

Food Distro

Product Requirements Document

1. Project Overview

In many communities around the world, there exists the challenge of food insecurity, where a significant portion of the population struggles to access an adequate supply of food while at the same time, a large portion of food is going to waste. Food Distro is an open source web application created for businesses non-profit organizations that want to start food distribution efforts in their own community.

Important to Note: At this point in development, focus is aimed towards mid-large size organizations with the possibility of individual focus later on.

2. Problem

To address this gap, there is a need for a user-friendly open-source app that empowers businesses and non-profit groups to seamlessly connect, educate and sustain their food distribution initiatives.

3. Objectives

- Develop a networking application between hotels/restaurants/other food related businesses and food banks/food redistribution organizations
- Educational toolkit for businesses to help reduce food waste across different areas (eg. overstocking, wasted leftovers, spoilage, meals being sent back etc.)
- Educational tool designed to help users reduce food waste and food redistribution

4. User Stories

Business User

- As a restaurant owner, I want to be able to review daily sales and consumption trends to identify patterns in customer preferences and adjust my food orders accordingly.
- As a restaurant owner, I want a feature in my inventory management system that integrates demand forecasting algorithms. This will help me make more accurate predictions about consumer expectations, preventing overstocking of certain products and minimizing food wastage.

Non-profit (i.e. connectors or food banks) User

- As a non-profit, I want a dedicated platform that connects nonprofits with businesses interested in excess food redistribution. This feature will streamline the process of finding willing partners and enhance communication between both parties.
- As a non-profit, I want access to mobile refrigeration units that can be stationed temporarily at our facility during peak donation periods. This will provide additional storage capacity and help prevent excess food from going to waste.

Organization (i.e. universities and farmers) User

- As a farmer, I want access to a market analysis tool that provides real-time insights into consumer demand, pricing trends, and market conditions. This will help me make informed decisions about when and where to sell my stock.
- As a food transporter, I want access to a fleet of temperature-controlled vehicles to ensure the safe and optimal transport of perishable food items. This will help me maintain the quality and freshness of the food throughout the transportation process.

5. Constraints

- Users lacking **general awareness** about food waste and food redistribution options. Where do they start?
- **User adoption:** Will users find value in Food Distro?
- Current systems exist but many are **overwhelmed** by logistics
- **Trust and safety concerns:** How can we ensure the safety and hygiene of the received goods?

6. Proto-Personas

Business Proto-Persona: Grocery Store Manager, Hotel Food Production Manager

- **Needs:** Educate customers on labels or other food waste practices. Wants to find ways to sell excess food waste that is still good, but not to market standards.
- **Goals:** Maximize profits and efficiency within the store. Prevent any inventory loss and help contribute to feeding the hungry by donating whatever products they can offer (food, toiletries, etc.)
- **Frustrations:** Current technology is outdated and lacks many features. Doesn't know where to begin to establish a process. Has tried to establish a process in the past, but staff struggled to adopt it. Under pressure to hit goals for the store. Doesn't have time to look into the food donation process.

Non-Profit (without distribution) Proto-Persona: Director of a Food Recovery organization, Sustainability Coordinator

- **Needs:** Improve current operational efficiency in food rescue and distribution. Raise public awareness and encourage sustainable practices regarding food consumption and waste.
- **Goals:** Develop and implement effective better food waste reduction strategies. Increase community awareness and involvement in food waste reduction
- **Frustrations:** Difficult to measure the impact of food waste. Hard to find engaging ways to educate community food waste with impact data and studies. Managing a large volunteer network across different locations.

Non-Profit (with distribution) Proto-Persona: Operations Director, Logistics Coordinator

- **Needs:** Maintain networks for regular food donations to increase the quantity and reliability of food donations. Smooth communication with donor organizations (eg. restaurants, cafes) to receive adequate amounts of surplus food.
- **Goals:** Central platform for seamless integration between the organization, food businesses, and transportation/delivery processes. Raise awareness about the importance of food redistribution.
- **Frustrations:** Ensuring food safety and quality during transportation and storage. Lack of trust between food suppliers and redistributors, impacting smooth collaboration.

The following sections are deemed out-of-scope for this phase in the project but should be revisited upon the upcoming phases.

7. User Journey

8. Features + Feature Prioritization Journey

9. Success Metrics