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# A Study of Professional Ethical Behaviour of Sri Lankan Software Engineers

By

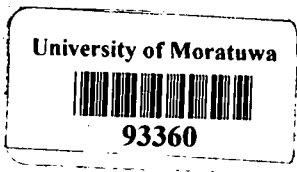
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This Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration



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## Declaration

I hereby recommend that the dissertation prepared under my supervision by Ms. I.A. Wijayasiri entitled "A Study of Professional Ethical Behaviour of Sri Lankan Software Engineers" be accepted in partial fulfilment of the requirement for the Degree of Master of Business Administration in Information Technology.

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## Abstract

Information systems have become an integral part of our lives supporting us in numerous ways, be it banking, accounting, medicine, education or any other discipline that could be complemented by the use of proper information systems. Among the group of personnel engaged in the management of information systems, software engineers in particular play a vital role as individuals who are directly involved in the creation of these systems. Consequently, software engineers could be considered as having a major accountability for the positive or negative impact of a system on its end users. Many cases have been observed in the past, of attempts at system implementations that have failed due to various reasons. Some failures have been directly attributed to flawed software engineering processes. Realizing the pivotal social role played by software engineers, the professional ethical behaviour of software engineers has become a widely discussed topic, internationally.

The previous researches on professional ethical behaviour have focused on disciplines such as Accounting, Medicine, Information Technology and Sales. In these studies, age, gender, education, experience, culture and personal attributes have been considered important as factors affecting professional ethical behaviour. Interestingly, while some researchers have observed a relationship between these factors and professional ethical behaviour, others have concluded that there is no relationship between them with regard to certain factors.

The present study analyses the impact of a selected set of factors on the professional ethical behaviour of Sri Lankan software engineers. In addition, the level of awareness of Sri Lankan software engineers of international codes of conduct and the codes of conduct of their respective organizations is also analysed.

The analysis of the data collected through a questionnaire revealed that the organizational culture seemed to have a positive correlation with the professional ethical behaviour of the Sri Lankan software engineers while, age, gender, work experience, being a member of a professional body, having followed a course on professional ethics and the level of education had no impact on it.

The awareness of the Sri Lankan software engineers of the international codes of ethics and the codes of ethics of their organizations was found to be at a low level.

The results of this research are presented and discussed analyzing their implications further. Accordingly, recommendations are made to the management services with a view to helping them promote and encourage professional ethical behaviour of software engineers in Sri Lanka.



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## Acronyms

<b>ACM</b>	- Association for Computing Machinery
<b>BCS</b>	- British Computer Society
<b>IEEE/ACM</b>	- Institute of Electrical and Electronic Engineers/Association for Computing Machinery (joint effort)
<b>IMIS</b>	- Institute for the Management Information Systems
<b>IT</b>	- Information Technology
<b>MS Excel</b>	- Microsoft Excel
<b>PEB</b>	- Professional Ethical Behaviour
<b>POC</b>	- Perceived Organizational Culture (Ethical Environment)
<b>QA</b>	- Quality Assurance
<b>SE</b>	- Software Engineer
<b>SPSS</b>	- Statistical Package for the Social Sciences



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