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GOVERNMENT ORGANIZATIONS EMPLOYEES SURVEY (GOES)

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Survey Final Report (Original)

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CONTENTS

ABBREVIATIONS

BMD	-	Birth, Marriage and Death (Certificates)
CIO	-	Chief Innovation Officer
DS	-	District Secretariat
DvS	-	Divisional Secretariat
FGD	-	Focus Group Discussion
G2B	-	Government-to-Business
G2C	-	Government-to-Citizen
G2E	-	Government-to-Employee
G2G	-	Government-to-Government
GIC	-	Government Information Centre
GIDC	-	Government Internet Data Center
GOES	-	Government Organizations Employees Survey
GOSL	-	Government of Sri Lanka
GOVS	-	Government Organizations Visitors Survey
ICT	-	Information and Communication Technology
ICTA	-	Information and Communication Technology Agency of Sri Lanka
ICTUGS	-	ICT Usage in Government Organizations Survey
LGN	-	Lanka Government Network
MDGs	-	Millennium Development Goals
M&E	-	Monitoring and Evaluation
PSC	-	Project Steering Committee
SPSS	-	Software Package for the Social Sciences
TOR	-	Terms of Reference

- **Citizen services**: Services provided with support of ICT facilities.
- **ICT literacy**: The ability to use word processing software, spreadsheets, email, browse the Internet and search, and the ability to organize and manage files and folders.
- **ICT services**: Activities such as hardware support, Consulting, Software support and implementation services, and web designing etc.
- **ICT workforce/personnel**: Include employees directly engaged in ICT work and those performing ICT related work.
- *Executives* are considered up to Office Assistant/Administrative officer and **Non Executives** are Management Assistants and other clerical grades.

EXECUTIVE SUMMARY

The **main objective** of this study was to assess the level of development of government staff on the understanding, usage and application of on-going ICT based applications being implemented by ICTA under its re-engineering government programme. The assessment focused on attainment of required knowledge and skills, ICT usage, awareness and usage of available government e-services, perceptions and attitudes towards using ICT facilities to improve the work processes, to provide better government services to citizens, motivation for further learning and making continuous improvements, etc.

This study is a follow-up survey and was built upon to certain extent on the design of previous survey conducted in 2007 in order to carry out a fair comparison. At the same time, this survey constitutes a rolling baseline survey because the government organizations' employees whom couldn't be surveyed during previous survey such as those in ***North and East Provinces have been covered in this survey***.

As a **conceptual model for the study**, **'**Sri Lanka e-Government Benchmarking Model / Results Chain' was developed subsequent to a review of international literature on e-government. On its basis, the identification of indicators for the study was made by jointly improving the 'Logical Framework Matrix for Re-engineering Government Programme' with the ICTA M&E Division. The primary data was collected using a structured questionnaire administered to samples of staff in executive and non-executive grades. The survey covered a county-wide cross-section of staff (totalling 581) in government organizations and included 3 ministries, 5 departments, 2 statutory organizations, 9 provincial council ministries, 9 district secretariats and 20 divisional secretariats. It was supplemented with information obtained through a series of focus group discussions conduced with the staff.

The following **conclusions** have been arrived at on the basis of the findings of the survey of government employees.

- Relatively high ICT literacy rate prevails among both the executives and non-executives.

- Relatively low proportion among those surveyed had the opportunity to attended training programs organized by ICTA; among them females were in higher proportion than males.

- An assessment of the outcomes of training revealed that benefit of training had been felt by all participants; relatively more by the non-executives than the executives.

- ICT usage in office among government employees is widespread; only 5% among the employees was not engaged in using ICT facilities for office work.

- ICT usage at home among government employees is also relatively high. However, the availability of internet connectivity as well as e-mail facility is low at home. The average time spent on the computer per week at home by the employees amounted to around 13 hours with equal proportion of the time on personal work and job related work.

- Access to internet was available (mostly in office) to majority of employees irrespective of rank and gender; close to half of them surfing the internet daily.

- Awareness of e-Sri Lanka Development Project, the role of ICTA in e-Sri Lanka Development Project and the LGN help desk were at satisfactory levels among the

employees. However, the awareness of Electronic Transactions Act, Computer Crimes Act, and e-Government Policy among the employees is generally low.

- The familiarity of the government employees with the e-services provided by the government organizations is limited to slightly more than half of them. Among the employees who are familiar with government e-services, generally executives had been using such services more than the non-executives. Majority of the employees who are familiar with government e-services are generally satisfied with the performance aspects of e-services.

- The awareness of the GIC website (www.gic.gov.lk) and Lanka Gate website (www.srilanka.lk) is relatively better among the executives but low among the non-executives. Frequency of use of the GIC Call Centre using "1919" by the government employees is low.

- Usage of internet by the government employees for obtaining services from the government organizations is also at a low level.

- The majority of the employees are of the opinion that the ICT is useful to improve the performance of government organizations and to provide friendly, speedy, transparent and trustworthy services.

- The government employees demonstrate positive attitudes with regard to the areas in which ICT can make the highest contribution in the government sector.

- The extent of willingness to adopt/use ICT based tasks in official duties is high among both executive officers and non-executive officers irrespective of gender.

- The major expectations of government employees on future improvement in government ICT services characterize the overall goals of e-government.

- Overwhelming majority of the government employees had affirmatively realized the achievable impacts of usage of ICT for citizens or e-government.

- Majority of the employees were in the opinion that the on-line services provided by the websites of their organizations provide convenience to the organizations.

- The constraints identified by the government employees `in implementing the re-engineering government programme activities in their organizations' focused on four distinct areas; *(i) ICT capacity development, (ii) provision of ICT infrastructure, (iii) development of soft skills, and (iv) maintenance of equipment.*

The following **recommendations** are made aimed at further improvement of the on-going implementation of the re-engineering government programme and to facilitate the achievement of envisaged outcomes and impact.

(i). Provision of further training on hardware, software, and communication techniques to the government employees.

(ii). Further provision of infrastructure facilities (hardware / software / system security / office space), after need assessment.

(iii). Implementation of change management in government organizations and develop attitudinal changes and motivational system for the employees.

(iv). Impart understanding on the importance of maintenance procedures for ICT systems in office and develop procedures for the same.

(v). Enhance among the government employees the awareness of Re-engineering Government Programme, ICT related legislations (Electronic Transactions Act and Computer Crimes Act), e-Government Policy, government websites [GIC website (www.gic.gov.lk) and Lanka Gate website (www.srilanka.lk)], and e-services of government organizations.

(vi). Popularize among the government employees the usage of internet for obtaining services from the government organizations.

(vii). Encourage the government employees to possess broadband internet / e-mail connectivity at home, possibly by provision of incentive package(s) focused on them.

(viii). Accelerate the implementation of the Re-engineering Government Programme to achieve island-wide coverage including Northern and Eastern Provinces.

List of Study Indicators and their estimates from the present survey together with the corresponding values from 2008 survey is given in the **Table** placed on next page.

LIST OF THE STUDY INDICATORS: ESTIMATED VALUES COMPARED WITH 2008 VALUES

Abbreviations: Es = Executives; NEs = Non-executives.

Indicators	Estimates of Indicators	
	GOES - 2008 (*)	GOES - 2010
OUTPUTS:		
Services to Citizen and Business:		
1. Type of tasks undertaken using office ICT facilities	➢ Preparation of letters/documents: 94% Es / 80% NEs ➢ E-mail communication within & outside office: 29% Es / 17% NEs ➢ Database handling: 44% Es / 39% NEs ➢ Data analysis: 31% Es / 25% NEs ➢ Administrative functions: 27% Es/12% NEs ➢ Service providing activities to clients: 22% Es / 23% NEs ➢ Information sharing with other organizations – 17% Es / 9% NEs (Table 4.3)	➢ Preparation of letters/documents: 73% Es / 82% NEs ➢ E-mail communication within & outside office: 56% Es / 37% NEs ➢ Database handling: 44% Es / 44% NEs ➢ Data analysis: 44% Es / 35% NEs ➢ Administrative functions: 58% Es / 26% NEs ➢ Service providing activities to clients: 23% Es / 25% NEs ➢ Information sharing with other organizations: 35% Es / 25% NEs (Figure 5.2)
Staff ICT Knowledge & Skills:		
2. ICT qualifications and skills of staff	• 66% Es / 64% NEs had formal training in ICT sector (Table 4.2) • 35% Es / 35% NEs had attended ICTA organized basic ICT skills training programs (Table 4.2) • 30% Es / 34% NEs had attained diploma level qualification or above (Table 4.2)	• 61% Es / 59% NEs (overall 60%) had formal training in ICT sector (Table 4.1) • 36% Es / 24% NEs (overall 28%) had attended training programs organized by ICTA (Table 4.2) • 52% Es / 46% NEs (overall 48%) had attended ICTA organized basic ICT foundation training programs (Table 4.3) • 24% Es / 25% NEs had attained diploma level qualification or above (Table 4.5)
3. Percent of ICT users in government institutions, disaggregated by gender	•	• Out of the workforce surveyed, 66% were ICT users in which only 6% directly engaged in ICT work and 60% use ICT for their day to day office activities. Percentage of ICT users by category of organization varies from 53% for Divisional Secretariats to 80% for Departments (Table A2.5.1 of ICTUGS Report).
4. Percent of staff in government institutions with Internet access at the office, disaggregated by gender & activity type	• Internet access in office – 81% Es / 40% NEs (Table 4.3) • Regular internet access – 63% Es / 34 % NEs (Table 4.6) • Popular purposes of use of internet by officers who access internet: (Table 4.6) E-mail – 52% Es / 49% NEs Information search – 30% Es / 37% NEs News – 8% Es / 7% NEs Education – 5% Es / 7% NEs	• Internet access in office – 90% Es / 83% NEs (Table A2.9) • Regular Internet access- 80% Es / 64% NEs (Table A2.9.1) • Popular purposes of use of internet by officers who access internet: E-mail – 45% Es / 43% NEs Information search – 42% Es / 38% NEs News – 21% Es / 17% NEs Education – 20% Es/ 15% NEs (Table A2.10)
5. Extent of usage of e-services by the employees	• Types of services used by above group (Tale 5.5) ➢ Obtaining of info. from govt. websites 62% Es / 40% NEs ➢ Making of queries from GIC: 27% Es / 15% NEs ➢ Info. sharing with govt. org. on official matters: 10% Es / 2% NEs ➢ Making of queries via e-mail from govt. org.: 18% Es / 7% NEs	• Types of services used by above group (Tale 7.2): ➢ Obtaining of info. from govt. websites 72% Es / 71% NEs ➢ Making of queries from GIC: 58% Es / 48% NEs ➢ Info. sharing with govt. org. on official matters: 47% Es / 35% NEs ➢ Making of queries via e-mail from govt. org.: 35% Es / 29% NEs
6. Attitudes and perceptions of staff towards ICT usage / delivering services by using ICT	• 70% Es / 69% NEs were with the attitude that the ICT can help to improve the performance of govt. org. in many ways (Table 4.7) • 66% Es / 74% NEs were with the perception that ICT can make the highest contribution in improving the efficiency of government sector (Table 4.8) • 60% Es / 48% NEs were highly willingness to adopt/use ICT based tasks in official duties (Table 5.9)	• 92% Es / 85% NEs were with the attitude that the ICT can help to improve the performance of govt. org. in many ways (Table 8.1) • 66% Es / 67% NEs were with the perception that ICT can make the highest contribution in improving the efficiency of government sector (Table 8.2) • 95% Es / 93% NEs were highly willingness to adopt/use ICT based tasks in official duties (Table 8.3)

Indicators	Estimates of Indicators	
	GOES - 2008 (*)	**GOES - 2010**
7. Expectations of future improvements in government IT services	• Five major expectations of the executives were (p. 44): 1. *Utilization of ICT to create an efficient & quality public sector;* 2. *Information sharing of all government organizations;* 3. *Utilization of ICT for convenience of the public*. 4. *Computerization of the services offered by Gov. Org* 5. *Provision of adequate training on ICT to govt. officers;* • Five major expectations of the non-executives were (p. 44): 1. *Utilization of ICT to create an efficient & quality public sector;* 2. *Provision of adequate training on ICT to govt. Officers* 3. *Computerization of the services offered by Gov. Org* 4. *Develop the ICT usage in govt. org* 5. *Distribution of ICT equipment & facilities by govt*	• 87% Es / 89% non-executives expect future improvements in government ICT services in the following areas (Table 8.4): 1. *Utilization of ICT to create an efficient & quality public sector;* 2. *Provision of adequate training on ICT to govt. officers;* 3. *Information sharing of all government organizations;* 4. *Utilization of ICT for convenience of the public*.
8. Degree of satisfaction of staff in government institutions on e-government services, disaggregated by gender (see also #2 under Outcomes)	• 93% Es / 94% NEs were satisfied with the govt. e-services (Table 5.6)	• Majority (nearly 80%) of the employees -- both Es and NEs – have expressed satisfaction with the ICT facilitated services provided by their organizations (Table 7.7)
Reorganized back-offices:		
9. Level of organization's capability to adopt ICT based tasks (based on employees perspective)	•	• The employees assessment with regard to organizations' capability to adopt ICT based tasks supported by the following three areas is on the overall favourable: *(i) hardware & software resources, (ii) human resource skills in ICT, and (iii) information sharing & access to information* (Table 9.5)
10. Level of organization's capability to use ICT in day-to-day tasks (based on employees perspective)	•	• The employees' assessment with regard to organizations' capability to use ICT in day-to-day tasks supported by the same above three areas is also on the overall generally favourable (Table 9.6). **Capability** / **Favorable** 1. Hardware & software resources: 73% 2. HR skills in ICT: 80% 3. Information sharing & access to information: 72%
11. Government Website assessment (based on employees perspective)	• Proportions of Es & NEs who were with the following opinions about the govt. websites (Table 5.8): *Very useful*: 39%; 38% *Useful*: 52%; 53% *Moderately useful*: 9%; 9%:	• Proportions of Es & NEs who were in the opinion that the following qualities of the govt. websites were good (Figure 7.1): *Up to date*: 59%; 67% *Easy to use & clearly written*: 78%; 83% *Designed to get things done quickly*: 78%; 80% *Designed for all kinds of people*: 35%; 36%.
OUTCOMES:		
Benefit to Citizen and Business:		
1. Level of satisfaction in use of government e-services (based on employees perspective)	• 93% Es / 94% NEs were satisfied with the govt. e-services (Table 5.6)	• 77% Es & 79% NEs satisfied with the ICT facilitated services provided by the govt. organizations (Table 7.7)
Efficient & effective		

Indicators	Estimates of Indicators	
	GOES - 2008 (*)	**GOES - 2010**
governance:		
2. Percent of government employees who perceive that on-line services had provided convenience to activities of the organizations	•	• 81% of the govt. employees surveyed perceived that on-line services had provided convenience to activities of the originations (Table 9.3) • 80% of the govt. employees were in the opinion that creation of awareness about the services and make available information, forms and circulars for download had provided convenience to activities of the originations (Table 9.4)

(*) MG Consultants (Pvt) Ltd., *Government Organizations Employees Survey: A Survey carried out for ICTA,* Battaramulla, 2008.

1. INTRODUCTION

1.1 Background

The Information and Communication Technology Agency of Sri Lanka (ICTA) (www.icta.lk), which became operational in July 2003 under the Information and Communication Technology Act (Act No. 27 of 2003), is the implementing organization for the e-Sri Lanka initiative and presently functions within the purview of the Presidential Secretariat. Under the ICT Act, ICTA was mandated to formulate and implement strategies and programmes in both the government and the private sector and pursuant thereto ICTA was instrumental in preparation of the **"e-Sri Lanka Development Project"** and its implementation since 2005.

Under the multi-donor funded e-Sri Lanka Development Project, the following six programmes are being implemented by ICTA (see also section 1.3):

1. ICT Policy, Leadership and Institutional Development Programme;
2. ICT Human Resources Development and Industry Promotion Programme;
3. Regional Telecommunications Network Programme;
4. Telecenter Development Programme;
5. Re-engineering Government Programme;
6. e-Society Development Programme.

Re-engineering Government Program is the major component of the e-Sri Lanka Development Project; with an initial fund allocation of US $ 35.2 million which amounts to 42% of the total fund allocation US $ 83 million for the e-Sri Lanka Development Project.

1.2 Government Organizations Employees Survey (GOES)

ICTA commissioned GreenTech Consultants (Pvt) Ltd, Colombo to undertake two surveys related to the re-engineering government programme of e-Sri Lanka Development Project -- a **Survey of ICT Usage in Government Organizations Survey** and a **Government Organizations Employees Survey**. In parallel with the above two surveys, commissioned by ICTA, **Government Organizations Visitors Survey (GOVS)** was also undertaken by GreenTech Consultants (Pvt) Ltd. The findings of these surveys have been documented in the following manner:

- Volume 1: Main Report: ICT Usage in Government Organizations Survey (ICTUGS) Report;
- Volume 2: Main Report: Government Organizations Employees Survey (GOES) Report;
- Volume 3: Main Report: Government Organizations Visitors Survey (GOVS) Report
- Volume 4: Report of the Assessment of Government Websites;
- Volume 5: Report of the Cost-Revenue Analysis of Government e-Services;
- Volume 6: Profiles of Eight Partner Organizations and Two Control Group Organizations[1];

This document, which constitutes the main report of **Government Organizations Employees Survey**, is organized in the following manner. Subsequent to the presentation of the study methodology in the next chapter, a profile of the respondents to the survey is outlined in chapter 3. The ICT knowledge and skills of employees surveyed and training received by them are presented in chapter 4. Chapter 5 deals with the ICT usage of employees in office and at home. The awareness among the employees on e-Sri Lanka

[1] During this assignment, the following eight (8) government organizations have been studied as partner organizations; (i) Ministry of Public Administration, (ii) Registrar General's Department, (iii) Department of Motor Traffic, (iv) Department of Labour, (v) Pensions Department, (vi) Department of Registrar of Companies, (vii) Foreign Employment Bureau, and (viii) Samurdhi Authority. For comparison purposes, Ministries of Education and Health have been studied as control group organizations.

Development Project and re-engineering government programme is presented in chapter 6 while the awareness on and satisfaction with government citizen services in chapter 7. The perception and attitudes of employees towards ICT usage for government services are presented in chapter 8 while the organization specific ICT related issues are discussed in chapter 9. The concluding chapter presents the summary of findings, study conclusions and recommendations. The report is supported by three Appendices which present (i) the survey sample selection procedure, (ii) additional statistical tables (numbered from Table A2.1 to A2.15), and (iii) the survey questionnaire.

As a forerunner to the present survey, also commissioned by ICTA, Government Organizations Employees Survey had been undertaken in first quarter of 2008 by MG Consultants (Pvt.) Ltd., with the aim of documentation of the baseline situation.[2]

1.3 e-Sri Lanka Development Project, Re-engineering Government Program and ICT HR Capacity Building Programme: In Brief

The Government of Sri Lanka (GOSL), in 2005, launched **e-Sri Lanka Development Project (the Project)** as a five year national development initiative, with the objective of using Information and Communication Technology (ICT) to foster social integration, peace, economic growth and poverty reduction. It is one of the world's pioneering ICT development initiatives

The principal development outcomes of the project are anticipated to be: (i) more effective, citizen-centred, and business-friendly government; (ii) empowerment of the rural poor, disabled, women, and youth through increased and affordable access to information and communication tools; (iii) developed leadership and skills in ICT; and (iv) employment creation through the ICT industry, ICT-enabled services, and enhanced competitiveness of user industries and services.

The **Re-engineering Government Program** pursues major improvements in GOSL's efficiency, transparency, effectiveness, and quality of services. It will expand already identified fundamental governance and public management reforms by reengineering public sector work processes for strategic use of ICT. It emphasizes: (i) client-focused rather than organization-centred processes; (ii) government accountability for service level standards to its clients; (iii) electronic sharing of data across agencies; (iv) separation of service delivery (front-end) from transaction processing (back-end) functions; (v) always-on, user-friendly, distance-neutral information and service facilities to citizens and businesses; (vi) transparency in government operations; and (viii) selective unbundling and privatization of selected activities that can be more efficiently and effectively performed by the private sector.

An objective of the **ICT Human Resources Development Programme** - another component of e-Sri Lanka Development Project and contributing to e-Re-engineering Government Program – is to equip public sector with the skills and competencies urgently needed to manage and administer forthcoming e-government projects, including Lanka Government Network (LGN) and use e-Services such as e-Foreign Employment, e-Pensions and e-Divisional Secretariat.

To structure the Capacity Building Programme, ICTA has developed a unique 'ICT Skills Framework' identifying the specific skills needed at different staff levels and categories, namely, Senior Managers, CIOs, Project Managers, IT Managers and General Staff. The

[2] MG Consultants (Pvt) Ltd., *Government Organizations Employees Survey: A Survey carried out for ICTA,* Battaramulla, 2008. (Available in: www.icta.lk.)

modules in the Framework are grouped under three categories: "General Skills", "ICT Management and Technical" and "Leadership", starting with basic ICT awareness and literacy and moving upwards towards more specialized and strategic management skills, such as strategic planning, business process re-engineering (BPR) and change management.

The achievements of the Human Resources Development Program carried out by ICTA are presented in **Table 1.1**. Accordingly, from inception, a total of 22,148 government employees had so far been trained (as of 01 November 2010) to support the Re-engineering Government Programme.

Table 1.1: Achievements of ICT Capacity Building Programme by ICTA
(as of 01 November 2010)

Details of ICT Training	
1. ICT Awareness	8,208
2. e-Citizen	6,657
3. Certification (ICDL)	5,155
4. Management & Technical	571
5. Advanced Technical Training	90
6. Joomla Training for Government Officers	30
7. Leadership	1,437
Total	**22,148**

Details of Leadership Training	
1. CIO Training	50
2. e Champion	25
3. Study Tour Estonia	10
4. Study Tour NISG	25
5. e Government workshops	802
6. MBA in e-Governance	9
7. CIO Conference	200
8. CIO Seminar on Information Security	83
9. CIO Seminar on Information Management	65
10. CIO Seminar on E-Government 2.0	25
11. CIO Seminar on Service Oriented Storage Strategies	35
12. CIO Seminar on IT Optimization in Government	65
13. ICT Skills for CIO's	43
Sub-Total	**1,437**

One of the key successes of the work of the ICTA is the development of **Policy and Procedures for ICT Usage in Government (e-Government Policy)**[3] which embodied a vision "*To adopt ICT in all its aspects to make government more efficient and effective, improve access to government services, and create a more citizen centric government".* E-Government Policy, being operationalized since January 2010, is crucial to make expected changes in the government for streamlining the internal processes as well as provision of high quality, effective and relevant e-services to citizens (G2C), business (G2B), employees (G2E), and government (G2G).

[3] E-Government Policy. ICTA, Colombo. 2010.

2. METHODOLOGY

2.1 Objectives of the Study and Key Elements of the Methodology

The **main objective** of this study was to assess the level of development of government staff on the understanding, usage and application of on-going ICT based tools being implemented by ICTA under its re-engineering government programme. The assessment focused on the attainment of required knowledge and skills, ICT usage, awareness and usage of available government citizen services, perceptions and attitudes towards using ICT facilities to improve the work processes, to provide better government services to citizens, motivation for further learning and making continuous improvements, and etc.

On one hand, this is partly a **follow-up survey** and was built upon to certain extent on the design of previous survey conducted in 2008[4] in order to carry out a fair comparison. On the other hand, the survey can be treated as **rolling baseline survey** because the government organizations' employees whom couldn't be surveyed during previous survey such as those in Northern Province have been covered in this survey.

The key elements of the methodology are depicted in **Figure 2.1** which lists the items under following aspects: assessment model; assessment scope; assessment process; instruments; sources; surveyed organizations; and assessment team.

