Summary

The Role of Consumers Within a Circular Economy Model

With climate change posing significant global challenges, extensive research has explored factors driving sustainable consumer behavior, particularly during the acquisition phase, such as purchasing eco-friendly products, and the disposal phase, including recycling habits. However, less attention has been given to reducing consumption—a critical factor at the heart of most environmental issues.

A circular economy advocates for a closed-loop system where products and materials are reused, repaired, or recycled to minimize waste and resource depletion. This project investigates consumers' roles in the circular economy, focusing on behaviors like secondhand purchasing and extending product lifespans. It also examines how adopting minimalist design can promote sustainable consumption.

While recycling is the final stage in the "Reduce, Reuse, Recycle" hierarchy, its limitations (e.g., material downgrading and restricted markets for recycled plastics; OECD, 2023) mean reducing and reusing are often more impactful. However, recycling remains critical for certain materials, such as paper and aluminum, which conserve natural resources and save energy compared to producing new raw materials. Recognizing this, the final project in this research focuses on the drivers of paper recycling behavior.

Through 25 experiments, this research examines the psychological and situational factors influencing sustainable behaviors across reducing, reusing, and recycling. By understanding these dynamics, the findings provide actionable insights for businesses, offering pathways to enhance consumer engagement in the circular economy and promote sustainable practices.

Level 1. Reduce
Project 1: Transformation Salience and Reduce

Prioritizing product longevity allows brands to mitigate the environmental costs of production, distribution, and disposal, offering a more sustainable alternative to the traditional linear consumption model. In response to this shift, a growing number of companies are promoting initiatives that encourage product repurposing and reuse, effectively extending their lifecycle. These efforts not only reduce waste but also align with the principles of a circular economy, which aim to keep products and materials in use for as long as possible, thereby minimizing environmental impact.

• Our findings reveal that transformation messaging (i.e., giving products a new life by transforming them) can significantly enhance how consumers perceive a product's utility. This, in turn, influences their preference for the brand and their purchase decisions.

• Transformational messaging encourages consumers to view products not just for their immediate purpose but also for their potential to deliver ongoing value and meet long-term needs. This shift in perception leads to an expectation of extended product usage. Since consumers increasingly value resourcefulness and favor products that are perceived as durable and longlasting, this expectation positively impacts how they evaluate brands and decide what to buy.

• Leveraging transformational messages can create a win-win situation by increasing consumer interest, extending product usage, and reducing environmental impact.

Level 2. Reuse
Project 2: Encouraging consumers to engage in second-hand consumption

Buying secondhand items significantly reduces the overall environmental footprint, making it vital to understand what drives consumers to choose secondhand products. This research focuses on the role of residential mobility—a socially relevant and actionable factor—in shaping consumer interest in secondhand goods.

• Residentially mobile consumers, who frequently move, tend to have more favorable responses toward brands when they offer second-hand products than residentially stable consumers, who tend to stay in one place for long time.

• Residential mobility is not just a demographic factor—it can also be triggered situationally. By framing marketing messages around the idea of mobility, businesses can make second-hand products more appealing. For example, a campaign message like "Fuel your wanderlust with our secondhand gear—perfect for those who embrace a life of mobility and adventure" can tap into consumers' sense of movement and exploration, boosting interest in second-hand purchases.

Project 3: Minimalism

Minimalist design and sustainability are closely connected, as both prioritize simplicity, efficiency, and the responsible use of resources. Minimalist products often feature clean, timeless designs that emphasize functionality over excess, reducing the need for unnecessary materials and manufacturing processes. In this research, we explore how consumers' preferences for product design differ depending on whether the product is intended for individual use (solo consumption) or shared use.

• For brands specializing in minimalist goods, emphasizing their suitability for shared experiences—such as group gatherings or family use—could increase their appeal. Conversely, for maximalist products, highlighting their value for individual, solo use might resonate more with consumers.

• Digital platforms like Meta offer even more specific targeting opportunities. For example, because many people publicly display their relationship status and married consumers often engage in shared consumption, minimalist products could be promoted directly to married users.

Level 3. Recycle

Our research demonstrates that consumers are less likely to recycle items containing private information compared to those without such information. Our study highlights an important insight: reducing the visibility of private information on documents, such as through shredding (or similar methods when shredding isn't available), significantly increases the likelihood of consumers recycling. This finding underscores the potential for targeted strategies to encourage responsible waste disposal while advancing environmental sustainability.

• For example, businesses that mail documents containing private information could prompt recipients to shred or otherwise obscure sensitive details before recycling.

• Promoting shredding and other privacy-preserving measures as standard practice not only addresses consumer concerns about information security but also supports increased paper recycling. These actions align with privacy laws while demonstrating environmental leadership, potentially setting new industry standards.