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ECONOMIC IMPACT OF SPAM IN A SRI LANKAN PERSPECTIVE

By

Haren Hasala Alwis Kodagoda

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

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DELEARATION

I do hereby declare that the work reported in this project report was exclusively carried out by me under the supervision of Dr.Ruvan Weerasinghe, Director, University of Colombo School of Computing. It describes the results of my own independent research except where due reference has been made in the text. No part of this project report has been submitted earlier or concurrently for the same or any other degree.

..... Date : 27.09.2007

(Signature of the Candidate)

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Abstract

The Economic Impact of Spam in a Sri Lankan Perspective

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This study on the economic impact of spam in a Sri Lankan perspective, attempts to evaluate the impact of spam especially on the local knowledge workers. It identifies based on previous research, that knowledge workers and organizations, ISP's and ESP's and the Government as well spammers to be the key entities playing a leading role in implications related to spam. It evaluates the impact of spam on the local knowledge workers at length, based on a survey. The study also attempts to provide a brief over view of the situation in relation to spam, with the local ISP's as well as the government policy making bodies based on a series of interviews and also provides a brief investigation in to the modus operandi of the local spammers.

The study finds that 1 in every 2.3 emails received by a local knowledge worker or 43% of the email received is spam. It also finds that an average employee receives 41.39 emails, 17.76 spam and 2.70 local oriented spam (spam of local origin, and intended to a local audience) per day. Average knowledge worker wastes around 4 minutes 49 seconds due to spam related issues per day and also loses 0.93% of his/her productivity due to spam. The study estimates that, subjected to available data, the National Annual Total Lost Productivity due to spam could stand around Rs.219 Million to Rs.446 Million. The study also makes a multitude of other findings in relation to lost band width, spam protection, the user behavior regarding spam related activities. It is seen that a surprisingly large number of local users would open and read spam.

The study identifies that there are no laws in relation to spam in Sri Lanka. It is observed that the local spammers would spam between 25,000 ~ 75,000 local email addresses and the cost per email advert ranges between 2cents and 12cents per message. While evaluating the quantifiable aspects of spam on local knowledge workers, based on these and other findings the research suggests that Sri Lanka may be or become a safe heaven of spammers, and stresses the importance of having laws, a code of ethics and a national strategy to combat spam.

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LIST OF ABBREVIATIONS

ACMA	Australian Communications and Media Authority
ESP	Email Service Provider
GB	Giga Byte(s)
ICTA	Information and Communication Technology Agency of Sri Lanka
ISP	Internet Service Provider
IT	Information Technology
KB	Kilo Byte(s)
kbps	kilo bits per second
LISPA	Lanka Internet Service Providers Association
OECD	Organization for Economic Co-operation and Development
R & D	Research and Development
ROKSO	Register Of Known Spam Operations
SBL	Spamhaus Block List
SLT	Sri Lanka Telecom
Std. Deviation	Standard Deviation
TRC	Telecommunication Regulatory Commission (of Sri Lanka)
UBE	Unsolicited Bulk Email (Spam)
XBL	Exploits Block List

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