An E-Waste Management Information System to Connect E-Waste Generators to E-Waste Recyclers

ICED21- Africa Design Workshop Abstract by Kipketer Brian Kibet Strathmore University Brian.kipketer@strathmore.edu

The Kenyan National government has acknowledged that the country produces more than 4000 tons of waste each day. This waste includes all kinds of materials that are being catered for, handled, and recycled in various ways. However, one type of waste is creeping behind our backs and will soon be a pain if the situation is not dealt with. E-Waste is a growing problem that needs attention. More and more every day, citizens are buying devices and gadgets. However, disposing of their previous devices is not being handled well. Some of these devices are made with harmful components which pose as a health risk for the handlers and the communities living close to where these materials are disposed. Furthermore, this e-waste can tamper with the ecological balance of the cities which actively contributes to pollution. The current e-waste collection systems are not well structured as it still is a relatively new concept in the country. Citizens are not very familiar about places they could recycle their e-waste. With the current rate at which electronic products are being purchased, e-waste will soon be a thorn in our flesh that we just cannot ignore.

The best solution to address this challenge is recycling the e-waste produced. Nearly 50% of ewaste produced come from still functioning devices that have just become obsolete over time courtesy ever changing developments in the technology industry. Mobile Phones, Computers, Cables and Refrigerators are the biggest culprit since people tend to change this products' often. The proposed solution will be to create an Information System where users will be able to sell their e-waste by posting the specific e-waste product on the system citing the type of material they would like to be recycled. The recyclers on the system, on the other hand, will be able to access the system and view the e-waste product and if they require the material, they can directly make a purchase for the materials on the system. This system will be able to solve the e-waste recycling problems and give the public an opportunity to earn from recycling.