

ABSTRACT

Waste management problems in West Java are increasing due to urbanization and the low practice of domestic waste sorting. In fact, regulations such as West Java Provincial Regulation No. 12 of 2010 and Ministry of Environment and Forestry Regulation No. 14 of 2021 have mandated waste sorting at source, and initiatives like the “No Sorting, No Collection” policy have also started to be implemented. However, the implementation of these policies remains uneven and is not yet supported by practical service systems at the community level. In Sukapura Village, Bandung Regency, 64% of households still do not segregate their waste due to a lack of education, busy routines, and limited access to segregated waste transportation services.

As a response to these challenges, this research designs a domestic waste-sorting startup business model called “PilahAja” using the Lean Canvas method. The design process involved literature review, field observation, interviews with 10 early adopters, and validation of user problems and solutions. A digital prototype was also developed to test the service features and integration with waste-sorting activities. The evaluation also considered the potential collaboration with stakeholders such as waste banks, neighborhood waste collectors, and local logistics platforms to strengthen business operations.

The results showed that the community highly welcomed PilahAja, which offers three main services as solutions, such as Pilah Tuntas (sorting by partners), Angkut Aja (transportation of segregated waste to waste banks), and education through the app. The main customer segment is households and individuals in West Java who lack the time or access to sort and dispose of their waste independently. The unique value proposition offered is “the most practical solution to sort and dispose of waste in one service.” Revenue streams come from subscriptions, platform service fees, and revenue from selling segregated waste, while the cost structure includes app development, partner operations, and marketing expenses.

Keywords — domestic waste, startup, Lean Canvas