2.2 Conceptual Model of the Study: Sri Lanka e-Government Benchmarking Model

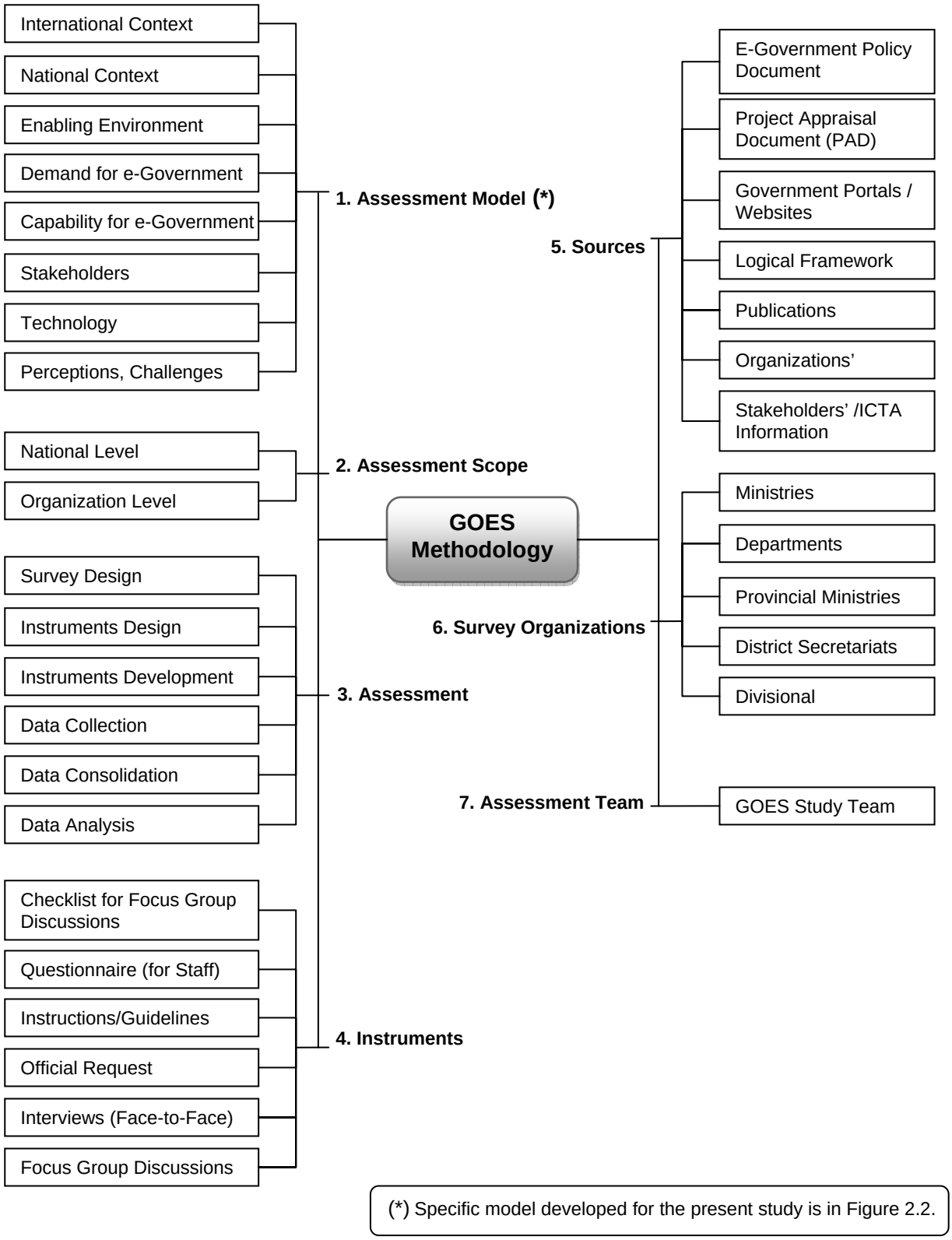
Towards arriving at a conceptual model for the study, a review of literature on e-government was undertaken. Among the models reviewed following need special mention:

(i) Richard Heeks' Full Model of e-Government Systems (Onion Ring Model)[5]
(ii) Design—Reality Gaps in e-Governance Projects[6]
(iii) Wackwella Gamage & Shahani Weerawarana's Conceptual Framework[7]
(iv) Richard Heeks illustrates the e-government value chain[8]
(v) Jeremy Millard's Generic Impact Analysis and Measurement Reference System[9]

In addition, the Results Chain for Results-Based Management[10] was also reviewed.

[4] See reference under footnote 2.
[5] Richard Heeks, *Understanding e-Governance for Development*. The *i*Government working paper series, No. 11, Development Informatics Group, Institute for Development Policy and Management, University of Manchester (2001).
[6] Richard Heeks (2003) "Causes of eGovernment Success and Failure: Design Design-Reality Gap Model" www.e-development.org/eGov/causegap.htm
[7] Wackwella Gamage C.D.N and Shahani Weerawarana. "A Critical Evaluation of e-Government Model Implementation in Sri Lanka. ICTA. Fourth International Conference on e-Government (ICEG), RMIT University, Melbourne, Australia (2008)
[8] Richard Heeks, "*Benchmarking E-government: Improving the National and International Measurement, Evaluation and Comparison of E-government*", The iGovernment working paper series, No. 18, 2006, Development Informatics Group, Institute for Development Policy and Management, University of Manchester.
[9] Jeremy Millard, eGovernment measurement for policy makers, *European Journal of e-Practice.* www.epracticejournal.eu. Nº 4 (August 2008).
[10] UNDP, *Handbook on Planning, Monitoring and Evaluating for Development Results*. New York. (2009). p. 55. Available at http://www.undp.org/eo/handbook

Figure 2.1: Key Elements of the GOES Methodology



(*) Specific model developed for the present study is in Figure 2.2.

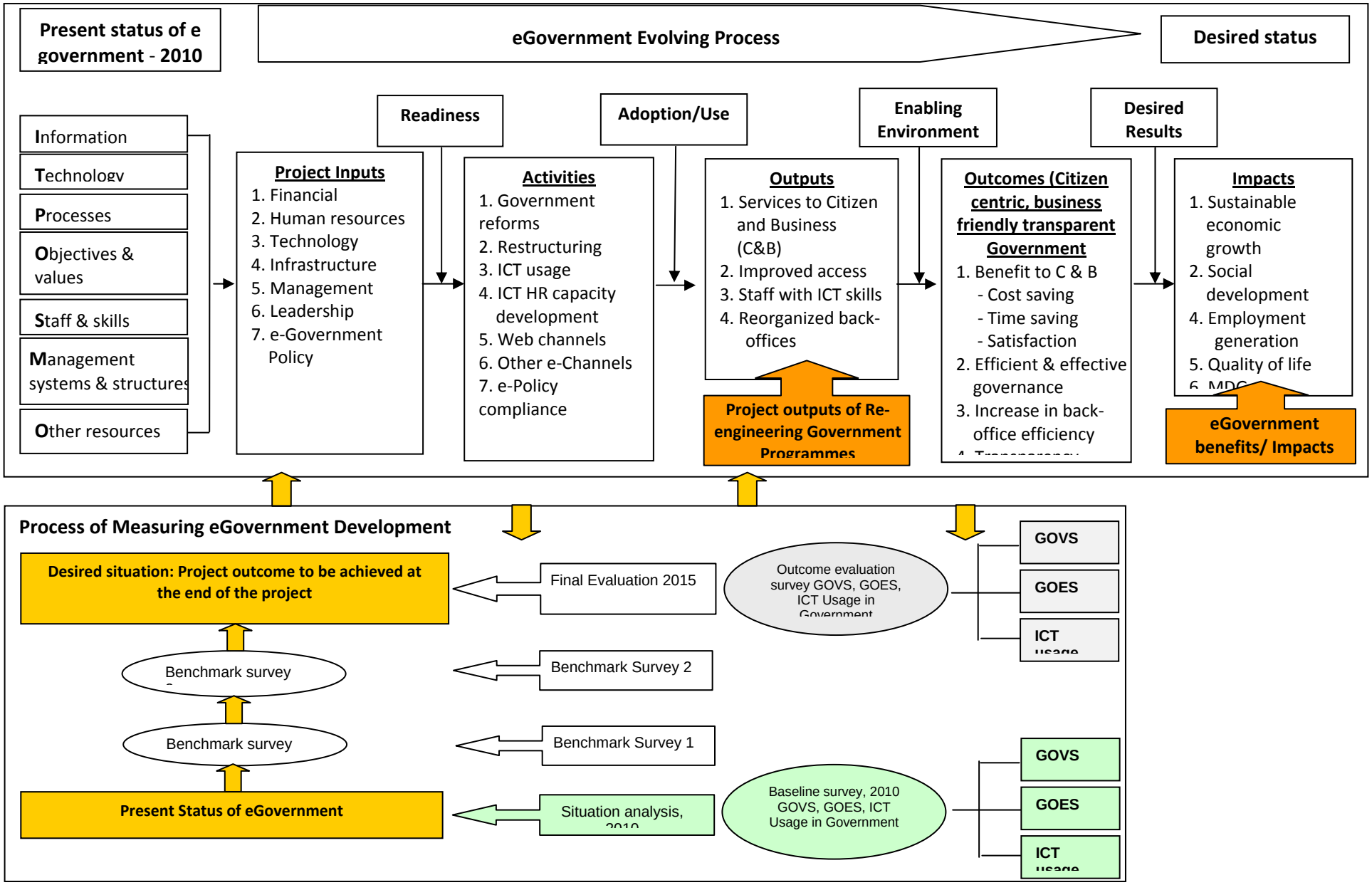


Figure 2.3: Sri Lanka e-Government Benchmarking Model

On the basis of the understanding so acquired, the Study Team developed the **Sri Lanka e-Government Benchmarking Model / Results Chain** as illustrated in **Figure 2.3**. It was used as the conceptual framework for undertaking the present study as well as the ICTUGS and GOVS. While bring together the concepts and understanding related to e-government, It highlights the key elements such as inputs, activities, outputs, outcomes and impact of the e-government programme and identifies the items under each of those elements.

As an extension of the Sri Lanka e-Government Benchmarking Model / Results Chain, the identification of indicators for the study was made by jointly improving the **Logical Framework Matrix for Re-engineering Government Programme** with the ICTA M&E Unit. **List of outputs and outcome indicators** used during the study are listed in the Table placed at the end of the Executive Summary.

2.3 Study Components of the GOES

Basically, GOES consisted of two components -- Questionnaire Survey and Focus Group Discussions – as outlined below.

2.3.1 Questionnaire Survey of Government Organizations Employees

The sample selection procedure adopted for GOES is presented in **Appendix 1** together with the achieved sample coverage.

The respondents of the survey consisted of two categories of employees of the government organizations; 185 executive officers and 396 non-executive officers, totalling 581 employees. The field survey was undertaken during October - November 2010 by competent enumerators together with survey supervisor visiting each organization in the sample and initially selecting two samples; each consisting of executive officers and non-executive officers. The structured questionnaire given in **Appendix 3** was administered by conducting face-to-face interviews with the officers in the sample. The field staff consisted of a survey manager, group of survey supervisors and teams of enumerators who performed under the continuous supervision of the study team. The field staff was initially provided with orientation and comprehensive training. Special attention was paid during the training of field staff as well as while they were in the field to ensure quality in data collected. The survey supervisors played a major role while the survey was operational by daily checking of each and every filled questionnaire and fine-tuning error free interviewing.

Filled questionnaires were initially edited and coded. Software Package for the Social Sciences (SPSS) was used for data entry and analyses, guided by a series of dummy tables initially prepared.

2.3.2 Focus Group Discussions (FGDs)

The composition of the participants at the FGDs consisted of five officers each from the executive and non-executive grades who are familiar with the ICT facilitated services of the organization. The FGDs were conducted by senior members of the field survey team. Aimed at streamlining the conducting of FGDs, a set of guide questions was initially developed. The numbers of FGDs planned and actually conducted are given in **Appendix 1**. The overall findings of FGDs have been incorporated in the relevant chapters of this document. Specific findings of the FGDs in respect of the 8 partner organizations and 2 control group organizations have been included in **Volume 6** while documenting the Profiles of those organizations.

2.4 Survey Experience and Study Limitations

A study of this nature is not without limitations. As already mentioned, the data collection for the survey involved undertaking a questionnaire survey and conducting focus group discussions where the respondents/participants were executive and non-executive officers of the organization. The head of the organizations readily granted due permission to interview the sampled officers.

On the overall, the extent of completeness and quality of responses received were of satisfactory level. The respondents were generally answering with open mind and, where required, gave their honest views to the questions posed. Although the interviews were conducted during the office hours, the most respondents willingly set aside their work for 30 to 40 minutes to answer the questionnaire and responded with interest, satisfactorily and cordial manner. Many respondents admired the present survey and value it. They expressed their satisfaction with it and appreciated the opportunity they were availed to express their views on the subject areas. The officials who were generally busy with many official commitments observed that the questionnaire is too long. However, with enumerators' explanation of the importance of the survey and persuasion, they responded satisfactorily.

Some of the executives who are near retirement felt that they are too old to gain competency in computer usage and ICT is for younger staff. Nevertheless, there were some senior officials, close to retirement by age, but with a good command of ICT and possess international exposure to computerized work environment.

Majority of the respondents, among both executives and non-executives, are generally with satisfactory understanding about the re-engineering government programme and showed interest in it. However, in areas far away from the Western Province, the understanding about it was observed to be less pronounced among the respondents, although they engage in the allocated ICT related tasks. The presence of a computer on respondents' desk is considered to be self-esteem by them. The government officials in the Eastern and Northern Provinces are eager to learn ICT and use it in the delivery of services.

The respondents who lack understanding about the re-engineering government programme look forward to acquire it. While they were satisfied with the training on ICT sponsored by ICTA, they want more training and re-training for performance of their work and gain competency in computer usage. They also welcome proficiency examinations in ICT usage.

The respondents are in the opinion that use of email and internet should be popularized for efficient work performance. There were some respondents who were unable to use the internet. The respondents highlight the need of awareness creation about the e-Government Policy among all the staff. The desirability of cultivating mutual cooperation among the senior officials and the others with regard to the ICT usage was also stressed. The respondents also understand about the importance of ICT facilitated services that are citizen-centric.

The extent of ICT usage across the government organizations surveyed is at different levels. Majority of the government employees is in the opinion that the implementation of the Re-engineering Government Programme should be accelerated to achieve island-wide coverage including Northern and Eastern Provinces. They look forward to see more and more Government e-Services being operationalized while creating broad awareness among the government employees as well as the citizens.

3. PROFILE OF GOVERNMENT EMPLOYEES SURVEYED

The salient characteristics of the government employees surveyed are presented in this chapter. It includes the organizational distribution, gender and age composition, and education levels of the employees. The **organizations surveyed** are given in Appendix 1 and summarized in Table 3.1. For the purpose of the present study and as proposed by the ICTA, the organizations 1 to 8 listed in Table 3.1 are considered as '*partner organizations*' and those with numbers 9 and 10 as '*control group organizations*'.

The total **sample surveyed** amounted to 581 government employees and consisted of 185 (32%) executive officers and 396 (68%) non-executive officers (Table 3.1). In the total sample, 44% of employees surveyed belong to '*partner organizations*', 11% to '*control group organizations*' and the remaining 45% to other organizations -- Provincial Ministries, District Secretariats and Divisional Secretariats.

The **gender and age composition** of the government employees surveyed are given in Table 3.2. The overall gender composition among them was such that there were more females than males; 60% were females and 40% males. By rank of officers, the proportion of females was 46% among the executive officers and 66% among the non-executive officers. The majority of the government employees surveyed were relatively young; around 40% of the executive officers and 70% of non-executive officers were less than 40 years old (see Figure 3.1).

By **level of educational**, the majority among the executives were graduates and above (77%). Among non-executives, half were with GCE A/L while 38% graduates and above (Table 3.3).

In summary, the sample of government employees surveyed consisted of executives and non-executives in the ratio of 1:2 (approximately) while males and females were in the ration 2:3. Among the executives, 46% were females and 40% less than 40 years old whereas, among the executives 66% were females and 70% less than 40 years old. Further, among the executives 77% were graduates and above while among non-executives 38% graduates and above.

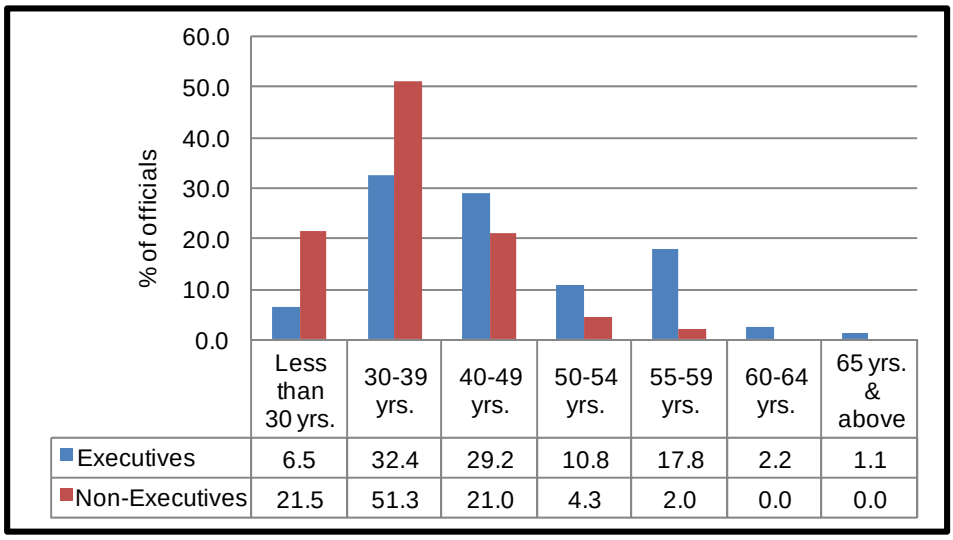
Table 3.1: Respondents by organization and rank of officer

Organization	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
1. Ministry of Public Administration	10	5.4	21	5.3	31	5.3
2. Department of Labour	11	5.9	22	5.6	33	5.7
3. Department of Motor Traffic	10	5.4	22	5.6	32	5.5
4. Department of Pensions	10	5.4	22	5.6	32	5.5
5. Department of Registrar General's	11	5.9	20	5.1	31	5.3
6. Department of Registrar of Companies	8	4.3	24	6.1	32	5.5
7. Sri Lanka Bureau of Foreign Employment	6	3.2	24	6.1	30	5.2
8. Samurdhi Authority of Sri Lanka	10	5.4	22	5.6	32	5.5
9. Ministry of Education	10	5.4	22	5.6	32	5.5
10. Ministry of Health	11	5.9	21	5.3	32	5.5
11. Provincial Council Ministries	26	14.1	46	11.6	72	12.4
12. District Secretariats	24	13.0	53	13.4	77	13.3
13. Divisional Secretariats	38	20.5	77	19.4	115	19.8
Table Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**
Row %	**31.8**	**-**	**68.2**	**-**	**100.0**	**-**

Table 3.2: Respondents by rank of officer, gender and age group

Age (years)	Executive Officers						Non-executive Officers						Table Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Less than 30	4	4.0	8	9.3	12	6.5	16	11.8	69	26.5	85	21.5	97	16.7
30-39	21	21.2	39	45.3	60	32.4	80	58.8	123	47.3	203	51.3	263	45.3
40-49	34	34.3	20	23.3	54	29.2	30	22.1	53	20.4	83	21.0	137	23.6
50-54	14	14.1	6	7.0	20	10.8	7	5.1	10	3.8	17	4.3	37	6.4
55-59	21	21.2	12	14.0	33	17.8	3	2.2	5	1.9	8	2.0	41	7.1
60-64	3	3.0	1	1.2	4	2.2	0	0.0	0	0.0	0	0.0	4	0.7
65 & above	2	2.0	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	2	0.3
Group Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

Figure 3.1: Respondents by rank of officer and age group



Source: Table 3.2

Table 3.3: Respondents by rank of officer and highest level of education

Highest Level of Education	Executive Officers		Non-executive Officers		Table Total	
	Count	Col %	Count	Col %	Count	Col %
Below GCE O/L	0	0.0	7	1.8	7	1.2
GCE O/L	0	0.0	16	4.0	16	2.8
GCE A/L	30	16.2	204	51.5	234	40.3
Graduate	91	49.2	128	32.3	219	37.7
Post-Graduate	52	28.1	23	5.8	75	12.9
Diploma	10	5.4	17	4.3	27	4.6
Other	2	1.1	1	0.3	3	0.5
Table Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

4. ICT KNOWLEDGE & SKILLS OF EMPLOYEES AND TRAINING RECEIVED

- *Government organizations shall strive towards computer literacy for all State sector employees. (Section 7).*
- *All staff including senior management and middle management staff in Government organizations must be competent in the use of ICT in their daily work, and necessary awareness and training should be provided to achieve this competency. # 070201*
- *All staff in government organizations should be encouraged to obtain government approved computer qualifications. # 070301*

e-Government Policy (2010)

This chapter sets forth the government employees' exposure to formal ICT training, ICT qualifications attained by them, and outcomes of ICTA training programmes.

4.1 Exposure to Formal ICT Training among Government Employees

Among the government employees surveyed, 60% is reported to have had formal training in the ICT sector; with hardly any variation in the proportion between the executives and non-executives. Gender-wise, slightly higher proportion of female employees had formal training in the ICT sector compared to that of male employees (Table 4.1).

Table 4.1: Respondents by rank of officer, gender and whether had formal training in the ICT sector

	Executive Officers						Non-executive Officers					
	Male		Female		Group Total		Male		Female		Group Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	55	55.6	58	67.4	113	61.1	78	57.4	155	59.6	233	58.8
No	44	44.4	28	32.6	72	38.9	58	42.6	105	40.4	163	41.2
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**

The achievements of the ICT Human Resource Capacity Development carried out by ICTA had already been presented in **Table 1.1** (page 3). Accordingly, from inception, a total of 22,148 government employees had so far been trained (as of 01 November 2010) to support the Re-engineering Government Programme.

Among the respondents only around one-fourth had the opportunity to attended training programs organized by ICTA; the corresponding proportions among the executives and non-executives were 36% and 24%, respectively. Gender-wise, higher proportion of female offices had the opportunity to attended training programs organized by ICTA compared to male officers (Table 4.2).

Table 4.2: Respondents by rank of officer, gender and whether attended training programs organized by ICTA

Whether attended training programs organized by ICTA	Executive Officers						Non-executive Officers						Grand Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	33	33.3	33	38.4	66	35.7	31	22.8	63	24.2	94	23.7	160	27.5
No	66	66.7	53	61.6	119	64.3	105	77.2	197	75.8	302	76.3	421	72.5
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

Most common ICTA organized training programs attended by the respondents were on (1) basic ICT skills / awareness and (2) workshops & seminars on e-government related topics. Relatively more executives had attended these training programmes than non-executives. Gender-wise, relatively more female officers had attended these training programmes than male officers. In contrast to the above, relatively more non-executives than executives and relatively more male officers than female officers had attended ICTA organized training programmes on ICT technical skills. (Tables 4.3 & 4.4)

Table 4.3: Respondents who had attended training programs organized by ICTA by rank of officer and type of ICT training (Multiple responses exist)

Type of ICT training programs organized by ICTA		Executive Officers (Out of 66)		Non-executive Officers (Out of 94)		Total (Out of 160)	
		Count	%	Count	%	Count	%
1. Basic ICT skills / awareness	a. ICT foundation	34	51.5	43	45.7	77	48.1
	b. ICT certification	22	33.3	27	28.7	49	30.6
2. Workshops & seminars on e-government		13	19.7	11	11.7	24	15.0
3. Web development		4	6.1	4	4.3	8	5.0
4. eGovernment MBA		0	0.0	0	0.0	0	0.0
5. ICT technical skills	a. System administration	5	7.6	15	16.0	20	12.5
	b. Network administration	0	0.0	6	6.4	6	3.8
	c. Database administration	0	0.0	3	3.2	3	1.9
	d. Linux (RHCT)	1	1.5	2	2.1	3	1.9
	e. Hardware	4	6.1	6	6.4	10	6.3

Table 4.4: Respondents who have attended training programs organized by ICTA by Gender and type of ICT training (Multiple responses exist)

Type of ICT training programs organized by ICTA		Male (Out of 64)		Female (Out of 96)		Total (Out of 160)	
		Count	%	Count	%	Count	%
1. Basic ICT skills / awareness	a. ICT foundation	28	43.8	49	51.0	77	48.1
	b. ICT certification	18	28.1	31	32.3	49	30.6
2. Workshops & seminars on e-government		9	14.1	15	15.6	24	15.0
3. Web development		3	4.7	5	5.2	8	5.0
4. eGovernment MBA		0	0.0	0	0.0	0	0.0
5. ICT technical skills	a. System administration	11	17.2	9	9.4	20	12.5
	b. Network administration	5	7.8	1	1.0	6	3.8
	c. Database administration	2	3.1	1	1.0	3	1.9
	d. Linux (RHCT)	2	3.1	1	1.0	3	1.9
	e. Hardware	6	9.4	4	4.2	10	6.3

4.2 ICT Qualifications Attained by Government Employees

Among the respondents with formal training in ICT sector, only one-fourth had attained diploma level qualification or above and 60% possessed certificate level qualifications (Table 4.5).

Among the respondents who had no formal training in ICT sector, around half of them possess e-mail communication and internet surfing skills; the proportions among the executives and non-executives were 57% and 52%, respectively (Table 4.6).

