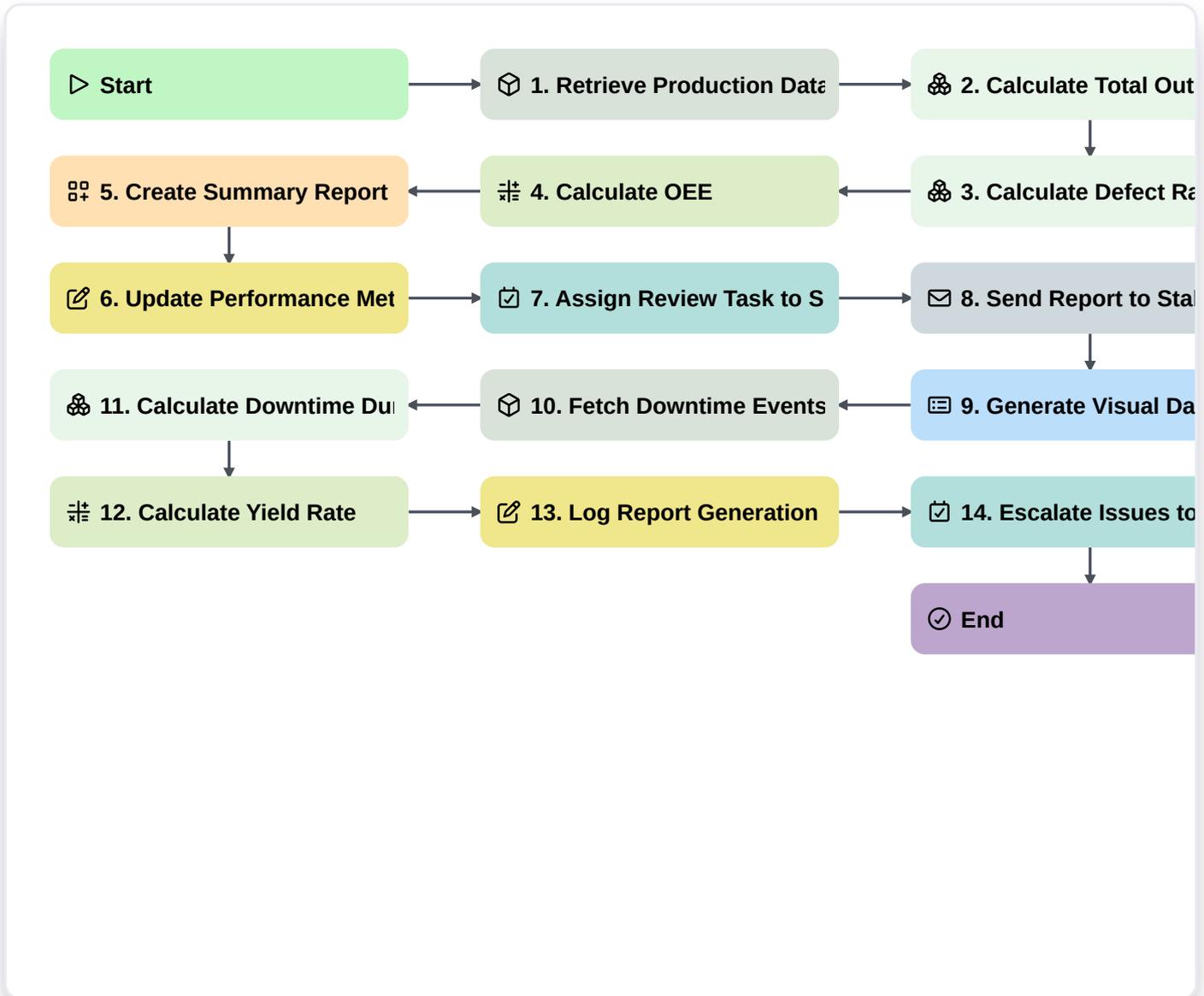


# Production Data Analysis & Reporting Workflow



## ▷ Start

Start of the Workflow/Process.

## 📦 1. Retrieve Production Data

Fetch raw production data from the MES system for the reporting period.

## 🔗 2. Calculate Total Output

Aggregate production entries to determine total units produced.

## 🔗 3. Calculate Defect Rate

Aggregate data on defective units to calculate the overall defect rate.

## 📊 4. Calculate OEE

Calculate Overall Equipment Effectiveness (OEE) based on availability, performance, and quality data.

## 📄 5. Create Summary Report Entry

Create a new entry in the 'Production Summary Reports' data model.

## 📝 6. Update Performance Metrics

Update existing KPIs in the 'Production Performance' data model with the calculated values.

### **7. Assign Review Task to Supervisor**

Create a task for the production supervisor to review the generated report.

### **8. Send Report to Stakeholders**

Automatically email the report to relevant stakeholders (e.g., plant manager, quality team).

### **9. Generate Visual Dashboard**

Create a visual dashboard summarizing key production metrics.

### **10. Fetch Downtime Events**

Retrieve information about downtime events from the maintenance system.

### **11. Calculate Downtime Duration**

Aggregate downtime event data to determine total downtime duration.

### **12. Calculate Yield Rate**

Calculate yield rate based on good output and total input.

### **13. Log Report Generation**

Update a log entry to record the report generation and its status.

### **14. Escalate Issues to Engineering**

Create a task for the engineering team if critical thresholds are breached.

### **End**

Start of the Workflow/Process.