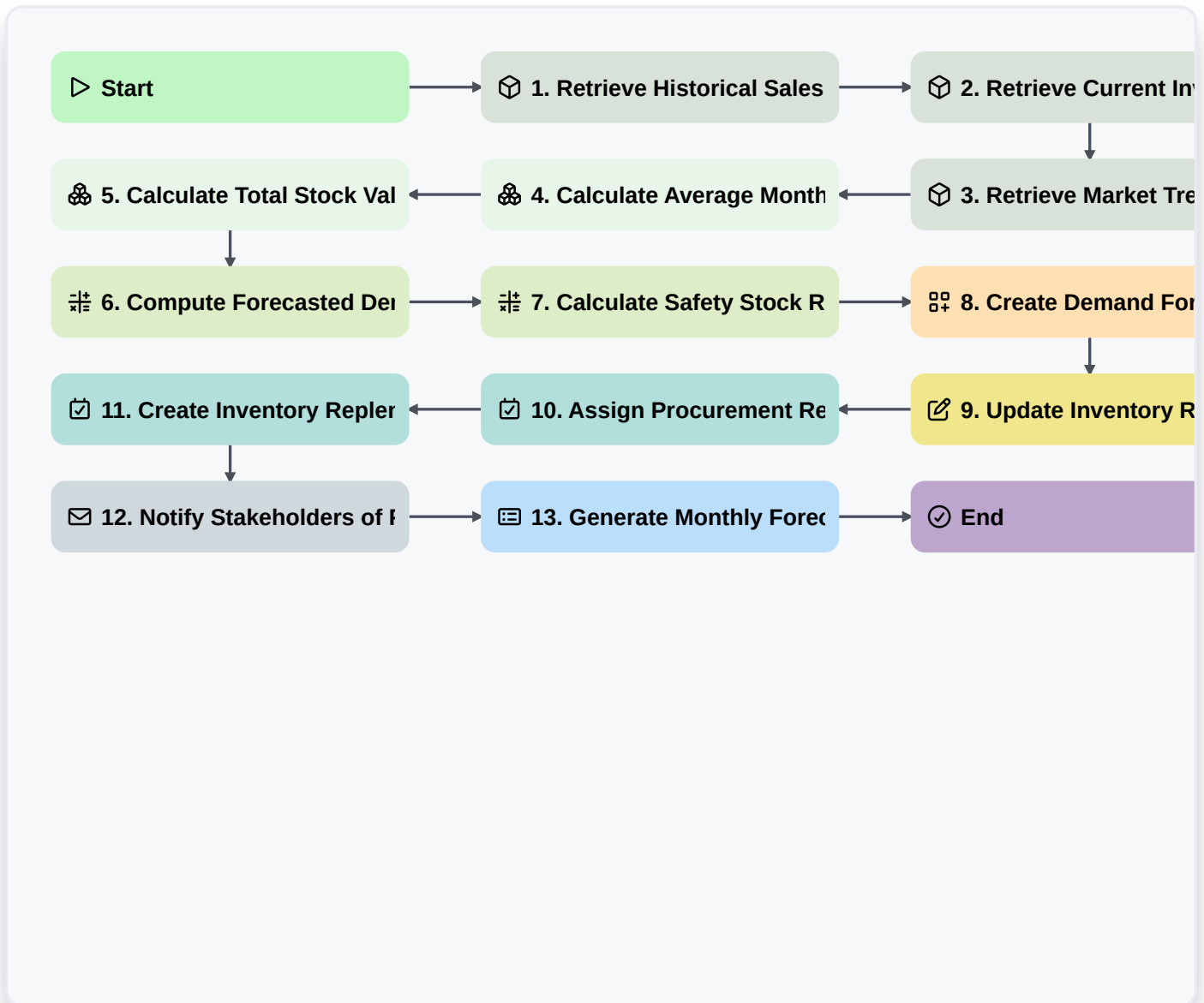


Retail Demand Forecasting Workflow



▷ Start

Start of the Workflow/Process.

📦 1. Retrieve Historical Sales Data

Fetch historical sales entries from the Sales Data Model for the previous 12 months.

📦 2. Retrieve Current Inventory Levels

Fetch current stock levels from the Inventory Data Model for all SKUs.

📦 3. Retrieve Market Trend Data

Get external market trend indicators and competitor pricing data entries.

📊 4. Calculate Average Monthly Sales

Aggregate historical sales entries to calculate the mean sales volume per month.

📊 5. Calculate Total Stock Value

Sum the value of all items in the current inventory entries.

📊 6. Compute Forecasted Demand

Apply a mathematical formula (e.g., Moving Average + Seasonal Factor) to the aggregated sales and market trend



7. Calculate Safety Stock Requirement

Calculate the required buffer stock based on lead time and demand volatility.

8. Create Demand Forecast Record

Create a new entry in the 'Forecast Results' Data Model containing the calculated projections.

9. Update Inventory Reorder Points

Update the 'Reorder Point' field in the Inventory Data Model based on the new forecast.

10. Assign Procurement Review Task

Create a task for the Purchasing Manager to review the forecasted demand vs. budget.

11. Create Inventory Replenishment Task

Create tasks for the Warehouse Team for items identified as 'Below Safety Stock'.

12. Notify Stakeholders of Forecast

Send an email to the Supply Chain and Finance departments with the summary of the new forecast.

13. Generate Monthly Forecast Report

Create a PDF/Dashboard report summarizing forecasted vs. actual sales performance.

End

End of the Workflow/Process.