Table 4.5: Respondents with formal training in ICT sector by rank of officer and highest qualification attained

Highest qualification attained	Executive Officers (Out of 113)		Non-executive Officers (Out of 233)		Total (Out of 346)	
	Count	Col %	Count	Col %	Count	Col %
1. Non-certificate award short term tanning	22	19.5	33	14.2	55	15.9
2. Certificate course: basic computer skills	47	41.6	106	45.5	153	44.2
3. Certificate course: intermediate/advance	17	15.0	35	15.0	52	15.0
4. Diploma / Advance diploma	22	19.5	48	20.6	70	20.2
5. Degree	4	3.5	8	3.4	12	3.5
6. Post graduate diploma/Post graduate degree	1	0.9	3	1.3	4	1.2
Total	**113**	**100.0**	**233**	**100.0**	**346**	**100.0**

Table 4.6: Respondents who had no formal training in ICT sector by rank of officer and level of highest computer literacy attained

Highest computer literacy attained	Executive Officers (Out of 72)		Non-executive Officers (Out of 163)		Total (Out of 235)	
	Count	%	Count	%	Count	%
1. Email communication and internet surfing	41	56.9	84	51.5	125	53.2
2. Word processing skills only	32	44.4	84	51.5	116	49.4
3. Skills in word processing + Spread sheets	21	29.2	52	31.9	73	31.1
4. Skills in word processing + spread sheets + DBMS	13	18.1	23	14.1	36	15.3
5. Office software + specialized professional packages	4	5.6	10	6.1	14	6.0
6. Office software +skills in programming	2	2.8	5	3.1	7	3.0

4.3 Outcomes of ICTA Training Programmes

From the foregoing, it could be computed that the **level of ICT literacy** among the government employees surveyed was 81%; the proportions among the executives and non-executives were 83% and 80%, respectively.[11,12]

As an approach to gauge the outcome of training organized by ICTA, the respondents were asked to indicate the extent of benefit accrued to each of them due to such training by selecting the most appropriate level out of three listed in first column of Table 4.7. It is encouraging to observe that among the employees almost 45% were in the opinion that training significantly improved their ability to do ICT related work while half indicated some improvement in their ability to do ICT related work. By rank of officers, it is evidence that the outcome of training had been felt relatively more by the non-executives than the executives.

Table 4.7: Respondents who have attended ICTA organized training programs by rank of officer and extent of benefit

Extent of benefit	Executive Officers (Out of 66)		Non-executive Officers (Out of 94)		Table Total (Out of 160)	
	Count	Col %	Count	Col %	Count	Col %
1. Significantly improved my ability to do ICT related work	27	40.9	43	45.7	70	43.8
2. Somewhat improved my ability to do ICT related work	35	53.0	46	48.9	81	50.6
3. Not improved my ability to do ICT related work	3	4.5	3	3.2	6	3.8
4. Undecided / No opinion	1	1.5	2	2.1	3	1.9
Table Total	**66**	**100.0**	**94**	**100.0**	**160**	**100.0**

[11] Calculated on the following basis: (i) among 185 executive officers surveyed, 113 had formal training in ICT and 41 had ability to use email communication and internet surfing, thus 154 out of 185 is 83.2%; (ii) among 396 non-executive officers surveyed, 233 had formal training in ICT and 84 had ability to use email communication and internet surfing, thus 317 out of 396 is 80.1%.

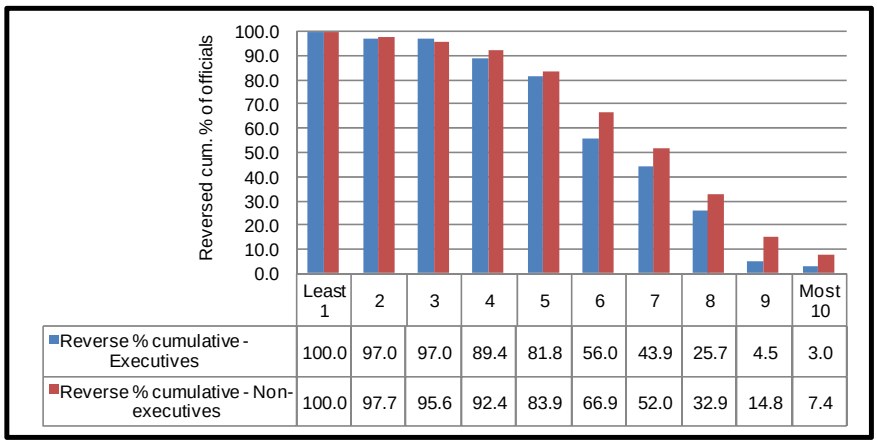
[12] Computer Literacy Survey – 2009 of Department of Census & Statistics reported computer literacy rates as follows in 2009: Sri Lanka - 20.3%, urban sector 31.3%, rural sector 19.3 and estate sector 8.4 (www.statistics.gov.lk).

Further attempt was made to ascertain the outcome of training organized by ICTA by asking the respondents to indicate using a ten-point scale (as presented in the first column of Table 4.8) the extent to which each of them was more efficient and/or effective in ICT related work as a result of the ICT training. According to the results given in Table 4.8 and illustrated in Figure 4.1, nearly two-thirds of the employees (56% of executives and 67% of non-executives) had selected scores 'above 5' indicating they were more efficient and/or effective in ICT related work. By rank of officers, it is evidence that the outcome of training had been felt relatively more by the non-executives than the executives.

Table 4.8: Respondents who have attended ICTA organized training programs by rank of officer and extent to which more efficient and/or effective in ICT related work on a ten-point scale

Extent to which more efficient and/or effective in ICT related work	Executive Officers (Out of 66)			Non-executive Officers (Out of 94)			Table Total (Out of 160)		
	Count	Col %	Reverse % cumulative	Count	Col %	Reverse % cumulative	Count	Col %	Reverse % cumulative
Least 1	2	3.0	100.0	2	2.1	100.0	4	2.5	100.0
2	0	0.0	97.0	2	2.1	97.7	2	1.2	97.5
3	5	7.6	97.0	3	3.2	95.6	8	5.0	96.3
4	5	7.6	89.4	8	8.5	92.4	13	8.1	91.3
5	17	25.8	81.8	16	17.0	83.9	33	20.6	83.2
6	8	12.1	56.0	14	14.9	66.9	22	13.8	62.6
7	12	18.2	43.9	18	19.1	52.0	30	18.8	48.8
8	14	21.2	25.7	17	18.1	32.9	31	19.4	30.0
9	1	1.5	4.5	7	7.4	14.8	8	5.0	10.6
Most 10	2	3.0	3.0	7	7.4	7.4	9	5.6	5.6
Table Total	**66**	**100.0**	**--**	**94**	**100.0**	**--**	**160**	**100.0**	**--**

Figure 4.1: Officials who have attended ICTA organized training programs by extent to which more efficient and/or effective in ICT related work on a ten-point scale



Source: Table 4.8

Finally, in the series of assessment of outcome of of training organized by ICTA, the government employees were further asked to indicate the styles in which their work performance had improved as an outcome of training organized by ICTA by identifying one or more of the five possible ways of improvement of performance listed in first column of Table 4.9. According to the findings presented in Table 4.9 and depicted in Figure 4.2, the proportions of government employees who identify ways in which their performance had been improved were as follows:

- Feel more confident at work (65%);
- More accurate work output (61%);
- Faster work performance (58%);

- Ability to do more work (49%);
- Provide better service to citizens (45%).

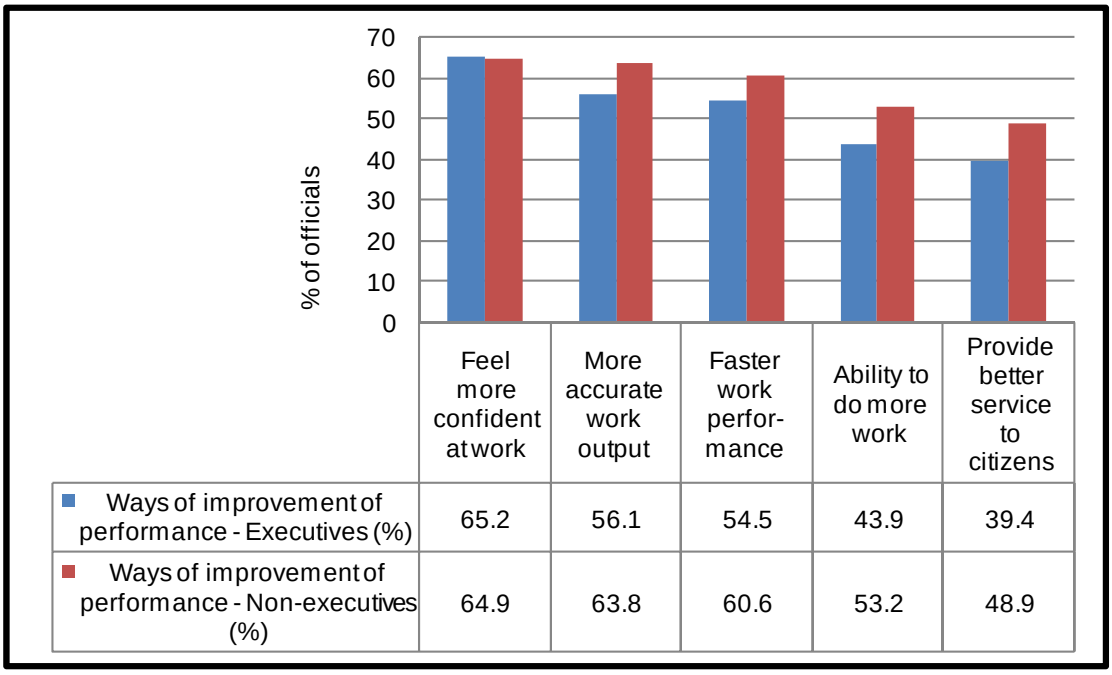
By rank of officers, it is evidence that the outcome of training had been felt relatively more by the non-executives than the executives.

Table 4.9: Respondents who have attended ICTA organized training programs by rank of officer and ways of improvement of performance

(Multiple responses exist)

Ways of improvement of performance	Executive Officers (Out of 66)		Non-executive Officers (Out of 94)		Total (Out of 160)	
	Count	%	Count	%	Count	%
1. Feel more confident at work	43	65.2	61	64.9	104	65.0
2. More accurate work output	37	56.1	60	63.8	97	60.6
3. Faster work performance	36	54.5	57	60.6	93	58.1
4. Ability to do more work	29	43.9	50	53.2	79	49.4
5. Provide better service to citizens	26	39.4	46	48.9	72	45.0

Figure 4.2: Officials who have attended ICTA organized training programs by ways of improvement of performance



Source: Table 4.12

4.4 Summary

Sixty (60) per cent among the executives as well as the non-executives surveyed had formal training in the ICT sector. Slightly higher proportion of female employees had formal training in the ICT sector compared to that of male employees.

Relatively low proportions, 36% of the executives and 24% of the non-executives had the opportunity to attended training programs organized by ICTA; among them females were in higher proportion than males.

Among the government employees with formal training in ICT sector, only one-fourth had attained diploma level qualification or above and 60% possessed certificate level qualifications. Those who had no formal training in ICT sector, around half of them possess e-mail communication and internet surfing skills.

Relatively high (80%) ICT literacy rate prevails among both the executives and non-executives. On assessing the outcomes of training in the following three ways, it was observed that the benefit of training had been felt relatively more by the non-executives than the executives.

Firstly, among the employees almost 45% were in the opinion that training significantly improved their ability to do ICT related work while half indicated some improvement in their ability.

Secondly, on a ten-point scale to gauge the extent of more efficient and/or effective in ICT related work as a result of the ICT training, nearly two-thirds of the employees had selected scores above '5' indicating they were more efficient and/or effective in ICT related work.

Thirdly, with regard to the styles in which government employees' work performance had improved as an outcome of training organized by ICTA, 65% considered more confident at work, 61% noticed more accurate work output, 58% believed faster work performance, 49% considered to be capable to do more work, and 45% felt provision of better service to customers.

5. ICT USAGE OF EMPLOYEES IN OFFICE AND AT HOME

This chapter sets out the ICT facilities available to government employees in office and at home, official tasks and personal tasks perforated using ICT facilities, time spent at home on the computer for office and personal tasks, and internet usage.

5.1 ICT Usage in Office

Overall, almost 60% of the government employees surveyed were individually provided with ICT facilities for office use (Table 5.1). Rank-wise three-fourth of the executives and half of the non-executives were having such facilities. Organization-wise, the proportion of executives provided with ICT facilities varies from 40% to 100% and that of non-executives from 14% to 78%.

Table 5.1: Respondents by rank of officer, provision of ICT facilities and organization

Organization	Executives (Es) / Non-executives (NEs)	Whether ICT facilities provided				Row Total	
		Yes		No			
		Count	%	Count	%	Count	%
Ministry of Public Administration	Es	10	100.0	0	0.0	10	100.0
	NEs	8	38.1	13	61.9	21	100.0
Ministry of Education	Es	9	90.0	1	10.0	10	100.0
	NEs	13	59.1	9	40.9	22	100.0
Ministry of Health	Es	10	90.9	1	9.1	11	100.0
	NEs	14	66.7	7	33.3	21	100.0
Department of Labour	Es	8	72.7	3	27.3	11	100.0
	NEs	15	68.2	7	31.8	22	100.0
Department of Motor Traffic	Es	9	90.0	1	10.0	10	100.0
	NEs	14	63.6	8	36.4	22	100.0
Department of Pensions	Es	10	100.0	0	0.0	10	100.0
	NEs	5	22.7	17	77.3	22	100.0
Department of Registrar General's	Es	6	54.5	5	45.5	11	100.0
	NEs	9	45.0	11	55.0	20	100.0
Department of Registrar of Companies	Es	6	75.0	2	25.0	8	100.0
	NEs	6	25.0	18	75.0	24	100.0
Sri Lanka Bureau of Foreign Employment	Es	3	50.0	3	50.0	6	100.0
	NEs	14	58.3	10	41.7	24	100.0
Samurdhi Authority of Sri Lanka	Es	4	40.0	6	60.0	10	100.0
	NEs	3	13.6	19	86.4	22	100.0
Provincial Council Ministries	Es	23	88.5	3	11.5	26	100.0
	NEs	36	78.3	10	21.7	46	100.0
District Secretariats	Es	21	87.5	3	12.5	24	100.0
	NEs	29	54.7	24	45.3	53	100.0
Divisional Secretariats	Es	25	65.8	13	34.2	38	100.0
	NEs	25	32.5	52	67.5	77	100.0
Total	**Es**	**144**	**77.8**	**41**	**22.2**	**185**	**100.0**
	NEs	**191**	**48.2**	**205**	**51.8**	**396**	**100.0**
Grand Total	**Es & NEs**	**335**	**57.7**	**246**	**42.3**	**581**	**100.0**

Among staff not individually provided with ICT facilities, 87% (78% of the executives and 89% of the non-executives) were using the commonly provided ICT facilities (Table 5.2). Accordingly, only 5.3% among the government employees surveyed (4.9% of the executives[13] and 5.6% of the non-executives) were not engaged in using ICT facilities for office work.

[13] Out of 185 executives surveyed, 144 were individually provided with ICT facilities and 22 were using commonly available ICT facilities totaling 176 which indicates only 9 out of 185 or 4.9% were not engaged in using ICT facilities. Similar computation indicates that, out of 396 non-executives surveyed, 22 or 5.6% were not engaged in using ICT facilities.

Table 5.2: Respondents who are not individually provided with ICT facilities by rank of officer, whether ICT related tasks undertaken using commonly used facilities and organization

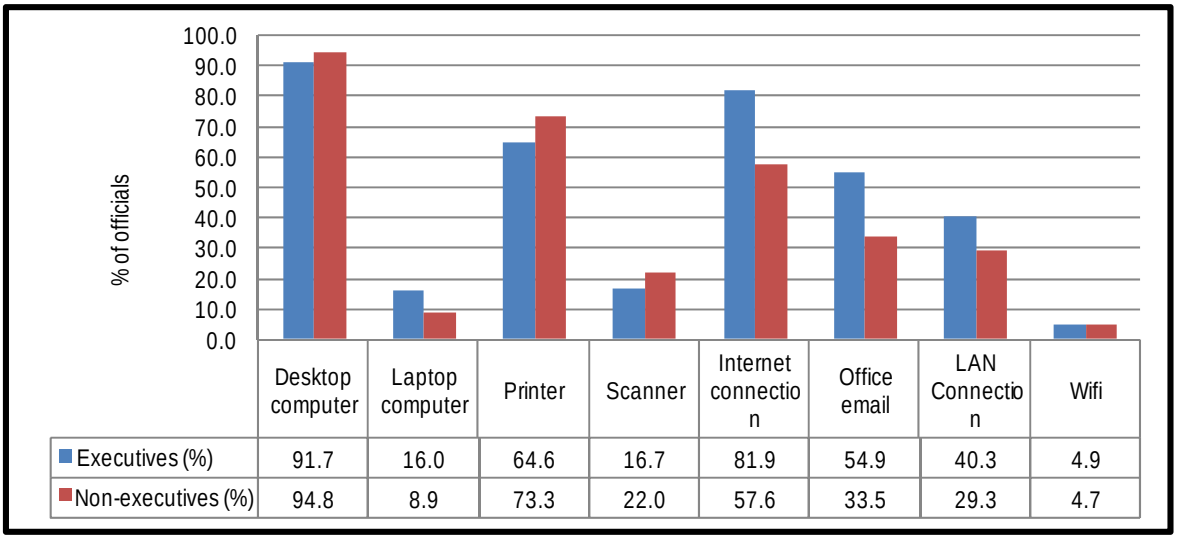
Organization	Executives (Es) / Non-executives (NEs)	Whether ICT related tasks undertaken				Row Total	
		Yes		No			
		Count	%	Count	%	Count	%
Ministry of Public Administration	Es	-	-	-	-	-	-
	NEs	13	100.0		0.0	13	100.0
Ministry of Education	Es	1	100.0		0.0	1	100.0
	NEs	9	100.0		0.0	9	100.0
Ministry of Health	Es	1	100.0		0.0	1	100.0
	NEs	7	100.0		0.0	7	100.0
Department of Labour	Es	3	100.0		0.0	3	100.0
	NEs	6	85.7	1	14.3	7	100.0
Department of Motor Traffic	Es	1	100.0		0.0	1	100.0
	NEs	8	100.0		0.0	8	100.0
Department of Pensions	Es	-	-	-	-	-	-
	NEs	9	52.9	8	47.1	17	100.0
Department of Registrar General's	Es	4	80.0	1	20.0	5	100.0
	NEs	11	100.0	0	0.0	11	100.0
Department of Registrar of Companies	Es	2	100.0	0	0.0	2	100.0
	NEs	13	72.2	5	27.8	18	100.0
Sri Lanka Bureau of Foreign Employment	Es	2	66.7	1	33.3	3	100.0
	NEs	9	90.0	1	10.0	10	100.0
Samurdhi Authority of Sri Lanka	Es	6	100.0	0	0.0	6	100.0
	NEs	18	94.7	1	5.3	19	100.0
Provincial Council Ministries	Es	0	0.0	3	100.0	3	100.0
	NEs	10	100.0	0	0.0	10	100.0
District Secretariats	Es	3	100.0	0	0.0	3	100.0
	NEs	23	95.8	1	4.2	24	100.0
Divisional Secretariats	Es	9	69.2	4	30.8	13	100.0
	NEs	47	90.4	5	9.6	52	100.0
Total	**Es**	**32**	**78.0**	**9**	**22.0**	**41**	**100.0**
	NEs	**183**	**89.3**	**22**	**10.7**	**205**	**100.0**
Grand Total		**215**	**87.4**	**31**	**12.6**	**246**	**100.0**

The most common hardware facilities provided to such officials include desktop computers, printers, and internet connections while office e-mail facilities were provided on limited extent, as can be seen from Figure 5.1.

The types of official tasks undertaken by government officials using ICT facilities provided in the office are illustrated in Figure 5.2. Among them, the common tasks are the following:

- Letters/documents preparation;
- E-mail communication within & outside office;
- Database handling;
- Data analysis;
- Administrative functions;
- Service providing activities to clients;
- Information sharing with other organizations.

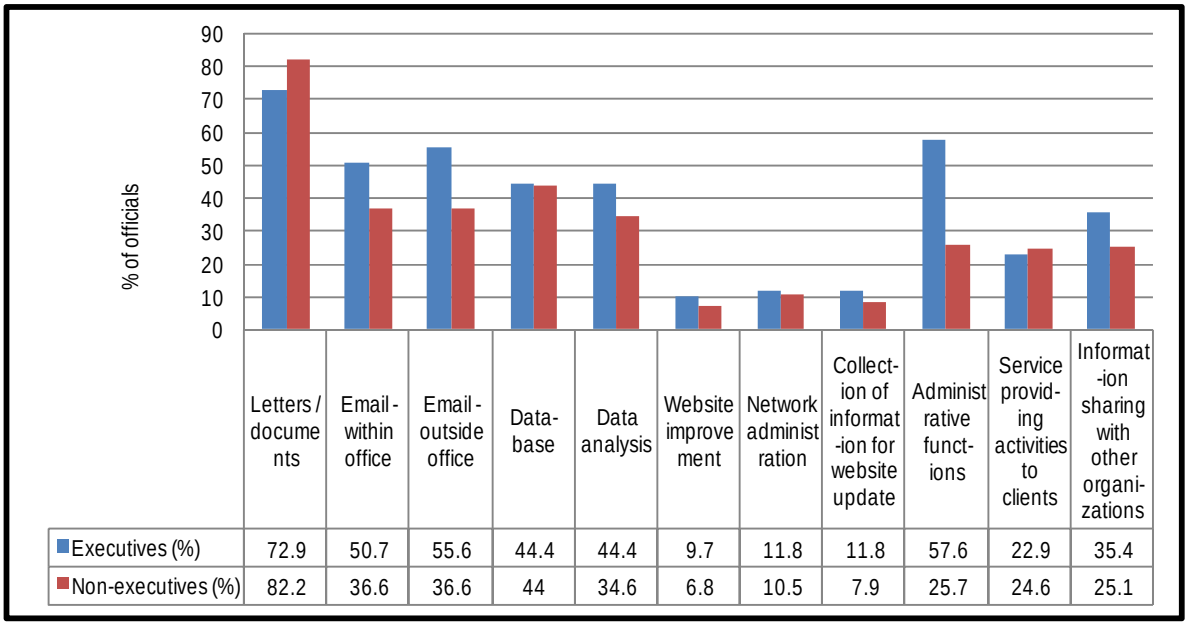
Figure 5.1: Types of hardware facilities available to government officials who are provided with ICT facilities



	Desktop computer	Laptop computer	Printer	Scanner	Internet connection	Office email	LAN Connection	Wifi
Executives (%)	91.7	16.0	64.6	16.7	81.9	54.9	40.3	4.9
Non-executives (%)	94.8	8.9	73.3	22.0	57.6	33.5	29.3	4.7

Source: Table A2.1

Figure 5.2: Types of official tasks undertaken by government officials using ICT facilities provided



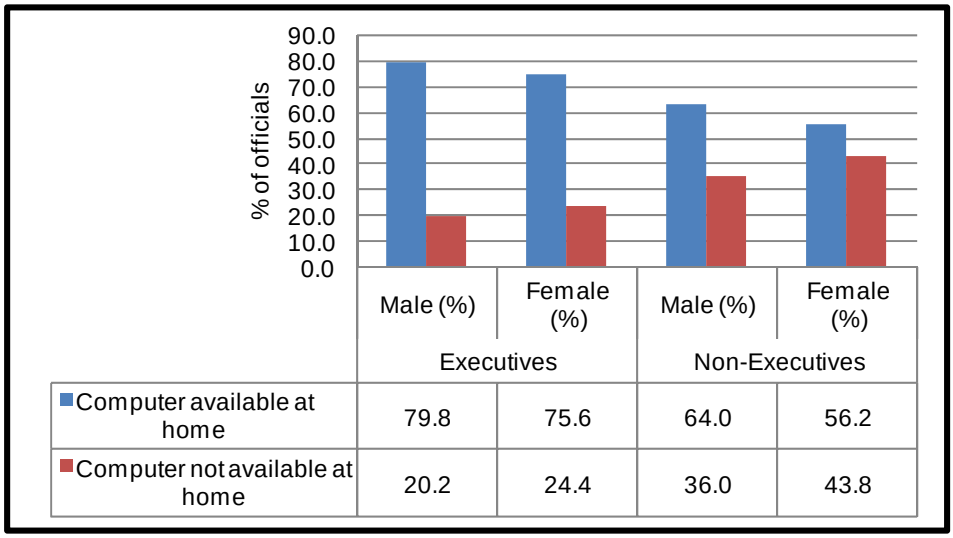
	Letters / documents	Email - within office	Email - outside office	Data-base	Data analysis	Website improvement	Network administration	Collection of information for website update	Administrative functions	Service providing activities to clients	Information sharing with other organizations
Executives (%)	72.9	50.7	55.6	44.4	44.4	9.7	11.8	11.8	57.6	22.9	35.4
Non-executives (%)	82.2	36.6	36.6	44	34.6	6.8	10.5	7.9	25.7	24.6	25.1

Source: Table A2.2

5.2 ICT Usage at Home

Among the government employees surveyed, nearly 80% of the executives and 60% of the non-executives have computer facilities at home. Gender-wise, around similar proportions of male executives (80%) and female executives (76%) have computer facilities at home. However, lesser proportion of female non-executives (56%) has computer facilities at home compared to male non-executives (64%) (Figure 5.3).

