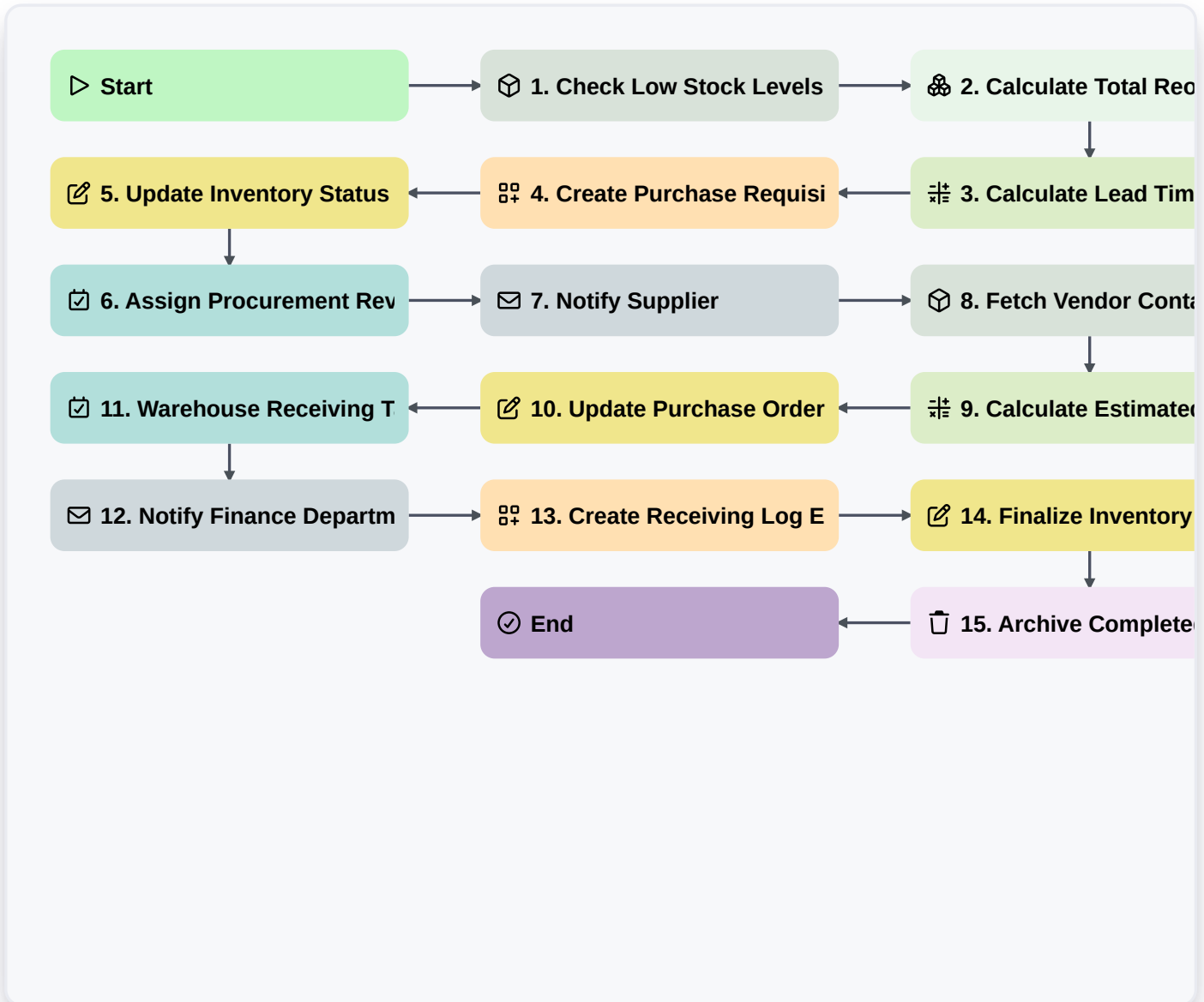


# Inventory Replenishment Automation Process



## Start

Start of the Workflow/Process.

## 1. Check Low Stock Levels

Retrieve all items from the Inventory Data Model where current stock is below the predefined reorder point.

## 2. Calculate Total Reorder Value

Sum the 'Unit Cost' of all identified low-stock items to determine the total capital required for replenishment.

## 3. Calculate Lead Time Buffer

Calculate the required safety stock level using the formula:  $(\text{Average Daily Usage} * \text{Lead Time}) + \text{Safety Buffer}$ .

## 4. Create Purchase Requisition

Generate a new entry in the 'Purchase Orders' data model for the identified low-stock items.

## 5. Update Inventory Status

Update the 'Status' field of the selected items in the Inventory Data Model to 'Pending Reorder'.

## 6. Assign Procurement Review

Create a task for the Procurement Manager to review and approve the newly created Purchase Requisition.



### **7. Notify Supplier**

Send an automated email to the Vendor's contact email with the details of the new Purchase Order.

### **8. Fetch Vendor Contact Info**

Retrieve contact details and payment terms from the Vendor Data Model based on the items being ordered.

### **9. Calculate Estimated Arrival Date**

Calculate the expected delivery date by adding the Vendor Lead Time to the current date.

### **10. Update Purchase Order Date**

Update the 'Expected Delivery Date' field in the Purchase Order entry with the calculated value.

### **11. Warehouse Receiving Task**

Create a task for the Warehouse Team to perform a physical count check once the delivery date is reached.

### **12. Notify Finance Department**

Send an email to the Accounts Payable team regarding the pending cost for the upcoming inventory replenishment.

### **13. Create Receiving Log Entry**

Create an entry in the 'Incoming Shipments' log to track the arrival of the goods.

### **14. Finalize Inventory Levels**

Once items are received, update the 'Current Stock' levels in the Inventory Data Model to reflect the new quantities.

### **15. Archive Completed Requisition**

Remove or archive the completed Purchase Requisition entry from the 'Active Orders' view to keep the dashboard clean.

### **End**

End of the Workflow/Process.