

REFERENCES:

- Adegboyega O., Janonski T, Estevez E. & Khan I.K., 2007, Human Capacity development for e-Government.
- Okunoye A., Abiodun O. B. & Frolick M. 2007, IT Innovations and E-Service Delivery: An Exploratory Study.
- Pavlichev A., 2004, The Effects of Internal Characteristics of Municipal Government Agencies and Environmental Factors of Municipalities on the Scope and the Quality of Municipal E-Government Initiatives: Developing an Integrated Approach.
- Sharpe A. 2006, The Relationship between ICT Investment and Productivity in the Canadian Economy: A Review of the Evidence, CSLS Research Report No. 05. (online) available at <<http://www.csls.ca/reports/csls2006-05.pdf>> (accessed 12 October 2009)
- Karwal A. 2007, Effective Public Service Delivery and e-Governance: Who Drives Whom.
- Victorian Auditor General's Office, Australia, 2008, Investing Smarter in ICT: Turning Principles into Practice.
- Public Employees Digital Government Task Force, 2002, Digital Government and Technological Change: The Impact on Public Employees and Quality Public Service. Available at <<http://www.aft.org>> [Accessed 13 October 2009]
- Baldwin J. & Sabourin D., 2001, "Impact of the Adoption of Advanced Information and Communication Technologies on Firm Performance in the Canadian Manufacturing Sector," Statistics Canada, Analytical Studies Branch – Research Paper Series 11F0019MIE, No. 174.
- Bhatnagar, S. 2004, e-Government, From Vision to Implementation, A practical Guide with case studies: Sage Publications, New Delhi.
- Jaeger B., 2009, User Driven Innovation in the Public Service Delivery.
- Brynjolfsson, E. & Hitt L., 2000, "Beyond Computation: Information Technology, Organizational Transformation and Business Performance," *Journal of Economic Perspectives*, Vol. 14, No. 4, p. 23-48.
- CIO University report of Employers Organization for Local Government, Skills and Development: e-Skills Planner, Available at http://www.lg-employers.gov.uk/skills/eskillsplanner/skills_map.html [Accessed 10 December 2009]
- Codagnone C. 2008, Editorial, European Journal of e-Practice, issue No. 4, August 2008 – ISSN 1988 625X

Dawes, Sharon S., Theresa A. P. & Stephanie S., 2004, Leadership for a Networked World: Strategic Diagnosis for Government: Getting Your Bearings in the Information Age. University of Albany, SUNY: Center for Technology in Government

Department of Public Administration, Faculty of Management Studies & Commerce, University of Sri Jayawardenepura , 2009, Evolution of Public Administrative System in Sri Lanka.

e-DS Project - Extract from the ICTA Web Site, Available at www.icta.lk [Accessed 10 November 2010]

E-government Council of Europe, (online) Available at <http://www.coe.int/T/E/Com/Files/Themes/e-voting/definition.asp> [Accessed 11 November 2010]

7th Global Forum on Reinventing Government. Building Trust in Government, Excellence and leadership in the Public Service: The Role of Education and Training. 26-29 June 2007, Vienna, Austria. UN, New York, 2007.

UN Department of Economic and Social Affairs and International Association of Schools and Institutes of Administration., 2007. UN Publication No. ST/ESA/PAD/SER.E/.

Kamuzora F. 2003, Enhancing Human Resources Productivity Using Information and Communication Technologies: Opportunities and Challenges for Tanzania, A Term Paper, Mzumbe University Tanzania

Australian Government, 2004, Future Challenges for E-Government Available at < [http://www.agimo.gov.au/publications/ egovt_challenges](http://www.agimo.gov.au/publications/egovt_challenges) > [Accessed 13 November 2010]

Gilmore & D'Souza, 2006, Service excellence in e-governance issues: An Indian Case Study.

Gupta, M. P., Kumar, P. & Bhattacharya, J. 2004, Government Online, Opportunities and Challenges. Tata Macgraw-Hill, New Delhi, pp.564-570

Hanna, N. K., 2006, From Envisioning to Designing e Sri Lanka (Vol-1): Joining the Information Services Economy. Washington, DC: World Bank.

Hanna, N. K.a, 2007, Transforming Government and Empowering Communities (Vol-2): The Experience of Sri Lanka.. Washington, DC: World Bank.

Hanna, N. K.b, 2007, From Envisioning to Designing e-Development: The Experience of Sri Lanka. Directions in Development Series. Washington, DC: World Bank.