Figure 5.3: Availability of ICT facilities at home of government employees



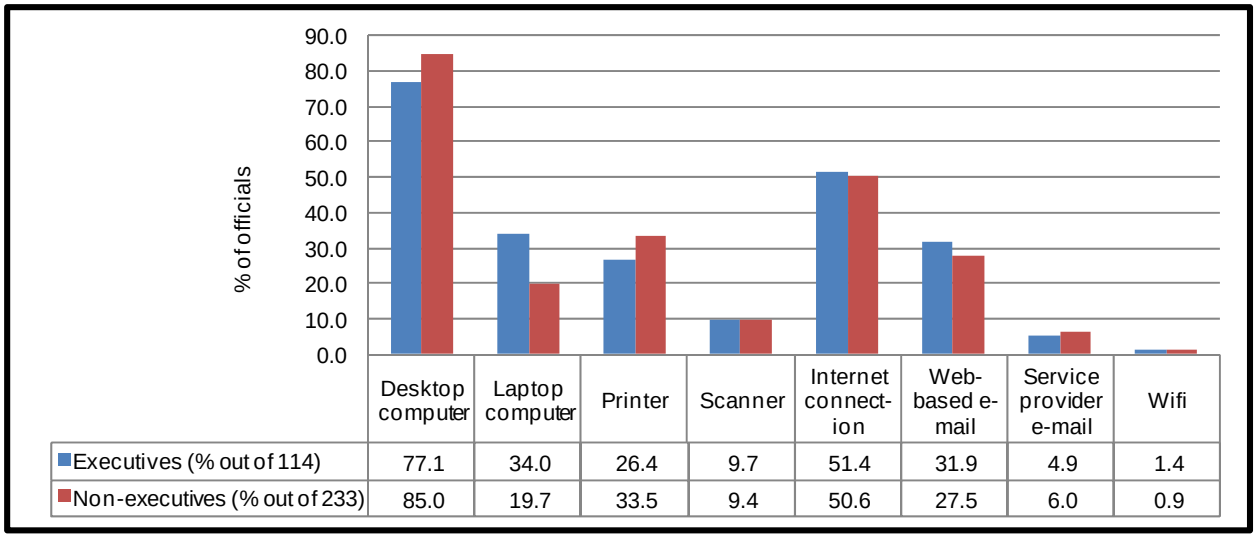
Source: Table A2.3

The type of computer hardware items available to the government employees who possess computer facilities at home are given in Table 5.3 and illustrated in Figure 5.4. Among the government employees who have computer facilities at home, there are those who have more than one computer at home; there are 107 computers per 100 employees. This means some are having both a desktop computer and a laptop computer. The extent of having internet facility by those of the employees with computer facilities at home is low – irrespective of the rank of the officials; only half of them have internet facility. Among those who have internet facility at home, only 72% of the executives and 66% of the non-executives have reported that they have e-mail facility. It could be that some other member of the household is having e-mail facility but not to the employee. Among e-mail users, majority (more than 80%) use web-based e-mail facility than that of service providers. Availability of printing facility to those with computer facilities at home is also low; around 30% have such facility.

Table 5.3: Respondents who have computer facilities at home by rank of officer and type of hardware facilities

	Executive Officers (Out of 144)		Non-executive Officers (Out of 233)		Total (Out of 377)	
	Count	%	Count	%	Count	%
Desktop computer	111	77.1	198	85.0	309	82.0
Laptop computer	49	34.0	46	19.7	95	25.2
Printer	38	26.4	78	33.5	116	30.8
Scanner	14	9.7	22	9.4	36	9.5
Internet connection	74	51.4	118	50.6	192	50.9
Web-based e-mail	46	31.9	64	27.5	110	29.2
Service provider e-mail	7	4.9	14	6.0	21	5.6
Wifi	2	1.4	2	0.9	4	1.1

Figure 5.4: Type of hardware facilities available to government employees who have computer facilities at home



Source; Table A2.4

"Broadband has considerable economic impact at all levels of individuals, firms, and communities. Individuals increasingly use broadband to acquire knowledge and skills to increase their employment opportunities. Where broadband has been introduced in rural areas of developing countries, villagers and farmers have gained better access to crop market prices, training, and job opportunities" *Information and Communications for Development 2009: Extending Reach and Increasing Impact*. World Bank, May 2009. p.5.

It is encouraging to observe that among the government employees who have internet facilities at home, large majority (89% of the executives and 94% of the non-executives) possess broadband connectivity (Table 5.4). Nearly three-fourths of the internet users among the employees are satisfied with the current data transmission speed (Table 5.5).

It is worth highlighting the fact that in spite of the large majority of employees who have internet facilities at home is possessing broadband connectivity, the use of e-mail facility among those is relatively at a low level (only 72% of the executives and 66% of the non-executives, as already inferred from Table 5.3).

Table 5.4: Respondents who have internet facilities at home by rank of officer and type of internet connection

Type of internet connection	Executive Officers (Out of 74)		Non-executive Officers (Out of 118)		Table Total (Out of 192)	
	Count	Col %	Count	Col %	Count	Col %
ADSL	33	44.6	52	44.1	85	44.3
HSDPA Mobile Broadband	33	44.6	59	50.0	92	47.9
Dial-Up	4	5.4	3	2.5	7	3.6
Other	4	5.4	4	3.4	8	4.2
Table Total	**74**	**100.0**	**118**	**100.0**	**192**	**100.0**

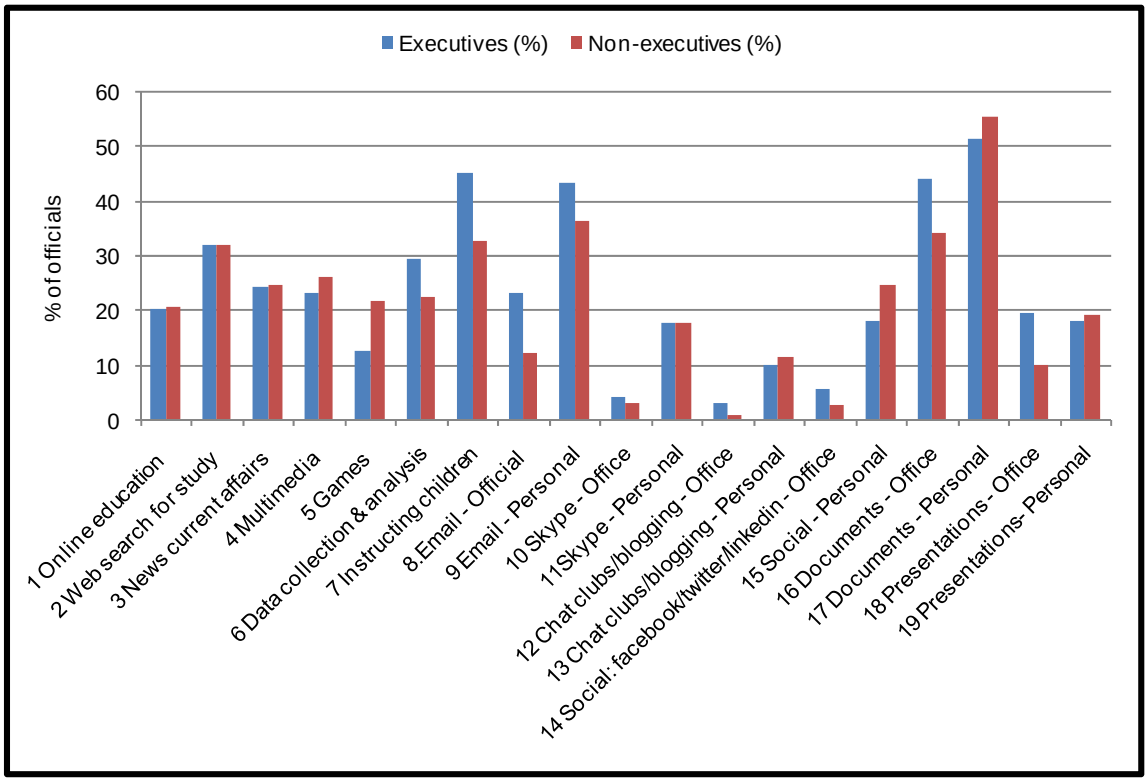
Table 5.5: Respondents who have internet facilities at home by rank of officer and whether satisfied with current data transmission speed

Whether satisfied with current data transmission speed	Executive Officers (Out of 74)		Non-executive Officers (Out of 118)		Table Total (Out of 192)	
	Count	Col %	Count	Col %	Count	Col %
Yes	53	71.6	86	72.9	139	72.4
No	18	24.3	31	26.3	49	25.5
No response	3	4.1	1	0.8	4	2.1
Total	**74**	**100.0**	**118**	**100.0**	**192**	**100.0**

The types of tasks undertaken by the government officials using ICT facilities at home include the following:

- *Documents – Personal (54%)*
- *Documents – Office (38%)*
- *Email – Personal (39%)*
- *Instructing children (37%)*
- *Web search for study (32%)*
- *Data collection & analysis (25%)*
- *Multimedia (25%)*
- *News / current affairs (24%)*
- *Social – Personal (22%)*
- *Online education (20%)*

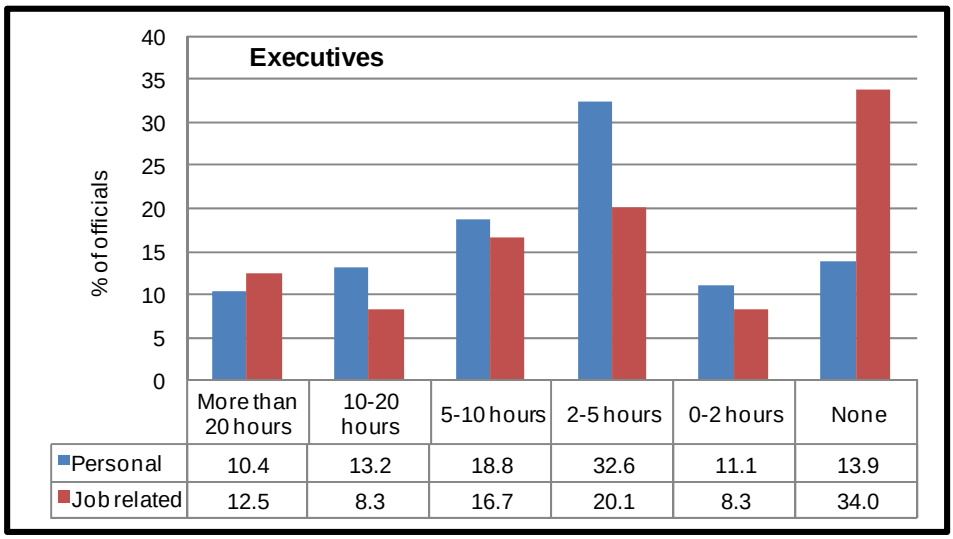
Figure 5.5: Types of tasks undertaken by government officials using ICT facilities at home



Source: Table A2.5

The time spent on the computer per week on (i) personal work and (ii) job related work by the executives and the non-executives who have computer facilities at home are given in Figures 5.6 and 5.7. Further, the average time spent on the computer per week by the executives amounted to 13.1 hours (6.9 and 6.2 hours on personal work and job related work) and that by the non-executives 13.7 hours (7.4 and 6.3 hours on personal work and job related work). Accordingly, a similar pattern and equal duration of computer usage at home between them are evidence.

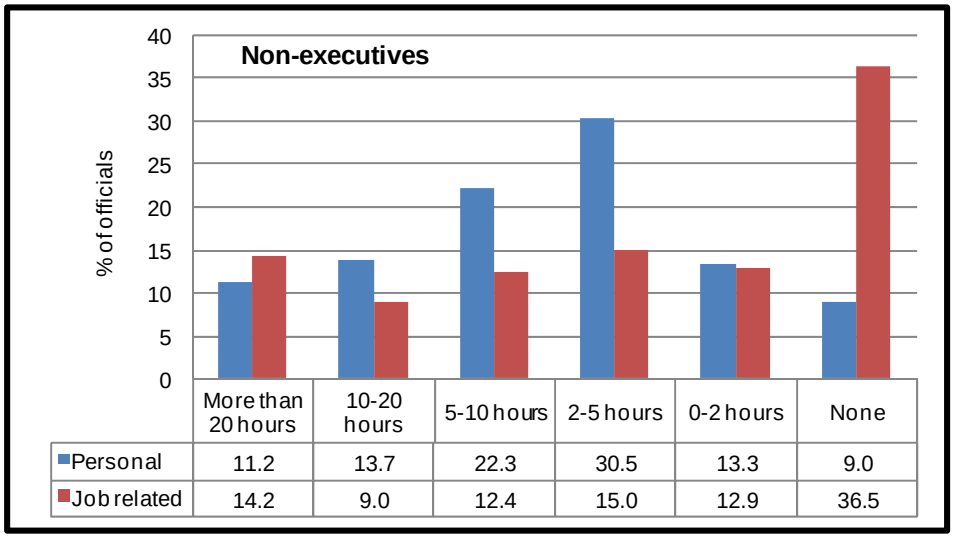
Figure 5.6: Time spent on the computer per week on (i) personal work and (ii) job related work by executives who have computer facilities at home



	More than 20 hours	10-20 hours	5-10 hours	2-5 hours	0-2 hours	None
Personal	10.4	13.2	18.8	32.6	11.1	13.9
Job related	12.5	8.3	16.7	20.1	8.3	34.0

Source: Tables A2.6 (a) & (b)

Figure 5.7: Time spent on the computer per week on (i) personal work and (ii) job related work by non-executives who have computer facilities at home



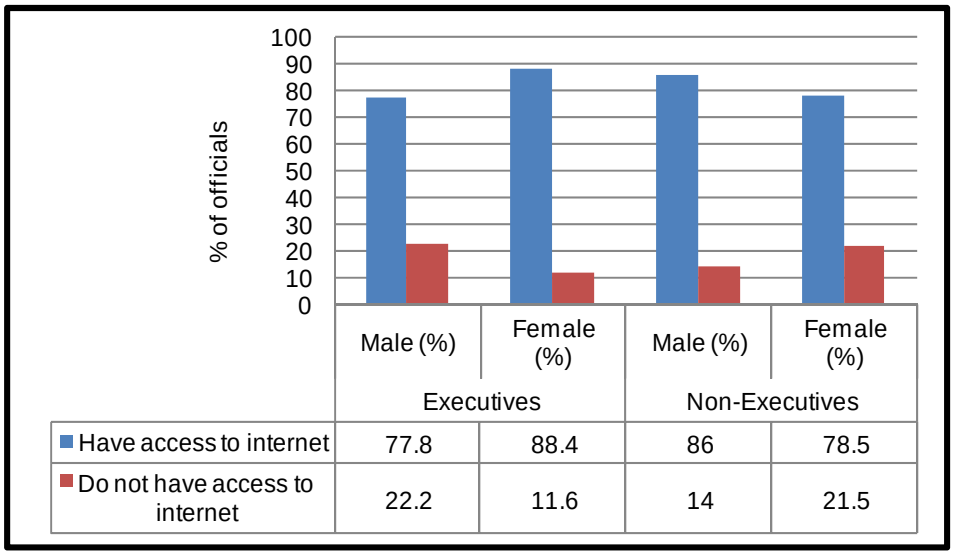
	More than 20 hours	10-20 hours	5-10 hours	2-5 hours	0-2 hours	None
Personal	11.2	13.7	22.3	30.5	13.3	9.0
Job related	14.2	9.0	12.4	15.0	12.9	36.5

Source: Tables A2.7 (a) & (b)

5.3 Internet Usage

Among the government employees surveyed, majority (around 82%) of both executives and non-executives have access to internet. Gender-wise, female executives have relatively more access to internet than male executives (by 10%) while female non-executives have relatively less access to internet than male executives (by 7.5%) (Figure 5.8). Majority of them access internet at the office (Figure 5.9).

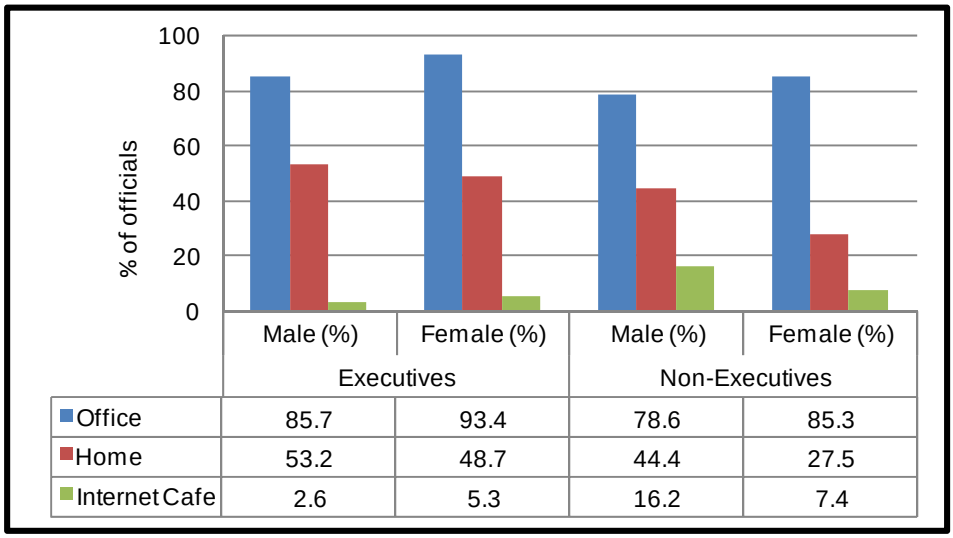
Figure 5.8: Availability of internet facilities to government employees



	Executives		Non-Executives	
	Male (%)	Female (%)	Male (%)	Female (%)
Have access to internet	77.8	88.4	86	78.5
Do not have access to internet	22.2	11.6	14	21.5

Source: Table A2.8

Figure 5.9: Place of internet access of government employees among those who access internet



	Executives		Non-Executives	
	Male (%)	Female (%)	Male (%)	Female (%)
Office	85.7	93.4	78.6	85.3
Home	53.2	48.7	44.4	27.5
Internet Cafe	2.6	5.3	16.2	7.4

Source: Table A2.9

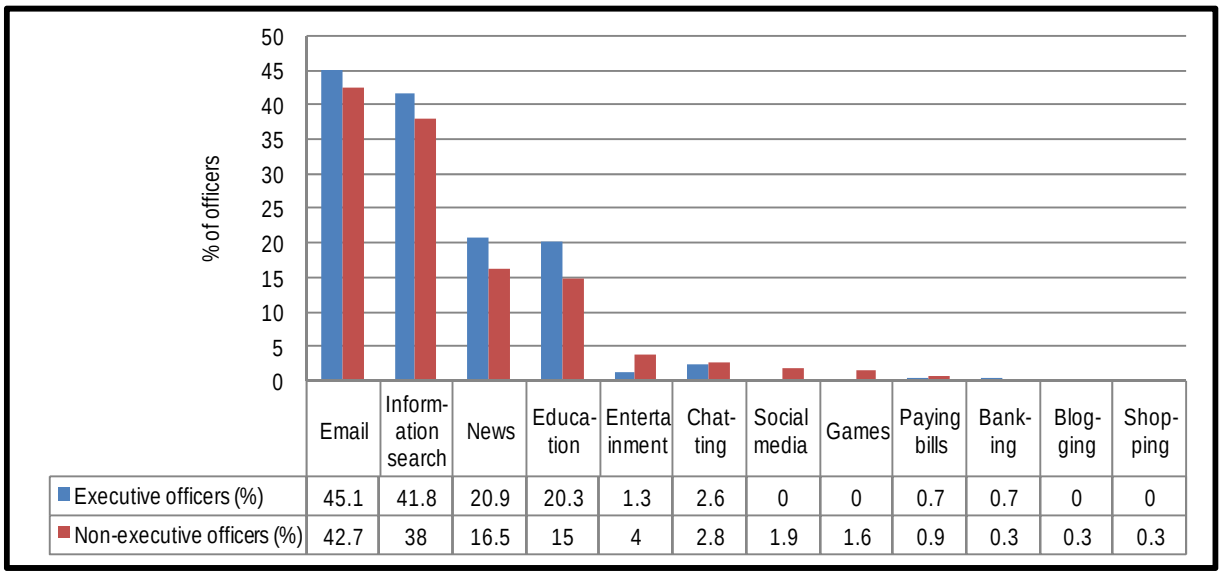
Among the government employees who access internet, almost half of the executives and 40% of the non-executives visit internet daily. In addition, one-fourth of the government employees access internet once in 2 – 3 days and around one-fifth do so weekly (Table 5.6).

Table 5.6: Respondents who access internet by rank of officer and regularity of access of internet

Regularity of access of internet	Executive Officers		Non-executive Officers		Table Total	
	Count	Col %	Count	Col %	Count	Col %
Daily	75	49.0	126	39.3	201	42.4
Once in 2-3 days	41	26.8	74	23.1	115	24.3
Weekly	24	15.7	71	22.1	95	20.0
Rarely	13	8.5	50	15.6	63	13.3
Table Total	**153**	**100.0**	**321**	**100.0**	**474**	**100.0**

Most popular users of internet by both the executives and non-executives who access internet were email communication (44%), information search (40%), news reading (18%), and educational purpose (17%) (Figure 5.10).

Figure 5.10: Purposes of use of internet by government officers who access internet



Source: Table A2.10

5.4 Summary

ICT usage in office among government employees is widespread. Three-fourth of the executives and half of the non-executives were individually provided with ICT facilities for office use. Among staff not individually provided such facilities, majority (87%) were using the commonly provided ICT facilities. Accordingly, only 5% among the executives as well as the non-executives was not engaged in using ICT facilities for office work. The common types of tasks undertaken by government officials using ICT facilities provided in office include; letters/documents preparation, e-mail communication within & outside office, database handling, data analysis, administrative functions, service providing activities to clients, and information sharing with other organizations.

ICT usage at home among government employees also is relatively high; regardless of gender nearly 80% of executives and around 60% of non-executives have computer facilities at home. The extent of having internet facility by them is low; only half of them have internet facility irrespective of the rank of the officials. Among those who have internet facility at home, only 72% of the executives and 66% of the non-executives have e-mail facility. Among e-mail users, majority (more than 80%) use web-based e-mail facility than that of service providers. The popular types of tasks undertaken by the government officials using

ICT facilities at home include documentation, email usage, educating children, and web search. The average time spent on the computer per week by the executives amounted to 13.1 hours (6.9 and 6.2 hours on personal work and job related work) and that by the non-executives 13.7 hours (7.4 and 6.3 hours on personal work and job related work).

Access to internet was available to majority (around 82%) of both executives and non-executives. Gender-wise, female executives have relatively more access to internet than male executives (by 10%) while female non-executives have relatively less access to internet than male executives (by 7.5%). Among the government employees who access internet, almost half of the executives and 40% of the non-executives visit internet daily. Most popular users of internet by both executives and non-executives who access internet were email communication (44%), information search (40%), news reading (18%), and educational purpose (17%).

6. AWARENESS OF E-SRI LANKA DEVELOPMENT PROJECT AND RE-ENGINEERING GOVERNMENT PROGRAMME

This chapter presents the government employees' awareness of e-Sri Lanka Development Project, Lanka Government Network (LGN), Electronic Transactions Act, Computer Crimes Act, and e-Government Policy.

6.1 Awareness of e-Sri Lanka Development Project

A brief introduction of e-Sri Lanka Development Project had already been presented in section 1.3. On the overall, two-thirds of the government employees were aware of the e-Sri Lanka Development Project (Table 6.1). Rank-wise of officials, three-fourth of the executives and 60% of the non-executives were with such awareness. Gender-wise, the awareness is highest among female executives (78%) and lowest among female non-executives (58%). Similar levels of awareness prevailed about role of ICTA in e-Sri Lanka Development Project (Table 6.2).

Table 6.1: Respondents by rank of officer, gender and whether aware of e-Sri Lanka Development Project

Whether aware of e-Sri Lanka Development Project	Executive Officers						Non-executive Officers						Table Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	72	72.7	67	77.9	139	75.1	92	67.6	150	57.7	242	61.1	381	65.6
No	27	27.3	19	22.1	46	24.9	44	32.4	110	42.3	154	38.9	200	34.4
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

Table 6.2: Respondents by rank of officer, gender and whether aware of role of ICTA in e-Sri Lanka Development Project

Whether aware of role of ICTA in e-Sri Lanka Development project	Executive Officers						Non-executive Officers						Total	
	Male		Female		Group Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	75	75.8	67	77.9	142	76.8	71	52.2	135	51.9	206	52.0	348	59.9
No	24	24.2	19	22.1	43	23.2	65	47.8	125	48.1	190	48.0	233	40.1
Group Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

6.2 Awareness of Lanka Government Network (LGN)

❖ *Lanka Government Network (LGN) is the highly available and reliable underlying network infrastructure that connects all the government agencies and departments of GoSL in a cost-effective and secure manner.*
- *Provide inter-connectivity to all Government of Sri Lanka (GoSL) organizations.*
- *Provide centrally managed Internet access to all GoSL organizations.*
- *Provide centrally managed email access (with web based email access) to all GoSL organizations.*
- *Provide centrally managed IP telephony facility to GoSL organizations.*
- *Provide centrally managed trusted secure connection to authorized agencies that are outside of the purview of GoSL*

e-Government Policy - Definitions; ICTA 2010.

