

# From Bean to Brew: Organizing System Behind Coffee Production

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## **Overview:**

Coffee is not just a beverage; it is a widely traded commodity that connects different cultures, economies, and environments across the world. Behind every cup lies a complex journey that requires careful cultivation, selection, distribution, and preparation of the coffee plant. Yet, do we ever pause to ask ourselves about the organizing systems that facilitate this journey of coffee beans? What specific interactions and processes govern these systems to support the production lifecycle?

How do coffee beans, sourced from remote high-altitude farms around the world, end up in our homes and stores? While there is a diverse range of coffee brands and shops, this case study focuses on Royal Coffee. This Oakland-based family-owned operation has been working with a diverse range of coffee producers since 1978 and is known for its commitment to transparency, traceability, and trust. They manage a strong network of relationships and expertise to control and utilize coffee resources effectively.

In this report, I will examine the organizing principles, interactions, and structures Royal Coffee employs to manage its supply chain. I will analyze the coffee bean production cycle, highlighting key stakeholder and resource interactions within the organizing system.

## **Resources: What is being organized?**

Coffee production, like any organizing system, involves arranging a collection of resources to facilitate certain interactions. These resources can be classified into physical and abstract categories.

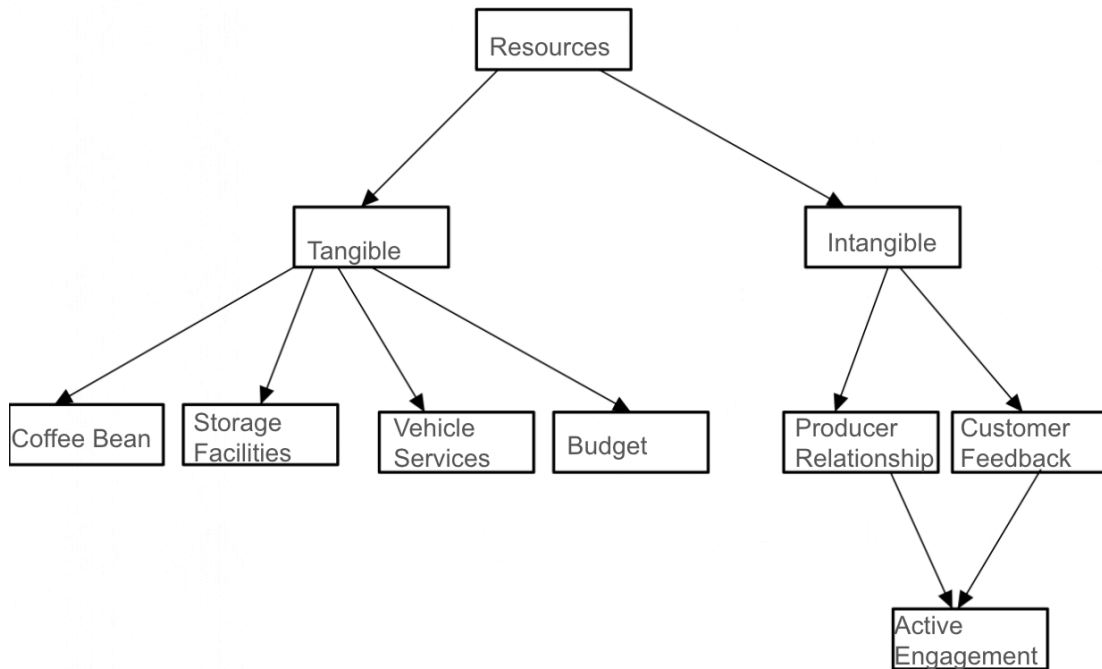
The primary physical resources are coffee beans, which vary significantly based on elevation, moisture content, bean size, and regional differences. In addition, Royal Coffee owns seven storage facilities globally, which store all imported beans. Here, warehouse managers conduct damage assessments via preliminary "eye tests" and prepare packaging materials for delivery. The budget and operational costs are allocated for selecting between different grades of coffee beans and managing their import processes. Ultimately, the organization of these resources significantly influences the distribution and selection processes.

The organization of these tangible resources depends heavily on the scope and scale. Currently, it is the spring season, marking the arrival of coffee beans, and the scope and scale of resource allocation and organization are at their peak. Therefore, both the variety and number of available resources are drastically higher than in other seasons.

Furthermore, Royal Coffee highly values its intangible resources, notably supplier and customer relationships. With over 40 years of industry experience, Royal Coffee maintains a traceable supply chain to ensure bean quality, minimize food risk, and enhance customer satisfaction. They host tasting and educational experiences to not only increase customer engagement but also create a customer feedback loop that notifies producers which ultimately enhances product quality. This management of abstract resources fosters engagement across multiple stakeholders.

