

## ABSTRACT

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*CLEIN is a mobile application integrated with Dropbox to address the growing issue of plastic bottle waste in the environment. The CLEIN mobile app is empowering communities to take action against plastic waste by transforming it into valuable rewards through a points system. To assess the effectiveness, efficiency, and user satisfaction of the CLEIN mobile app, researchers used the System Usability Scale (SUS) and Time-Based Efficiency Analysis. This approach evaluated the success rate of 22 testers in completing tasks on the CLEIN prototype by calculating their Screen Usability Score (SCUS) using the formula provided by the Maze-App tools. Data collection was carried out through an online questionnaire. The score of 74 falls within the "C" grade range (typically 68-80) on the System Usability Scale (SUS) but is still considered "good" based on the adjective ratings. This suggests that users generally perceive the app as user-friendly, indicating its suitability for implementation and adoption within the community. However, there might be room for improvement. Users appreciated the app's intuitive, aesthetically pleasing design and user-friendly functionality. To further enhance usability and attractiveness, the CLEIN app can consider several recommendations, such as developing additional features and expanding the types of waste that can be redeemed for points.*

*Keywords: User experience, System Usability Scale, Usability testing, Waste Management, Sustainability, Mobile Application*