

**Name of the Project:** Waste No More!

**Domain of the Project:** Food waste management

**Description of the Project:**

Food Waste is a massive problem not only in America but all over the world. One third of all food produced in the world goes to waste. From restaurant scraps, to grocers disposing of imperfect produce, to spoiled food, roughly \$400B in food ends up in landfills every year resulting in 3.3 billion metric tons of greenhouse gases annually. According to USDA estimates, between 30-50% of all food produced is discarded. Meanwhile 1 in 6 Americans have difficulty finding enough to eat. Our project aims at reducing the wastage of food, both in prepared form or raw form, by establishing a communication between various enterprises and organizations.

**Scope of the Project:**

The scope of the project is to plan, design, build, and implement a food waste management system which will comprise of two enterprises, namely the Food Management Enterprise and the Compost Management Enterprise. Various access and permissions will be granted to the appropriate personnel in order to update, manage, and view organizations at these enterprise levels. The Food Management enterprise will consist of four organizations viz., Restaurants, Households, Grocers and NGOs and the Compost management enterprise will consist of Farmers, Hog Producers and Mediator Organizations. Each organization will incorporate a virtual dashboard with key functionality that will help them to efficiently manage the food waste and also monitor the statistics of food recycled and reused. The scope of this project includes all requirements gathering, planning, design, development, and implementation of the food waste management system at regional level.

Key Roles and Use Case:

- **Network Administrator:** Will be able to add networks, enterprises and admins for each enterprise
- **Enterprise Administrator:** Will be able to add organizations and employees in each organizations and assign roles to them
- **Organization Administrator:** Will be able to communicate with other organizations and manage the work queue and work requests
- **Mediator:** Will be able to mediate between the organizations in the Compost Management enterprise

**Conclusion:**

- Restaurants participating in the waste food management system can gain economic benefits from this as they ensure that maximum of their produce is sold and also help them analyze the food they were able to donate or send to compost and thus helping in forecasting their future produce.
- Households will also be able to save money by availing the food offered at discounted prices and also support the NGOs in their noble cause of serving people who are food insecure.
- Surplus food available at the Grocery stores will be handled in an efficient way thus ensuring that there are less losses and less wastage of food.
- Compost industry will be benefitted since they will have easy access to the raw material to produce compost.