

Institute of Food Science and Biotechnology **Dep. Of Food Informatics (150L)**

Jun.-Prof. Dr. Christian Krupitzer

Bachelor-/Master Thesis

To the topic:

"Relevance of sustainability certification and digitalization potential in different food product categories"



Motivation

Sustainability is a megatrend of our time and is bringing about far-reaching changes in all areas of our lives, including nutrition. In addition to the political framework conditions that are driving the sustainability transformation, changes in consumer behavior can also be heard through demands for more sustainable food. In the case of products aimed at consumers, sustainability attributes are usually documented by certifications and labeled accordingly on the products. Studies have shown that such sustainability attributes are evaluated differently depending on the product group in question, e.g. in terms of their relevance or trustworthiness. Digital technologies can make sustainability certification both more efficient and more trustworthy.

Goals

The thesis will use structured literature analysis and semantic-structuring analysis methods (term mapping, knowledge graphs) to identify the food product categories for which different stakeholders along the food value chain place particular value on sustainability attributes and the reasons behind this. The aim is to show the extent to which digital technologies are already being used in the value chains and to analyze the optimization potential for sustainability certification through the integration of additional technologies, e.g. sensor technology, IoT, Al or blockchain. The results should provide clear demarcation criteria for the different relevance of sustainability certification in the various product categories, but also between different stakeholder groups. Furthermore, a recommendation should be derived as to the product categories in which digitalization in the value chain offers particularly high potential for increasing the value of sustainability certification. The required scope and depth of the thesis will be determined in consultation with the supervisor, depending on the degree objective (Bachelor's or Master's).

We offer

- □ Innovative work in the field of digitalization of food processing
- □ Opportunity to work with high practical relevance
- Excellent working environment and intensive support

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