# FACTORS AFFECTING e-SERVICE DELIVERY IN THE PUBLIC SECTOR OF SRI LANKA

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Degree of Master of Business Administration in Information Technology



Department of Computer Science & Engineering

University of Moratuwa Sri Lanka

February 2013

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#### **ACKNOWLEDGEMENT**

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It is a great pleasure for me to complete this dissertation not only as a fulfillment of compulsory academic requirement for my MBA qualification but also as the first thesis completed by me in public sector eService delivery. In this endeavor, the outcome of this dissertation would not have been a success without the theoretical knowledge, close monitoring, guidance and supervision provided by many academic professionals attached to Computer Science and Engineering Department, University of Moratuwa. It is a great opportunity and an invaluable experience for me to receive necessary advice and academic guidance from Dr. Shahani Weerawarana, a very senior high academic professional in many research fields including Computer Science, ICT, Software engineering and eGovernment to complete this dissertation.

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#### **ABSTRACT**

Public sector eService delivery, which derived from eGovernment concept, is a novel experience to many developing countries in the world. The Government of Sri Lanka also has taken a policy decision to adopt ICT in public sector to make government service delivery more efficient and citizen centric. This research examined the factors affecting eService delivery in the public sector of Sri Lanka. In this context, research scope was confined to 16 government agencies that provide eServices through Lanka Gate Web Portal. In addition to research literature, interviews were conducted with 16 Heads of government agencies, 03 ICTA officials and 05 IT professionals in private sector to identify views and experience of them on public sector eService delivery. 66 sample respondents for pilot study and 1122 citizens for final questionnaire were selected throughout the country to represent the total population in Sri Lanka.

Based on responsibilities and IT adoption, the Government, Agencies, Citizens and Private sector IT professionals were identified as four stakeholders of eService delivery. The four-stakeholder analysis in this research revealed both positive and negative factors within their purview. The factors identified through the analysis of literature review content, interviews and questionnaires of this research, affecting eService delivery in the public sector were tested with enablers and constraints of Factor Model Theory and findings were aligned with research objectives, research questions and expected results of this thesis. It was found that, still there are many challenges and issues encountered with eService delivery and it is proposed to improve and use the identified positive factors to discourage all negatives by implementing a very strategic eService development process with the support of IT industry expertise of private sector and the commitment of public sector service delivery capabilities.

Both negative and positive factors identified in this research will replicitly be changed in the future due to human dechnological, educational and policy reforms and recommend for further research in appropriate periodic intervals.

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#### Key words

Public sector, eService delivery, Information and Communication Technology, Citizens, Government Agencies, Employees, ICTA, IT Professionals, IT Infrastructure development.

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## LIST OF ABBREVIATIONS

Abbreviation	Description
ADB	Asian Development Bank
ASPA	American Society for Public Administration
AUP	Acceptable Use Policy
BOO	Build Own Operate
BOOT	Build Own Operate Transfer
BPO	Business Process Outsourcing
BPO	Business Process Outsourcing
C2G	Citizen to Government
CDMA	Code Division Multiple Access
CEB	Ceylon Electricity Board
CERT	Computer Emergency Readiness Team
CERT/CC	Computer Emergency Readiness Team/Coordination Centre
CGR	Ceylon Government Railway
CINTEC	Council for Information Technology
CIO	Chief Information Officer
COMPOL	Communication Policy
DC	Data Centerersity of Moratuwa, Sri Lanka.
DMT	Department of Registration of Motor Traffic
DOI	Department of Registration of Motor Traffic Department of Immigration and emigration
DOL	Department of Labor
DOP	Department of Posts
DPO	Department of Police
DPR	Department of Persons Registration
DRS	Disaster Recovery Site
EAT	Electronic Travel Authority
EGOV	Electronic Government
EHRC	Equality and Human Rights Commission
EPF	Employee Provident Fund
ETF	Employee Trust Fund
EU	European Union
FEB	Foreign Employment Bureau
G2B	Government to Business
G2C	Government to Citizen
G2E	Government to Employees

G2G	Government to Government
GDP	Gross Domestic Production
GIC	Government Information Center
GOSL	Government of Sri Lanka
GVF	Government Factory
HW	Hardware
ICT	Information and Communication Technology
ICTA	Information and Communication Technology Agency
IDA	International Development Agency
IGP	Inspector General of Police
IMF	International Monetary Fund
ISP	Internet Service Provider
IT	Information Technology
ITU	International Telecommunication Union
JV	Joint Venture
KPO	Knowledge Process Outsourcing
LAN	Local Area Network
LGN	Lanka Government Network
LIFe	Lanka Interoperability Framework
MB	Mega Brieversity of Moratuwa, Sri Lanka.
VA 200	Ministry of Public Administration Dissertations
MSD 📚	Merchant Shipping Division
NARESA	Natural Resources, Energy and Science Authority
NIC	National Identity Card
NWS	National Water Supply and Drainage Board
PKI	Public Key Infrastructure
PPP	Public Private Partnership
RMV	Registration of Motor Vehicle
ROI	Return On Investment
SLCERT	Sri Lanka Computer Emergency Readiness Team
SMS	Short Message Service
STH	Small Tea Holders' Authority
SW	Software
TASS	Technical Architecture Security Standards
TRCSL	Telecommunication Regularity Commission of Sri Lanka
TV	Television
UN	United Nations

UNDP	United Nations Development Program
UNESCAP	United Nations Economic and Social Commission for Asia and
	Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHRC	United Nations Human Rights Commission
UNICEF	United Nations International Children's Emergency Fund
USD	United State Dollar
WAN	Wide Area Network
WB	World Bank
WIKI	Wikipedia
WMS	Water Management Service



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