**Core Processor Tasks**

**Raw Material Management**

* Monitor raw material inventory from farmers (Arabica and Robusta coffee by variety, processing method, and grade)
* Track stock levels
* Manage raw material procurement from farmers
* Calculate the average cost per kg for different coffee types

**Production Planning & Recipe Management**

* Create and maintain product recipes for four categories:
  + Drinking Coffee, Roasted Coffee in different roast grades, Coffee Scents, Coffee Soap
* Define ingredient composition percentages for each recipe
* Specify required coffee varieties, processing methods, and grades for recipes
* Convert retailer demand into raw material requirements using recipe decomposition
* Optimize production batches and scheduling

**Finished Goods Inventory Management**

* Track finished product inventory across all product categories
* Monitor stock levels for finished goods
* Calculate production costs per unit and selling prices
* Manage product variants within each category, especially roasted coffee

**Order Processing (Dual Role)**

**From Farmers (Raw Materials):**

* Create and place orders with farmers for raw materials
* Specify coffee variety, processing method, grade, and quantities needed
* Track farmer order status and delivery schedules
* Process raw material receipts and inventory updates.

**To Retailers (Finished Products):**

* Receive and process orders from retailers
* Manage order fulfillment and shipping
* Track order status through completion

**Workforce Management**

* Manage employee assignments across different stations:
  + Grading, Roasting, Packaging, Logistics, Quality Control, Maintenance
* Track employee availability and shift schedules
* Optimize workforce distribution based on production needs

**Communication & Collaboration**

* Communicate with farmers about raw material needs and quality requirements
* Coordinate with retailers on product specifications and delivery

**Inventory Transactions**

* Process stock-in transactions for raw materials
* Handle stock-out transactions for production consumption
* Manage inventory adjustments and transfers