Empowering Circular Economy Through Effective Waste Segregation Awareness: An Innovation-Driven Approach to Sustainable Public Engagement

Jay Bhanderi[1]✉

[1] *Wroclaw University of Economics and Business, Poland*

Abstract

Improper waste segregation remains a key challenge in the transition to a circular economy, leading to increased landfill waste and inefficiencies in recycling. This research explores how innovative awareness strategies can drive behavioural change and improve waste disposal habits. Using a theoretical approach, we analyse existing waste management models, stakeholder roles, and policy measures to develop a framework for effective public engagement. We focus on marketing-based interventions, such as customised visual guidance at disposal points and QR-code-enabled feedback, to enhance public engagement. While this study is in its early stages, it aims to lay the groundwork for future implementation and data collection to validate its impact. By analysing the role of key stakeholders, policy measures, and technology-assisted awareness, this work-in-progress research contributes to the broader discussion on improving waste management practices for a more sustainable future.

Keywords

Circular economy, Waste segregation, Public awareness, Sustainable practices, Behavioural change, Marketing innovation

Current status of the research is: Work-in-progress

Potential collaboration with Authors

We are interested in collaborating with researchers, policymakers, environmental organizations, and industry experts working on waste management, behavioural change, and sustainability initiatives. We seek partners who can provide insights on policy development, stakeholder engagement, and technology-driven interventions to enhance public awareness of waste segregation. Our research provides a theoretical framework for innovative waste segregation awareness strategies, focusing on marketing interventions, stakeholder analysis, and policy recommendations. We can contribute expertise in behavioural change strategies, circular economy principles, and public engagement models, as well as collaborate on future empirical studies to test and implement our proposed approach. We welcome discussions with those interested in policy-driven solutions, real-world implementation, and interdisciplinary research that bridges social sciences, technology assessment, and environmental sustainability.