INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH & DEVELOPMENT

ISSN 2278 – 0211 (Online)

E-Waste Management at Egerton University Library, Njoro Campus, Kenya

Sally Kiplagat
Senior Library Assistant, Egerton University, Egerton, Nakuru, Kenya
Damaris Odero
Senior Lecturer, Department of Library, Records Management and Information Studies, School of Information Science, Moi University, Eldoret, Kenya
Sirma Buigutt
Lecturer, Department of Publishing and Media Studies, School of Information Science, Moi University, Eldoret, Kenya

Abstract:
Electronic waste (e-waste) comprises of discarded computers, office electronic equipment, electronic entertainment devices, mobile phones, television sets and refrigerators. They include electronics equipment that are destined for reuse, resale, salvage, recycle or disposal because they are either old, have reached end-of-life cycle or have ceased to be of any value to their owners. The aim of the study was to establish the state of e-waste management at Egerton University Library for the purposes of promoting conducive and safe working environment for the staff and students. Sustainability helix model was adopted as the theoretical framework. Purposive sampling was used to obtain a sample of 50 respondents from the University Library. Other respondents included the HoDs of Departments of ICT, Procurement and Environmental Science. Data was collected using questionnaires, interviews and observation. Survey research paradigm was used. Tables and texts were used to present the data. Qualitative data analysis method was used to analyze the data. The study established that generation of e-waste is inevitable and libraries and information centres and users of electronics must find a suitable framework that ensures efficient and effective management of all resulting e-wastes. The study proposed sustainability helix model that explains a comprehensive response for dealing with e-waste. The model indicates that upper management support is necessary and the adoption of a formal e-waste policy that would introduce guidelines for responsible management of e-wastes from all premises.

Keywords: *E-waste, E-waste Management, Egerton University Library, Kenya*

1. Introduction

Rapid changes in technology, including changes in media such as tapes, software, MP3, falling prices, and planned obsolescence have resulted in a fast-growing surplus of electronic waste around the globe. There is a dropping lifespan of electronic and electrical products, high consumption of these products, low recycling rates and illegal trans-boundary movement from developed to developing countries (Puckett et al., 2002; Brigden et al., 2005; Deutsche Umwelthilfe, 2007; Cobbing, 2008) as cited by (Victor and Kumar, 2012). All these facts have triggered the disposal of electronic goods in a planned obsolescence manner and an increasing scientific and political interest for how to safely dispose-off and recycle waste Electrical and Electronic Equipment (WEEE). Solutions have been proposed from the perspective of new industrial product designs, manufacturing and recycling philosophies, for example, the extended producer responsibility (EPR) and various other green procurement policies (Victor and Kumar, 2012).

Electronic equipment such as computers including their peripherals, printers, scanners, photocopiers and projectors are greatly used in libraries today. They are used for information sharing and communication, management and administrative functions, information processing (cataloguing and classification), provision of library services (circulation, selective dissemination of information, current awareness services), acquisition and information storage (databases). Most of these information and communication technologies (ICTs) lose their functionality so fast due to either obsolescence or non-reparable nature and, hence become e-waste. This calls for their disposal because libraries are growing organisms and, therefore, luck space. Secondly, storing WEEE for long within a working environment poses health problems to the people due to lead poisoning and various side effects caused by heavy metals. However, disposal of WEEE is a problem to most institutions due to lack of functional disposal policies and where to dispose them.

The purpose of this research is to consider possible solutions to e-waste management and disposal at Egerton University Library. This is basically because e-waste is the fastest growing waste stream world- wide and a key waste stream under the Basel Convention (www.basel.int). Failure to deal with disposal of electrical and electronic equipment (EEE) properly presents a serious environmental and health challenge for many countries. In Kenya, for example, NEMA observes three major negative impacts. Firstly, environmental