Thematic Seminar 2

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1 Introduction

In this assignment, the **Food industry** was chosen and is, briefly, discussed in this report. The report will answer the following questions:

- What/Which is the problem

- Where in the food system does it emerge and why?

- What is your proposed ICT solution and in what way could it contribute to decrease impact?

- Are there any possible negative indirect consequences of your solution?

2 What/Which is the problem?

In the United States of America 30 per cent of all food worth 50 billion dollars is thrown away each year. As a result of this half of the water used to produce this food is also wasted[4]. United King waste one-third of all food purchased, which estimates to 7 million tonnes of food every year. Roughly one third of the food produced in the world for human consumption goes to waste or gets lost. [4] Decreasing food waste is one of *United Nations Sustainable Development Goals(section 12)* [5].

3 Where in the food system does it emerge and why?

Food waste is defined as either *food lost* or *food waste*. Food loss occurs more often and is any edible food that goes uneaten at any stage. Food waste is a specific kind of food loss. It is food discarded by retailers due to color or appearance and plate waste by consumers according to USDA[1]. Edible food is discarded at every point of along the supply chain. Food loss also occurs on farms. If the price of a product on the market is lower than the cost of harvesting and transportation then farmers tend to leave their crops un-harvested, also known as dumping. This happens when a product is being produced more than the demand [6]. Food lost occurs on fishing boats, transportation and distribution to the retailers and supermarkets, waste in retail businesses, restaurants and households. To summarise food lost happens in all stages of the food system [3], the reasons behind all of them are not discussed to prevent exceeding the word limit in this report.

4 What is your proposed ICT solution and in what way could it contribute to decrease impact?

Having previously worked in many restaurants and Supermarkets, immeasurable food waste has been personally observed. Perfectly edible food that contains no, or minimal, health risks and are hygienically clean that could've been sold but not done because of "selling hours" was finished, overproduced or didn't appear in an ascetic way that matched the restaurant/Supermarkets view

of the food. An app named ***Karma*** [2] tries to minimize this type of food lost by letting retailers resell the food not sold during retail hours to customers for a hefty discounted price. Customers are incentived to consume these products and all the customers have to do is appear to the re-seller and pick up the food. Retailers profit out of this while contributing to sustainable development and are able to empty the shelves which in turn adds more space for raw materials in the shelves and that in turn can generate even more profits. The first order impact is the amount of energy the mobile-app uses however this could be neglected as minimal changes that reduce the energy-cost of the app would not be noticed as the app in not running on the background all day. The second order is that the app reduces food lost as it provides incentives to eat perfectly edible left-over food.

5 Are there any possible negative indirect consequences of your solution?

The mobile app does not oversee the condition of the food the resells promotes on the app. Food that otherwise wouldn't pass food safety rules could theoretically be sold on the app which could affect the health of the consumer. Newly opened restaurants with unacceptable practices from an environmental perspective could promote their unsold food on the app which in turn raises awareness of the restaurants and that in turn generates more profit for these restaurants. The restaurants could value profitability over

References

[1] U.S Department of Agriculture. *U.S food waste Challenge: FAQ*. Feb. 2022. URL: https://www.usda.gov/oce/foodwaste/faqs.htm.

[2] Karma. *Home page*. Feb. 2022. URL: https://www.karma.life%5C/.

[3] Food print. *The problem of Food Waste*. Feb. 2022. URL: https://foodprint.org/issues/the-problem-of-food-waste/#easy-footnote-bottom-2-1309.

[4] United Nations Enviroment Program. *Wordwide Food waste*. Feb. 2022. URL: https://www.unep.org/thinkeatsave/get-informed/worldwide-food-waste.

[5] UN. *Sustainable Development Goals*. Feb. 2022. URL: https://www.un.org/sustainabledevelopment%5C/.

[6] David Yaffe-Belanny and Michael Corkery. "Dumped milk". In: *New York Times* (Apr. 2020).