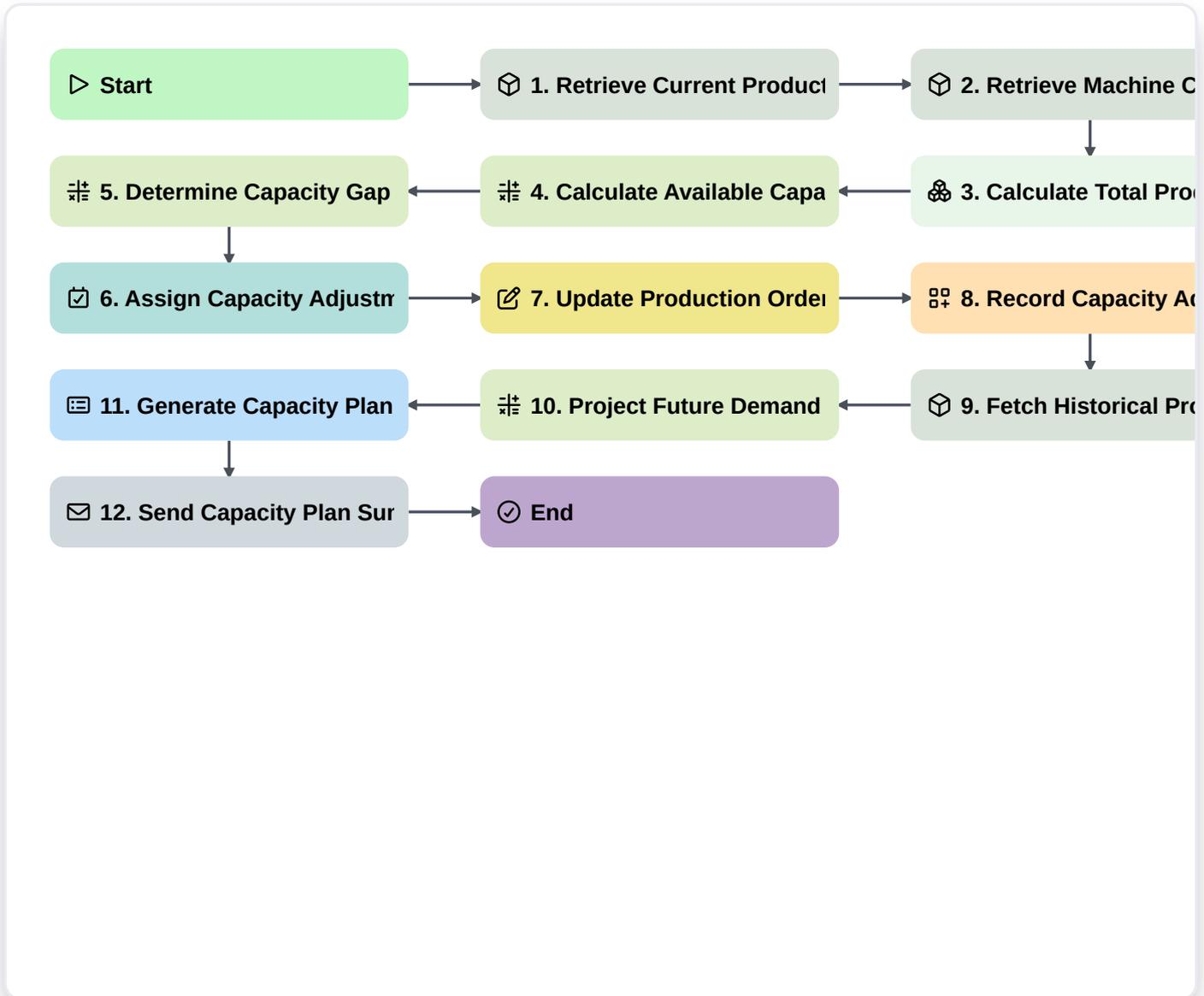


# Production Capacity Planning Workflow



## Start

Start of the Workflow/Process.

## 1. Retrieve Current Production Orders

Fetch all active production orders from the Production Orders data model.

## 2. Retrieve Machine Capacity Data

Fetch machine capacity data (available hours, maintenance schedules) from the Machine Capacity data model.

## 3. Calculate Total Production Demand

Aggregate production order quantities to determine total demand for the planning period.

## 4. Calculate Available Capacity

Calculate total available capacity for each machine or work center, considering scheduled downtime.

## 5. Determine Capacity Gap

Calculate the difference between total production demand and available capacity.

## 6. Assign Capacity Adjustment Tasks

Create tasks for relevant personnel (e.g., production planners, supervisors) to address capacity gaps.

### **7. Update Production Order Priorities**

Update production order priorities based on capacity constraints and customer demand.

### **8. Record Capacity Adjustment Decisions**

Create an entry to document capacity adjustments made and the reasoning behind them.

### **9. Fetch Historical Production Data**

Retrieve historical production data to inform future capacity planning estimates.

### **10. Project Future Demand**

Calculate projected future demand based on historical data and sales forecasts.

### **11. Generate Capacity Plan Report**

Create a report summarizing the capacity plan, including demand projections, available capacity, and potential bottlenecks.

### **12. Send Capacity Plan Summary to Stakeholders**

Send an email with the capacity plan summary to relevant stakeholders (e.g., management, sales).

### **End**

Start of the Workflow/Process.