Heeks, R. 2001, Understanding e-Governance for Development, iGovernment working paper series, Paper No. 11, Institute for development Policy and Management, University of Manchester. Available at http://www.sed.manchester.ac.uk/idpm/publications/wp/igov_wp1.htm [Accessed November 08, 2010]

Heeks, R. 2003, "Most eGovernment-for-Development projects fail: How can risks be reduced?", iGovernment Working Paper Series, Paper No.14. Available at http://www.sed.manchester.ac.uk/idpm/research/publications/wp/igovernment/igov_wp14.htm [Accessed November 10, 2010]

Heeks, R. 2006, "Improving the National and International Measurement, Evaluation and Comparison of eGovernment", iGovernment Working Paper Series, Paper No. 18.

Heeks, R. & Arun, S., 2006, Social outsourcing as development tool: outsourcing to social enterprises for poverty reduction and women's empowerment in Kerala. Proceedings of SDA Annual Conference, Reading, UK, 11, November.

Australia Government. Interacting with Government: Australians' use of and satisfaction with e-Government Services. Available at http://www.agimo.gov.au/publications/2005/june/e-government_services [Accessed November 9, 2010]

Brodar K., Klacmer M.C., & Pihir I., 2002, Impact of ICT on the Organizational Structure Elements: Case of the Varazdin County, A Working Paper by Faculty of Organization and Informatics, University of Zagreb.

Malikova L. & Staronova K., 2005, Innovation in the Public Sector-Case Study Analysis.  University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations. www.lib.mrt.ac.lk

Perera M., 2010, e.Governance, ICTA Presentation.

Scott M., Gordan W., Hughes M., 2004, A Click And Bricks Strategy For eGovernment.

Kakabadse, N.K., Kakabadse A., Kouzmin A., 2002, After the Re-Engineering: Rehabilitating the ICT Factor in Strategic Organizational Change through Outsourcing. London.

Nalinisekera, 2010, ICTA Presentation at CIO Conference on Introduction to CIO Evaluation Process.

Sukasame N., 2006, E-Service Quality: A Paradigm for Competitive Success of E-Commerce Entrepreneurs.

Eynon R., 2007, Breaking Barriers to eGovernment: *Overcoming obstacles to improving European public services. Case Study Report.* Prepared for the eGovernment Unit, DG Information Society and Media, European Commission, Project Manager, Oxford Internet Institute-University of Oxford

Devapura R., 2009, ICTA Presentation on Enabling Environment for e/m Government-ICT Infrastructure and Interoperability.

Rogers, W.O. O. 2000, 'Electronic Governance: Re-inventing Good Governance', Commonwealth Secretariat, London. Available at <http://www1.worldbank.org/publicsector/egov/Okot-Uma.pdf> [Accessed November 10, 2010]

O'Neill, R.R. 2009, E-Government: Transformation of Public Governance in New Zealand

Rudd T. F. and Schillewaert N., 1999. Organizations Innovation Adoption.

Karunasena S., 2010, ICTA Presentation on Policies for Connected Government and e-Services

Department of Financial Administration, Australian Government Information Management Office. 2006, Service Delivery Capacity Model : Delivering Australian Government Services. Available at <http://www.dcita.gov.au/cca> [Accessed November 11 2010]

Sharon S. D., Bloniarz P.A., Connelly D.R., Kristine L. K., and Perdo T.A., 1999, Four Realities of IT Innovation in Government, *The Public Manager*, Vol. 28.

Gera S. and Gu W., 2004, The Effect of Organizational Innovation and Communications Technology on Firm Performance. *International Productivity Monitor*.

Department of Economic and Social Affairs (DESA), United Nations. Sri Lanka Public Administration Country Profile, 2004, Division for Public Administration and Development Management (DPADM). The Human Factor in Capacity-Building for Development - Note by the Secretariat - UN Economic and Social Council-Committee of Experts on Public Administration, Eighth Session- 2009. E/c.16/2009/2

Hempell T., and Zwick T., 2005, Technology Use, Organisational Flexibility and Innovation: Evidence for Germany Discussion Paper No. 05-57, Available at <http://www.econstor.eu/dspace/bitstream/10419/24154/1/dp0557.pdf> [Accessed November 12 2010]

Australian Government. Transforming Government Volume 1: Achievements in e-Government. Available at <http://www.agimo.gov.au/publications/2003/06/transform> [Accessed November 12 2010]

Australian Government. Transforming Government Volume 2: Enhancing Productivity. http://www.agimo.gov.au/publications/2005/04/enhancing_productivity. [Accessed November 12, 2010]

Turcotte, J. and Rennison L.W., 2004, "The Link between Technology Use, Human Capital, Productivity and Wages: Firm-level Evidence," *International Productivity Monitor*, Number 9, Fall.

