

Opportunities For Enhancing Company Performance Through Food Waste Reduction

Exploring Coordination Mechanisms and Product Characteristics for Food Waste Reduction Principles: A Case Study in Physical Distribution

Zacharias Samuelsson, Department of Industrial Management & Logistics, LTH

The preciousness of food is being recognized by enterprises, governments and consumers creating a demand for efficient and non-wasting food supply chains in the 21st century. Food waste is directly connected to sustainability, costs and energy usage through unnecessary production and distribution of unconsumed goods. There is great potential for companies wanting to increase their performance through reducing food waste. However, coordinating today's food supply chains is a complex task with high pressure from regulations and quality requirements. How can companies form a direction in their food waste reduction initiatives?

To stay competitive, companies active in food distribution networks need to strengthen their assortment with new products as well as constantly develop how they operate their distribution network. Improving the quality of deliveries at reduced cost is key to tackle the retail trends and future uncertainties. One way towards more efficient flows is to focus on reduction of the amount of obsolete product generated in the supply chain. This waste minimization can generate benefits such as reduced costs, improved company image and reduced climate footprint.

Through a case at a study company operating a global food distribution network, this study highlights two main types of food waste occurring in the flow and strategies for reducing them. The first type identified is food waste from overstock consisting of products whose best before date has ran out before being

sold. Reducing this type of waste is exemplified in the study through strategies for increased coordination between the actors of the supply chain. Further on the setup of the supply chain and the level of responsibilities for the actors is shown to be associated with waste from products running old.

The second type of waste identified is waste stemming from compliance issues consisting of products being unsellable due to damages or quality issues. For reducing this food waste type mitigation strategies focusing on improved quality of deliveries and transparency in the supply chain is provided.

Furthermore the study put its findings into practice by developing a framework for food waste mitigation. Utilising this framework in the company case the practicality of the methodology is tested. Making the food waste mitigation framework featured in the study of value for companies wanting to make their food supply chain more efficient.

Finally the study weights and connects reasons for food waste with ways of coordinating work tasks and maps product characteristics that are of significance for different food waste causes. It shows that for the study company different reasons for food waste could be associated with certain work efforts and certain types of products. This provides focus and a base for where to start for the study company in its food waste reduction initiatives. The benefits are to be collected and similar opportunities are most likely present in other companies active in food distribution networks.