## **ABSTRACT**

Indonesia faces significant challenges in waste management, such as rapid population growth and inadequate infrastructure. Bank Sampah Bersinar is one of the waste management projects experiencing issues with customer data management, waste price transparency, selection of marketable waste, future waste price projections, and customer registration systems. This study develops a solution to these problems by enhancing the specifications of the Bank Sampah Bersinar website. The development process includes dataset collection, machine learning algorithm selection, model training, website integration, and application testing. The aim of enhancing the website specifications is to address the current limitations and provide better solutions for users. Application testing was conducted through beta testing, User Acceptance Testing (UAT), and response time testing. The test results show that the specification enhancements have successfully improved the functionality and performance of the Bank Sampah Bersinar website.

Keywords: Waste Management, Waste Bank, Website Specifications, Application Testing.