

Graduation opportunity

Improving consumer evaluations of the MIWA refillable packaging product-service system



The problem

In Europe, plastic production has reached 58 million tonnes each year and 40% of plastic was used for (single-use) packaging while only 40% of them got recycled. Today, it is clear that recycling alone is no longer enough. Stopping the waste before it happens makes more sense to retain the value and reduce waste. In the new plastic economy, a refillable packaging system is regarded as an effective product-service system solution. It offers an in-store infrastructure and encourages consumers to refill the multiple-use packaging instead of choosing single-use packaging for fast-moving consumer good.

Company partner

MIWA <https://www.miwa.eu/> (Minimize WASTE) is a Czech company that decided to make waste-free shopping a “new normal”. They have developed an in-store reusable and refillable bulk dispensers, which offer consumers a single-use packaging waste shopping experience. MIWA is currently collaborating with several researchers of IDE ([Xueqing Miao](#), [Lise Magnier](#) and [Ruth Mugge](#)) to understand how consumers perceive reusable packaging systems and to explore new opportunities to improve such systems, thereby attracting more consumers and having more environmental impact.

Project goal

During the graduation project, the student will analyse how consumers evaluate and perceive the MIWA system. To study consumer responses, an actual model of the MIWA packaging system will be provided by the company partner and will be placed in the Product Evaluation Lab to imitate a shopping atmosphere. A specific topic of interest is how consumers can be motivated to continue the use of the system and the reuse the same cup (even though it may show signs of wear in time).

Based on the analysis of the MIWA system (and other desk research), different strategies and concepts on how to improve the current system to increase adoption can be developed.

Student profile

We are looking for a student with an interest in sustainability and consumer behaviour. The student should have a strong affinity for doing research with consumers. Enthusiasm, strong analytical capabilities and an eye for detail will be beneficial. This assignment is most suitable for an SPD or a DFI student.

The project will start from **September** to define the topic and proposal, the packaging modular used in the offline experiment will be available from the middle of **October 2021 to February 2022**. The graduate student will be part of the [Circular Design Lab](#) (Delft Design Labs).

Contact If you are interested in this project, please send an email with your motivation to: X.Miao@tudelft.nl