UN Report for 13th Meeting of the Intergovernmental Committee of Experts (ICF) on "Tracking Progress on Implementing ICTs for Development in Eastern Africa".

Deshapriya W. 2010, ICTA Presentation at CIO Conference on e-Gov. Policy.

World Bank, 2004, Building Blocks of e-Governments: Lessons from Developing Countries, Development Economics Vice Presidency and Poverty Reduction and Economic Management Network (PREM Notes for Public Sector), No. 91

Yin, R. K., 2003, Case Study Research: Design and Methods (3rd Edition), Thousand Oaks, CA: Sage.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

APPENDIX 1: QUESTIONNAIRE

Dear Sir/ Madam,

I am a postgraduate student of the University of Moratuwa, Department of Computer Science & Engineering engaged in the research on “Impact of Training on Improved e-Government Service Delivery from the Divisional Secretariat in Sri Lanka. A Comparative Study” as a fulfillment of Master of Business Administration (MBA e-Governance) Programme.

I would appreciate if you could spare few minutes of your precious time to fill up the questionnaire below please.

M.C.L. Rodrigo

Questionnaire for the staff of the DS office.

A) Demographic data:

A.1 Name of DS Office:



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

A.2. District:

A.3. Designation

A.4. Office Unit: Please use () to fill the following.

1	Administration/ Establishment	<input type="checkbox"/>
2	Land	<input type="checkbox"/>
3	Social Welfare Services	<input type="checkbox"/>
4	Accounts/ Finance	<input type="checkbox"/>
5	Samurdhi	<input type="checkbox"/>
6	Planning	<input type="checkbox"/>
7	Other (specify)	<input type="checkbox"/>
8	All Above	<input type="checkbox"/>

A.5. Service period in the present office:

1	Less than 2 years	
2	Between 2 - 4 years	
3	Between 4 - 6 years	
4	Between 6 - 8 years	
5	Between 8 - 10 years	
6	More than 10 years	

A.6. What is your age?

1	Less than 25 years	
2	26 – 35 years	
3	36 – 45 years	
4	46 – 54 years	
5	>55 years	



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

A.7 What are your IT qualifications?

1	IT Degree	
2	Diploma in IT	
3	Certificate Course	
4	Practical knowledge	
5	Other (Please specify)	

B. IT training:

B.1 Have you had any IT related training?

YES	
NO	

If YES,

B.2 No. of ICT training programs attended:

1	Only one training program	
2	More than one program	

B.3 What are the types of training you received? (Select multiple choices)

1	Windows & MS Office	
2	Advanced MS Office	
3	Open source applications	
4	Internet & e-mailing	
5	Database management	
6	Programming	
7	Software engineering	
8	Software project management	
9	Networking	



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

B.4 Where do you use the knowledge acquired from such trainings?

1	At office work only	
2	At office and home	

B.5 For what purposes do you use the training received?

1	At front office work	
2	Word processing	
3	Spread sheet applications	
4	Database applications	
5	Accounts applications	
6	Presentations	
7	Planning activities	



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

B.6 How do you feel about the quality of training you received?

(Please circle the number which best describes how strongly you agree or disagree with each statement)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Training you received was good enough to fulfill your office usage of ICT	1	2	3	4	5
2. Training was not relevant to your office needs	1	2	3	4	5
3. You were taught theory only	1	2	3	4	5
4. Practical sessions were not enough for you	1	2	3	4	5
5. Training was in English and you found it difficult to understand	1	2	3	4	5
6. Training was good but no facility to practice at the office	1	2	3	4	5
7. I as an adult found difficulties in understanding the trainings received	1	2	3	4	5
8. I went for training only as a duty obligation	1	2	3	4	5
9. Training was on general IT and not in e-service delivery	1	2	3	4	5
10. Trainers were not qualified enough to deliver training	1	2	3	4	5



C. ICT infrastructure:

C.1 What is the type of network connectivity at your office?

ADSL	
Dial-up	
Leased line	

C.2 Are you satisfied with Internet access speed at your office?

Yes	
No	
Could be better	



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

C.3 What are the ICT infrastructure facilities at work?

(Please put () mark appropriately)

		Always	Some times	Seldom	Never
1	You have been allocated a personal computer				
2	You use computer in the pool				
3	You have access to the Internet				
4	You have access to the LGN				
5	Your access to office web site				
6	You use e-mail to communicate with other offices				
7	You are allowed to use personal e-mail at office				
8	Your office has document scanners				
9	Your office has a web mail service				

D. e-Service delivery:

D.1 What is your opinion of e-service delivery by your office?

