**Community Fridge Food Waste Data Dashboard Report**

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Introduction:

This document provides an overview of the Community Fridge Food Waste Data Dashboard, designed to visualise the magnitude of food saved through the community fridge initiative. It discusses the integrity of the data, the total amount of food saved, and addresses challenges such as specific user errors encountered during data collection.

Challenges:

One of the primary challenges faced during the creation of the Community Fridge Food Waste Data Dashboard was the inconsistency and incompleteness of data entries. Many entries in the dataset were either incomplete or missing, limiting the scope of analysis to a few selected categories. Formatting inconsistencies further complicated this issue, particularly in the quantity field where donated food was measured in grams and taken food was a numerical count of items. This inconsistency made it difficult to accurately compare and analyse the data. Additionally, some numerical entries included characters, which further complicated calculations and required data cleaning and preprocessing.

The original dataset featured overly detailed categories, making the analysis cumbersome. Some categories were too specific and could have been grouped under broader headings, while others were irrelevant and could have been merged into an "Other" category. This required categories to be cleaned and re-categorize the data for analysis. Additionally, during a visit to the fridge, we found it complicated to operate the machine that records taken food, leading to errors in data entry such as incorrect quantities, mismatched categories, and missing user details such as staff, student, etc. This indicated a need for a more user-friendly graphical interface for the data entry system to reduce errors and improve future data accuracy. Despite these challenges, by cleaning the data, correcting inconsistencies, and implementing broader category groupings, the dashboard was able to visualise the magnitude of food saved through the community fridge initiative effectively and how new users visit the fridge over time.

Community Fridge Link: https://www.harper-adams.ac.uk/community/988/community-fridge-pilot-project/