### Sustainable FoodMetrics

Applying Data Analytics to Project Individual & Institutional Food Waste Trends

Renny John

### Food Waste in the United States

An estimated 70 million metric tons of edible food is wasted annually

< 2% of edible food loss is recovered

Reducing national levels of food waste by 20% would be more cost effective than increase food production

Global issue, institutional and individual responsibility

# Cornell University: Food Waste Initiatives

- Composting Programs
  - Dining Hall and Residential Compost
- Food Recovery Program
  - Reduces food waste and donates extra meals to community food pantries
- Trayless Dining Initiatives
  - Reduces food waste, conserves water, and reduces detergent use
- Ongoing Food Waste Studies and Data Collection
  - Personal food waste studies conducted by Cornell Dining's Student Sustainability Coordinators

## Institutional vs. Individual Food Waste Initiatives

- Cornell University has an established institutional strategy for reducing waste
- In 2016-2017 individual food waste was studied
  - Study analyzed food waste patterns among freshman students
  - ► Findings report an average of 3.37 ounces of food waste per student per meal; or 5.25 pounds of food per student per week
  - Most common reasons for waste:
    - ▶ Taste
    - ► Food quality
    - ▶ Taking too much food
    - ► In a hurry
- Despite study findings, individual initiatives are lacking

#### Data Analytics to Reduce Food Waste



Data analytics have been used at the institutional level to reduce food waste

Improved data tracking and analysis of unsold inventory

Optimize distribution

Recover food through donation and re-distribution



Community Level Efforts

Food sharing apps
Reduced cost food apps

#### Food Waste Reduction App for Students at Cornell University



An app that specifically targets individual food waste



Integrate education and information sharing



Provide reduced or free food



Track and monitor individual food consumption/waste patterns



Incentive students to reduce food waste

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