(Please circle the number which best describes how strongly you agree or disagree with each statement)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. It enhances speed & quality of service delivery	1	2	3	4	5
2. It is complicated and takes time	1	2	3	4	5
3. It is costly for government service delivery	1	2	3	4	5
4. It is easier to work manually	1	2	3	4	5
5. Untrustworthy to depend on machines & technology	1	2	3	4	5
6. We have to start e-service delivery soon	1	2	3	4	5
7. People may not accept it	1	2	3	4	5
8. Concept is good practice is difficult	1	2	3	4	5



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

D.2 What do you think would be the challenges associated with e-service delivery?

(Please circle the number which best describes how strongly you agree or disagree with each statement)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Employees are reluctant to use ICT and prefer manual work	1	2	3	4	5
2. Employees are happy to use ICT, no directives issued	1	2	3	4	5
3. Funds are limited and not allocated for ICT infrastructure	1	2	3	4	5
4. Funds are available, allocation is problematic	1	2	3	4	5
5. Suitable connectivity is not available	1	2	3	4	5
6. Training facility is not sufficient	1	2	3	4	5
7. Failures/ break-downs in the connectivity and electricity hinder service delivery	1	2	3	4	5
8. Employees have no trust on ICT	1	2	3	4	5
9. Political will for innovations is lacking	1	2	3	4	5
10. Unit managers are not pushing ICT usage	1	2	3	4	5
11. Head of institution has no interest to push ICT usage.	1	2	3	4	5
12. e-service delivery is not a prioritized strategy of the organization	1	2	3	4	5
13. Existing ICT facilities are outdated	1	2	3	4	5
14. Facilities are sufficient, usage is insufficient	1	2	3	4	5

D.3 How familiar are you with the existing e-Government applications?

(Please circle the number which best describes how strongly you agree or disagree with each statement)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. You are familiar with ICTA and its activities	1	2	3	4	5
2. You are familiar with laws related to e-applications	1	2	3	4	5
3. You are familiar with e-government applications used by government bodies in your area	1	2	3	4	5
4. You frequently visit/ explore the Web	1	2	3	4	5
5. You frequently use LGN	1	2	3	4	5
6. You frequently use e-mail for office works	1	2	3	4	5
7. You have knowledge about e-applications in other countries	1	2	3	4	5
8. You exchange/ share information electronically with other government offices	1	2	3	4	5
9. You use only facsimile and telephone exchange /share information with other government offices	1	2	3	4	5
10. You have knowledge sharing facility at your office	1	2	3	4	5
11. You are familiar with e-procurement	1	2	3	4	5
12. e-procurement is practiced at your office	1	2	3	4	5
13. e-banking is practiced at your office	1	2	3	4	5

D.4 What impact do the following barriers have on DS office use of ICT in general?

Problems & barriers have on DS office usage of ICT in general		Impact of barrier			
		None	Some	Large	No idea
1	Errors/ defects in supplied software				
2	Lack of flexibility of ICT suppliers				
3	Lack of integration between applications				
4	Lack of ICT qualified staff in the DS office				
5	Difficult to recruit / retain ICT qualified staff				
6	Non-existence of ICT unit at the DS office				
7	DS office lacks updated ICT strategy				
8	ICT expenditure is too high				
9	Difficult to release resources for development				
10	Difficult to adjust DS office normal routines				
11	Risk of hacking, viruses or unwanted access to DS office data				
12	Insufficient standards for digital signatures				
13	Legislation and set of rules & regulations need to be adjusted				
14	Difficult to integrate existing systems with the proposed e-Government applications				
15	Lack of standards for exchange of data				
16	Lack of information security measures at the DS office				

E. Innovativeness:

E.1 What is your opinion of the relationship between HR Capacity Building and Service innovation?

(Please circle the number which best describes how strongly you agree or disagree with each statement)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. ICT is a catalyst for innovation and change in the public sector delivery process.	1	2	3	4	5
2. Leadership towards innovative approaches should be at the DS office.	1	2	3	4	5
3. Investment in ICT strongly supports innovative service delivery from DS office.	1	2	3	4	5
4. Providing the right training environment for Internet-driven innovation is a must.	1	2	3	4	5
5. There should be an IT unit at DS office to promote e-service innovation.	1	2	3	4	5
6. Innovative best practices elsewhere can help innovative practices at DS office	1	2	3	4	5
7. New and speedy ways of service delivery can be done with ICT equipped employees at DS office.	1	2	3	4	5
8. Existing ways of service delivery can be changed into new and speedy ways with ICT usage.	1	2	3	4	5