

ABSTRACT

Waste is a serious problem faced by many countries, including Indonesia. With a total national waste production reaching 36,113,922.58 tons in 2023, Indonesia is categorized as one of the largest waste-producing countries in the world. If not properly managed, the large amount of waste will cause significant issues that not only burden the government but also impact society across various sectors. To prevent such problems, the most critical aspect to consider is the waste management system. Currently, Indonesia still employs a conventional door-to-door waste collection system. This conventional waste management system is considered not good due to significant vulnerabilities. One of the biggest challenges in the conventional system is the poor flow of information. In this system, the flow of information depends heavily on the individuals and facilities involved in the waste management process. Consequently, if any issues arise with the people or facilities involved, the waste management system may fail, leading to substantial losses. A concrete example is the fire incident at the Sarimukti landfill in West Java. This fire disrupted the flow of information regarding the disposal of household waste to the landfill. This situation has prompted the design of a User Interface and User Experience for a household waste transportation management application named Wasteaways using the Design Thinking method. The designed application facilitates the flow of information from upstream to downstream. With features such as View Schedule, New Updates, Request Collection, Feedback, and Insight, the application provides direct information related to household waste management and transportation. After testing using the System Usability Scale method, a final score of 86.5 was achieved, which falls under the adjective rating of Best Imagineable and a grade scale of B, indicating that the application design meets the users' needs and expectations.

Keywords: Waste Management System, Information System, User Interface, User Experience, Household Waste Management Application, Design Thinking.