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ABSTRACT

The vast amount of information brought about by the use of Information Technologies can sometimes pose a challenge to decision makers about the relevance and effectiveness of certain information. This paper proposes a Mobile Decision Support System (MDSS) suitable for Higher Learning institution. To arrive to the proposed design, researchers used traditional research techniques such a questionnaire and interview to understand the way decision makers operate in their respective organizations. Using four higher learning institutions located in Dar es Salaam as case study, data were collected, digitized and analyzed. Results showed that despite having access to computers and other forms of information technologies, most decision makers rely on tradition methods such word of mouth, document review and meetings to arrive to most of their decisions. Many participants expressed their skepticism on the state of the information and communication technologies (ICT) infrastructures as some turned to their subordinates and offline sources as their convenient ways to gather information.

KEYWORDS
Dss, Mdss, Mobile, Social Media

INTRODUCTION

Information and Communication Technologies (ICTs) is a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information (Meeker & Wu, 2013). This broad definition of ICT includes technologies as radio, television, video, DVD, telephone, satellite systems, computer and network, hardware and software; as well as the equipment and services associated with these technologies, such as videoconferencing and electronic mail (UNESCO, 2002). But for this study, ICT can be defined as mobile based technologies used to access information and to communicate with others. These are technologies by which the information is accessed and used in electronic format through the use of smartphone or tablet. ICT plays a vital role in supporting powerful, efficient management and administration in education sector. It is specified that technology can be used right from student administration to various resources administration to strategic decision makers in an education institution (Maki, 2008).
In the last decades, support for decision making has taken a variety of forms, and as the forms enlarged, the support has become more comprehensive and integrated. Bresfeleanu and Ghisoiu (2009) identified one of the strategies is to support effective decisions through the selection and utilization of ICT in higher education. Manual system can no longer manage the current demands of management processes in Higher Learning Institution because accurate and timely data is a critical resource in decision making (Acosta, 2004). In this aspect, ICT must play an essential role to facilitate accurate and summarized data needed to facilitate decision making processes. Ready accessibility to information and knowledge and strategic use of information and knowledge would allow managers as the information users to be better decision-makers and lead their institutions to achieve their goals (Sedoyeka, 2013).

Since the beginning of the new millennia, mobile technologies have taken a huge step in every angle of our lives. More importantly, mobiles are now the most effective way to communicate and therefore, collect and access information for decision making (Sedoyeka, 2015). With the rapid rise of mobile users globally, mobile decision based systems are fast becoming the most investment in a modern organization (Ayed et al., 2015).

The process of decision making in any organization is a long, tedious, time and resource consuming system. The manual and mechanical methods are associated with heavy cost of processing, low efficiency, inconsistency, lack of integrity and long period of time in its processing so that institutions incur heavy bills in their decision-making process. However, efficiency, timeliness, consistency and integrity are associated with electronic or automatic method under which we have mobile technology (Akomolafe et. al., 2010).

This is the basic reasons why researchers inspired to conduct this research in order to determine the way information is obtaining, analyzing and interpreting by managers that have to take strategic decisions in Higher Learning Institution. The research investigated how managers use ICT in their decision making process. The research further developed a mobile decision support model that can provide support to managers of Higher Learning Institutions on better use of ICTs in their decision-making process.

This paper has six sections. After the introduction, literature review follows in section two, covering the relevant and related literature while methodology will follow in section three. In section four, findings and analysis will present the outcomes of the study conducted. After this section, a proposed MDSS that combines literature and the findings of the study into a model that can assist managers to make decisions is presented in section five. This paper will conclude in section six.

LITERATURE REVIEW

ICTs provide tools for data collection, analysis, storage and distribution to support decision making in organization. Arising from his studies of Information Technology Strategic Plan for University of Baguio, Acosta (2004) commented that, for quick and accurate decisions in higher learning institutions, managers require readily accessible and relevant information. This means ICT is now a vital tool in today’s business world providing tools for information collection, storage, and management to facilitate communication and decision making processes. The same view was observed by Haris (2012) in his study conducted at State University of Gorontalo, Indonesia. Srinivas (2011) laid some questions regarding the information in decision making such as from where information needed for decision-making can be obtained, what information needs to be taken, who has that information, why is that information being collected by the source, which component of the information will help to make a decision, and which source can provide the best information, as well as which information is available and presented.
Resource Allocation for Multi Access MIMO Systems
www.igi-global.com/article/resource-allocation-multi-access-mimo/55866?camid=4v1a

Provisioning of Multimedia Applications across Heterogeneous All-IP Networks
www.igi-global.com/chapter/provisioning-multimedia-applications-across-heterogeneous/17177?camid=4v1a