

THE PROBLEM

Team 207 was assigned to optimize the operations of the Beaver Classic Food Truck. The existing state of the truck was disorganized, resulting in inefficiencies in their processes (see Fig. 2). As the food truck serves events with a potential of up to 2,000 people per day, it is crucial to streamline operations for optimal customer service.

THE SOLUTION

Team 207 identified the 5S model, a lean manufacturing tool, as the solution to optimize the Beaver Classic Food Truck's operations. The 5S's stand for *Sort*, *Straighten*, *Shine*, *Standardize*, and *Sustain*. This method aims to reduce waste and enhance customer satisfaction by improving efficiency, safety, and productivity [1]. It involves organizing and cleaning up the workplace to enhance the current condition.

RESULTS

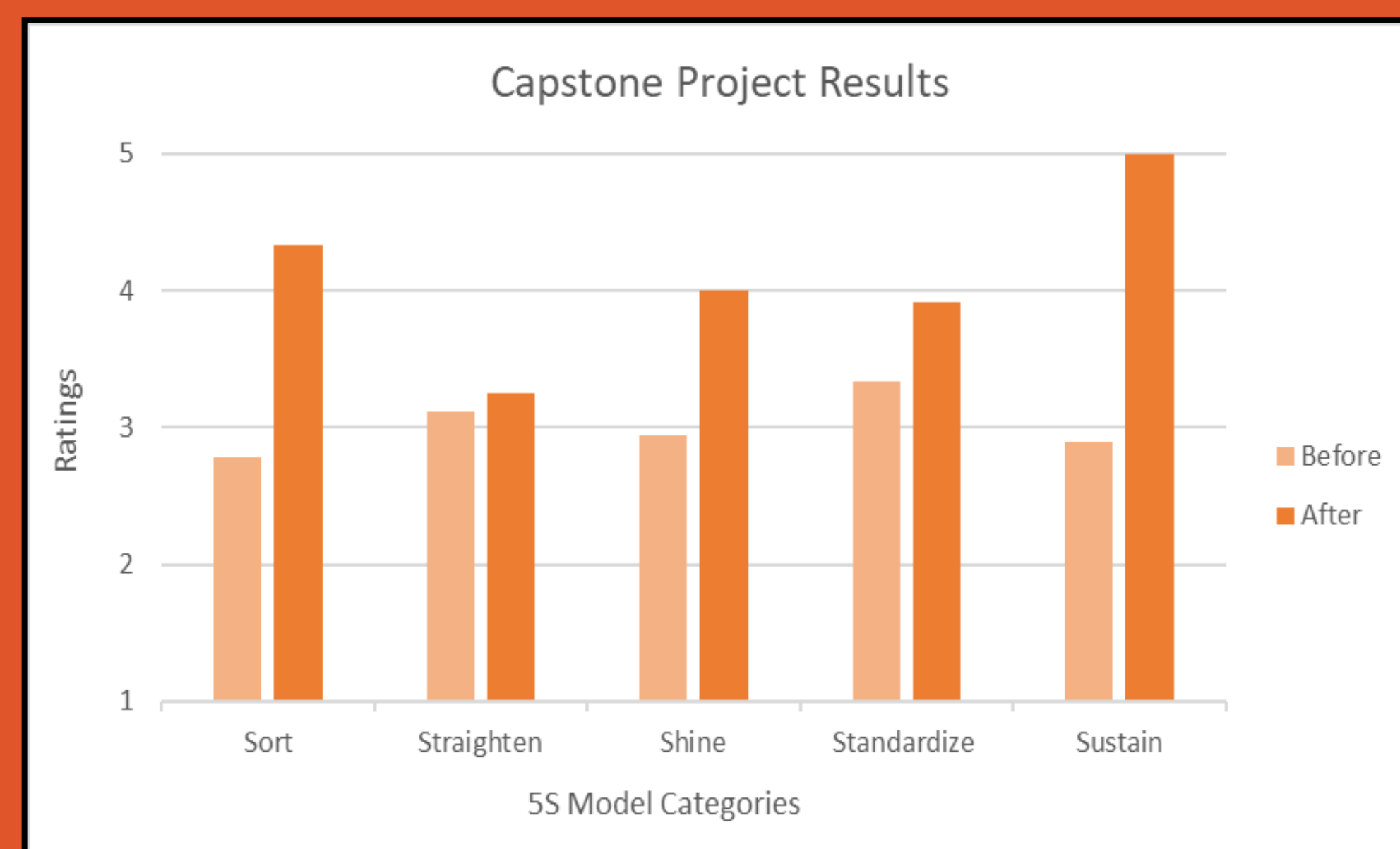


Figure 5. Results based on staff satisfactory ratings. Feedback surveys were given to the food truck staff before and after the 5S model was implemented to determine the satisfactory ratings for the organization of the truck. Overall, the results yielded a 20% increase in satisfaction after the 5S model was implemented.



OPTIMIZING THE BEAVER CLASSIC FOOD TRUCK

The Beaver Classic is a student-run food brand within the College of Food Science and Technology at Oregon State University. Under the leadership of the project sponsor Robin Frojen, the brand recently expanded with the addition of the Beaver Classic Food Truck that attends local events in the Corvallis area. The food truck offers a diverse menu of student-made products, including cheese, ice cream, grilled cheese sandwiches, jerky, and honey.



Figure 1. Beaver Classic staff at the Corvallis Saturday market.

IMPLEMENTATION

Here is how each of the 5S's were applied for the optimization of the food truck:

- **Sort:** Determined necessary items for truck operations and sorted into containers.
- **Straighten:** Containers were put into the truck and properly labeled.
- **Shine:** An initial deep clean was done and cleaning procedures were added to easily accessible checklists.
- **Standardize:** Documented all processes and operations, including cleaning, opening/closing procedures, and sales inventory checklists. QR codes were created for easy access to all documents.
- **Sustain:** Created a suggestion sheet for employees to provide constructive criticism and concerns.

BEFORE



Figure 2. Before 5S model implementation

AFTER



Figure 3. After 5S model implementation



Figure 4. After 5S model implementation

References:
 [1] U.S. Environmental Protection Agency. "Lean Thinking and Methods: 5S." EPA.gov, 23 Aug. 2016, <https://www.epa.gov/sustainability/lean-thinking-and-methods-5s>.