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STUDY OF FACTORS AFFECTING THE INCREASE OF INFORMATION COMMUNICATION TECHNOLOGY INFRASTRUCTURE MAINTENANCE COST IN THE PUBLIC SECTOR ORGANIZATIONS OF SRI LANKA - A CASE STUDY

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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 in e- Governance

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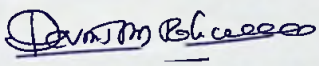
Signature:  Date: 26-04-2013

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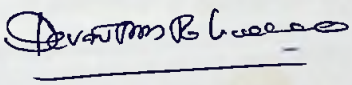
Signature:  Date: 26-04-2013

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Abstract

ICT is vital component for any organization. Over past ten years, there can be seen significant ICTI investment in public sector organizations to deliver their services to the general public. In the meantime ICTI maintenance cost of the public sector organizations have been increased due to a number of reasons. Hence, the main objective of this research is to study of the factors affecting to increase of ICTI maintenance cost in the public sector organizations.

Due to rapid change of ICT over the past two decades, the typical government institutions have been changing with respect to their business functions and maintenance cost of the ICTI has been increased over last five or six years. Therefore, it is very enthusiastic to study about the reasons for increasing of ICTI maintenance cost. It is identified that the specific objectives of this research are to study about the existing ICTI maintenance procedures in the public sector, to make aware of the officials regarding the ICTI maintenance of their institutions, to introduce the best practices for the reduction of the ICTI maintenance cost, to create a time framework with guidelines for the public sector organizations to understand how effective their ICTI and to introduce an evaluation mechanism for suppliers to evaluate their performance. The literature review revealed some factors regarding the ICTI and its maintenance and ICT supplier evaluation. Based on factors and strategies identified through the literature review and the experiences of the author, the conceptual model was built up. Based on the conceptual model, the writer made the questionnaire and were distributed among the respective officials of the selected organizations. Secondary Data was collected through the archival documents and other documents from the respective organizations. Having done a descriptive analysis with primary data and then comparative analysis with primary data and secondary data respectively. Ultimately conclusion and recommendations are made with respect to objectives and findings of the research study.

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Being a student of University of Moratuwa. I would like to recall my memory of the life I spent last two years in which I had engaged in MBA e-Governance programme in studying hard with great memories. This research thesis is compulsory for the fulfillment of my MBA degree in e-Governance.

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List of Abbreviations

BPR	Business Process Reengineering
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
CIO	Chief Innovation Officer
CMMS	Computerized Management Maintenance System
ESI	Early Supplier Involvement
GIS	Geographical Information System
HR	Human Resources
HRM	Human Resources Management
ICT	Information & Communication Technology
ICTA	Information & Communication Technology Agency
ICTI	Information & Communication Technology Infrastructure
IS	Information System
IT	Information Technology
LGN	Lanka Government Network
MCL	Maintenance Capacity Loss
NOC	Network Operations Centre
PBX	Public Branch exchange
PMO	Planned Maintenance Optimization
RCM	Reliability Centered Maintenance
RFT	Request For Tender
SaaS	Software as a Service
SBD	Standard Bidding Document
SMS	Short Message System
TQM	Total Quality Management

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