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Post-use Design Thinking for Sustainability: A Research on an Educational Project in Industrial Design

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Design solutions for sustainable consumption and production suggest increased and improved product life spans, which not only take into account product and material durability, and resource efficiency, but also embody enduring relationships between products and users. There might be various approaches to design long-lasting products or products with increased life spans. In this paper, an original approach, the post-use design thinking, will be presented to develop enduring products and relationships for achieving sustainable consumption and production. To explore that approach, findings and conclusions from and insights into a research at the graduate level will be presented, of which primary emphasis is on the implications of the post-use design thinking for design process and product-user relationships.

This graduate research focuses on an educational project in industrial design with an emphasis on postuse design thinking. This design project was carried out in the Department of Industrial Design (ID) at the Middle East Technical University (METU) in Spring 2010, which was undertaken in collaboration with a major glass-packaging producer in Turkey. The aim of the project was to develop design solutions demonstrating the potential and the implications of post-use design thinking in the area of glass packaging (i.e. bottles and jars) for food and beverages. Mass-produced glass packaging designs were transformed into promotional products, such as candle jars and water bottles with the integration of locally made parts, accessories and surface finishing applications. The project has focused on both the use and the post-use phases of the product lifespan, which progress concurrently at the early stages of the product design and development.

The graduate research encompasses the analysis of the project outcomes and semi-structured interviews with the ID students, and the glass-packaging producer. By revealing the findings from aforementioned study, this paper will present conclusions from and insights into the following areas of research:

- Integration of the post-use design thinking into the early stages of the design process
- Contribution of this design thinking to the notion of product longevity
- The feasibility of implementing this thinking in terms of design and production

The 'post-use design thinking' attempts to integrate the potential post-use design solutions into the early stages of the product design and development process through enabling products to be reused after the fulfillment of their initial tasks. This design thinking also embraces user involvement in transforming the products into the new ones, thus it suggests enduring products that users want to keep for a long time. Consequently, based on the initial findings, this type of thinking appears to be a fresh approach towards sustainable consumption and production.