SWIRE

Reduce Food Waste from Commercial Food Preparation

About Cathay Pacific Catering Services (CPCS)

Cathay Pacific Catering Services (H.K.) Ltd. (CPCS) is one of the largest flight kitchens in the world.

With over 50 years of experience in the airline catering industry, CPCS is renowned as a reputable caterer especially having moved into its state-of-the-art facility at the Hong Kong International Airport at Chek Lap Kok.

In 2019, CPCS supplied around 30 million meals to over 50 global carriers operating out of Hong Kong International Airport.

The company is a 100% subsidiary of Cathay Pacific Airways. In addition to preparing authentic, mouth-watering dishes, CPCS provides the logistics services in delivering food and beverages and other commissary items onto aircraft.

For more details on CPCS: https://www.cpcs.com.hk/

Problem Statement

To monitor and reduce the food waste associated with the commercial food preparation process across the production stages, sourcing, and storage.

Aims

Swire Pacific Sustainable Development (SD) Fund Challenge Process, invites innovators to submit a new solution to be trialled with the intention of implementing and scaling to other sites with similar problems.

- Solution may include, but not limited to:
  - o In-kitchen waste monitoring
  - o Food inventory tracking and optimization
  - o Automated waste auditing
  - o Order optimization
  - o Food quality monitoring at point of delivery
  - o Produce re-sale channels
  - o End-to-end solutions encompassing all of the above
- CPCS is not currently considering food waste treatment, processing, upselling or exportation.
- CPCS is looking solutions that drive insight throughout the preparation process, from control of input, monitoring the WIP, verifying the output, to identifying disposal.

- Solutions must comply with our IT polices and standards, hygiene standards and must not affect our productivity.
- Operations are round the clock so inventory tracking would need to be dynamic.
- Solutions should also be able to track perishable inventory across multiple kitchens, with items moving between production lines.
- The trial will likely be conducted in CPCS's operations at Hong Kong Airport.

Problem Background

In 2020, CPCS cooked and delivered around 4.6M meals, which involved more than 3,000 different raw materials. Due to the variety of food items, CPCS lacks an effective and efficient system to track the actual material usage from raw materials to finished goods (end to end). This makes it difficult to identify how many items have been disposed and why (quantity and reason).

Current food variance (actual usage compared to the billed products) is estimated to be ~14%. The goal is to reduce this variance to 5%. Actual food waste has been difficult to understand across the operation as it is currently recorded manually at various points.

Operations are round the clock to meet the needs of the airlines we service. Furthermore, many of the food items are perishable, are stored and proceed across multiple kitchens and move between production lines.