Overall, Royal Coffee embodies a holistic approach that integrates both tangible and intangible resources throughout its production cycle to maintain high service standards. The hierarchical organization of these resources, as depicted in Figure 1, illustrates a top-down management approach to increase efficiency.

**Figure 1:** Resource Allocation Hierarchy Diagram



### **Purposes/Interactions: Why is it being organized?**

Royal Coffee organizes its resources in its production cycle to maximize and preserve bean quality while upholding a transparent, honest, and sustainable trust-trade approach in all trades. This organizational philosophy is fundamental for maintaining the company's reputation and for strengthening its bonds with the producers. By adhering to these values, Royal Coffee secures a superior product and fosters a reliable supply chain.

Royal Coffee's export outreach team finds fluid ways to work with farmers and maintain high-quality standards. For instance, until 2018, private export of any coffee beans in Ethiopia required cooperative jurisdiction or special government permission. To obtain Ethiopia's famous Geisha Cultivar—one of the highest-quality coffee beans globally—Royal Coffee partially funded the farmers' cultivation and harvest processes in addition to paying the bean price. This investment not only allowed for greater transparency in the production line but also positioned Royal Coffee as one of the select establishments to access this high-demand bean.

Moreover, Royal Coffee’s taste specialists hold weekly cup quality tests on both new and existing beans to ensure consistent flavor and smoothness patterns. This process ensures quality stability regardless of the previous testing. Throughout these tests, specialists ensure moisture content remains above 12.5% and certain beans exceed a specified size. These quality tests are complemented by customer-tasting events to enhance customer engagement and feedback, refining resource interactions.

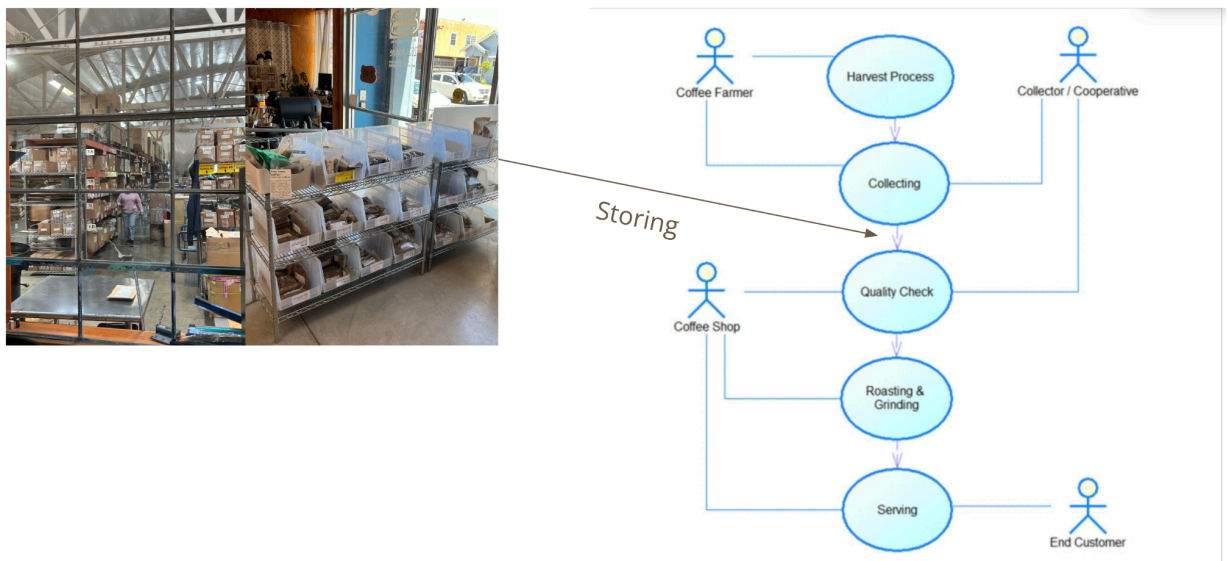
These cohesive quality assurance checks, along with strong supplier connections, contribute to greater customer satisfaction and consistently finding the “perfect” coffee bean, which is the foundational principle behind Royal Coffee’s whole operation.

## Organizing Principles: How and by Whom?

In the realm of coffee production, the organization of processes can be abstracted into six distinct, sequential steps: Harvesting, collecting, storing, quality checking, roasting and grinding, and serving. Each step equally contributes to the overarching aim of producing high-quality coffee. The organizing principles of each of these steps are mainly “taskonomic” which is described through activity and goal-based principles. The following section focuses on each stage, providing a clear description of how and by whom these processes are employed, which can be visually followed in **Figure 2**

**Figure 2:** This figure demonstrates the timeline and organization of steps and stakeholders involved in the process of utilizing coffee resources.

