



DRIVERS AND HINDERERS OF (UN)SUSTAINABLE SERVICE: A SYSTEMS VIEW

BACKGROUND AND RESEARCH AIM



Humankind faces several planetary crises, such as climate change, biodiversity loss, pollution, and waste. We are still far from operating within the boundaries of what the planet can support. Recognizing this reality, it is imperative to rethink how we utilize and manage our resources. However, achieving sustainable service provisioning poses a challenge, particularly in evaluating and implementing ecological sustainability measures. While social sustainability has received some attention in service research, there is a lack of theoretical understanding of environmental sustainability and the factors that contribute to unsustainable outcomes.

To better understand what sustainability is and why it is so difficult to achieve in the context of service provisioning, this study specifically addresses the challenge of food waste. Adopting a systems view, the study investigates the specific mechanisms leading to (un)sustainable outcomes in service provisioning, focusing on the role of food retailers in the context of food waste reduction. By examining this issue, the study aims to address a prevalent sustainability problem and gain a deeper understanding of the challenges involved.

RESEARCH METHODS

Using an abductive research design, the study combines insights from theoretical and empirical sources to deeply understand the dynamics of food waste and identify strategies for reduction at both the retailer and consumer spheres. The theoretical insights stem from the system dynamics literature and the systemic framework of sustainability, while the empirical input comes from a case study of a Swedish food retailer and is supported with previous academic literature on food waste at the retailer-consumer interface. In the empirical case study, the primary data is derived from interviews with employees from the food retailer's regional headquarters and various stores and secondary data is gathered from the retailer's sustainability reports.

Employing a systematic combining approach with multiple rounds of iteration, the research integrates insights from these multiple sources to identify the systemic drivers of food waste or hinderers of food waste reduction. This analysis led to the development of a causal loop model that illustrates the complex interactions between retailers and consumers contributing to food waste.

UNDERLYING MINDSETS

The food retailer's behavior is influenced by two mindsets: the Sustainability mindset and the Profit Maximization mindset, and the interplay between these mindsets impacts how the retailer addresses food waste initiatives:

- The Sustainability mindset focuses on reducing food waste but faces challenges in implementation.
- The Profit Maximization mindset prioritizes profit over sustainability, unless there are financial benefits.

FEEDBACK LOOPS

MAJOR DRIVERS OF FOOD WASTE

The known drivers of food waste in the retail industry include marketing activities (such as, date labelling, packaging design, and aggressive promotions) and consumer expectations on high-quality, visually appealing food products. The systems view adopted in this study further reveals a reinforcing feedback loop between these drivers:

- The Unsustainable Expectations loop illustrates how marketing strategies increase consumer quality expectations, which in turn pressures retailers to stock "perfect" produce, perpetuating the amount of waste both at the retailer and in households.

DRIVERS AND HINDERERS OF FOOD WASTE REDUCTION INITIATIVES

Three feedback loops arise from the interactions of the two mindsets for the food retailer in connection to food waste reduction initiatives:

- The Win-Win Loop promotes food waste reduction initiatives that offer efficiency improvements that save money and encourage further investment in sustainable initiatives aligned with profit maximization.
- The Diminishing Returns Loop balances efficiency improvements by noting the point where further efforts yield limited benefits and thus, slowing down the Win-Win Loop.
- The Cost Barrier Loop highlights financial challenges associated with non-profit-generating initiatives like food donation. This complexity demonstrates the interplay between sustainability, profitability, and the challenges posed by diminishing returns and cost barriers.

MISSED OPPORTUNITIES DUE TO RETAILERS' GOAL CONFLICTS

The current emphasis on profit maximization in food retailing system is a major barrier to reducing consumer and retailer food waste. This is due to three self-reinforcing cycles:

- The Growth Loop, where sales-focused marketing strategies prioritize revenue over sustainability.

- The Over-purchase Loop, where promotions lead consumers to buy and waste more food, challenging efforts to cut waste without affecting profits.
- The Overstocking Loop, where retailers stock excessively to maintain an image of abundance, resulting in unsold food waste.

Together, these patterns highlight the systemic obstacles to minimizing food waste, revealing how entrenched business models and consumer expectations contribute to the issue, often at the expense of sustainable and efficient practices.

COLLECTIVE-LEVEL HINDERERS OF FOOD WASTE REDUCTION

Two systemic barriers to food waste reduction in retail are identified:

- The Externalization loop, where retailers pass costs onto society to keep prices low, leading to environmental harm.
- The Collective Action Problem loop, where conflicting interests among actors prevent effective collaboration on waste reduction initiatives.

These loops indicate the need for regulatory intervention and a shift towards collaborative, sustainable business practices to overcome these challenges.

IMPLICATIONS FOR PRACTICE AND FUTHER RESEARCH



THEORETICAL IMPLICATIONS

The research proposes a shift in how sustainability is understood and studied in service research. It advocates for a systemic approach that considers the interdependencies between different, nested systems. The study highlights the dynamic nature of sustainability, which requires continuous evaluation and adaptation in changing service contexts. By integrating system dynamics, the research emphasizes the role of mindsets and feedback mechanisms in shaping service provision outcomes. It challenges conventional approaches to sustainability and calls for transformative changes in the structural elements driving system behaviors.

The findings also emphasize the need for a holistic view of sustainability that transcends boundaries and considers the interconnectedness of systems at both micro and macro levels. The research has theoretical implications for understanding service sustainability and underscores the importance of considering system dynamics for meaningful progress towards sustainability goals.

PRACTICAL IMPLICATIONS

The study has provided an integrative model that highlights the relationships between different mechanisms in the food system and the collective responsibility of all stakeholders. Policymakers and food retailers can use this model to foster innovation and implement both immediate and long-term solutions for sustainable service provisioning. This research has practical implications for achieving sustainability goals in the food industry. For example, our findings suggest that strategies for reducing food waste should vary depending on the type of feedback loop that food retailers are dealing with.

ACADEMIC REFERENCE

Koskela-Huotari, K., Svärd, K., Williams, H., Trischler, J. and Wikström, F. (2024) Drivers and Hinderers of (Un)Sustainable Service: A Systems View. Journal of Service Research, 27(1), 106-123.