AN INVESTIGATION OF THE PERCEPTION OF FREE AND OPEN SOURCE SOFTWARE (FOSS) AMONG SRI LANKAN ORGANISATIONS

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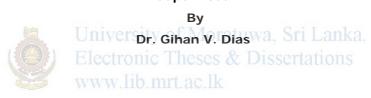
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The Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfilment of the requirement for the Degree of Master of Business Administration.

Department of Computer Science and Engineering
University of Moratuwa
December 2004

Supervised



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 belief 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 summary to be made available to outside organizations

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Nishan Weerasooriya Colombo Sri Lanka

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LIST OF ABBREVIATIONS USED

BSD Berkeley Software Design
CIO Chief Information Officer

EU European Union

FLOSS Free / Libre Open Source Software

FOSS Free / Open Source Software
FSF Free Software Foundation
FUD Fear, Uncertainty, Doubt

GNU GNU's Not Unix

GPL General Public Licence

ICT Information and Communication Technology

ICTA ICT Agency

IPR Intellectual Property Rights

IT Information Technology Luwa, Sri Lanka.

LGPL Lesser General Public Licence SSCritations

LKLUG LanKa Linux User Group

LSF Lanka Software Foundation

MIT Massachusetts Institute of Technology

OSI Open Source Initiative
OSS Open Source Software
TCO Total Cost of Ownership

TOE Technology, Organisation and Environment

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme

ABSTRACT

This study investigates the perception of Free and Open Source (FOSS) products among IT professionals within the business community of Sri Lanka.

Until recently FOSS has been branded as a hobbyist interest and as a playground for computer geeks. However, in recent years, this concept has been intensively discussed and many organisations and governments have become keen promoters and users of FOSS. These governments and businesses are now realising the dangers of locking themselves in to a single monopolistic supplier for all their software needs. In addition, the premise of high quality software with low deployment costs and the ability to customise and distribute without infringing copyrights has made FOSS products highly attractive to organisations.

The FOSS community currently has two flagship products. The *Apache web server*, which is the market leader in the web server products category, commanding over 70% of the current deployments, and the *Linux operating system* that has been having a phenomenal success in adoption rates recently. This success of FOSS products has now caught the attention of proprietary software giants like Microsoft who have started special campaigns targeted at the business community to bring fear, uncertainty and doubt, popularly known as FUD, regarding FOSS products.

Although FOSS offers many advantages, Sri Lankan IT professionals in the business community have not shown a great interest in adopting FOSS products in their organisations. This study examines the role of perception for this phenomenon.

In order to develop a framework for the study, the author studied established theories used in previous studies such as the Diffusion of innovations theory and the TOE framework, which has been used extensively to understand the technology perceptions and adoption in organisations. Informal interviews of several key IT decision makers in larger organisations helped to develop the boundaries of the project. A questionnaire, primarily based on these inputs, was developed and was sent to IT department staff at selected medium and large private sector organisations.

The study primarily followed quantitative research methodology. Qualitative techniques were used to supplement and elaborate the findings. These were primarily the interviews with key IT decision makers, which were held in the second phase.

The findings of the study suggest that there is a probable relationship between the perception of FOSS (in product technology and vendor support) and the level of usage of FOSS products. With the use of FOSS products, the organisations' perception of FOSS appears to be getting better.

Therefore, it can be argued that the most important issue to address is to correct the perception of FOSS products of non FOSS users. The FOSS community should develop strategies to build confidence levels of non FOSS users. Once organisations start using these products, they appear to change the way they perceive FOSS.

The study also invited respondents to give their strategies and plans in reducing the total cost of ownership and in handling licensing issues. This part of the study attempted to identify the role FOSS products are expected to play in their organisations in managing such challenges. By using this information, the FOSS community, especially vendors, can identify the needs and opportunities in the today's organisations and focus their activities accordingly.

