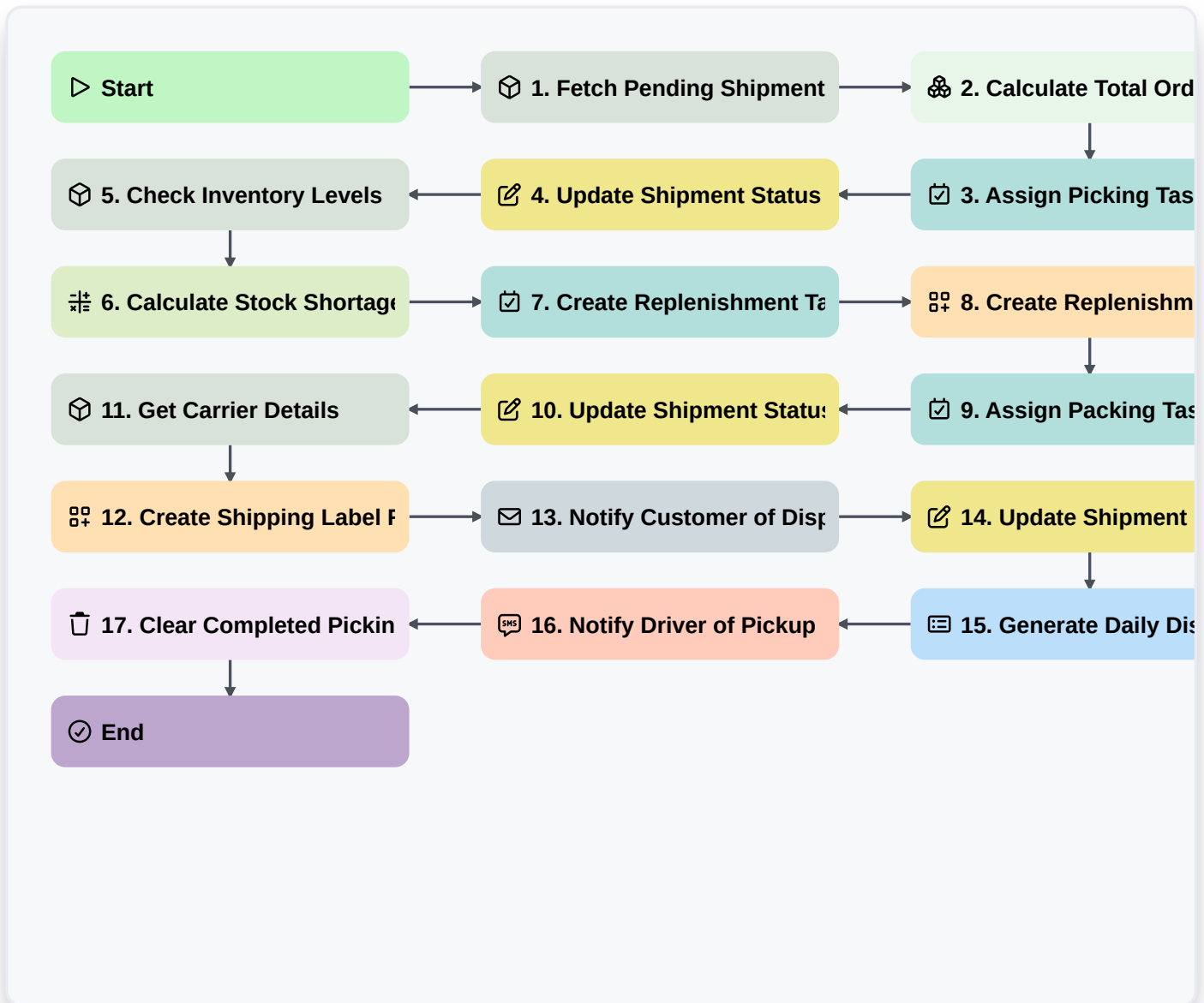


# Distribution Center Operations Workflow



## ▷ Start

Start of the Workflow/Process.

## 📦 1. Fetch Pending Shipments

Retrieve all shipment entries currently marked as 'Ready for Picking' from the Shipment Data Model.

## 🔗 2. Calculate Total Order Volume

Sum the total number of units across all pending shipment entries to determine warehouse workload.

## ✅ 3. Assign Picking Task

Create a task for the Warehouse Floor Supervisor to initiate the picking process for the identified shipments.

## ✍️ 4. Update Shipment Status to 'Picking'

Change the status of the selected shipment entries from 'Ready for Picking' to 'In Progress'.

## 📦 5. Check Inventory Levels

Retrieve inventory levels for all SKUs included in the current picking wave from the Inventory Data Model.

## ⚖️ 6. Calculate Stock Shortage

Subtract 'Required Quantity' from 'Available Quantity' to identify if any items are out of stock.



### **7. Create Replenishment Task**

Generate a task for the Receiving Team if the calculation identifies a stock shortage.

### **8. Create Replenishment Order**

Create a new entry in the Procurement Data Model to restock the depleted SKUs.

### **9. Assign Packing Task**

Create a task for the Packing Station staff once the 'Picking' task is marked as complete.

### **10. Update Shipment Status to 'Packed'**

Update the shipment record to indicate that items have been verified and boxed.

### **11. Get Carrier Details**

Fetch shipping carrier information and contact details from the Carrier Data Model.

### **12. Create Shipping Label Record**

Create a new entry in the Logistics Data Model containing tracking numbers and manifest details.

### **13. Notify Customer of Dispatch**

Send an automated email to the customer's email address contained in the Order Entry.

### **14. Update Shipment Status to 'Dispatched'**

Finalize the shipment status as 'Dispatched' and move it to the completed stage.

### **15. Generate Daily Dispatch Report**

Generate a summary report of all shipments dispatched within the last 24 hours for management review.

### **16. Notify Driver of Pickup**

Send an SMS to the assigned delivery driver notifying them that the shipment is ready for pickup at the loading dock.

### **17. Clear Completed Picking Wave**

Remove temporary 'Picking Wave' entries from the active dashboard once the wave is fully processed.

### **End**

End of the Workflow/Process.