

Digital Tools for Monitoring and Reducing Food Waste in the Tourism Sector - Experiences and Results from Greece and Germany.

G. Hafner¹

¹ISWA – Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, Bandtäle 2, 70569 Stuttgart, Germany

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Presenting author email: Gerold.Hafner@iswa.uni-stuttgart.de

Results from two research projects related to monitoring and reducing food waste in the tourism sector are compared:

- **A2UFood**: UIA - Urban Innovative Actions): Hotels in Heraklion
- **ELoFoS**: Efficient Lowering of Food Waste in the Out-of-Home Sector

A special focus will be placed on the use of digital tools for the semi-automatic recording of food waste. Appropriate apps have been developed for this purpose at the University of Stuttgart. These will be presented and an outlook on further developments will be given.

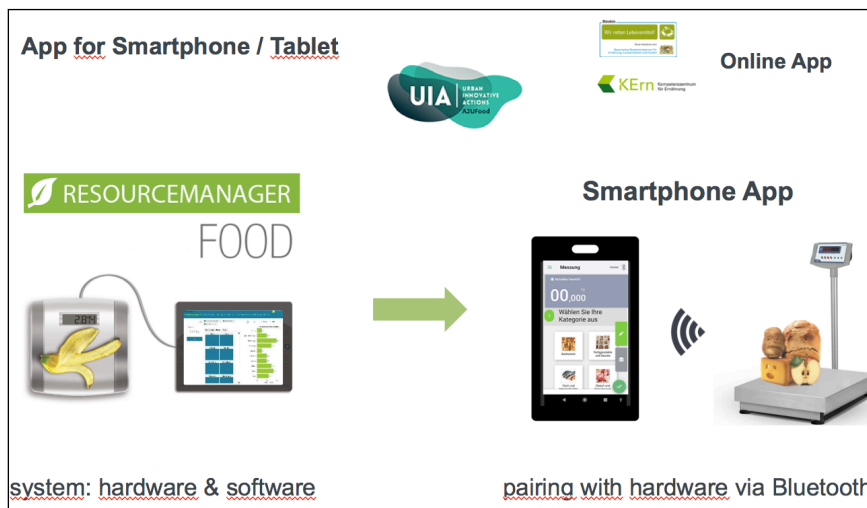


figure 1: RESOURCEMANAGER FOOD (MS Windows) & RMFood App (Android)

In both research projects, efficient measures to reduce food waste in the out-of-home sector have been investigated. First, information on the generation, composition and value of food waste as well as their disposal reasons at several locations in the hotel business was collected. Next, optimizations within the supply chain between the hotel business and its suppliers for fish and meat products were optimized.

From these results, complemented with literature research, strategies and measures for avoiding food waste have been developed. The costs of avoiding food waste, such as the cost of staff training, will be taken into account when evaluating our avoidance measures. Furthermore the transferability of the strategies and measures to other out-of-home sectors have been proofed.

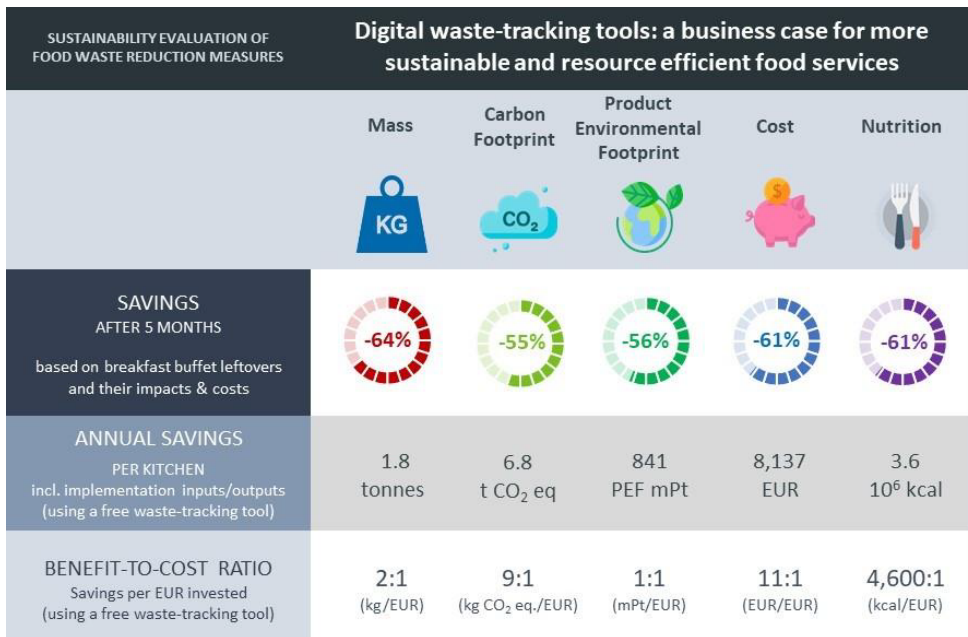


figure 2: Summary of the quantitative sustainability assessment (Goossens et al., 2021)

In this context material-flow analyses have been carried out in order to identify the most resource efficient strategies. In the process, strategies and innovations are being developed using the practical example of a commercial kitchen with suppliers.



figure 2: Sankey diagram for the scenario purchase of whole salmon (filleting and portioning is performed in the hotel kitchen). (Goossens et al., 2021)

References:

<https://a2ufood.gr/>, <https://www.uia-initiative.eu/en>

<https://elofos.de/en/project-description>

Goossens, Yanne; Kuntscher, Manuela; Lehn, Friederike; Schmidt, Thomas (2021): Nachhaltigkeitsbewertung von Maßnahmen zur Reduzierung von Lebensmittelabfällen; Braunschweig: Johann Heinrich von Thünen-Institut, 2 p, Project brief 22, DOI:10.3220/PB163413037300.