

ABSTRACT

Waste production in Indonesia continues to increase yet efforts to reduce and manage it remain far from meeting national target. One of the key issues is the management system at the Temporary Disposal Site (TPS) level which is still fragmented and inconsistent. This contributes to the accumulation of waste, making it difficult to optimize waste processing. Redooceit, a community-based waste management startup in Bandung Regency, aims to address this problem by partnering with local TPS units. However, their current manual and scattered approach to data recording and management reduces operational efficiency and responsiveness. This study aims to design and implement a centralized, web-based waste management information system to support Redooceit in managing, monitoring, and reporting TPS operations more effectively.

The system was developed using the iterative incremental method, with features implemented in stages. Testing was conducted through User acceptance testing (UAT) and system performance testing using load testing techniques. The results of the study showed that the system successfully met user needs, with a 100% success rate and a UAT score of 95.7%. Load testing confirmed that the system could handle real-world operational loads. Stakeholder surveys also show that the system is effective in simplifying the monitoring, reporting, data control, and eliminating manual processes between TPS officers. Overall, the system helps improve work efficiency and has the potential to be implemented in other areas.

Keywords: information system, iterative incremental, Redooceit, TPS, website