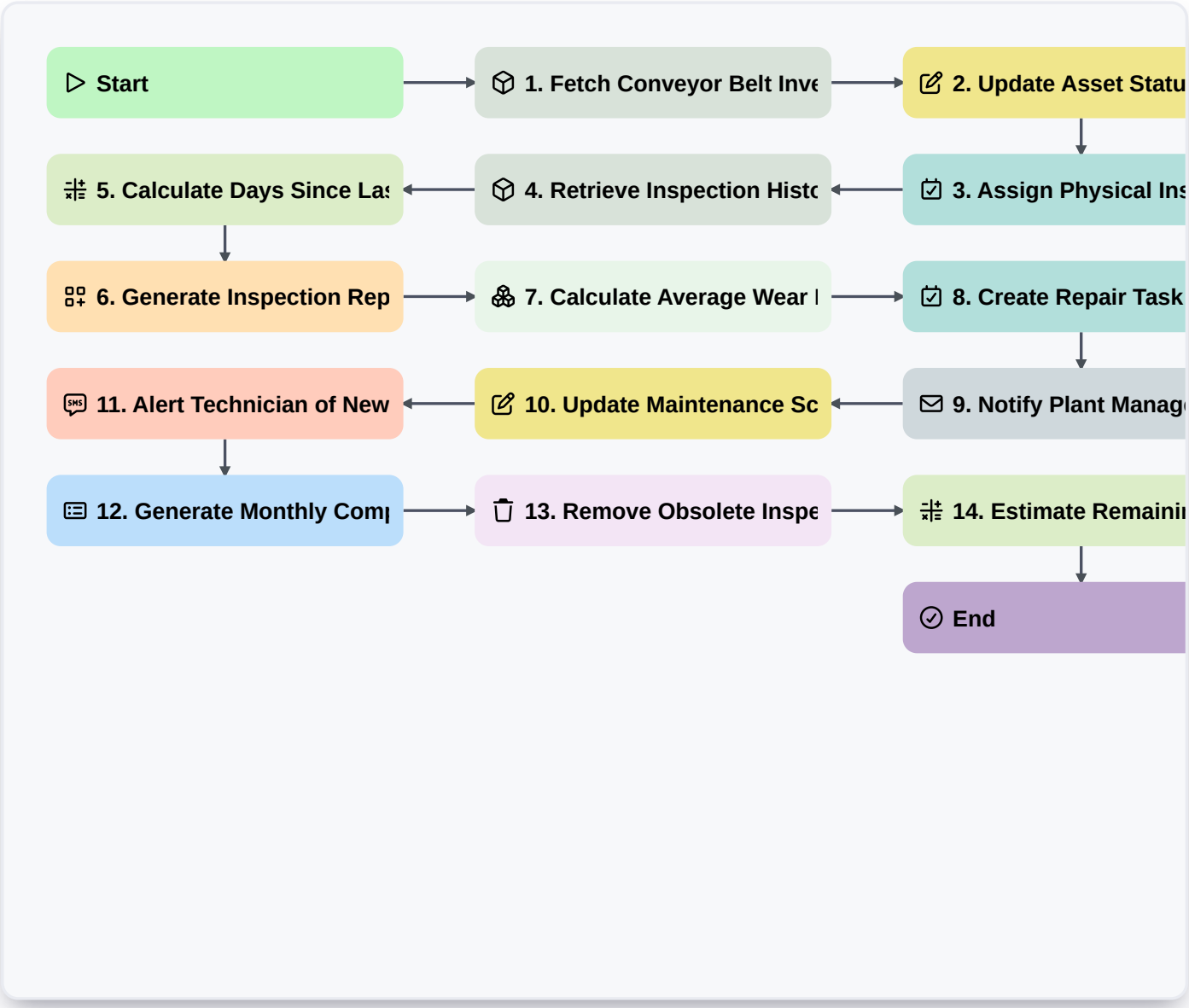
ChecklistGuro

Conveyor Belt Inspection & Maintenance



Start
Start of the Workflow/Process.

1. Fetch Conveyor Belt Inventory
Retrieve all active conveyor belt records from the Asset Data Model to identify which units are due for inspection.

2. Update Asset Status to 'Under Inspection'
Update the status field in the Asset Data Model to prevent other maintenance tasks from being scheduled simultaneously.

3. Assign Physical Inspection Task
Create a task for the Maintenance Technician containing the specific checklist for visual and mechanical inspection.

4. Retrieve Inspection History
Get previous maintenance logs for the specific belt to identify recurring mechanical issues.

5. Calculate Days Since Last Service
Subtract the 'Last Inspection Date' from the 'Current Date' to determine if the interval exceeds the safety threshold.

6. Generate Inspection Report Entry
Create a new entry in the Inspection Logs Data Model to document the findings of the current session.

7. Calculate Average Wear Rate
Aggregate the 'Belt Thickness' values from the last 5 inspections to determine the degradation trend.

8. Create Repair Task (If Defect Found)
If the inspection checklist identifies a 'Critical' defect, trigger a high-priority repair task for the engineering team.

9. Notify Plant Manager of Critical Failure
Send an automated email alert to the Plant Manager if a belt is marked as 'Out of Service' during inspection.

10. Update Maintenance Schedule
Update the 'Next Scheduled Inspection' date in the Asset Data Model based on the newly completed inspection date.

11. Alert Technician of New Urgent Task
Send an SMS notification to the on-call technician when a high-priority repair task is created.

12. Generate Monthly Compliance Report
Generate a PDF report summarizing all completed inspections and identified defects for the monthly audit.

13. Remove Obsolete Inspection Records
Delete temporary or duplicate inspection drafts that were not finalized to keep the Data Model clean.

14. Estimate Remaining Useful Life (RUL)
Use the wear rate calculation to estimate how many operational hours remain before the belt requires replacement.

End
End of the Workflow/Process.