In view of the major role played by LGN in supporting the provision of e-government services, it is important for the government employees to be aware of it. The responses received from the employees on the extent of awareness of the LGN help desk and their usages are presented in Table 6.3. Accordingly, only three-fourths of the executives and half of the non-executives were aware of the LGN help desk. Among those who were aware of the LGN help desk, only about 40% of the executives and 30% of the non-executives had sought LGN help desk services. However, among the government employees who sought LGN help desk services, most (above 90%) of the executives as well as the non-executives were satisfied with the services (Table 6.4).

Table 6.3: Respondents by Rank of Officer and whether they are aware of Lanka Government Network (LGN) help desk and sought its services

Executive officers					Non-executive officers				
Whether aware of LGN help desk	Whether sought LGN help desk services		Total	%	Whether aware of LGN help desk	Whether sought LGN help desk services		Total	%
	Yes	No				Yes	No		
Yes	70	69	139	75.1	Yes	112	93	205	51.8
No	1	45	46	24.9	No	5	186	191	48.2
Total	71	114	185	100.0	Total	117	279	396	100.0
%	38.4	61.6	100.0	--	%	29.5	70.5	100.0	--

Table 6.4: Respondents who sought LGN help desk services by rank of officer and extent to which they are satisfied

Level of satisfaction	Executive Officers		Non-executive Officers		Table Total	
	Count	Col %	Count	Col %	Count	Col %
Highly satisfied	7	9.9	6	5.1	13	6.9
Satisfied	37	52.1	73	62.4	110	58.5
Moderately satisfied	20	28.2	28	23.9	48	25.5
Unsatisfied	5	7.0	8	6.8	13	6.9
Highly unsatisfied	2	2.8	2	1.7	4	2.1
Table Total	71	100.0	117	100.0	188	100.0

6.3 Awareness of Electronic Transactions Act, Computer Crimes Act, and e-Government Policy

❖ *The most relevant legislation for use of ICT in government and establishment of e-government services is the Electronic Transactions Act No. 19 of 2006. The Electronic Transactions Act was brought into operation with effect from 1st October 2007. Based on this Act steps could now be taken by government organizations to provide services by electronic means as well as to retain data and information in electronic form. (p. 4)*

e-Government Policy; ICTA 2010.

❖ *The Computer Crimes Act No. 24 of 2007 provides for the identification of computer crimes and stipulates the procedure for the investigation and enforcement of such crimes. The basis of the Computer Crimes Act which became effective on 15th July 2008 is to criminalise attempts at unauthorised access to a computer, computer programme, data or information. (p. 5)*

e-Government Policy; ICTA 2010.

❖ *"Policy and Procedures for ICT Usage in Government" (e-Government Policy), adopted from January 2010, is mandatory for providing a unified approach in implementing e-government services.*

The awareness of Electronic Transactions Act among the overall government employees is generally very low; only 21% of the respondents is aware of it (Table 6.5). By rank of the respondents, 30% of the executives and 17% of the non-executives are awareness of **e**-Government Policy. The males among the executives and the non-executives are relatively more aware of Electronic Transactions Act than the females.

Table 6.5: Respondents by rank of officer, gender and whether aware of 'Electronic Transactions Act'

Whether aware of 'Electronic Transaction Act'	Executive Officers						Non-executive Officers						Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	33	33.3	23	26.7	56	30.3	33	24.3	34	13.1	67	16.9	123	21.2
No	66	66.7	63	73.3	129	69.7	103	75.7	226	86.9	329	83.1	458	78.8
Group Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

The awareness of Computer Crimes Act among the overall government employees is also generally very low; only 33% of the respondents are aware of it (Table 6.6). By rank of the respondents, 42% of the executives and 28% of the non-executives are awareness of **e**-Government Policy. The males among the executives and the non-executives are relatively more aware of Computer Crimes Act than the females.

Table 6.6: Respondents by rank of officer, gender and whether aware of 'Computer Crimes Act'

Whether aware of 'Compute Crimes Act'	Executive Officers						Non-executive Officers						Grand Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	47	47.5	31	36.0	78	42.2	50	36.8	61	23.5	111	28.0	189	32.5
No	52	52.5	55	64.0	107	57.8	86	63.2	199	76.5	285	72.0	392	67.5
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

The awareness of e-Government Policy among the overall government employees is generally low; only 44% of the respondents is aware of it (Table 6.7). By rank of the respondents, 58% of the executives and 38% of the non-executives are awareness of **e**-Government Policy. The males among the executives and the non-executives are relatively more aware of **e**-Government Policy than the females.

Table 6.7: Respondents by rank of officer, gender and whether aware of 'e-Government Policy'

Whether aware of 'e-Government Policy'	Executive Officers						Non-executive Officers						Total	
	Male		Female		Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	63	63.6	45	52.3	108	58.4	58	42.6	91	35.0	149	37.6	257	44.2
No	36	36.4	41	47.7	77	41.6	78	57.4	169	65.0	247	62.4	324	55.8
Group Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

6.4 Summary

Awareness of e-Sri Lanka Development Project is more among the executives (75%) than non-executives (60%) and highest among female executives (78%) while lowest among female non-executives (58%). Similar levels of awareness prevailed about the role of ICTA in e-Sri Lanka Development Project.

Awareness of LGN help desk is also more among the executives (75%) than non-executives (52%). Among those who were aware of LGN help desk, only about 40% of the executives and 30% of the non-executives had sought LGN help desk services. However, among the government employees who sought LGN help desk services, most (above 90%) of them were satisfied with the services.

Awareness of Electronic Transactions Act, Computer Crimes Act, and e-Government Policy among the government employees is generally low; the proportions of those aware of the Acts and Policy were 21%, 33%, and 44%, respectively.

7. AWARENESS OF AND SATISFACTION WITH GOVERNMENT CITIZEN SERVICES

- *Government organizations shall improve citizen accessibility to government services, extending service provision beyond traditional means while complying with relevant standards, as given in 0104. # 0108*
- *Government web sites to be developed to ensure interoperability and to maximize access and participation of users. All government websites should conform to the web standards publish by ICTA. # 0301*

e-Government Policy; ICTA 2010.

Aimed at presenting the government employees' awareness of and satisfaction with government citizen services, this chapter covers, (1) employees' awareness and use of key government websites, (2) extent of contacts made with government organizations for services, and (3) satisfaction with ICT facilitated services provided by organization surveyed.

7.1 Government Employees' Awareness and Use of Key Government Websites

It is beneficial for the government employees to be aware of and familiar with the key government websites. The most popular among the projects so far been implemented under the Re-engineering Government Programme is the **Government Information Center (GIC)**. The GIC was established as a public / private partnership to provide a single point of access to information concerning government services in an effective and friendly manner. The GIC is a single, electronic, trilingual (Sinhala, Tamil and English), online knowledge base of 1,600 services available to citizens from 77 key government organizations.

Although two-thirds of the executives were aware of the government information centre website -- www.gic.gov.lk, only half of the non-executives have such awareness (Table 7.1). Among those who were aware of the government information centre website, only around 60% of executives as well as non-executives had visited it.

Table 7.1: Respondents by rank of officer and whether they have heard of www.gic.gov.lk and visited it

Executive officers

Whether heard of www.gic.gov.lk		Whether visited www.gic.gov.lk		Total	Col %
		Yes	No		
Yes	Count	77	45	122	65.9
	Row %	63.1	36.9	100.0	--
No		0	63	63	34.1
Total		77	108	185	100.0

Non-executive officers

Whether heard of www.gic.gov.lk		Whether visited www.gic.gov.lk		Total	Col %
		Yes	No		
Yes	Count	117	80	197	49.7
	Row %	59.4	40.6	100.0	--
No		0	199	199	50.3
Total		117	279	396	100.0

The most important among the projects so far been implemented under the Re-engineering Government Programme is the **Lanka Gate Initiative** -- www.srilanka.lk **--** Sri Lanka country portal. While 62% of the executives were aware of Lanka Gate website, only half of the non-executives were aware of it (Table 7.2). Among those who were aware of Lanka Gate website, only around 60% of the executives and 45% of the non-executives had visited it.

Majority (76%) of the government employees surveyed had visited government web site(s) other than www.gic.gov.lk and www.srilanka.lk (Table 7.3).

Table 7.2: Respondents by rank of officer and whether they have heard about www.srilanka.lk and visited it

Executive officers					
Whether heard of www.srilanka.lk		Whether visited www.srilanka.lk		Total	Col %
		Yes	No		
Yes	Count	70	45	115	62.2
	Row %	60.9	39.1	100.0	--
No		0	70	70	37.8
Total		70	115	185	100.0

Non-executive officers					
Whether heard of www.srilanka.lk		Whether visited www.srilanka.lk		Total	Col %
		Yes	No		
Yes	Count	87	109	196	49.5
	Row %	44.4	55.6	100.0	--
No		0	200	200	50.5
Total		87	309	396	100.0

Table 7.3: Respondents by rank of officer and whether visited any government website(s) other than www.gic.gov.lk and www.srilanka.lk

Whether visited any government web site(s) other than www.gic.gov.lk & www.srilanka.lk	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
Yes	143	77.3	298	75.3	441	75.9
No	42	22.7	98	24.7	140	24.1
Table Total	185	100.0	396	100.0	581	100.0

Among the most useful government websites listed by the government employees, the prioritized websites are listed in Table 7.4. Accordingly, highly useful websites were those of the following government organizations:

- Ministry of Public Administration (www.pubad.gov.lk);
- Department of Examinations (www.doenets.lk);
- Ministry of Education (www.moe.gov.lk).

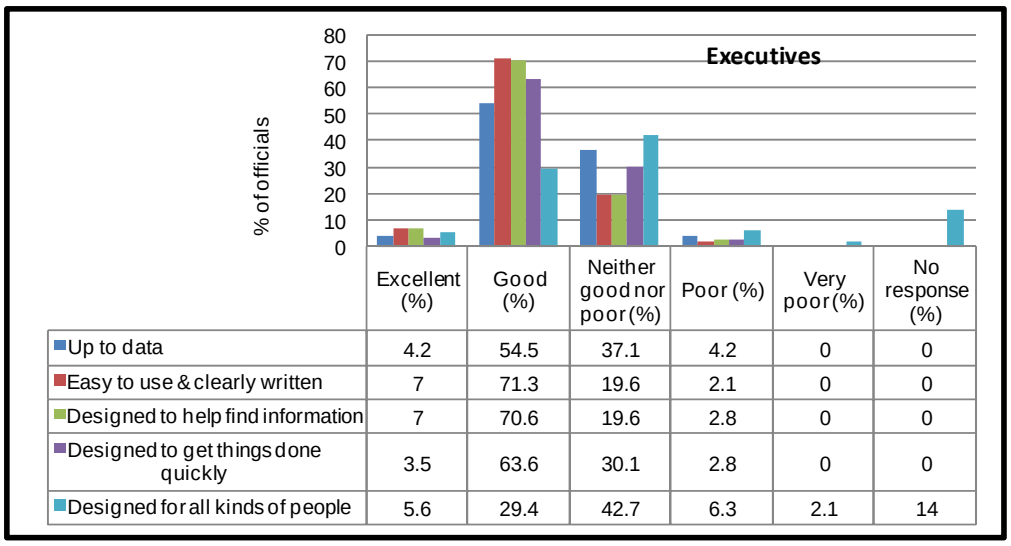
Tables 7.4: Respondents by rank of officer and government organization with most useful website

Organization	Most useful web site	Executive Officers (No. of responses = 130)		Non-executive Officers (No. of responses = 286)		Total (No. of responses = 416)	
		Count	Col %	Count	Col %	Count	Col %
1. Ministry of Public Administration	www.pubad.gov.lk	55	42.3	120	42.0	175	42.1
2. Department of Examinations	www.doenets.lk	7	5.4	35	12.2	42	10.1
3. Ministry of Education	www.moe.gov.lk	11	8.5	21	7.3	32	7.7
4. Government Information Centre	www.gic.gov.lk	6	4.6	19	6.6	25	6.0
5. Ministry of Finance & Planning & The Treasury of Sri Lanka	www.treasuary.gov.lk	7	5.4	10	3.5	17	4.1
6. Sri Lanka Institute of Development Administration	www.slida.gov.lk	8	6.2	2	0.7	10	2.4
7. Department of Pensions	www.pensions.gov.lk	4	3.1	6	2.1	10	2.4
8. Ministry of Health	www.health.gov.lk	3	2.3	7	2.4	10	2.4
9. Ministry of Defence	www.defence.lk	0	0.0	10	3.5	10	2.4
10. Lanka Gate	www.srilanka.lk	3	2.3	4	1.4	7	1.7
11. Central Bank of Sri Lanka	www.cbsl.gov.lk	0	0.0	5	1.7	5	1.2
12. Department of Census and Statistics	www.statistics.gov.lk	3	2.3	2	0.7	5	1.2

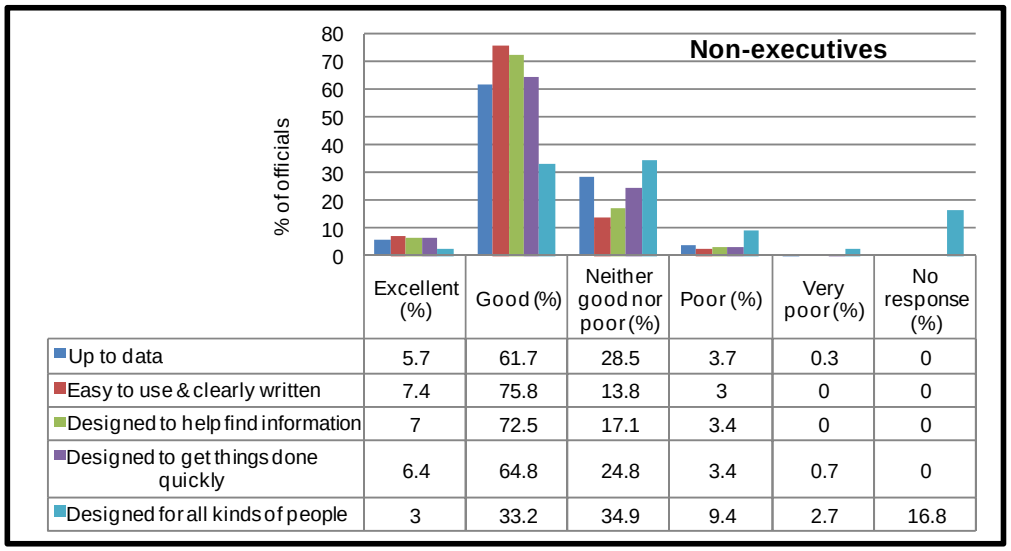
The assessments by executive and non-executive officers of different **qualities of government websites** recently visited by them are given in Figures 7.1. Accordingly,

officers of both ranks were in equal opinion that the government websites are good in respect of qualities such as (a) up to date, (b) easy to use and clearly written, (c) designed to help find information, (d) designed to get things done quickly, and (e) designed for all kinds of people.

Figure 7.1: Level of assessment of different qualities of government websites recently visited by officers (Source: A2.11)



	Excellent (%)	Good (%)	Neither good nor poor (%)	Poor (%)	Very poor (%)	No response (%)
Up to data	4.2	54.5	37.1	4.2	0	0
Easy to use & clearly written	7	71.3	19.6	2.1	0	0
Designed to help find information	7	70.6	19.6	2.8	0	0
Designed to get things done quickly	3.5	63.6	30.1	2.8	0	0
Designed for all kinds of people	5.6	29.4	42.7	6.3	2.1	14



	Excellent (%)	Good (%)	Neither good nor poor (%)	Poor (%)	Very poor (%)	No response (%)
Up to data	5.7	61.7	28.5	3.7	0.3	0
Easy to use & clearly written	7.4	75.8	13.8	3	0	0
Designed to help find information	7	72.5	17.1	3.4	0	0
Designed to get things done quickly	6.4	64.8	24.8	3.4	0.7	0
Designed for all kinds of people	3	33.2	34.9	9.4	2.7	16.8

Government Information Center (GIC) is available through multiple channels; among them "1919" which is available from any part of the country and could be dialled from any telephone network is most common among the public. Frequency of use of the GIC Call Centre using "1919" by the government employees is, however, low. Only around 40% of the executives and 35% of the non-executives were using "1919" either always or sometimes (Table 7.5). Further, around 40% of the government employees rarely used "1919" while another 20% had never used it.

Table 7.5: Respondents by rank of officer and frequency at which they use "1919" to find information about the government services

Frequency of use of "1919"	Executive Officers		Non-executive Officers		Table Total	
	Count	Col %	Count	Col %	Count	Col %
Always	29	15.7	34	8.6	63	10.8
Sometimes	44	23.8	105	26.5	149	25.6
Rarely	74	40.0	160	40.4	234	40.3
Never	38	20.5	97	24.5	135	23.2
Table Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

7.2 Extent of Contacts made over Internet with Government Organizations for Services

Usage of internet by the government employees for obtaining services from the government organizations is at a low level. For around 60% of the government employees, the proportion of contacts made over the internet is less than 10% of the total contacts made with the government organizations for services during the past 12 months; whereas for about three-fourths of the government employees, the above proportion is less than one-fifth (20%) (Table 7.6).

Table 7.6: Respondents by rank of officer and proportion of contacts made over the internet out of total contacts made with the government organizations for services during the past 12 months

Proportion took place over internet	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
<10%	104	56.2	253	63.9	357	61.4
11 - 20%	24	13.0	45	11.4	69	11.9
21 - 30%	9	4.9	20	5.1	29	5.0
31 - 40%	13	7.0	12	3.0	25	4.3
41 - 50%	13	7.0	14	3.5	27	4.6
51 - 60%	4	2.2	11	2.8	15	2.6
61 - 70%	4	2.2	4	1.0	8	1.4
71 - 80%	7	3.8	8	2.0	15	2.6
81 - 90%	5	2.7	7	1.8	12	2.1
91 - 100%	1	0.5	5	1.3	6	1.0
No response	1	0.5	17	4.3	18	3.1
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

7.3 Satisfaction with ICT Facilitated Services provided by own Organizations

Majority (nearly 80%) of the government employees -- both executives and non-executives – have expressed satisfaction with the ICT facilitated services provided by their organizations (Table 7.7).

Table 7.7: Respondents by rank of officer and level of satisfaction with the ICT facilitated services provided by their organizations

Level of satisfaction	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
Highly satisfied	15	8.1	23	5.8	38	6.5
Satisfied	76	41.1	171	43.2	247	42.5
Moderately satisfied	52	28.1	118	29.8	170	29.3
Unsatisfied	24	13.0	25	6.3	49	8.4
Highly unsatisfied	1	0.5	19	4.8	20	3.4
No response	17	9.2	40	10.1	57	9.8
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

7.4 Summary

The awareness of the government information centre website (www.gic.gov.lk) is relatively better (66%) among the executives but low (50%) among the non-executives. Among those who were aware of it, only around 60% of both executives and non-executives had visited it.

Similar pattern of awareness and usage prevails with regard to the Lanka Gate website (www.srilanka.lk).

Among the most useful government websites listed by the government employees were (i) Ministry of Public Administration (www.pubad.gov.lk), (ii) Department of Examinations (www.doenets.lk), and (iii) Ministry of Education (www.moe.gov.lk).

The assessments by executive and non-executive officers of different qualities of government websites recently visited by them revealed that they were in equal opinion that the websites are good in respect of qualities such as (a) up to date, (b) easy to use and clearly written, (c) designed to help find information, (d) designed to get things done quickly, and (e) designed for all kinds of people.

Frequency of use of the GIC Call Centre using “1919” by the government employees is, however, low; only around 40% of the executives and 35% of the non-executives were using “1919” either always or sometimes (Table 7.9).

Usage of internet by the government employees for obtaining services from the government organizations is also at a low level. For around 60% of the government employees, the proportion of contacts made over the internet is less than 10% of the total contacts made with the government organizations for services during the past 12 months.

Majority (80%) of the government employees -- both executives and non-executives -- have expressed satisfaction with the ICT facilitated services provided by their organizations.

8. PERCEPTION AND ATTITUDES OF EMPLOYEES TOWARDS ICT USAGE IN GOVERNMENT SERVICES

Towards delineating of perception and attitudes of the government employees towards ICT usage in government services, this chapter sets forth (1) the general opinion of the employees about the ICT in the government sector, (2) areas in which ICT can make the highest contribution in the government sector, (3) willingness to adopt/use ICT based tasks in official duties, (4) the major expectations of employees on future improvement in government ICT services, and (5) areas where new 'enabler' projects are needed to improve the government service.

8.1 General Opinion of the Government Employees on ICT in the Government Sector

An attempt was made to understand the general opinion of the government employees about the ICT in the government sector by asking the respondents to indicate which of the opinions among five given that they are in agreement. The results were as in Table 8.1. The majority of the employees, irrespective of gender and rank, are of the opinion that the ICT is useful to improve the performance of government organizations and to provide friendly, speedy, transparent and trustworthy services as revealed by the following:

1. *ICT can help to improve the performance of government organizations in many ways (87% of respondents);*
2. *ICT can be useful for improving some areas of the government services (80% of respondents);*
3. *ICT can provide friendly, speedy, transparent and trustworthy services (69% of respondents)*.

There were close to one-fourth of the respondents with the opinion that ICT can be useful only if situation in other areas such as poor management, corruption, political influence etc. also improve. However, there are about 10% of the respondents who think negatively and are in the opinion that ICT cannot improve the situation in government services.

Table 8.1: Respondents by rank of officer, gender and general opinion about ICT in the government sector

Note: Multiple responses present. All %s are out of corresponding respondents in the sample.

Opinion about ICT in the government sector	Executive Officers						Non-executive Officers						Grand Total	
	Male		Female		Total		Male		Female		Total			
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
1. ICT can help to improve the performance of government organizations in many ways	91	91.9	79	91.9	170	91.9	116	85.3	221	85.0	337	85.1	507	87.3
2. ICT can be useful for improving some areas of the government services	74	74.7	61	70.9	135	73.0	102	75.0	181	69.6	283	71.5	418	71.9
3. ICT can provide friendly, speedy, transparent and trustworthy services	68	68.7	57	66.3	125	67.6	85	62.5	191	73.5	276	69.7	401	69.0
4. ICT can be useful only if situation in other areas such as poor management, corruption, political influence etc. also improve	26	26.3	14	16.3	40	21.6	33	24.3	60	23.1	93	23.5	133	22.9
5. ICT cannot improve the situation in government services	10	10.1	10	11.6	20	10.8	15	11.0	24	9.2	39	9.8	59	10.2

8.2 Areas in which ICT could make highest contributions in the Government Sector

The government employees demonstrate positive attitudes with regard to the areas in which ICT can make the highest contribution in the government sector as evident below. The respondents were asked to rank up to three items using 1 (as highest importance) among a given list of 10 items which were thought to be the areas where ICT can make the highest contributions in the government sector. According to Table 8.2 (which presents responses with rank 1), altogether 90% of the respondents were in the opinion that ICT can make the highest contribution in the government sector in the following areas:

1. *Improving the efficiency of government sector;*
2. *Improving the quality of government services;*
3. *Increasing the productivity of government organizations;*
4. *Reducing the discomfort to the public.*

Table 8.2: Respondents by rank of officer, gender and opinion about areas where ICT can make the highest contributions in the government sector

Notes: Responses marked as rank 1. All %s are out of corresponding respondents in the sample.

