ABSTRACT

Waste is a serious issue that significantly affects environmental quality and public health. According to data from the Ministry of Environment and Forestry (KLHK), the volume of waste in Indonesia continues to increase annually, with household waste being the primary contributor. In response to this issue, the government has established various policies, including the development of waste banks based on the 3R principles (Reduce, Reuse, Recycle). Yayasan Islam Al-Amin, located in a densely populated area, faces similar challenges, where waste accumulation disrupts activities and poses environmental risks. To address this, the foundation established a waste bank division in collaboration with the community and local government to manage recyclable waste. However, the bank's manual operational process leads to errors in recording and unsatisfactory service. Therefore, the foundation initiated the development of a web-based information system using the SDLC Waterfall model to automate all processes, including waste recording, collection, and exchange. The Waterfall model was chosen due to its suitability for projects with well-defined and stable requirements. The results of this study are a Laravel-based information system website named "AWAB" that is able to make requests for pickup, recording and points for customers of the Al-Amin Islamic Foundation Bank. This innovation is able to enhance waste management process while increasing public awareness of environmental cleanliness.

Keyword : ***Waste, Waste Bank, Environmental Management, SDLC Waterfall, Information System, 3R, Automation.***