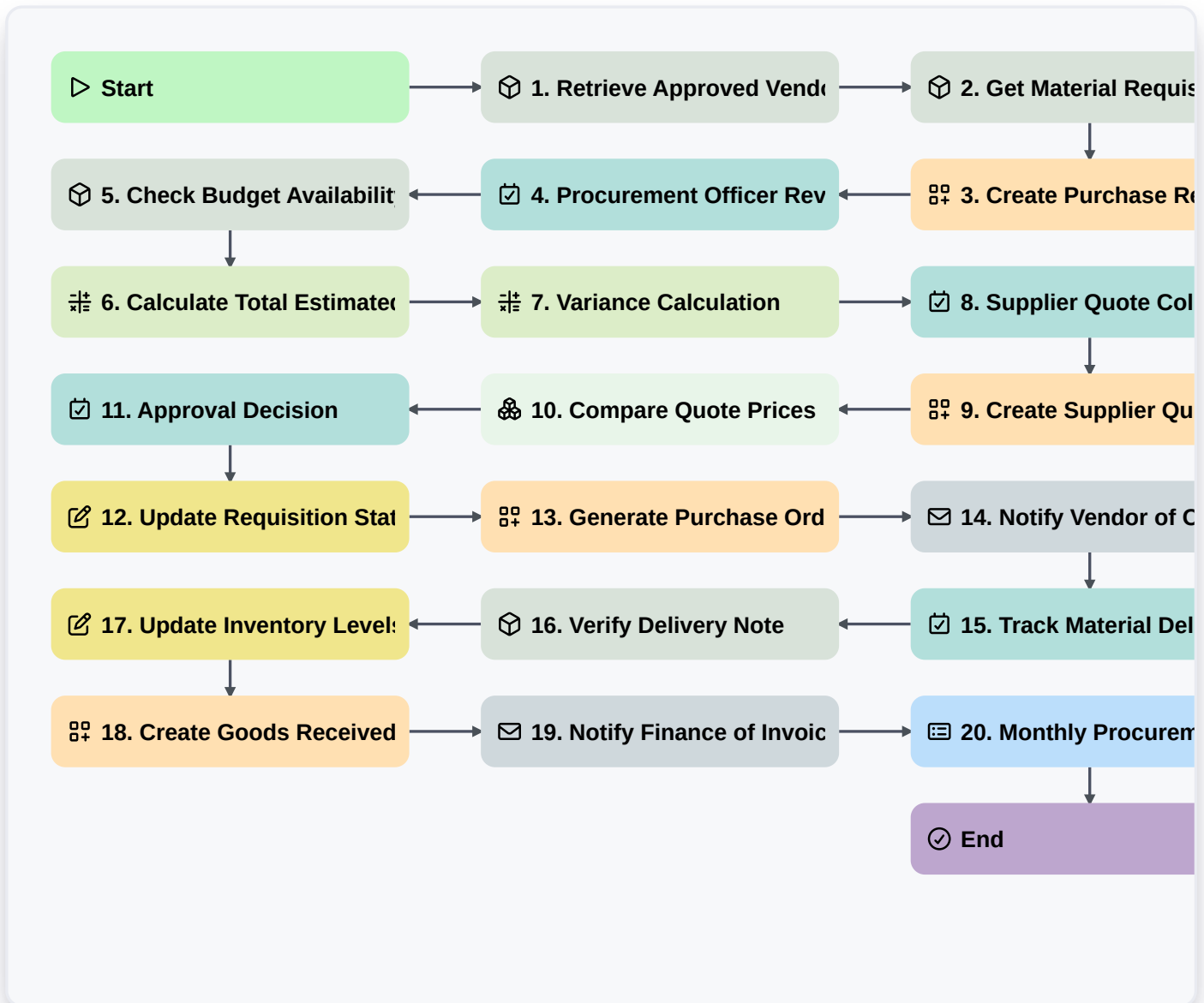


Construction Material Procurement Workflow



▷ Start

Start of the Workflow/Process.

📦 1. Retrieve Approved Vendor List

Fetch all active vendors from the Vendor Data Model that meet the qualification criteria.

📦 2. Get Material Requisition

Retrieve the specific material request details entered by the Project Manager.

📋 3. Create Purchase Requisition

Generate a new entry in the Purchase Requisition Data Model based on the material request.

✅ 4. Procurement Officer Review

Assign a task to the Procurement Officer to review the requisition for accuracy and budget availability.

📦 5. Check Budget Availability

Retrieve the current project budget and allocated funds from the Project Budget Data Model.

📊 6. Calculate Total Estimated Cost

Sum the unit prices and quantities from the requisition to calculate the total estimated expenditure.



7. Variance Calculation

Subtract the estimated cost from the remaining project budget to check for overruns.

8. Supplier Quote Collection

Create a task for the Procurement Clerk to contact selected vendors and obtain formal quotes.

9. Create Supplier Quote Entry

Create a new entry in the Quotes Data Model for each quote received from vendors.

10. Compare Quote Prices

Aggregate the entries in the Quotes Data Model to find the Minimum price among all received quotes.

11. Approval Decision

Assign a task to the Construction Manager to approve or reject the selected vendor/quote.

12. Update Requisition Status

Update the status of the original Purchase Requisition to 'Approved' or 'Rejected'.

13. Generate Purchase Order (PO)

Create a new entry in the Purchase Order Data Model containing the finalized terms and vendor info.

14. Notify Vendor of Order

Send an email to the selected vendor with the attached Purchase Order details.

15. Track Material Delivery

Create a task for the Site Supervisor to monitor the arrival of the materials.

16. Verify Delivery Note

Retrieve the digital delivery note/manifest from the Logistics Data Model.

17. Update Inventory Levels

Update the Material Inventory Data Model to increase the stock count for the received items.

18. Create Goods Received Note (GRN)

Create an entry in the GRN Data Model to document the successful arrival and inspection of goods.

19. Notify Finance of Invoice Ready

Send an email to the Finance Department that a new GRN is available for invoice matching.

20. Monthly Procurement Summary

Generate a monthly report summarizing total spend, vendor performance, and procurement lead times.

End

End of the Workflow/Process.