Areas where ICT can make the highest contribution	Executive Officer						Non-executive Officer						Grand Total	
	Male		Female		Total		Male		Female		Total			
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
1. Improving the efficiency of government sector	63	63.6	59	68.6	122	65.9	87	64.0	179	68.8	266	67.2	388	66.8
2. Improving the quality of government services	14	14.1	8	9.3	22	11.9	14	10.3	20	7.7	34	8.6	56	9.6
3. Increasing the productivity of government organizations	11	11.1	3	3.5	14	7.6	9	6.6	20	7.7	29	7.3	43	7.4
4. Reducing the discomfort to the public	6	6.1	4	4.7	10	5.4	11	8.1	19	7.3	30	7.6	40	6.9
5. ICT can provide friendly, speedy, transparent and trustworthy	2	2.0	4	4.7	6	3.2	3	2.2	9	3.5	12	3.0	18	3.1
6. Reducing the corruption in government sector	1	1.0	1	1.2	2	1.1	5	3.7	5	1.9	10	2.5	12	2.1
7. Improving the working conditions of the organizations	1	1.0	3	3.5	4	2.2	1	0.7	3	1.2	4	1.0	8	1.4
8. Reduction in expenditure	0	0.0	1	1.2	1	0.5	2	1.5	1	0.4	3	0.8	4	0.7
9. Minimizing the harmful political interventions	0	0.0	1	1.2	1	0.5	2	1.5	1	0.4	3	0.8	4	0.7
10. Increasing the income and facilities of employees	0	0.0	1	1.2	1	0.5	0	0.0	2	0.8	2	0.5	3	0.5
11. Increasing the income of government organizations	0	0.0	1	1.2	1	0.5	1	0.7	0	0.0	1	0.3	2	0.3
12. Other	1	1.0	0	0.0	1	0.5	1	0.7	1	0.4	2	0.5	3	0.5
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

Note: Tables A2.12 & A2.13 present responses with rank 2 and rank 3 (in Appendix 2).

8.3 Extent of willingness of government employees to adopt/use ICT based tasks in official duties

The willingness to adopt/use ICT based tasks in official duties is a contributory factor for successful implementation of the e-government initiatives. The survey reveals that the extent of willingness to adopt/use ICT based tasks in official duties is high among both executive officers and non-executive officers surveyed irrespective of gender; the proportion of each category of officials who expressed such willingness is around 93% (Table 8.3).

Table 8.3: Respondents by rank of officer, gender and extent of willingness to adopt/use ICT based tasks in official duties

Extent of willingness	Executive Officer						Non-executive Officer						Grand Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Very High	46	46.5	41	47.7	87	47.0	81	59.6	125	48.1	206	52.0	293	50.4
High	46	46.5	41	47.7	87	47.0	47	34.6	115	44.2	162	40.9	249	42.9
Moderate	4	4.0	3	3.5	7	3.8	7	5.1	19	7.3	26	6.6	33	5.7
Low	3	3.0	0	0.0	3	1.6	0	0.0	1	0.4	1	0.3	4	0.7
Very low	0	0.0	1	1.2	1	0.5	1	0.7	0	0.0	1	0.3	2	0.3
Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

8.4 Major expectations of government employees on future improvements in ICT based government services

The major expectations of government employees on future improvement in government ICT services characterize the overall goals of e-government. The employees were asked to rank up to three items using 1 (as highest importance) among a given list of 7 expectations which were thought to be possible major expectations on future improvements in government ICT services. According to Table 8.4 (which presents responses with rank 1), altogether nearly 90% of the employees expect future improvements in government ICT services in the following areas:

1. *Utilization of ICT to create an efficient & quality public sector;*
2. *Provision of adequate training on ICT to govt. officers;*
3. *Information sharing of all government organizations;*
4. *Utilization of ICT for convenience of the public.*

Table 8.4: Respondents by Rank of Officer, Gender and expectations on future improvements in government ICT services

Notes: Marked as rank 1. All %s are out of corresponding respondents in the sample.

Expectation	Executive Officers						Non-executive Officers						Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
1. Utilization of ICT to create an efficient & quality public sector	40	40.4	32	37.2	72	38.9	47	34.6	82	31.5	129	32.6	201	34.6
2. Provision of adequate training on ICT to govt. officers	13	13.1	13	15.1	26	14.1	27	19.9	53	20.4	80	20.2	106	18.2
3. Information sharing of all government organizations	17	17.2	15	17.4	32	17.3	27	19.9	46	17.7	73	18.4	105	18.1

Expectation	Executive Officers						Non-executive Officers						Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
4. Utilization of ICT for convenience of the public	14	14.1	16	18.6	30	16.2	24	17.6	46	17.7	70	17.7	100	17.2
5. Computerization of the services offered by Gov. Org.	6	6.1	3	3.5	9	4.9	6	4.4	11	4.2	17	4.3	26	4.5
6. Develop the ICT usage in govt. org.	2	2.0	3	3.5	5	2.7	3	2.2	13	5.0	16	4.0	21	3.6
7. Distribution of ICT equipment & facilities by govt.	2	2.0	2	2.3	4	2.2	1	0.7	4	1.5	5	1.3	9	1.5
8. Other	1	1.0	0	0.0	1	0.5	0	0.0	1	0.4	1	0.3	2	0.3
9. No response	4	4.0	2	2.3	6	3.2	1	0.7	4	1.5	5	1.3	11	1.9
Group Total	**99**	**100.0**	**86**	**100.0**	**185**	**100.0**	**136**	**100.0**	**260**	**100.0**	**396**	**100.0**	**581**	**100.0**

Note: Tables A2.14 & A2.15 present responses with rank 2 and rank 3 (in Appendix 2).

8.5 Areas where new 'enabler' projects are needed to improve the government service**s**

To capture visualizations of the government employees towards improvement of the government services, their views on the areas where new 'enabler' projects are needed to improve such services were canvassed. Among the responses received the following had been prioritized (Table 8.5):

1. *Improve ICT usage / provide ICT facilities / further computerization;*
2. *Provision of (more) training including of soft skills such as attitudinal change among govt employees;*
3. *Improve awareness among citizens;*
4. *Improve service delivery at DSs & DvSs by issuing of all certificates / permits / validation of certificates including GNs activities;*
5. *Exchange of information between govt organizations (G2G).*

The government employees surveyed were also asked to express their opinion on the usage of ICT for citizens, young and future generation. Among the responses received the following had been be prioritized (Table 8.6):

1. *It benefits the public to get govt services very conveniently and develop the country;*
2. *It helps create knowledge society;*
3. *Encourage ICT usage by making more facilities / opportunities;*
4. *Need of allowing children to use computers under parents supervision.*

It is encouraging to observe from the above that overwhelm majority had affirmatively realized the achievable impacts of usage of ICT for citizens or e-government.

Table 8.5: Areas where new 'enabler' projects are needed as highlighted by the respondents

Types of enabler projects	No. of responses	% out of total respondents (581)
1. Improve ICT usage/ provide ICT facilities / further computerization	269	46.3
2. Provision of (more) training including of soft skills such as attitudinal change	148	25.5

Types of enabler projects	No. of responses	% out of total respondents (581)
among govt employees		
3. Improve awareness among citizens	134	23.1
4. Improve service delivery at DSs & DvSs by issuing of all certificates / permits / validation of certificates including GNs activities	92	15.8
5. Exchange of information between govt organizations (G2G)	83	14.3
6. Financial transactions (govt organizations) / ETF	41	7.1
7. Use of ICT for management and business need	26	4.5
8. Improvement of services of government organizations	22	3.8
9. Use of ICT in schools for students	21	3.6
10. Timely updating of information	17	2.9
11. Use of ICT in transport sector	13	2.2
12. Use of ICT in health sector	13	2.2
13. Use of ICT for govt employees recruitment/promotion/transfer	10	1.7
14. Minimize political interference & eliminate corruption and malpractices	10	1.7
15. Other (Land use monitoring/ defence activities / legal activities)	6	1.0
Total	**905**	**--**

Table 8.6: Respondents' opinion on usage of ICT for citizens, young and future generation

Opinions on usage of ICT for citizens, young and future generation	No. of responses	% out of total respondents (581)
1. It benefits the public to get govt services very conveniently and develop the country	231	39.8
2. It helps create knowledge society	165	28.4
3. Encourage ICT usage by making more facilities / opportunities	151	26.0
4. Need of allowing children to use computers under parents supervision	85	14.6
5. Opportunities for employment generation	9	1.5
6. It helps to communicate information internationally	9	1.5
7. It might leads to unemployment	11	1.9
8. Use of computers may lead to reduce human relations / need of reducing generation gap	8	1.4
Total	**669**	**100.0**

8.6 Summary

The majority of the employees, irrespective of gender and rank, are of the opinion that the ICT is useful to improve the performance of government organizations and to provide friendly, speedy, transparent and trustworthy services.

The government employees demonstrate positive attitudes with regard to the areas in which ICT can make the highest contribution in the government sector. These include (i) *Improving the efficiency of government sector, (ii) Improving the quality of government services, (iii) Increasing the productivity of government organizations, and (iv) Reducing the discomfort to the public.*

The extent of willingness to adopt/use ICT based tasks in official duties is high among both executive officers and non-executive officers surveyed irrespective of gender; the proportion of each category of officials who expressed such willingness is around 93%.

The major expectations of government employees on future improvement in government ICT services characterize the overall goals of e-government. Altogether, nearly 90% of the employees expect future improvements in government ICT services in the following areas: *(i) Utilization of ICT to create an efficient & quality public sector; (ii) Provision of adequate training on ICT to govt. officers; (iii) Information sharing of all government organizations; and (iv) Utilization of ICT for convenience of the public.*

The views of the government employees on the areas where new 'enabler' projects are needed to improve the government services include *(i) improve ICT usage / provide ICT facilities / further computerization, (ii) provision of (more) training including of soft skills such as attitudinal change among govt employees; (iii) improve awareness among citizens; (iv) improve service delivery at DSs & DvSs by issuing of all certificates / permits / validation of certificates including GNs activities; and (v) exchange of information between govt organizations (G2G).*

It is encouraging to observe from the above that overwhelm majority of the government employees had affirmatively realized the achievable impacts of usage of ICT for citizens or e-government.

9. ORGANIZATION SPECIFIC ICT RELATED ISSUES

This chapter is devoted to present the organization specific ICT related issues as perceived by the government employees. These include (1) efficiency of providing services (2) aspects related to on-line services, and (3) capability of organizations to adopt ICT based tasks and to use ICT in day-to-day tasks. This chapter also includes the responses received to the final open question included in the questionnaire; on the constraints for implementing re-engineering government programme and suggestions to overcome them.

9.1 Efficiency of providing services by the Organizations and ICT involvement

The respondents were asked to rank (using a five point scale) the efficiency of providing services and ICT involvement in them in respect of three (3) major administrative processes of the organizations, namely, (i) human resources management and development, (ii) salaries and other payments, and (iii) management information system (MIS). The results are presented in Table 9.1. Accordingly, on the overall, the efficiency of providing services and ICT involvement in them in respect of listed 3 administrative processes of the organizations are at satisfactory level. The proportions of employees who rank the efficiency of providing services and ICT involvement in them as moderate to high are around three-fourths and higher in respect of those administrative processes.

Table 9.1: Respondents by ranking on a five point scale of efficiency of providing services and ICT involvement in them in respect of 3 major administrative processes of the organizations

(i) Administrative process 1: HR management and development

Efficiency of providing service	Ranking for ICT involvement													
	Very high		High		Moderate		Low		Very low		No response		Table Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Very high	16	61.5	11	6.7	3	1.3	0	0.0	1	2.5	0	0.0	31	5.3
High	6	23.1	121	73.3	100	44.6	31	35.2	15	37.5	2	5.3	275	47.3
Moderate	2	7.7	24	14.5	107	47.8	36	40.9	15	37.5	0	0.0	184	31.7
Low	2	7.7	7	4.2	9	4.0	18	20.5	9	22.5	0	0.0	45	7.7
Very low	0	0.0	2	1.2	3	1.3	2	2.3	0	0.0	1	2.6	8	1.4
No response	0	0.0	0	0.0	2	0.9	1	1.1	0	0.0	35	92.1	38	6.5
Table Total	**26**	**100.0**	**165**	**100.0**	**224**	**100.0**	**88**	**100.0**	**40**	**100.0**	**38**	**100.0**	**581**	**100.0**
Row %	4.4	--	28.4	--	38.6	--	15.1	--	6.9	--	6.5	-	100.0	-

(ii) Administrative process 2: Salaries and other payments

Efficiency of providing service	Ranking for ICT involvement													
	Very high		High		Moderate		Low		Very low		No response		Table Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Very high	55	72.4	29	10.7	8	5.9	4	7.8	0	0.0	0	0.0	96	16.5
High	16	21.1	203	75.2	87	64.4	17	33.3	7	43.8	0	0.0	330	56.8
Moderate	4	5.3	37	13.7	37	27.4	18	35.3	7	43.8	0	0.0	103	17.7
Low	1	1.3	1	0.4	3	2.2	11	21.6	1	6.3	0	0.0	17	2.9
Very low	0	0.0	0	0.0	0	0.0	1	2.0	1	6.3	1	3.0	3	0.5
No response	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	32	97.0	32	5.5
Table Total	**76**	**100.0**	**270**	**100.0**	**135**	**100.0**	**51**	**100.0**	**16**	**100.0**	**33**	**100.0**	**581**	**100.0**
Row %	13.1	--	46.5	--	23.2	--	8.8	--	2.7	--	5.7	--	100.0	--

(iii) Administrative process 3: Management information system (MIS)

Efficiency of providing service	Ranking for ICT involvement													
	Very high		High		Moderate		Low		Very low		No response		Table Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Very high	14	66.7	11	6.2	5	2.2	1	1.1	0	0.0	0	0.0	31	5.3
High	5	23.8	133	74.7	80	35.6	14	15.9	7	21.9	2	5.4	241	41.5
Moderate	2	9.5	28	15.7	125	55.6	45	51.1	12	37.5	1	2.7	213	36.7
Low	0	0.0	5	2.8	13	5.8	25	28.4	8	25.0	0	0.0	51	8.8
Very low	0	0.0	1	0.6	2	0.9	3	3.4	5	15.6	1	2.7	12	2.1
No response	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	33	89.2	33	5.7
Table Total	**21**	**100.0**	**178**	**100.0**	**225**	**100.0**	**88**	**100.0**	**32**	**100.0**	**37**	**100.0**	**581**	**100.0**
Row %	3.6	--	30.6	--	38.7	--	15.1	--	5.5	--	6.4	--	100.0	--

9.2 Aspects related to on-line services of the Organizations

Majority (85%) of the organizations where the government employees were surveyed have websites. Among them only 44% of the websites provide on-line services; indicating more than half the websites do not provide on-line services (Table 9.2).

Table 9.2: Respondents according to whether the organizations have websites and whether they provide on-line services

Whether organizations have websites	Whether organizations provide on-line services		Total	
	Yes	No	Count	Col %
Yes	253	238	491	84.5
No	0	90	90	15.5
Total	253	328	581	100.0
Row %	43.5	56.5	100.0	--

Majority (81%) of the employees were in the opinion that the on-line services provided by the websites of their organizations provide convenience to the organizations (Table 9.3). The level of response to the on-line services of the organizations was generally satisfactory; majority (82%) of the employees expressed that the response level was moderate to high.

Table 9.3: Respondents whose organizations have websites with on-line services according to level of response to those on-line services and whether on-line services provide convenience to the organizations

Level of response to on-line services of the organizations	Whether on-line services provided convenience for activities of organizations					
	Yes		No		Total	
	Count	Col %	Count	Col %	Count	Col %
Very high	6	2.9	4	8.5	10	4.0
High	115	55.8	10	21.3	125	49.4
Moderate	52	25.2	19	40.4	71	28.1
Low	17	8.3	4	8.5	21	8.3
Very low	5	2.4	4	8.5	9	3.6
Don't know	11	5.3	6	12.8	17	6.7
Total	**206**	**100.0**	**47**	**100.0**	**253**	**100.0**
Row %	81.4	--	18.6	--	100.0	--

Majority (80%) of the employees think that the '*creation of awareness about the services and make available information, forms and circulars for download'* as an important means by which on-line services provide convenience to the organizations (Table 9.4). The '*provision of efficient services'* and *'cost saving for the organization'* are other conveniences to the organizations due to on-line services.

Table 9.4: Respondents opinion on the ways in which on-line services provide convenience to the organizations

Multiple responses exist. No. of organizations with websites having on-line services = 253

Ways in which on-line services provide convenience to Organizations	Frequency	Percent (% out of 253)
1. Creation of awareness about the services and make available information, forms and circulars for download	202	79.8
2. Provision of efficient services	52	20.6
3. Cost saving for the organization	10	4.0

9.3 Capability of Organizations to adopt ICT based tasks and to use ICT in day-to-day tasks

The government employees' opinions on the capability of organizations to adopt ICT based tasks and to use ICT in day-to-day tasks were sought related to three work related supportive areas, (i) hardware & software resources, (ii) human resource skills in ICT, and (iii) information sharing & access to information

The respondents' assessment with regard to organizations' capability to adopt ICT based tasks supported by above three areas is on the overall favourable, as evident from Table 9.5. While close to half of them assess the capability as either very good or good, more than three-fourths assess it as moderate or above.

Table 9.5: Respondents by rank of officer and their assessment with regard to organizations' capability to adopt ICT based tasks in general

Capability	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
(i) Hardware & software resources:						
Very good	15	8.1	33	8.4	48	8.3
Good	71	38.4	158	40.1	229	39.6
Moderate	52	28.1	110	27.9	162	28.0
Poor	38	20.5	77	19.5	115	19.9
Very poor	9	4.9	16	4.1	25	4.3
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**
(ii) Human resource skills in ICT:						
Very good	10	5.4	7	1.8	17	2.9
Good	80	43.2	175	44.3	255	44.0
Moderate	64	34.6	141	35.7	205	35.3
Poor	31	16.8	58	14.7	89	15.3
Very poor	0	0.0	14	3.5	14	2.4
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**
(iii) Information sharing & access to information:						
Very good	6	3.2	20	5.1	26	4.5
Good	68	36.8	146	37.0	214	36.9
Moderate	65	35.1	140	35.4	205	35.3
Poor	29	15.7	47	11.9	76	13.1
Very poor	17	9.2	42	10.6	59	10.2
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

The respondents' assessment with regard to organizations' capability to use ICT in day-to-day tasks supported by the same above three areas is also on the overall generally favourable, as evident from Table 9.6. While close to 45% of them assess the capability as either very good or good, around three-fourths assess it as moderate or above.

Table 9.6: Respondents by rank of officer and their assessment with regard to organizations' capability to use ICT in day-to-day tasks

Capability	Executive Officers		Non-executive Officers		Total	
	Count	Col %	Count	Col %	Count	Col %
(i) Hardware & software resources:						
Very good	13	7.0	26	6.6	39	6.7
Good	70	37.8	155	39.2	225	38.8
Moderate	54	29.2	108	27.3	162	27.9
Poor	31	16.8	82	20.8	113	19.5
Very poor	17	9.2	24	6.1	41	7.1
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**
(ii) Human resource skills in ICT:						
Very good	8	4.3	14	3.5	22	3.8
Good	76	41.1	158	40.0	234	40.3
Moderate	60	32.4	146	37.0	206	35.5
Poor	37	20.0	64	16.2	101	17.4
Very poor	4	2.2	13	3.3	17	2.9
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**
(iii) Information sharing & access to information:						
Very good	6	3.2	17	4.3	23	4.0
Good	57	30.8	127	32.2	184	31.7
Moderate	69	37.3	144	36.5	213	36.7
Poor	35	18.9	60	15.2	95	16.4
Very poor	18	9.7	47	11.9	65	11.2
Total	**185**	**100.0**	**396**	**100.0**	**581**	**100.0**

9.4 Re-engineering Government Programme Implementation Constraints

The identification of implementation constraints of the re-engineering government programme was also an aim of this study. The government employees surveyed were finally asked to identify the types of constraints in implementing the re-engineering government programme activities in their organizations and suggestions they wish to make to overcome such constraints. The responses received on the above aspects are listed in Tables 9.7 & 9.8. Accordingly, many of the employees had prioritized the following four implementation constraints:

1. *Lack of training on ICT / English language difficulties / shortage of trained officers;*
2. *Lack of computer hardware / shortage of office space / financial constraints;*
3. *Need of attitudinal change / lack of motivation / employee problems;*
4. *Lack of maintenance of equipment / system maintenance & updating problems / administrative problems*.

The above identified constraints clearly focus on four distinct areas; ICT capacity development, provision of ICT infrastructure, development of soft skills, and maintenance of equipment.

The suggestions made by the employees to overcome such implementation constraints could be prioritized as follows:

1. *Provision of adequate training (hardware/software/communication techniques / awareness about re-engineering programme / e-Government Policy);*
2. *Supply of infrastructure facilities (hardware/software/security/office space);*
3. *Creating attitudinal changes of staff / need of staff motivation;*
4. *Implementation of change management;*
5. *Establishment of maintenance system*.

While it is acknowledged that all the above tasks are presently being implemented[14], they should be viewed as requests for further strengthening of them. On the overall, the above listed constraints and the suggestions to overcome them would be useful towards improvement of the implementation of the re-engineering government programme.

Table 9.7: Types of constraints in implementing re-engineering government programme activities in the organizations surveyed as highlighted by the respondents

Constraints for implementing re-engineering government programme	No. of responses	% out of total respondents (581)
1. Lack of training on ICT / English language difficulties / shortage of trained officers	385	66.3
2. Lack of computer hardware / shortage of office space / financial constraints	240	41.3
3. Need of attitudinal change / employee problems / Lack of motivation	167	28.7
4. Lack of maintenance of equipment/ system maintenance & updating problems / administrative problems	118	20.3
5. Lack of coordination among divisions within the organization	20	3.4
6. Longer duration for computerization	18	3.1
7. Practical difficulties during implementation	15	2.6
8. Political interference / problems	14	2.4
9. Lack of transparency / trustworthiness / information security concerns	14	2.4
10. Lack of awareness among the citizens about the ICT facilitated services provided	4	0.7

Table 9.8: Suggestions made by respondents to overcome constraints in implementing re-engineering government programme

Ways to overcome constraints	No. of responses	% out of total respondents (581)
1. Provision of adequate training (hardware/software/communication techniques/ awareness about re-engineering programme / e-Government Policy)	404	69.5
2. Supply of infrastructure facilities (hardware/software/security/office space)	212	36.5
3. Creating attitudinal changes / need of motivation	111	19.1
4. Implementation of change management	76	13.1
5. Establishment of maintenance system	29	5.0
6. Improve awareness among citizens & create trust	25	4.3
7. Harmonizing understanding/cooperation among the Divisions/Units within the Organizations	21	3.6
8. Accelerating computerization	10	1.7
9. Minimize political interference	9	1.5
10. Developing transparency	7	1.2

9.5 Summary

The government employees were in the opinion that the efficiency of providing services and ICT involvement in *(i) human resources management and development, (ii) salaries and other payments, and (iii) management information system (MIS)* are at satisfactory level.

[14] For example, Training on Change Management for the Task Force of e-Pensions Project at Department of Pensions had been provided at University of Oxford, United Kingdom in November 2009. Source: www.icta.lk/en/programmes/re-engineering-government/131-main-projects/260--epensions-project-.html

Majority (85%) of the government organizations surveyed have websites. However, among them only 44% of the websites provide on-line services; indicating more than half the websites does not provide on-line services.

Majority (81%) of the employees were in the opinion that the on-line services provided by the websites of their organizations provide convenience to the organizations. The level of response to the on-line services was generally satisfactory.

Majority (80%) of the employees believe that the '*creation of awareness about the services and make available information, forms and circulars for download'* as an important means by which on-line services provide convenience to the organizations. The '*provision of efficient services'* and *'cost saving for the organization'* are other conveniences to the organizations due to on-line services.

The employees' assessments with regard to organizations' capability to (a) adopt ICT based tasks and (b) use ICT in day-to-day tasks, supported by (i) hardware & software resources, (ii) human resource skills in ICT, and (iii) information sharing & access to information, were on the overall favourable.

The constraints identified by the government employees `in implementing the re-engineering government programme activities in their organizations' focused on four distinct areas; *(i) ICT capacity development, (ii) provision of ICT infrastructure, (iii) development of soft skills, and (iv) maintenance of equipment.*

The suggestions made by the employees to overcome such implementation constraints include:

- *Provision of adequate training (hardware/software/communication techniques / awareness about re-engineering programme / e-Government Policy);*
- *Supply of infrastructure facilities (hardware/software/security/office space);*
- *Creating attitudinal changes of staff / need of staff motivation;*
- *Implementation of change management;*
- *Establishment of maintenance system*.

The above areas of constraints and the suggestions to overcome them would be useful towards improvement of the implementation of the re-engineering government programme.

10. CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter presents (i) the overall study findings, (ii) conclusions including constraints so far faced in the implementation of the re-engineering government programme and (iii) a set of recommendations which should be addressed to facilitate the achievement of envisaged outcomes and impact.

10.1 Summary of Findings

The **sample of government employees surveyed** consisted of executives and non-executives in the ratio of 1:2 (approximately) and totalling 581 with males and females in the ratio 2:3. Majority among those surveyed were relatively young; 62 % were less than 40 years old.

ICT knowledge and skills and training outcomes

ICT knowledge and skills of employees and training received indicates that sizable amount (60%) had formal training in the ICT sector with higher proportion of females than males. Relatively low proportion among surveyed had the opportunity to attended training programs organized by ICTA (36% of the executives and 24% of the non-executives); among them females were in higher proportion than males. Among those who had no formal training in ICT sector, around half of them possess e-mail communication and internet surfing skills. Relatively high (80%) ICT literacy rate prevails among both the executives and non-executives.

