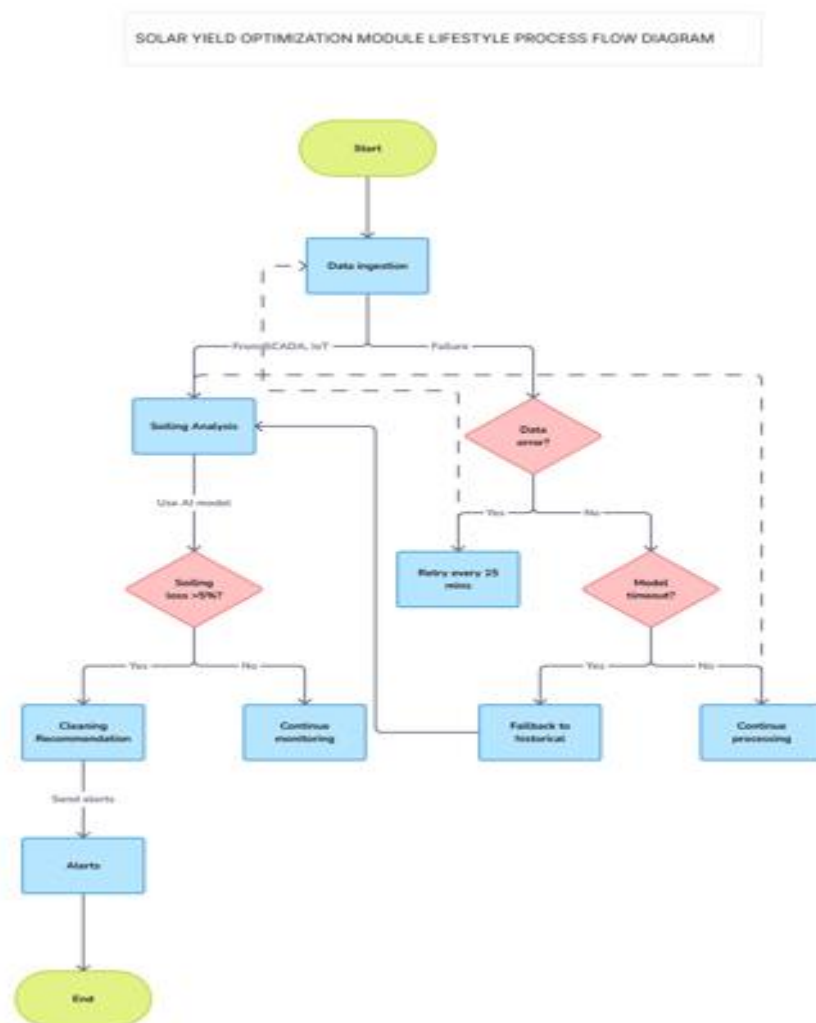# Process Flows & Data Mapping

- Data Ingestion: SCADA + IoT + Weather APIs → Cloud storage.
- Soiling Analysis: AI model calculates loss (if >5%, proceed).
- Yield Prediction: Forecast energy output.
- Recommendation: Generate cleaning schedule with cost analysis.
- Alerts: Trigger notifications via SMS/email.

Decision Points & Errors:

Decision: "Soiling loss >5%?" If no, continue monitoring.

Error Handling:

- Data ingestion failure → Retry every 15 mins.
- Model timeout → Fallback to historical data.

Link for better view of process flow diagram : (process flow diagram)