Closing the Loop: Consumer Frictions in Circular Packaging Systems

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Abstract

Circular packaging systems promise environmental benefits but depend on consumers completing a post-purchase reuse loop. This study examines if, where, and why circularity breaks down across the customer journey in a large-scale retail pilot of a reusable six-pack carrier (the retourpack). Combining store-level sales data, a survey of verified purchasers, and focus group interviews, we analyze adoption, use, and return behavior. Sales analyses show that introducing the retourpack did not alter purchase behavior, suggesting that adoption is not the primary bottleneck. Instead, survey and qualitative evidence reveal substantial post-purchase breakdowns: consumers frequently fail to return the packaging despite positive evaluations and attitudes. These breakdowns are driven by friction in everyday routines, ambiguity in deposit and return procedures, and psychological ownership that encourages repurposing over circulation. The findings demonstrate that circular systems falter not due to consumer resistance, but because the responsibility for loop completion is shifted to consumers without sufficient structural support.

Keywords: reusable packaging; circular economy; consumer behavior; field pilot; psychological ownership; difference-in-differences