A FRAMEWORK FOR EVALUATING THE EFFECTIVENESS OF eGOVERNMENT INITIATIVES

By

L. P. H. WADUGE

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 & Engineering
University of Moratuwa
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DECLARATION

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ABSTRACT

The Government of Sri Lanka has embarked on the *e-Sri Lanka Re-Engineering Government* program, which is an Information and Communication Technology (ICT) road map, with the intention of providing efficient and effective services to its stakeholders, mainly, the citizens of the country. The implementation of eGovernment solutions necessitates organizational readiness in terms of structure and human capacity as conventional practices have failed to achieve institutional objectives desirable in today's context. eGovernment can transform the way the traditional public sector organizations work. However, the success of the program is contingent upon several factors such as leadership commitment, competent staff, financial and other resources.

In this backdrop, this research study presents an interesting Analytical Model that public-sector institutions may adopt, in evaluating the effectiveness of eGovernment implementations within government organizations in Sri Lanka.

The objective of this research was to find critical factors that influence the *effectiveness* of eGovernment initiatives in the solution implementation stage as well as in the solution operation stage, and to then formulate an evaluation model to analyze those factors at the organizational level. The key eGovernment projects and initiatives under the Ministry of Public Administration and Home Affairs have been included as the sample space to test the effectiveness factors in the analytical model. The development of this analytical model was done after extensive literature review in related areas with respect to developing countries, and through a pilot study done in the Sri Lankan organizational context.

The proposed analytical model can be used by any government agency to evaluate eGovernment projects prior to deployment and more importantly, during the operational stage. Based on this factor analysis, appropriate recommendations can be proposed to enhance and strengthen the eGovernment initiatives by considering all related factors in the implementation stage such as organizational, surrounding environmental, and other enabling factors pertaining to government organizations in

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Sri Lanka. The model features built-in iterations and feedback loops which enables systematic analysis of operational effectiveness, thereby enabling the implementation of timely corrective measures leading to continuous improvement and enhanced positive operational impact of the eGovernment solutions.

Furthermore, since the model was conceptualized and designed with Sri Lankan government organizations as the focus, it is highly relevant in the local context in comparison to the existing evaluation models that are in use elsewhere in the world. Clearly, this model would also be useful in other developing countries with government organization and government process profiles that are similar to Sri Lanka, for the purpose of evaluating their eGovernment projects systematically in order to improve their solution effectiveness.

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L. P. H. Waduge
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Abbreviations

BMD	Birth Marriage Death
BPR	Business Process Reengineering
DS	Divisional Secretariat
eBMD	Electronic Birth Marriage Death Project
eDS	Electronic Divisional Secretariat Project
eGov	Electronic Government
eGSEEM	eGovernment Solution Effectiveness Evaluation Model
eGovernment	Electronic Government
eHRM	Electronic Human Resources Management Project
ePensions	Electronic Pensions Project
ePopReg	Electronic Population Registry Project
G2C	Government to Consumer
G2B	Government to Business
G2E	Government to Employee
G2G	Government to Government
G2N	Government to Non-Profits
GIC	Government Information Centre
ICT	Information and Communication Technology
ICTA	ICT Agency of Sri Lanka
IS	Information Systems
LGN	Lanka Government Network
MPA&HA	Ministry of Public Administration and Home Affairs
NCS	National Computer Systems
SDSA	Software Development Services Approach