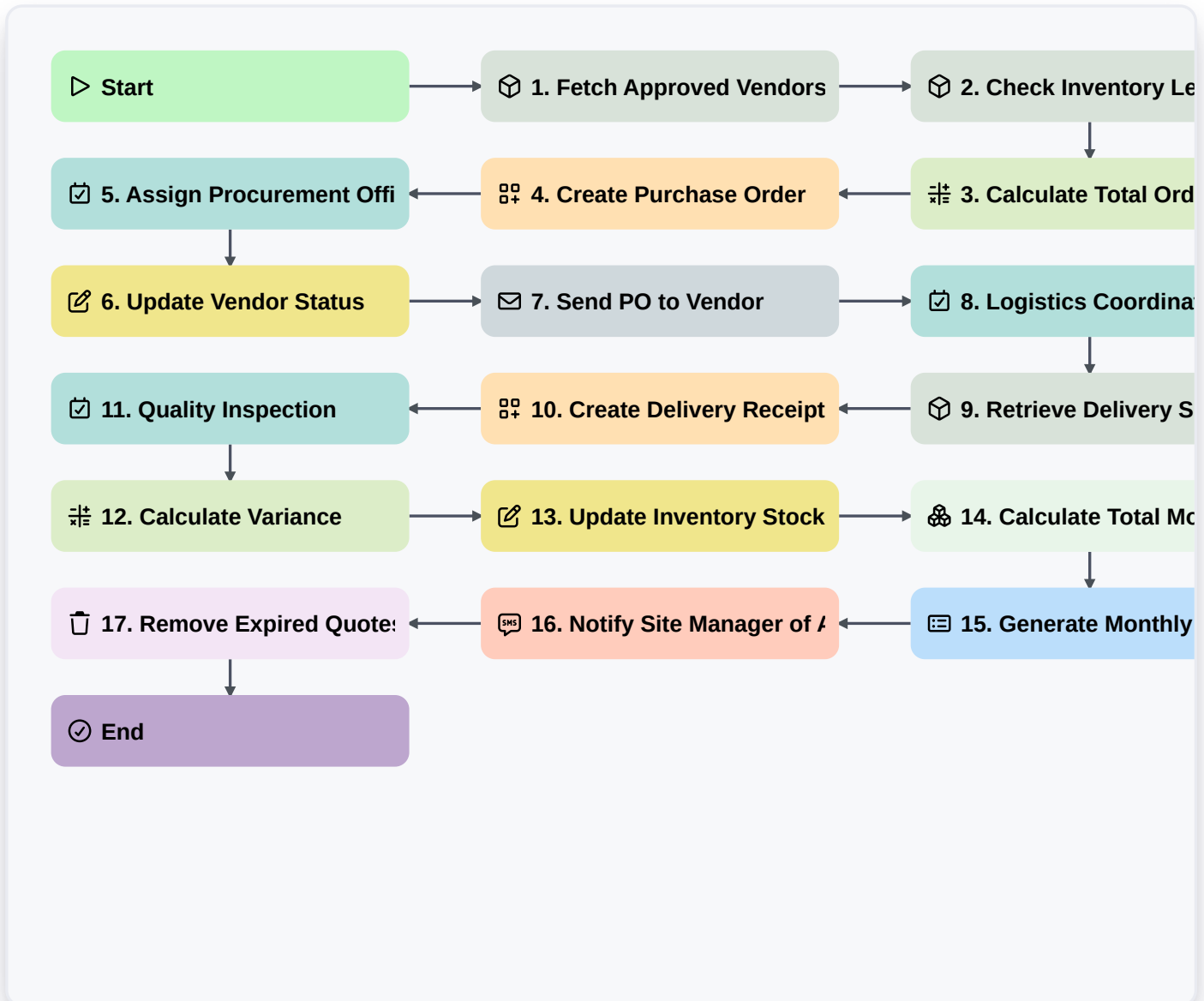


Construction Supply Chain Management Process



Start

Start of the Workflow/Process.

1. Fetch Approved Vendors

Retrieve a list of all vendors from the Vendor Data Model who have passed recent compliance audits.

2. Check Inventory Levels

Query the Inventory Data Model to check current stock levels for required construction materials.

3. Calculate Total Order Value

Sum the unit prices multiplied by quantities for all items in the current procurement request.

4. Create Purchase Order

Generate a new entry in the Purchase Order Data Model once a requisition is approved.

5. Assign Procurement Officer

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



6. Update Vendor Status

Update the 'Last Ordered Date' and 'Active' status in the Vendor Data Model after an order is placed.

7. Send PO to Vendor

Send an automated email containing the Purchase Order details and attachments to the selected Vendor's email address.

8. Logistics Coordination

Create a task for the Logistics Team to arrange transport for the incoming materials.

9. Retrieve Delivery Schedule

Get existing delivery slots from the Logistics Data Model to avoid site congestion.

10. Create Delivery Receipt

Create an entry in the Delivery Data Model once the materials have arrived on-site.

11. Quality Inspection

Create a task for the Site Supervisor to perform a physical inspection of materials against the PO.

12. Calculate Variance

Compare the 'Delivered Quantity' against the 'Ordered Quantity' to identify discrepancies.

13. Update Inventory Stock

Increase the quantity of materials in the Inventory Data Model based on the verified delivery.

14. Calculate Total Monthly Spend

Aggregate all 'Order Value' entries from the Purchase Order Data Model for the current month.

15. Generate Monthly Procurement Report

Create a summary report showing vendor performance, lead times, and total spend for management review.

16. Notify Site Manager of Arrival

Send an SMS to the Site Manager when a high-priority delivery is confirmed for arrival.

17. Remove Expired Quotes

Delete quote entries from the Procurement Data Model that have exceeded their validity period.

End

End of the Workflow/Process.