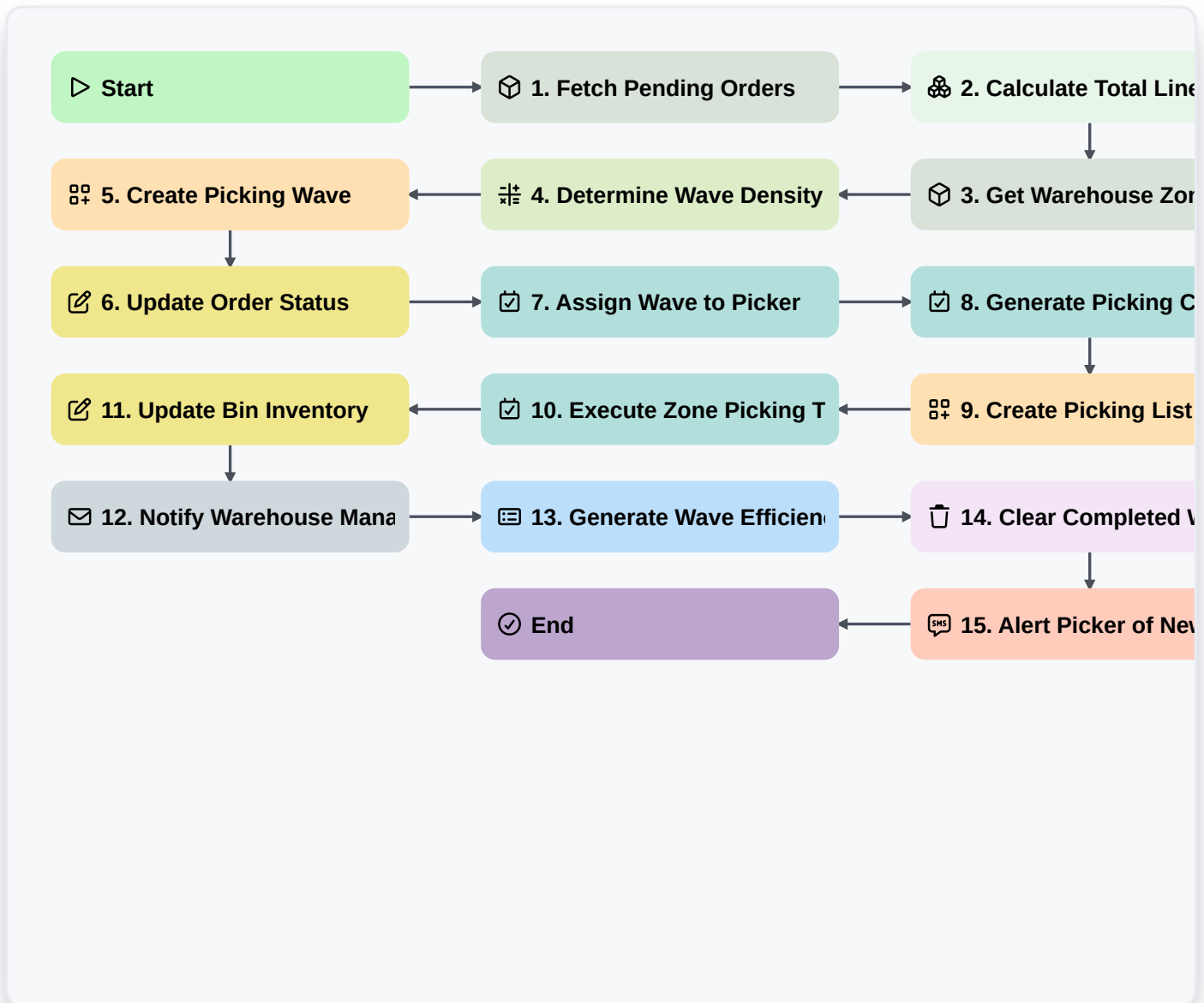


# Wave Picking Process For High Volume



## Start

Start of the Workflow/Process.

## 1. Fetch Pending Orders

Retrieve all orders from the Order Data Model that are in 'Ready for Picking' status.

## 2. Calculate Total Line Items

Sum the total number of individual items across all retrieved pending orders to determine wave size.

## 3. Get Warehouse Zone Map

Retrieve location data for all active warehouse zones to optimize picking routes.

## 4. Determine Wave Density

Calculate the ratio of items to zones to determine if the wave should be split into smaller sub-waves.

## 5. Create Picking Wave

Create a new record in the 'Picking Wave' data model containing the wave ID, timestamp, and total item count.

## 6. Update Order Status

Update the status of all selected orders from 'Ready for Picking' to 'Allocated to Wave'.



### ✔ **7. Assign Wave to Picker**

Create a task for a Warehouse Operator to begin the physical picking process for the specific Wave ID.

### ✔ **8. Generate Picking Checklist**

Create a task for the Quality Control team to verify items once the wave is completed.

### ☰ **9. Create Picking List Entry**

For every item in the wave, create a line entry in the 'Picking List' data model linked to the current Wave ID.

### ✔ **10. Execute Zone Picking Task**

Assign sub-tasks to specific zone pickers based on the calculated wave density.

### ✍ **11. Update Bin Inventory**

Decrement the 'Available Quantity' in the Inventory Data Model as items are picked.

### ✉ **12. Notify Warehouse Manager**

Send an email notification to the manager once a high-volume wave has been successfully initiated.

### 📄 **13. Generate Wave Efficiency Report**

Create a report comparing the estimated picking time vs. actual time taken for the completed wave.

### 🗑 **14. Clear Completed Wave Data**

Remove temporary 'In-Progress' wave identifiers from the active queue once the wave is archived.

### 📱 **15. Alert Picker of New Wave**

Send an SMS alert to the handheld device of the assigned picker to signal a new wave is ready.

### ✔ **End**

End of the Workflow/Process.