An **assessment of the outcomes** of training revealed that benefit of training had been felt by all participants; relatively more by the non-executives than the executives. Among the employees, nearly 45% were in the opinion that training significantly improved their ability to do ICT related work while half indicated some improvement in their ability. On a ten-point scale to gauge the extent to which more efficient and/or effective in ICT related work as a result of the ICT training, nearly two-thirds of the employees had selected scores above '5' indicating they were better in ICT related work. With regard to the styles in which government employees' work performance had improved as an outcome of training organized by ICTA, half to two-thirds observed *'more confident at work', 'more accurate work output', 'faster work performance', 'capability to do more work',* and *'provision of better service to customers'*.

ICT Usage in Office and at Home

ICT usage in office among government employees is widespread. Three-fourth of the executives and half of the non-executives were individually provided with ICT facilities for office use. Among the staff not individually provided such facilities, majority (87%) were using the commonly provided ICT facilities. Accordingly, only 5% of the employees were not using ICT facilities for office work. The common types of tasks undertaken by government employees using ICT facilities provided in office included; letters/documents preparation, e-mail communication, database handling, data analysis, administrative functions, service providing activities to clients, and information sharing with other organizations.

ICT usage at home among government employees is also relatively high; regardless of gender nearly 80% of executives and around 60% of non-executives have computer facilities at home. The extent of having internet facility by them is low; only half of them have internet facility irrespective of the rank of the officials. Among those who have internet facility at home, only 72% of the executives and 66% of the non-executives have e-mail facility. The popular types of tasks undertaken by the government officials using ICT facilities at home include documentation, email usage, educating children, and web search. The average time

spent on the computer per week at home by both executives and non-executives amounted to around 13 hours with equal proportion of the time on personal work and job related work.

Access to internet was available to majority (around 80%) irrespective of rank and gender; close to half of them surfing the internet daily. Most popular users of internet were email communication, information search, news reading and educational purposes.

Awareness of and Satisfaction with Citizen Services

Awareness of e-Sri Lanka Development Project, the role of ICTA in e-Sri Lanka Development Project and the LGN help desk were at satisfactory levels among the employees. However, the awareness of Electronic Transactions Act, Computer Crimes Act, and e-Government Policy among the employees is generally low. Accordingly, there is a need for enhancing the awareness of these legislations and policies.

The **awareness** of the GIC website (www.gic.gov.lk) is relatively better (66%) among the executives but low (50%) among the non-executives. Among those who were aware of it, only around 60% of both executives and non-executives had visited it. Similar pattern of awareness and usage prevails with regard to the Lanka Gate website (www.srilanka.lk). Among the most useful government websites listed by the government employees were that of (i) Ministry of Public Administration (www.pubad.gov.lk), (ii) Department of Examinations (www.doenets.lk), and (iii) Ministry of Education (www.moe.gov.lk). **Frequency of use** of the GIC Call Centre using "1919" by the government employees is, however, low; only around 40% of the executives and 35% of the non-executives were using it either always or sometimes.

The **assessments** by executive and non-executive officers of different qualities of government websites recently visited by them revealed that they were in equal opinion that the websites are good in respect of qualities such as (a) up to date, (b) easy to use and clearly written, (c) designed to help find information, (d) designed to get things done quickly, and (e) designed for all kinds of people.

Usage of internet by the government employees for obtaining services from the government organizations is also at a low level. For around 60% of the government employees, the proportion of contacts made over the internet is less than 10% of the total contacts made with the government organizations for services during the past 12 months.

Majority of both executives and non-executives have expressed satisfaction with the ICT facilitated services provided by their organizations.

Perception and Attitudes of the Employees

The majority of the employees, irrespective of rank and gender, were of the opinion that the ICT is useful to improve the performance of government organizations and to provide friendly, speedy, transparent and trustworthy services.

The government employees demonstrated positive attitudes with regard to the areas in which ICT can make the highest contribution in the government sector. These include *(i) improving the efficiency of government sector, (ii) improving the quality of government services, (iii) increasing the productivity of government organizations, and (iv) reducing the discomfort to the public.*

The extent of willingness to adopt/use ICT based tasks in official duties is high among both executive officers and non-executive officers irrespective of gender.

The major expectations of government employees on future improvement in government ICT services characterize the overall goals of e-government. The views of the government employees on the areas where new 'enabler' projects are needed to improve the government services include *(i) improve ICT usage / provide ICT facilities / further computerization, (ii) provision of (more) training including of soft skills such as attitudinal change among govt employees; (iii) improve awareness among citizens; (iv) improve service delivery at DSs & DvSs by issuing of all certificates / permits / validation of certificates including GNs activities; and (v) exchange of information between govt organizations (G2G).*

It is encouraging to observe from the above that overwhelming majority of the government employees had affirmatively realized the achievable impacts of usage of ICT for citizens or e-government.

Organization Specific Matters

The government employees were in the opinion that the efficiency of providing services and ICT involvement in *(i) human resources management and development, (ii) salaries and other payments, and (iii) management information system (MIS)* are at satisfactory level.

Majority of the government organizations have websites. However, less than half of the websites provide on-line services; indicating more than half the websites does not provide on-line services. Majority of the employees were in the opinion that the on-line services provided by the websites of their organizations provide convenience to the organizations. The level of response to the on-line services was generally satisfactory. Majority of the employees believe that the '*creation of awareness about the services and make available information, forms and circulars for download'* as an important means by which on-line services provide convenience to the organizations. The '*provision of efficient services'* and *'cost saving for the organization'* are other conveniences to the organizations due to on-line services.

The employees' assessments with regard to organizations' capability to (a) adopt ICT based tasks and (b) use ICT in day-to-day tasks, supported by (i) hardware & software resources, (ii) human resource skills in ICT, and (iii) information sharing & access to information, were on the overall favourable.

The **constraints** identified by the government employees `in implementing the re-engineering government programme activities in their organizations' focused on four distinct areas; *(i) ICT capacity development, (ii) provision of ICT infrastructure, (iii) development of soft skills, and (iv) maintenance of equipment.* The **suggestions** made by the employees to overcome such implementation constraints include:

- *Provision of adequate training (hardware/software/communication techniques / awareness about re-engineering programme / e-Government Policy);*
- *Supply of infrastructure facilities (hardware/software/security/office space);*
- *Creating attitudinal changes of staff / need of staff motivation;*
- *Implementation of change management;*
- *Establishment of maintenance system*.

The above areas of constraints and the suggestions to overcome them would be useful towards improvement of the implementation of the re-engineering government programme.

Majority of the government employees is in the opinion that the implementation of the Re-engineering Government Programme should be accelerated to achieve island-wide coverage including Northern and Eastern Provinces. They look forward to see more and

more Government e-Services being operationalized while creating broad awareness among the government employees as well as the citizens.

10.2 Conclusions

The following conclusions have been arrived at on the basis of the findings of the government employee's survey.

- Relatively high ICT literacy rate prevails among both the executives and non-executives.
- Relatively low proportion among those surveyed had the opportunity to attended training programs organized by ICTA; among them females were in higher proportion than males.
- An assessment of the outcomes of training revealed that benefit of training had been felt by all participants; relatively more by the non-executives than the executives.
- ICT usage in office among government employees is widespread; only 5% among the employees was not engaged in using ICT facilities for office work.
- ICT usage at home among government employees is also relatively high. However, the availability of internet connectivity as well as e-mail facility is low at home. The average time spent on the computer per week at home by the employees amounted to around 13 hours with equal proportion of the time on personal work and job related work.
- Access to internet was available (mostly in office) to majority of employees irrespective of rank and gender; close to half of them surfing the internet daily.
- Awareness of e-Sri Lanka Development Project, the role of ICTA in e-Sri Lanka Development Project and the LGN help desk were at satisfactory levels among the employees. However, the awareness of Electronic Transactions Act, Computer Crimes Act, and e-Government Policy among the employees is generally low.
- The awareness of the GIC website (www.gic.gov.lk) and Lanka Gate website (www.srilanka.lk) is relatively better among the executives but low among the non-executives. Frequency of use of the GIC Call Centre using "1919" by the government employees is low.
- Usage of internet by the government employees for obtaining services from the government organizations is also at a low level.
- The majority of the employees are of the opinion that the ICT is useful to improve the performance of government organizations and to provide friendly, speedy, transparent and trustworthy services.
- The government employees demonstrate positive attitudes with regard to the areas in which ICT can make the highest contribution in the government sector.
- The extent of willingness to adopt/use ICT based tasks in official duties is high among both executive officers and non-executive officers irrespective of gender
- The major expectations of government employees on future improvement in government ICT services characterize the overall goals of e-government.

- ❖ Overwhelming majority of the government employees had affirmatively realized the achievable impacts of usage of ICT for citizens or e-government.

- ❖ Majority of the employees were in the opinion that the on-line services provided by the websites of their organizations provide convenience to the organizations.

- ❖ The constraints identified by the government employees `in implementing the re-engineering government programme activities in their organizations' focused on four distinct areas; *(i) ICT capacity development, (ii) provision of ICT infrastructure, (iii) development of soft skills, and (iv) maintenance of equipment.*

10.3 Recommendations

On the basis of the study findings, the following recommendations are made aimed at further improvement of the on-going implementation of the re-engineering government programme and to facilitate the achievement of envisaged outcomes and impact.

(i). Provision of further training on hardware, software, and communication techniques to the government employees.

(ii). Further provision of infrastructure facilities (hardware / software / system security / office space), after need assessment.

(iii). Implementation of change management in government organizations and develop attitudinal changes and motivational system for the employees.

(iv). Impart understanding on the importance of maintenance procedures for ICT systems in office and develop procedures for the same.

(v). Enhance among the government employees the awareness of Re-engineering Government Programme, ICT related legislations (Electronic Transactions Act and Computer Crimes Act), e-Government Policy, government websites [GIC website (www.gic.gov.lk) and Lanka Gate website (www.srilanka.lk)], and citizen services of government organizations.

(vi). Popularize among the government employees the usage of internet for obtaining services from the government organizations

(vii). Encourage the government employees to possess broadband internet/e-mail connectivity at home, possibly by provision of incentive package(s) focused on them.[15]

(viii). Accelerate the implementation of the Re-engineering Government Programme to achieve island-wide coverage including Northern and Eastern Provinces

❋ ❋ ❋ ❋ ❋

[15] "Because broadband networks have the potential to contribute so much to economic development, they should be widely available at affordable prices and should become an integral part of national development strategies." *Information and Communications for Development 2009: Extending Reach and Increasing Impact*. World Bank, May 2009. p.5.

APPENDIXES

1. Sample Selection Procedure for Government Organizations Employees Survey (GOES)

2. Additional Statistical Tables

3. Government Organizations Employees Survey Questionnaire

Appendix 1

Sample Selection Procedure for Government Organizations Employees Survey (GOES)

The respondents of the survey were envisaged as two categories of employees of the government organizations; executive officers and non-executive officers. The planned numbers of each category of employees to be surveyed from Colombo-based organizations and provincial/regional organizations are presented in **Tables A1.1** and **A1.2**. Accordingly, the total number of employees to be surveyed amounted to 584; consisting of 194 (= 100 + 94) executives and 390 (= 220 + 170) non-executives. The actual sample sizes achieved were 185 executives and 396 non-executives, totalling 581 employees. Thus, the overall sample surveyed was 99.5% of the planned sample.

Colombo-based Organizations

Since the information from each organization will have to be discussed separately, a sufficient number of employees was planned to be selected from each organization (as given in Tables below) in order to ensure a proper representation. The stratified random sampling method was adopted to select the employees. The strata considered were executives and non-executives. Further, non-executives were randomly selected among the clusters (administrative units). The planned and actual sample sizes are as given in **Table A1.1**.

Table A1.1: Sampling Sizes for Colombo-Based Offices for GOES

Organization	Planned Sample size		Actual Sample size		FGDs	
	Executives	Non-executives	Executives	Non-executives	Planned	Actual
Partner Organizations:						
1. Ministry of Public Administration	10	22	10	21	1	1
2. Department of Labour	10	22	11	22	1	1
3. Department of Motor Traffic	10	22	10	22	1	1
4. Department of Pensions	10	22	10	22	1	1
5. Department of Registrar General's	10	22	11	20	1	1
6. Department of Registrar of Companies	10	22	8	24	1	1
7. Sri Lanka Bureau of Foreign Employment	10	22	6	24	1	1
8. Samurdhi Authority of Sri Lanka	10	22	10	22	1	1
Sub Total (Partner Organizations)	**80**	**176**	**76**	**177**	**8**	**8**
Organizations as Control Group:						
1. Ministry of Education	10	22	10	22	1	1
2. Ministry of Health	10	22	11	21	1	1
Sub Total (Control Group)	**20**	**44**	**21**	**43**	**2**	**2**
Total	**100**	**220**	**97**	**220**	**10**	**10**

Provincial/Regional Organizations: Provincial Ministries (PMs), District Secretariats (DSs) and Divisional Secretariats (DvSs)

In sampling from **Provincial/Regional Organizations**, the administrative areas were taken as strata. To attain full coverage, all the **Provinces** were selected to the sample while the **District** where the Provincial Council is located was taken as the representative District in each Province. In each Provincial Council, **one Provincial Ministry** was purposively chosen. In the chosen District, the **District Secretariat** was chosen. In selecting employees

within strata, executives and non-executives were considered as before and selected from each stratum randomly. The planned and actual sample sizes are as given in **Table A1.2**

As the sample should cover **Divisional Secretariats (DvSs)**, it was initially decided to take a sample of 2 DvSs from each District already chosen above. On observing the presence of relatively large number of DvSs in Anuradhapura and Kurunegala Districts, it was decided to increase the number of DvSs from 2 to 3, in these two Districts. Accordingly, a total of 20 DvSs were selected from the 9 Districts identified above, as given in **Table A1.3**.

Table A1.2: Sampling Sizes of PMs, DSs and DvSs for GOES

Organization	Planned Sample size		Actual Sample Size		FGDs	
	Executives	Non-executives	Executives	Non-executives	Planned	Actual
Provincial Council Ministries (PMs) (9)	9 x 3 = 27	9 x 5 = 45	26	46	3	-
District Secretariats (DSs) (9)	9 x 3 = 27	9 x 5 = 45	24	53	3	3
Divisional Secretariats (DvSs) (20)	20 x 2 = 40	20 x 4 = 80	38	77	10	8
Total	**94**	**170**	**88**	**176**	**16**	**11**

Table A1.3: Distribution of Samples of PMs, PDs, DSs and DvSs for GOES

Province	PMs in the sample	District	DSs in the sample	Names of DvSs in the sample
Western	Ministry of ……..	1. Colombo	✓	……
		2. Gampaha		
		3. Kalutara		
Central	Ministry of Industries	4. Kandy	✓	Akurana, Kundasale
		5. Matale		
		6. Nuwara Eliya		
Southern	Ministry of Health	7. Galle	✓	Balapitiya, Habaraduwa
		8. Matara		
		9. Hambantota		
Northern	Ministry of Education and Cultural Affairs	10. Jaffna	✓	Jaffna, Thenmaradchi
		11. Kilinochchi		
		12. Mannar		
		13. Vavuniya		
		14. Mulativu		
Eastern	Ministry of Agriculture, Animal Production & Fisheries	15. Batticaloa		
		16. Ampara		
		17. Trincomalee	✓	Thambalagamam, Town & Gravets
North Western	Ministry of Agriculture	18. Kurunegala	✓	Mallawapitiya, Panduwasnuwara, Wariyapola
		19. Puttalam		
North Central	Ministry of Agriculture	20. Anuradhapura	✓	Kekirawa, Mihinthale, Rajangnaya
		21. Polonnaruwa		
Uva	Ministry of Agriculture	22. Badulla	✓	Ella, Welimada
		23. Moneragala		
Sabaragamuwa	Ministry of Agriculture	24. Ratnapura	✓	Ratnapura & Nivithigala
		25. Kegalle		
Total	**9**		**9**	**20**

Justification for Planned Sample Sizes

As already mentioned above (and presented in Tables A1.1 and A1.2), the total planned sample was 584 officers consists of 194 executives and 390 non-executives. According to

ICTA requirement, the total sample should be around 600. On arguing backwards and referring to sampling tables[16], sample of size 390 is a sample from a population of 15,000 with 95% confidence interval and precision/error margin of ±5% for proportion, p = 0.5. Further, sample of size 194 is a sample from a population of 375 with 95% confidence interval and precision/error margin of ±5% for proportion, p = 0.5. Although a convenient and purposive sample sizes have been planned, these samples could be safely considered as **statistically acceptable**. The samples are **representative** because adequate coverage had been build-in and final samples of executives and non-executives were drawn randomly within each category in each organization.

[16] See for example, Glenn D. Israel (2009) *Determining Sample Size*, University of Florida, available in http://edis.ifsa.ufl.edu.

Appendix 2

ADDITIONAL STATISTICAL TABLES

Table A2.1: Respondents who are provided with computer facilities by rank of officer and type of hardware facilities

Type of hardware facility	Executive Officers (Out of 144)		Non-executive Officers (Out of 191)		Total (Out of 335)	
	Count	%	Count	%	Count	%
Desktop computer	132	91.7	181	94.8	313	93.4
Laptop computer	23	16.0	17	8.9	40	11.9
Printer	93	64.6	140	73.3	233	69.6
Scanner	24	16.7	42	22.0	66	19.7
Internet connection	118	81.9	110	57.6	228	68.1
Office email	79	54.9	64	33.5	143	42.7
LAN Connection	58	40.3	56	29.3	114	34.0
Wifi	7	4.9	9	4.7	16	4.8

Table A2.2: Respondents who are provided with computer facilities by rank of officer and types of official tasks undertaken using them

Type of official task	Executive Officers (Out of 144)		Non-executive Officers (Out of 191)		Total (Out of 335)	
	Count	%	Count	%	Count	%
Letters / documents	105	72.9	157	82.2	262	78.2
Email - within office	73	50.7	70	36.6	143	42.7
Email - outside office	80	55.6	70	36.6	150	44.8
Database	64	44.4	84	44.0	148	44.2
Data analysis	64	44.4	66	34.6	130	38.8
Website improvement	14	9.7	13	6.8	27	8.1
Network administration	17	11.8	20	10.5	37	11.0
Collection of information for website update	17	11.8	15	7.9	32	9.6
Administrative functions	83	57.6	49	25.7	132	39.4
Service providing activities to clients	33	22.9	47	24.6	80	23.9
Information sharing with other organizations	51	35.4	48	25.1	99	29.6

Table A2.3: Respondents by rank of officer, gender and whether have a computer at home

Whether a computer available at home	Executive Officers						Non-executive Officers						Table Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	79	79.8	65	75.6	144	77.8	87	64.0	146	56.2	233	58.8	377	64.9
No	20	20.2	21	24.4	41	22.2	49	36.0	114	43.8	163	41.2	204	35.1
Group Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Table A2.4: Respondents who have computer facilities at home by rank of officer and type of hardware facilities

	Executive Officers (Out of 144)		Non-executive Officers (Out of 233)		Total (Out of 377)	
	Count	%	Count	%	Count	%
Desktop computer	111	77.1	198	85.0	309	82.0
Laptop computer	49	34.0	46	19.7	95	25.2
Printer	38	26.4	78	33.5	116	30.8

	Executive Officers (Out of 144)		Non-executive Officers (Out of 233)		Total (Out of 377)	
	Count	%	Count	%	Count	%
Scanner	14	9.7	22	9.4	36	9.5
Internet connection	72	50.0	117	50.2	189	50.1
Web-based e-mail	46	31.9	64	27.5	110	29.2
Service provider e-mail	7	4.9	14	6.0	21	5.6
Wifi	2	1.4	2	0.9	4	1.1

Table A2.5: Respondents who have computer facilities at home by rank of officer and types of tasks undertaken using them

Types of tasks undertaken	Executive Officers (Out of 144)		Non-executive Officers (Out of 233)		Total (Out of 377)	
	Count	%	Count	%	Count	%
1 Online education	29	20.1	48	20.6	77	20.4
2 Web search for study	46	31.9	74	31.8	120	31.8
3 News / current affairs	35	24.3	57	24.5	92	24.4
4 Multimedia	33	22.9	60	25.8	93	24.7
5 Games	18	12.5	50	21.5	68	18.0
6 Data collection & analysis	42	29.2	52	22.3	94	24.9
7 Instructing children	65	45.1	76	32.6	141	37.4
8.Email - Official	33	22.9	28	12.0	61	16.2
9 Email - Personal	62	43.1	84	36.1	146	38.7
10 Skype - Office	6	4.2	7	3.0	13	3.4
11Skype - Personal	25	17.4	41	17.6	66	17.5
12 Chat clubs/blogging - Office	4	2.8	2	0.9	6	1.6
13 Chat clubs/blogging - Personal	14	9.7	26	11.2	40	10.6
14 Social: facebook/twitter/linkedin - Office	8	5.6	6	2.6	14	3.7
15 Social - Personal	26	18.1	57	24.5	83	22.0
16 Documents - Office	63	43.8	79	33.9	142	37.7
17 Documents - Personal	74	51.4	129	55.4	203	53.8
18 Presentations - Office	28	19.4	23	9.9	51	13.5
19 Presentations- Personal	26	18.1	44	18.9	70	18.6

Table A2.6 (a): Time spent on the computer per week on (i) personal work and (ii) job related work by executives who have computer facilities at home

Personal work	Job related work													
	More than 20 hours		10-20 hours		5-10 hours		2-5 hours		0-2 hours		None		Table Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
More than 20 hours	8	44.4	1	8.3	0	0.0	4	13.8	1	8.3	1	2.0	15	10.4
10-20 hours	5	27.8	2	16.7	6	25.0	2	6.9	1	8.3	3	6.1	19	13.2
5-10 hours	2	11.1	0	0.0	10	41.7	7	24.1	0	0.0	8	16.3	27	18.8
2-5 hours	2	11.1	5	41.7	4	16.7	10	34.5	5	41.7	21	42.9	47	32.6
0-2 hours	0	0.0	1	8.3	3	12.5	2	6.9	4	33.3	6	12.2	16	11.1
None	1	5.6	3	25.0	1	4.2	4	13.8	1	8.3	10	20.4	20	13.9
Table Total	18	100.0	12	100.0	24	100.0	29	100.0	12	100.0	49	100.0	144	100.0

Table A2.6 (b): Time spent on the computer per week on (i) personal work and (ii) job related work by executives who have computer facilities at home

Personal work	Job related work													
	More than 20 hours		10-20 hours		5-10 hours		2-5 hours		0-2 hours		None		Table Total	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
More than 20 hours	8	53.3	1	6.7	0	0.0	4	26.7	1	6.7	1	6.7	15	100.0
10-20 hours	5	26.3	2	10.5	6	31.6	2	10.5	1	5.3	3	15.8	19	100.0
5-10 hours	2	7.4	0	0.0	10	37.0	7	25.9	0	0.0	8	29.6	27	100.0
2-5 hours	2	4.3	5	10.6	4	8.5	10	21.3	5	10.6	21	44.7	47	100.0
0-2 hours	0	0.0	1	6.3	3	18.8	2	12.5	4	25.0	6	37.5	16	100.0
None	1	5.0	3	15.0	1	5.0	4	20.0	1	5.0	10	50.0	20	100.0
Table Total	18	12.5	12	8.3	24	16.7	29	20.1	12	8.3	49	34.0	144	100.0

Table A2.7 (a): Time spent on the computer per week on (i) personal work and (ii) job related work by non-executives who have computer facilities at home

Personal work	Job related work													
	More than 20 hours		10-20 hours		5-10 hours		2-5 hours		0-2 hours		None		Table Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
More than 20 hours	8	24.2	4	19.0	2	6.9	6	17.1	0	0.0	6	7.1	26	11.2
10-20 hours	6	18.2	5	23.8	4	13.8	6	17.1	4	13.3	7	8.2	32	13.7
5-10 hours	8	24.2	3	14.3	9	31.0	11	31.4	5	16.7	16	18.8	52	22.3
2-5 hours	4	12.1	7	33.3	10	34.5	8	22.9	11	36.7	31	36.5	71	30.5
0-2 hours	4	12.1	1	4.8	2	6.9	3	8.6	9	30.0	12	14.1	31	13.3
None	3	9.1	1	4.8	2	6.9	1	2.9	1	3.3	13	15.3	21	9.0
Table Total	33	100.0	21	100.0	29	100.0	35	100.0	30	100.0	85	100.0	233	100.0

Table A2.7 (b): Time spent on the computer per week on (i) personal work and (ii) job related work by non-executives who have computer facilities at home

