

Food Waste Tracking

Data on food waste empowers culinary workers to make preparation and serving more efficient, more environmentally friendly and less costly.



The Impact

Food waste tracking can drastically reduce food waste from items and dishes that were not served by closing time. Not only will it have a positive environmental impact, but it will also help businesses and organizations save money on production and food costs.

Where It's Been Implemented

There are many food waste tracking technology vendors that offer tools to track and analyze food waste. One is Leanpath, which has partnered with major food providers like Aramark and smaller ones in a variety of sectors. Google currently uses Leanpath at almost 130 Google cafes in 11 countries, and since 2014 the company has saved 3 million pounds of food waste. Hotels, including the Hilton San Diego Bayfront, Marriott's Hotel Alfonso XII and Novotel Brisbane, have also had positive experiences with Leanpath.

Like Leanpath, Winnow Solutions provides camera products and software that automatically track food waste. It offers two models: Winnow Sense, which measures how much plate waste is being thrown away, and Winnow Vision, which utilizes AI cameras to pinpoint waste, cut costs and improve performance.

Waste Harmonics takes a different approach with its iWaste camera system, which monitors how full trash or recycling dumpsters are, as well as when the waste haulers pick up. The device provides data that allows customers to identify unsustainable behaviors. For example, if dumpsters aren't full when they are emptied, customers might save money by lowering the frequency of dumpster service.

Another company working to address excess food waste is Spoiler Alert, which works with stakeholders before food even enters a kitchen, focusing on more efficiently distributing unpurchased food to vendors before food spoils. Its software aggregates suppliers' inventory data and connects buyers to ensure that little food goes to waste.

Description

Technology can help kitchen staff account for food waste on the buffet line or in the kitchen at the end of each day. By measuring the specific dishes wasted, the culinary team can work to create an optimal menu and prepare the proper amount of each food each night. Kitchen staffers can do this themselves or they can use technological tools that streamline the process.

Leanpath invented automated food waste tracking technology in 2004. The company offers tools for data collection such as scales and cloud-based analytics, as well as specifically tailored coaching for culinary teams. The goal is to decrease excess prepared food at the end of the day. Often, this food is not donated to local shelters because of concerns around liability and, instead, is discarded. In an attempt to prevent this, California Senate Bill 1383 will require 20 percent of edible food to be recovered for human consumption by 2025 instead of going into the garbage or compost. Food waste tracking technology vendors provide services that aim to prevent this needless waste.

Leanpath offers a number of services for different needs and industries. For example, one of its most detailed products includes a built-in scale, camera and touchscreen interface for kitchens wanting highly detailed pre-consumer food tracking. Leanpath also provides a floor scale smart meter that can weigh waste from garbage and compost bins. Products as simple as online tracking and data analysis tools can give culinary staff the basic tools necessary for efficient tracking and efficient meal planning.

Key Drivers

Food waste is costly to both the environment and the wallet. On top of contributing to landfill mass and greenhouse gas emissions, companies are losing money for every bite that is wasted. California's SB 1383 promises to become a key driver for increasing food waste tracking as restaurants will be required to save 20 percent of food waste for human consumption. In order to meet these goals, companies like Leanpath, Winnow Solutions and others will be vital for informed, data-driven decisions.

Key Obstacles

Food waste tracking technology is a service that comes at a cost, and some businesses may not think the additional cost is necessary. Besides, services like Leanpath can be expensive and hard to use, causing frustration to kitchen staff. Businesses and organizations with food service establishments can implement their own version of food waste tracking, accounting for food waste at the end of each day. Then kitchen staff can make their own decisions in terms of how to modify food preparation and ingredient purchasing to minimize food waste and optimize their efficiency.

References and Resources

- Kristin Rainey, led Leanpath implementation at Google from 2013 to 2020, kmrainey@gmail.com

- [EPA's Sustainable Management of Food website](#)
- [EPA's Tools for Preventing and Diverting Food WasteWaste Tracking and Analytics](#) by ReFED, a multi-stakeholder nonprofit
- [Leanpath's case studies](#)
- [Winnow Solutions](#)
- [Waste Harmonics iWaste System](#)
- [Spoiler Alert](#)

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