WEEE Management: Approach of Reverse Logistics at Higher Education Institutions

Luis Augusto Valencia Rivera
Engineering Faculty
Universidad Santiago de Cali
Cali, Colombia
luis.valencia13@usc.edu.co

Claudia Cecilia Peña Montoya, Ph.D.
Engineering Faculty
Universidad Santiago de Cali
Cali, Colombia
claudiapena@usc.edu.co

Abstract
Waste of Electrical and Electronic Equipment (WEEE) is growing more than urban solid waste generating impacts for environment and human health. Due to development of Information and Communication Technology (ICT), the Higher Education Institutions (HIE) have adopted measures to correctly manage WEEE, as HIE contribute to growth of WEEE by replacing and/or disposing equipment to strengthen and satisfy institutional operations. The objective of this article is to propose an institutional framework related to Reverse Logistics (RL) for the management of RAEE. The Study of Times and Value Stream Mapping was conducted to establish the connection of agents involved in the management. Results show the potential HIE have to strengthen decision making process through RL obtaining economics and environmental benefits.

Keywords
Waste of Electrical and Electronic Equipment (WEEE), Reverse Logistics (RL), Higher Institutions of Education (HIE), Information and Communication Technology (ICT), Study of Times, Value Stream Mapping (VSM).

Biography
Luis Augusto Valencia Rivera is an Industrial Engineering Student at Universidad Santiago de Cali University, Cali (Colombia); member of IDEAS research group. He is a leader among his peers and currently he is training as a young researcher in the field of reverse logistics.

Claudia Cecilia Peña Montoya is an Industrial Engineer from Universidad Autónoma de Occidente, Cali (Colombia), Magister in Management Lancaster University, United Kingdom. Doctorate in Engineering Universidad del Valle, Cali (Colombia). She is currently the head of the Master degree in Industrial Engineering at the Universidad Santiago de Cali and leader of the IDEAS research group. She has worked in the productive sector in logistics and operations area. She is researcher and fulltime lecturer in logistics, quality management, operations management and reverse logistics.