

Increasing the acceptance of digital tools in the bakery sector as a measure to tackle food waste

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Abstract

In Germany, 4,7 million tonnes of bakery products are produced annually, of which 1,7 million tonnes are wasted. The return of unsold bakery products accounts for 36% of the total waste amount, being the second largest cause after households (49%) (Schmidt et al., 2019). Digital forecasting tools in the bakery sector, which help to optimize the production volume by reconfiguring the order quantity of industrial bakery goods, can serve as an accelerator towards the target attainment of international and national sustainability strategies such as SDG 12.3 by reducing the return of bakery goods. So far, rare knowledge exists about the acceptance and usage rate of digital forecasting tools in bakeries. The main objective of this study is to provide a measure framework for the bakery sector, accelerating the acceptance of such digital tools in order to tackle food waste reduction. The study comprises two phases. In the first phase, the current attitude towards and the usage rate of digital tools in the bakery sector is examined by conducting an online survey with employees of bakeries. In a second online survey, inhibiting and promoting factors regarding the application of digital tools in the bakery sector are investigated. Target group of this survey are management trainees of the bakery sector, as this group represents the future managers of bakery stores and hence carry the potential for transformation in this sector. The results serve for the second phase of the study, in which expert interviews will be carried out to elaborate the type and feasibility of acceptance enhancing measures. Based on the findings, measures for bakeries and training facilities are derived. By targeting different levels of stakeholders from the selling point up to the management level, a holistic approach is provided targeting food waste reduction.

Keywords: Digitalisation, food waste, bakery sector, food waste reduction measures

References

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