A STUDY ON THE CHOICE OF FREE & OPEN SOURCE SOFTWARE FOR GOVERNMENT SECTOR ENTERPRISE APPLICATIONS IN SRI LANKA

MASTER OF BUSINESS ADMINISTRATION
IN
INFORMATION TECHNOLOGY

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December 2008

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This Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration.

Department of Computer Science & Engineering

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December 2008

DECLARATION

"I certify that this thesis does not incorporate without acknowledgement, any material previously submitted for a degree or diploma in any university, to the best of my knowledge and believe it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and abstract to be made available to outside organizations"

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…… ……..

Supervisor Date

Prof. Gihan Dias

ABSTRACT

This document presents a study on the selection of software for government sector enterprise applications. Many factors could influence the choice of software in government sector enterprise applications. The research is based on the following problem: what factors influence the choice of software for government sector enterprise applications, in the Sri Lankan context.

Information systems (IS) projects in several selected government sector organizations have been studied in depth during the course of the research. Around 30% of the investigated government sector information systems projects have been found to have used FOSS. Several factors have been identified to have affected the choice of software for government sector enterprise IS. Out of these, technical compliance, cost, bidders/developers expertise and maintenance/support options were some of the most commonly indicated factors. Cost was highlighted as an important factor in a majority of the investigated IS. However, the analysis revealed that cost did not influence the choice between FOSS and proprietary software, when implementing the IS. This was quite unusual given the common perception that FOSS is used to lower costs. It was concluded from the analysis that certain other factors including bidders/developers expertise, technical compatibility with legacy proprietary systems and maintenance/support options override the cost factor, when selecting software.

Based on the analysis and conclusions, several recommendations have been made to leverage on the benefits of FOSS in government sector enterprise IS. These recommendations include ways to achieve cost advantages, especially in large scale replication. It is recommended to nurture a FOSS ecosystem and to develop internal FOSS expertise within government organizations, in order to leverage on the advantages of FOSS in government sector enterprise IS.

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Keywords: Enterprise Software, Government, Free and Open Source Software, Software Adoption.

ACKNOWLEDGEMENT

I would like to extend my heartfelt gratitude to my supervisor, Professor Gihan Dias for his invaluable guidance and constant encouragement. I would also like to thank Mrs Vishaka Nanayakkara and Dr Chandana Gamage for their guidance and advice.

This research would not have been possible if not for the sincere help of Mr. Wasantha Deshapriya , the staff at the ICT Agency and government organizations. I wish to thank them for spending their valuable time in order to make this research a success.

Finally I wish to thank my parents and family for their constant encouragement. I would especially like to thank my wife Nirasha, for bearing up with me and constantly encouraging me.

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K M S P Jayawardena

MBA/IT/07/9071

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LIST OF ABBREVIATIONS

CIO – Chief Innovation Officer

CRM – Customer Relationship Management

FOSS – Free and Open Source Software

HRM – Human Resource Management

ICTA – The ICT Agency of Sri Lanka

IS – Information System

LGN – Lanka Government Network

MIS – Management Information System

ODBC – Online Database Connection

PPP – Private Public Partnerships

SAGE – Software Architecture Group of Experts

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