THE PERCEPTION OF TANZANIAN HIGHER LEARNING INSTITUTION'S COMMUNITY ON OPEN SOURCE SOFTWARE ADOPTION

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ABSTRACT

This project focused on finding out the perception of Tanzanian higher learning institution's community on open source software adoption. It is an attempt to reduce the current problem of pirated software in use by a number of users who cannot afford purchasing a genuine copy of proprietary software such as Microsoft products. A quantitative research was adopted to test the relationship between independent variables: Top management support, cost saving, compatibility, continuity & flexibility technical support and IS community's perception and dependent variable: Open source software adoption. A questionnaire survey was conducted to collect data from three Tanzanian higher learning institutions. Various factors of open source software adoption including IS community's perception and opportunities of open source software to higher learning institutions was examined in this study. An analysis was performed using the SPSS package to which the subsequent result of the correlations shows significant relationship between all independent variables and dependent variables, multiple regressions was also conducted. Three independent variables: Continuity & flexibility, top management support and cost saving had strong influence to the study while compatibility, technical support and IS community's perception had weak influence. Finally discussion, recommendation and conclusion were made.

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LIST OF ABBREVIATIONS

ACM: Advanced Computer Machinery

ALMC: Arusha Lutheran Medical Centre

ANOVA: Analysis of Variance

CD: Compact Disk

CSS: Closed Source Software

FOSS: Free Open Source Software

FSF: Free software Foundation

GPL: GNU Public License

HMIS: Health Management information system

HTML: Hypertext Markup Language

HTTP: Hypertext Transfer Protocol

ICT: Information and Communication Technology

IEEE: The Institute of Electrical and Electronics Engineers

IICD: International Institute for Communication and Development

CHAPTER ONE

INTRODUCTION

1 Introduction

Open source software is a computer software that comes with a license that offers users the autonomy to run the program, study, modify and redistribute copies of original or modified program for free as per open source initiative (OSI) conditions (Wheeler, 2005). There have been interests on open source software development since 1998 involving software developers from different locations and different organizations. The developers share codes to develop and refine programs that can be given away or charged little fee depending on the business model of specific software. There are different open source products ranging from operating system such as Linux, desktop applications (Open office), Internet infrastructure (Apache, SendMail) and internet applications (Mailman).

Several studies about open source has been conducted in different places, show the way organizations can benefit from adopting it as an alternative to proprietary commercial software. Many organizations adopt open source software for the purpose of cost reduction apart from the gain in autonomy for code modification offered by the open source community (West and Dedrick, 2008; Fitzgerald, 2004; West and Dedrick, 2004). Linux is one of the most adopted open source product in different organization whether public or private. The success of Linux operating system makes the concept of open source software familiar to many institutions and organizations that deal with activities related to information and

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