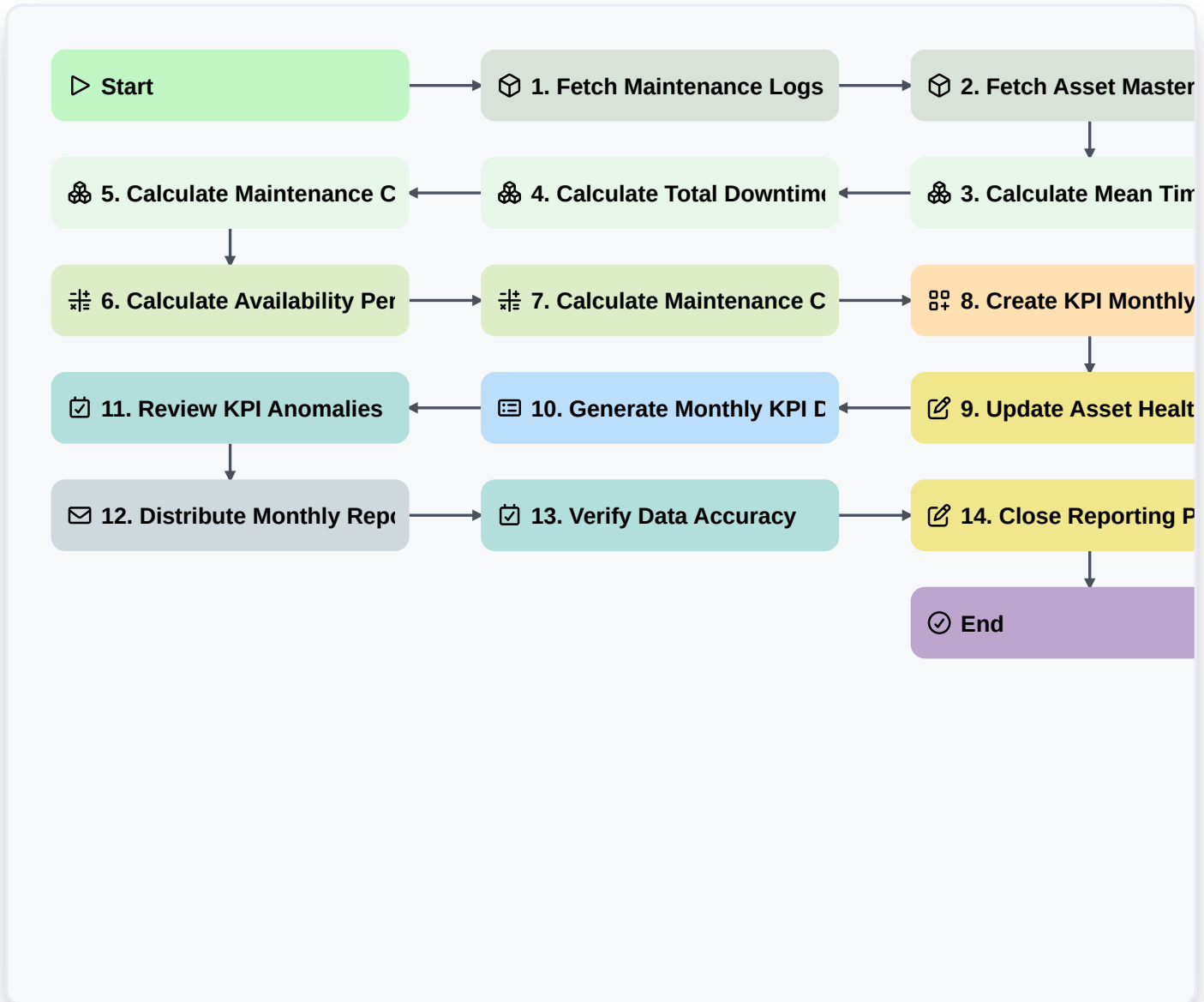


Maintenance KPI Reporting Process



Start

Start of the Workflow/Process.

1. Fetch Maintenance Logs

Retrieve all completed maintenance logs from the Maintenance Logs Data Model for the current period.

2. Fetch Asset Master Data

Retrieve asset details (age, criticality, type) from the Asset Data Model to contextualize the KPIs.

3. Calculate Mean Time Between Failures (MTBF)

Calculate the average time elapsed between breakdown entries retrieved from the logs.

4. Calculate Total Downtime

Sum the duration of all 'Down' status entries in the maintenance logs.

5. Calculate Maintenance Cost Total

Sum the 'Cost' property from all completed maintenance work orders.

6. Calculate Availability Percentage

Apply formula: $((\text{Total Scheduled Time} - \text{Total Downtime}) / \text{Total Scheduled Time}) * 100$.



7. Calculate Maintenance Cost Ratio

Calculate the ratio of maintenance cost against the total asset value.

8. Create KPI Monthly Summary

Create a new entry in the KPI Report Data Model containing the calculated metrics.

9. Update Asset Health Score

Update the 'Health Score' field in the Asset Data Model based on the calculated downtime metrics.

10. Generate Monthly KPI Dashboard

Generate a visual report summarizing the aggregated data and trends for the stakeholders.

11. Review KPI Anomalies

Create a task for the Maintenance Manager to investigate any KPI drops below the defined threshold.

12. Distribute Monthly Report

Send the generated KPI Report and summary via email to the Operations Director and Plant Manager.

13. Verify Data Accuracy

Create a task for the Data Analyst to audit the source logs against physical work orders.

14. Close Reporting Period

Update the Reporting Period Data Model to mark the current month as 'Finalized'.

End

End of the Workflow/Process.