WE BELIEVE IN THE ASTONISHING POWER OF FOOD.

Mission:
Community Servings is a non-profit organization committed to providing nutritious meals to individuals suffering from chronic and critical illness. Based out of Jamaica Plain, Massachusetts. Community Servings believes in a “food as medicine” approach to treating patients. They provide fresh, home-delivered meals to clients and their families. Their goals are to help clients maintain their health and dignity and preserve the integrity of their families through culturally appropriate food, nutrition education, and other community programs.

Problem Statement
The organization seeks to optimize its operations in order to lay the groundwork for a planned expansion beginning in late 2018.

In order to meet the demands of scaling to 3x the current client base, our team was tasked with investigating opportunities to increase meal production efficiency.

Opportunities for Efficiency
We identified four main problem areas which, together are responsible for a large source of complexity in the daily operations of CS.

These four areas create time delays, extra waste, and inefficient labor use.

1. STREAMLINING PORTFOLIO OF DIETS

   The proliferation of diet types (141) served by CS complicates two areas: Cooking and Packaging.

   Targeting this source of complexity will have positive downstream effects.

   70% of diets have only 1-3 clients enrolled.

2. STREAMLINING MENU PLANNING & VARIETY

   Lack of systematic approach, and no automation or optimization for meal planning to meet the requirements of all the diet types.

   Manual optimization iterations to decrease # of meals from ~40 on average to 17 (by week) while still fulfilling the requirement of all the diets.

3. SIMPLIFYING PACKAGING

   Multiple packaging and storage processes and types of packaging increase the congestion in the work-in-progress space, and do not add value.

   Raising costs of both packaging and labor calls into question the current packaging and stacking approach of all diets.

4. OPTIMIZING DELIVERY ROUTING

   The routing system is based on historically developed routes and new patients are added manually, that have not been optimized recently.

   Van constraints will be a major obstacle with the growth of the organization.

Our Recommendations
Optimization for areas 1 & 2
Consolidated diet types for production through analysis of nutritional requirement.

Built an Excel-based optimization model that automatically selects recipes from database to minimize # of distinct meals required to be cooked per week.

Future Projects
Additional Action Learning Lab projects have been identified for:

- Redesigning packaging
- Optimizing routing

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Yuying Ren
PhD Chem Eng, 2019

Evan Humphrey
SCM, 2018

Katherine Luby
Sloan Fellow, 2018

Shantanu Sathe
MBA, 2018

Sofya Kravchenko
MBA, 2018