### Resource Lifecycle: A Hierarchical Diagram of Coffee Commodities Supply Chain



The first step is harvesting coffee beans which involves a labor-intensive selection of ripe cherries to ensure the readiness of beans. This is managed by agricultural farmers who identify ripe cherries and oversee the plants' seasonal and maturation cycles to guarantee scheduled harvests.

The next step is collecting the coffee cherries and sorting them according to size and ripeness. It involves an initial washing period that separates ripe from less ripe cherries. Here, a Royal Coffee cooperative visits the coffee-growing areas monthly and assesses the farming environment and bean quality to allow only cherries meeting certain criteria to proceed to the next phase.

After collection, the cherries are dried and fermented. The sufficient storage method depends on the desired processing technique (dry, washed, or natural). Once the beans are processed, they are exported to Royal Coffee's warehouses using cargo planes and heavy-duty trucks. At this stage, warehouse managers are responsible for monitoring the humidity and temperature of the warehouse environment to maintain bean quality.

The fourth step is quality checks. Through a sensory and performance analysis beans are tested for moisture content, size, and defects. This is known as a cup quality test which is led by Royal Coffee's experienced cuppers to ensure consistency in flavor profiles.

The fifth stage is roasting and grinding green beans into aromatic dark brown beans we purchase. Depending on the roasting method—either Drum Roasting or Hot Air Roasting—Royal Coffee's roastmasters adjust roasting duration and temperature to achieve the desired profile. Then, they tailor grinding methods to brewing techniques to complement the intended flavor. In the following picture, **Figure 3**, you may see the pieces of equipment used for the grinding process.

**Figure 3**



Finally, the processed coffee is either packaged for sale or brewed for immediate consumption. In cafes, baristas brew beans using precise methods while for home use, warehouse managers prioritize freshness and shelf-life, ensuring it is properly shipped. This final step readies the coffee for service and consumption.

### **Comparative Analysis:**

When comparing Royal Coffee with other coffee distributors like Starbucks or smaller boutique shops, we have to consider differences in scale, budget, and effort put in to build strong relationships, as well as their educational offerings and tasting events.

Royal Coffee, a medium-scale importer, deals with diverse high-grade coffee beans from over fifty different farms in thirty countries, focusing on selective sourcing. In contrast, Starbucks operates on a larger scale by providing high volumes of consistent quality beans to customers globally, with limited variety due to its institutional approach to bean sourcing. On the other end of the spectrum, small boutique shops specialize in gathering beans from specific regional farms, allowing them to have a unique product knowledge of that area. However, unlike Royal Coffee, they lack scale and diversity.

Furthermore, Royal Coffee values close producer relationships to uphold sustainable and ethical sourcing practices by investing in premium beans like Ethiopia's Geisha Cultivar. They also enhance customer engagement through taste tests and personalized sourcing, reflecting their commitment to connections despite the high cost. While Starbucks employs standardized, sustainable sourcing practices to maintain brand consistency, it places a lighter emphasis on building personalized relationships. Small shops, however, may offer the most personalized client engagement due to their smaller customer base.

Finally, Royal Coffee stands out from the other two with its educational offerings and tasting room experiences. Their classes, tastings, and seminars educate their customers about coffee varieties, brewing techniques, and market trends to improve their brand exposure. This sustains the producer-customer feedback loop to enhance their coffee quality further. The following picture, **Figure 4**, showcases one of Royal Coffee's tasting rooms.

**Figure 4**



In summary, all three types of businesses uniquely tailor their operations in scale, client engagement, and educational efforts to reach their main goal and target markets. Despite these differences, all share a commitment to delivering quality coffee.

### Bibliography(APA Style):

1. Pradana, I. G. M. T., & Djatna, T. (2020, September). A design of traceability system in coffee supply chain based on hierarchical cluster analysis approach. In 2020 International Conference on Computer Science and Its Application in Agriculture (ICOSICA) (pp. 1-5). IEEE.
2. Yeretian, C., Jordan, A., Badoud, R., & Lindinger, W. (2002). From the green bean to the cup of coffee: investigating coffee roasting by on-line monitoring of volatiles. *European Food Research and Technology*, 214, 92-104.
3. CUBBAGE, T. (2019). From Bean to Cup: Coffee comes to the science lab. *The Science Teacher*, 86(7), 35–39. <https://www.jstor.org/stable/26899145>
4. de Almeida, L. F., & Spers, E. E. (Eds.). (2019). *Coffee Consumption and Industry Strategies in Brazil: A Volume in the Consumer Science and Strategic Marketing Series*. Woodhead Publishing.
5. Cole, N. L. (2008). Global Capitalism Organizing Knowledge of Race, Gender and Class: The Case of Socially Responsible Coffee. *Race, Gender & Class*, 15(1/2), 170–187. <http://www.jstor.org/stable/41675364>