3.6.1 How much time spent on the computer per week- Personal	3.6.2 How much time spent on the computer per week- Official													
	More than 20 hours		10-20 hours		5-10 hours		2-5 hours		0-2 hours		None		Table Total	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
More than 20 hours	8	30.8	4	15.4	2	7.7	6	23.1	0	0.0	6	23.1	26	100.0
10-20 hours	6	18.8	5	15.6	4	12.5	6	18.8	4	12.5	7	21.9	32	100.0
5-10 hours	8	15.4	3	5.8	9	17.3	11	21.2	5	9.6	16	30.8	52	100.0
2-5 hours	4	5.6	7	9.9	10	14.1	8	11.3	11	15.5	31	43.7	71	100.0
0-2 hours	4	12.9	1	3.2	2	6.5	3	9.7	9	29.0	12	38.7	31	100.0
None	3	14.3	1	4.8	2	9.5	1	4.8	1	4.8	13	61.9	21	100.0
Table Total	33	14.2	21	9.0	29	12.4	35	15.0	30	12.9	85	36.5	233	100.0

Table A2.8: Respondents by rank of officer, gender and whether they access internet

Whether access internet	Executive Officers						Non-executive Officers						Table Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Yes	77	77.8	76	88.4	153	82.7	117	86.0	204	78.5	321	81.1	474	81.6
No	22	22.2	10	11.6	32	17.3	19	14.0	56	21.5	75	18.9	107	18.4
Group Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Table A2.9: Respondents who access internet by rank of officer, gender and place where they access internet (Multiple responses exist)

Place of access of internet	Executive Officers						Non-executive Officers						Total (Out of 474)	
	Male (Out of 77)		Female (Out of 76)		Group Total (Out of 153)		Male (Out of 117)		Female (Out of 204)		Group Total (Out of 321)			
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Office	66	85.7	71	93.4	137	89.5	92	78.6	174	85.3	266	82.9	403	85.0
Home	41	53.2	37	48.7	78	51.0	52	44.4	56	27.5	108	33.6	186	39.2
Internet Cafe	2	2.6	4	5.3	6	3.9	19	16.2	15	7.4	34	10.6	40	8.4

Table A2.9.1: Respondents who access internet by rank of officer, and office where they access internet

Regularity of access of internet	Executive Officers		Non-executive Officers		Table Total	
	Count	Col %	Count	Col %	Count	Col %
Daily	73	53.3	106	39.8	179	44.4
Once in 2-3 days	37	27.0	64	24.1	101	25.1
Weekly	19	13.9	55	20.7	74	18.4
Rarely	8	5.8	41	15.4	49	12.2
Table Total	**137**	**100.0**	**266**	**100.0**	**403**	**100.0**

Table A2.10: Respondents who access internet by rank of officer and most important purposes of use of internet

Purpose(s) of use of internet	Executive Officers (Out of 153)		Non-executive Officers (Out of 321)		Group Total (Out of 474)	
	Count	Row %	Count	Row %	Count	Row %
Email	69	45.1	137	42.7	206	43.5
Information search	64	41.8	122	38.0	186	39.2
News	32	20.9	53	16.5	85	17.9
Education	31	20.3	48	15.0	79	16.7
Entertainment	2	1.3	13	4.0	15	3.2
Chatting	4	2.6	9	2.8	13	2.7
Social media – facebook/twitter	0	0.0	6	1.9	6	1.3
Games	0	0.0	5	1.6	5	1.1
Paying bills	1	0.7	3	0.9	4	0.8
Banking	1	0.7	1	0.3	2	0.4
Blogging	0	0.0	1	0.3	1	0.2
Shopping	0	0.0	1	0.3	1	0.2

Table A2.11: Respondents by rank of officer and level of assessment of the different qualities of government websites recently visited

Quality of government websites	Excellent		Good		Neither good nor poor		Poor		Very poor		Not answered		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Executive Officers:														
(a) Up to data	6	4.2	78	54.5	53	37.1	6	4.2	0	0.0	0	0.0	143	100.0
(b) Easy to use & clearly written	10	7.0	102	71.3	28	19.6	3	2.1	0	0.0	0	0.0	143	100.0
(c) Designed to help find information	10	7.0	101	70.6	28	19.6	4	2.8	0	0.0	0	0.0	143	100.0
(d) Designed to get things done quickly	5	3.5	91	63.6	43	30.1	4	2.8	0	0.0	0	0.0	143	100.0

Quality of government websites	Excellent		Good		Neither good nor poor		Poor		Very poor		Not answered		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
(e) Designed for all kinds of people	8	5.6	42	29.4	61	42.7	9	6.3	3	2.1	20	14.0	143	100.0
Non-executive Officers:														
(a) Up to data	17	5.7	184	61.7	85	28.5	11	3.7	1	0.3	0	0.0	298	100.0
(b) Easy to use & clearly written	22	7.4	226	75.8	41	13.8	9	3.0	0	0.0	0	0.0	298	100.0
(c) Designed to help find information	21	7.0	216	72.5	51	17.1	10	3.4	0	0.0	0	0.0	298	100.0
(d) Designed to get things done quickly	19	6.4	193	64.8	74	24.8	10	3.4	2	0.7	0	0.0	298	100.0
(e) Designed for all kinds of people	9	3.0	99	33.2	104	34.9	28	9.4	8	2.7	50	16.8	298	100.0

Table A2.12: Respondents by rank of officer, gender and opinion about areas where ICT can make the highest contributions in the government sector

Notes: Responses marked as rank 2. All %s are out of corresponding respondents in the sample

Areas where ICT can make the highest contribution	Executive Officer						Non-executive Officer						Grand Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
1. Improving the efficiency of government sector	17	17.2	8	9.3	25	13.5	19	14.0	35	13.5	54	13.6	79	13.6
2. Improving the quality of government services	43	43.4	28	32.6	71	38.4	55	40.4	96	36.9	151	38.1	222	38.2
3. Increasing the productivity of government organisations	14	14.1	16	18.6	30	16.2	18	13.2	33	12.7	51	12.9	81	13.9
4. Reducing the discomfort to the public	9	9.1	13	15.1	22	11.9	19	14.0	49	18.8	68	17.2	90	15.5
5. ICT can provide friendly, speedy, transparent and trustworthy	4	4.0	2	2.3	6	3.2	5	3.7	6	2.3	11	2.8	17	2.9
6. Reducing the corruption in government sector	3	3.0	6	7.0	9	4.9	6	4.4	11	4.2	17	4.3	26	4.5
7. Improving the working conditions of the organizations	2	2.0	8	9.3	10	5.4	6	4.4	10	3.8	16	4.0	26	4.5
8. Reduction in expenditure	1	1.0	1	1.2	2	1.1	3	2.2	2	0.8	5	1.3	7	1.2
9. Minimizing the harmful political interventions	3	3.0	2	2.3	5	2.7	0	0.0	6	2.3	6	1.5	11	1.9
10. Increasing the income and facilities of employees	3	3.0	0	0.0	3	1.6	1	0.7	0	0.0	1	0.3	4	0.7
11. Increasing the income of government organizations	0	0.0	0	0.0	0	0.0	4	2.9	9	3.5	13	3.3	13	2.2

Areas where ICT can make the highest contribution	Executive Officer						Non-executive Officer						Grand Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
12. Other	0	0.0	2	2.3	2	1.1	0	0.0	3	1.2	3	0.8	5	0.9
Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Table A2.13: Respondents by rank of officer, gender and opinion about areas where ICT can make the highest contributions in the government sector

Notes: Responses marked as rank 3. All %s are out of corresponding respondents in the sample

Areas where ICT can make the highest contribution	Executive Officer						Non-executive Officer						Total	
	Male		Female		Group Total		Male		Female		Group Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
1. Improving the efficiency of government sector	8	8.1	6	7.0	14	7.6	13	9.6	18	6.9	31	7.8	45	7.7
2. Improving the quality of government services	13	13.1	15	17.4	28	15.1	22	16.2	34	13.1	56	14.1	84	14.5
3. Increasing the productivity of government organizations	13	13.1	13	15.1	26	14.1	29	21.3	63	24.2	92	23.2	118	20.3
4. Reducing the discomfort to the public	23	23.2	18	20.9	41	22.2	23	16.9	51	19.6	74	18.7	115	19.8
5. ICT can provide friendly, speedy, transparent and trustworthy	6	6.1	10	11.6	16	8.6	13	9.6	21	8.1	34	8.6	50	8.6
6. Reducing the corruption in government sector	9	9.1	7	8.1	16	8.6	9	6.6	16	6.2	25	6.3	41	7.1
7. Improving the working conditions of the organizations	11	11.1	9	10.5	20	10.8	11	8.1	30	11.5	41	10.4	61	10.5
8. Reduction in expenditure	4	4.0	3	3.5	7	3.8	2	1.5	8	3.1	10	2.5	17	2.9
9. Minimizing the harmful political interventions	3	3.0	1	1.2	4	2.2	3	2.2	5	1.9	8	2.0	12	2.1
10. Increasing the income and facilities of employees	2	2.0	0	0.0	2	1.1	7	5.1	3	1.2	10	2.5	12	2.1
11. Increasing the income of government organizations	4	4.0	2	2.3	6	3.2	4	2.9	8	3.1	12	3.0	18	3.1
12. Other	3	3.0	2	2.3	5	2.7	0	0.0	3	1.2	3	0.8	8	1.4
Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Table A2.14: Respondents by Rank of Officer, Gender and expectations on future improvements in government ICT services

Notes: Marked as rank 2. All %s are out of corresponding respondents in the sample.

Expectation	Executive Officers						Non-executive Officers						Total	
	Male		Female		Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
1. Utilization of ICT to create an efficient & quality public sector	13	13.1	9	10.5	22	11.9	16	11.8	24	9.2	40	10.1	62	10.7
2. Provision of adequate training on ICT to govt. officers	11	11.1	19	22.1	30	16.2	18	13.2	55	21.2	73	18.4	103	17.7
3. Information sharing of all government organization	23	23.2	15	17.4	38	20.5	29	21.3	52	20.0	81	20.5	119	20.5
4. Utilization of ICT for convenience of the public	17	17.2	12	14.0	29	15.7	31	22.8	51	19.6	82	20.7	111	19.1
5. Computerization of the services offered by Gov. Org.	15	15.2	11	12.8	26	14.1	16	11.8	35	13.5	51	12.9	77	13.3
6. Develop the ICT usage in govt. org.	13	13.1	10	11.6	23	12.4	16	11.8	30	11.5	46	11.6	69	11.9
7. Distribution of ICT equipment & facilities by govt.	3	3.0	4	4.7	7	3.8	5	3.7	7	2.7	12	3.0	19	3.3
8. Other	0	0.0	2	2.3	2	1.1	1	0.7	1	0.4	2	0.5	4	0.7
9. Not answered	4	4.0	4	4.7	8	4.3	4	2.9	5	1.9	9	2.3	17	2.9
Group Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Table A2.15: Respondents by Rank of Officer, Gender and expectations on future improvements in government ICT services

Notes: Marked as rank 3. All %s are out of corresponding respondents in the sample.

Expectation	Executive Officers						Non-executive Officers						Total	
	Male		Female		Group Total		Male		Female		Total			
	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %	Count	Col %
1. Utilization of ICT to create an efficient & quality public sector	10	10.1	6	7.0	16	8.6	5	3.7	25	9.6	30	7.6	46	7.9
2. Provision of adequate training on ICT to govt. officers	14	14.1	17	19.8	31	16.8	27	19.9	63	24.2	90	22.7	121	20.8
3. Information sharing of all government organization	12	12.1	12	14.0	24	13.0	13	9.6	25	9.6	38	9.6	62	10.7
4. Utilization of ICT for convenience of the public	29	29.3	15	17.4	44	23.8	27	19.9	40	15.4	67	16.9	111	19.1
5. Computerization of the services offered by Gov. Org.	9	9.1	8	9.3	17	9.2	22	16.2	27	10.4	49	12.4	66	11.4
6. Develop the ICT usage in govt. org.	12	12.1	16	18.6	28	15.1	23	16.9	52	20.0	75	18.9	103	17.7
7. Distribution of ICT equipment & facilities by govt.	5	5.1	4	4.7	9	4.9	14	10.3	20	7.7	34	8.6	43	7.4
8. Other	2	2.0	2	2.3	4	2.2	1	0.7	2	0.8	3	0.8	7	1.2
9. Not answered	6	6.1	6	7.0	12	6.5	4	2.9	6	2.3	10	2.5	22	3.8
Group Total	99	100.0	86	100.0	185	100.0	136	100.0	260	100.0	396	100.0	581	100.0

Appendix 3

Information and Communication Technology Agency (ICTA)
Government Organizations Employees Survey (GOES)
Questionnaire for Employees (September 2010)

Identification No. (*For survey office use*) | | | | | |

***Note on the Survey*:**
The **purpose of this survey** is to assess the performance of government staff in using and applying the on-going ICT based applications being implemented by ICTA under its Re-Engineering Government Programme. The performance will be assessed especially in terms of knowledge, skills, attitudes and perceptions towards using ICT to improve the work process, to provide better services to citizens through ICT applications, motivation for further learning and making continuous improvements, etc.
The findings of this survey will greatly assist strengthening the Re-engineering Government Programme being implemented by ICTA. This will enable an assessment of the current levels of ICT usage in Government, thereby allowing projects and programs to be restructured accordingly, resulting in more informed decision making and the achievement of development objectives.

Please be informed that all data collected during this survey will be treated with strict confidentiality. We greatly appreciate your participation and cooperation.

Name of Respondent:
Telephone Number(s) / Office: Mobile:

	Enumerator	*Checked by*	*Edited & Coded by*	*Data Entry Operator*
Name				
Date				

PART 1: ORGANIZATION AND DIVISION

Colombo Ministry / Department:

Partner Organizations:		Ministry of Public Administration	4	Registrar General's Department	8
Foreign Employment Bureau	1	Pensions Department	5	**Control Group Organizations:**	
Department of Motor Traffic	2	Department of Registrar of Companies	6	Ministry of Education	9
Samurdhi Authority of Sri Lanka	3	Department of Labour	7	Ministry of Health	10

Division of the Ministry / Department: .....
Provincial Ministry: State Province: .....
Regional Offices - District Secretariat/Divisional Secretariat. State District: .....

District Secretariat (Name):		Divisional Secretariat (Name):.....	

PART 2: ABOUT THE EMPLOYEE

1 PERSONAL INFORMATION

1.1 Position in the Organization/Designation:

1.2 Rank: 1. Executive officer [ ] 2. Non-executive officer [ ]

1.3 Gender: 1. Male [ ] 2. Female [ ]

1.4 Age:
Less than 30 [ ] 30 – 39 [ ], 40 – 49 [ ], 50 – 54 [ ], 55 – 59 [ ], 60 – 64 [ ], 65 & above [ ]

1.5 Level of Education (Indicate the highest level achieved)**:**

1. Below GCE O/L	2. GCE O/L	3. GCE A/L	4. Graduate	5. Post-graduate	6. Diploma (*)	7. Other

(*) Course with at least 400 contact hours.

2 ICT USAGE IN THE OFFICE

2.1 Have you been provided a computer and access to other facilities (such as printer) in use in the office?
1. Yes [ ] 2. No [ ] (*If no, please go to Q. 2.4)*

2.2 If yes, which of the following facilities are provided for your use?

1. Desktop computer	2. Laptop computer	3. Printer	4. Scanner	5. Internet connection	6. Office e-mail	7. LAN connection	8. Wifi

2.3 Which of the official tasks listed below are undertaken using the ICT facilities?

1. Letters/documents		5. Web site improvement	
2. Official communication (email)		6. Network administration	
a. Within office		7. Collection of information for web update	
b. Outside office		8. Administrative functions	
3 Database		9. Service providing activities to clients	
4. Data analysis		10. Info sharing with other organizations	
Other (pl specify)			

2.4 If you have not been provided a computer for own use, do you undertake any ICT related tasks in commonly used facilities?
1. Yes [ ] 2. No [ ]

3. ICT USAGE AT HOME

3.1 Do you have a computer at your home?
1. Yes [ ] 2. No [ ] (*If no, please go to Section 4)*

3.2 If yes, what are the ICT facilities available at home? (*Pls. tick*)

1. Desktop computer	2. Laptop computer	3. Printer	4. Scanner	5. Internet connection	6. Web-based e-mail	7. Service provider e-mail	8. Wifi

3.3 What type of internet connection do you have at home?

1. ADSL [ ], 2. HSDPA Mobile Broadband [ ], 3 Dial-up [ ], 4. Other [ ], 5. None [ ] 6. Not known [ ]

3.4 Are you satisfied with the current data transmission speed available at home?

1. Yes [ ] 2. No [ ] 3. Not applicable [ ]

3.5 What tasks do you undertake using the ICT facilities, including mobile phones, at home?

1. On-line Education		8. Communication	(a) official	(b) personal
2. Web search for study, research		8.1 Email		
3. News, current affairs, sport		8.2 Skype		
4. Multi-media (entertainment)		8.3 Chat clubs / blogging		
5. Games		8.4 Social: facebook /twitter /linkedin		
6. Data collection and analysis		8.5 Documents		
7. Instructing children		8.6 Presentations		

3.6 On average how much time you spent at home on the computer <u>per week</u> on your job related work/ personnel work?

	More than 20 hours	10 – 20 hours	5 – 10 hours	2 - 5 hours	0 – 2 hours	None
Personal						
Official						

4. <u>INTERNET USAGE</u>

4.1 Do you access internet?

1. Yes [ ] 2. No [ ] (*If no, please go to <u>Section 5</u>)*

4.2 If yes how regularly you access internet?

1. Daily [ ], 2. Once in 2 – 3 days [ ], 3. Weekly [ ] 4. Rarely [ ]

4.3 Where do you access internet? [*Rank according to the priority, e.g. 1 – highest priority]*

1. Office	2. Home	3. Internet café	4. Other (pls. Specify)

4.4 For what purposes do you use internet?

(List 5 most important purposes in order e.g. 1 – highest priority)

E-mailing	Information search	Education	News	Game	Entertainment (e.g. movie, music)	Chatting	Social media	Blogging	Shopping	Paying bills	Banking	Other (specify)

5 AWARENESS ON AND SATISFACTION WITH GOVERNMENT E-SERVICES

5.1 Are you familiar with e-services provided by government organizations? (e.g. birth certificates, revenue license, downloading forms etc.)

1. Yes [ ] 2. No [ ] *(If no, go to Q. 5.5)*

5.2 If yes, what are the e-services have you experienced among the government e-services?

1. Obtaining information from government websites [ ]
2. Making queries from Govt. Information Centre (GIC) [ ]
3. Making queries via e-mail from government organizations [ ]
4. Online application for government services [ ]
5. Information sharing with government organizations on official matters [ ]
6. Other (pl. specify) ……..
7. Other (pl. specify) ……..

5.3 Please list 3 govt. organizations and their e-services you appreciate most?

Govt. Organization	Service

5.4 Indicate the level of satisfaction on the following aspects of your experience with government e-services?

Aspect	1. Highly satisfied	2. Satisfied	3. Moderately satisfied	4. Unsatisfied	5. Highly unsatisfied
(a) Time required to wait for a reply to the enquiry					
(b) Ease of finding the information or service required					
(c) Ease of using the service					
(d) Outcome					

5.5 Have you heard of www.gic.gov.lk? 1. Yes [ ] 2. No [ ]

5.6 Have you ever visited www.gic.gov.lk? 1. Yes [ ] 2. No [ ]

5.7 Have you heard of www.srilanka.lk? 1. Yes [ ] 2. No [ ]

5.8 Have you ever visited www.srilanka.lk? 1. Yes [ ] 2. No [ ]

5.9 Have you ever visited any other government web sites? 1. Yes [ ]2. No [ ] If No go to 5.12

5.10 What government web sites and services did you find most useful? List up to 3.

Organization	Website	Purpose/Service

5.11 How do you assess each of the following qualities of the government website you recently visited? (*Provide a tick for each quality*)

Quality	1. Excellent	2. Good	3. Neither good nor poor	4. Poor	5. Very poor
(a) Up to date					
(b) Easy to use and clearly written					
(c) Designed to help find information					
(d) Designed to get things done quickly					
(e) Designed for all kinds of people					

5.12 Indicate your recollection of the number of contacts that you had with government agencies and services over the past 12 months

None	1 - 5	6 - 10	11 - 20	21 - 30	More than 30

5.13 Approximately what proportion of the above took place over the internet?

< 10%	11 – 20%	21 – 30%	31 – 40%	41 – 50%	51 – 60%	61 – 70%	71 – 80%	81 – 90%	91 – 100%

5.14 When you want to find information about government services, how frequently do you use "1919"?

1. Always [ ], 2. Sometimes [ ], 3. Rarely [ ], 4. Never [ ]

5.15 To what extent are you satisfied with the ICT facilitated services provided by your Organization?

1. Highly satisfied	2. Satisfied	3. Moderately satisfied	4. Unsatisfied	5. Highly unsatisfied

6. ICT KNOWLEDGE AND SKILLS

6.1 Have you had formal training in the ICT sector? 1. Yes [ ] 2. No [ ]
(*If no, please go to the Question 6.3 or 6.4*)

6.2 If yes, at what level? *(Indicate the highest qualification)*

1. Non/ award short term tanning [ ]
2. Certificate course: basic computer skills [ ]
3. Certificate course: intermediate/advanced [ ]
4. Diploma/ Advance diploma [ ]
5. Degree [ ]
6. Post-graduate diploma/ degree [ ]

6.3 If not formally trained but possess literacy in computer/ICT usage, please indicate your level of proficiency:

1. Email communication + internet surfing [ ]
2. Word processing skills only [ ]
2. Skills in word processing + spread sheets [ ]
3. Skills in word processing + spread sheets + DBMS (Office software) [ ]
4. Office software + specialized professional packages (e.g. SPSS, Arc GIS) [ ]
5 Office software + skills in programming [ ]

6.4 I am not formally trained and lack ICT literacy [ ]

6.5 On the basis of your capability on ICT usage, could you place yourself in one of the following categories? (*Enumerator: please refer to the guidelines provided*)

Lack ICT literacy	e-Novice	e-Skilled	e-Expert	e-Champion

7 AWARENESS ON E-SRI LANKA DEVELOPMENT PROJECT AND RE-ENGINEERING GOVERNMENT PROGRAMME

7.1 Are you aware about e-Sri Lanka Development Project?

1. Yes [ ] 2. No [ ]

7.2 What is the level of your involvement in e-Sri Lanka Development Project?

1. Involved as a counterpart of e-Sri Lanka activities in the organization [ ]
2. Trained by e-Sri Lanka [ ]
3. Not involved and trained under e-Sri Lanka but know about e-Sri Lanka from those who are involved with it [ ]
4. Not involved and trained under e-Sri Lanka but know about e-Sri Lanka from media and other sources of information [ ]

7.3 Are you aware of ICTA's role in e-Sri Lanka Development Project?

1. Yes [ ] 2. No [ ]

7.4 Have you attended any training program organized by ICTA?

1. Yes [ ] 2. No [ ] If No go to 7.9

7.4.1 If yes, what are the ICT training programs you have attended? *(Can tick more than one)*

Type of ICT training	tick	Type of ICT training	tick
1. Basic ICT Skills-ICT Awareness Program		5. ICT Technical Skills-	
(a) ICT Foundation		(a) System Administration	
(a) ICT Certification		(b) Network Administration (CCNA)	
2. Web Development-Joola content management		(c) Database Administration (mysql)	
3. eGovernment MBA		(d) Linux (RHCT)	
4. Workshops & seminars on e-government related topics		(e) Hardware	
		6. Other (Specify)……	

7.4.2 To what extent have you benefited from any training programs organized by ICTA that you have attended?

Significantly improved my ability to do ICT related work	Somewhat improved my ability to do ICT related work	Not improved my ability to do ICT related work	I did not undertake such training
1	2	3	4

7.5 How much more efficient and / or effective are you in your ICT related work as a result of the ICT training? (*Circle the most appropriate number according to your assessment*)

Least	1	2	3	4	5	6	7	8	9	10	Most

7.6 What are the ways in which your performance has improved as a result of training? (More than one answer is possible)

1. I feel more confident at work [ ]
2. I do my work faster [ ]

3. I am able to do more work [ ]
4. My work is more accurate [ ]
5. I provide better service to customers [ ]

7.7 Is there anything that you would like to do differently after training but you feel unable to put it into practice?

1. Yes [ ] 2. No [ ]

7.8 If yes, please outline:

……
……
……

7.9 Are you aware of Lanka Government Network (LGN) help desk facility made available by e-Sri Lanka? 1. Yes [ ] 2. No [ ] *(If no, go to Q. 7.12.)*

7.10 Have you ever sought the services of it? 1. Yes [ ] 2. No [ ]

7.11 If yes, to what extent are you satisfied about its services?

1. Highly satisfied	2. Satisfied	3. Moderately satisfied	4. Unsatisfied	5. Highly unsatisfied

7.12 Are you aware of e-Government Policy? 1. Yes [ ] 2. No [ ]

7.13 Are you aware of 'Electronic Transactions Act'? 1. Yes [ ] 2. No [ ]

7.14 Are you aware of 'Computer Crimes Act'? 1. Yes [ ] 2. No [ ]

8 PERCEPTION AND ATTITUDE OF THE EMPLOYEES TOWARDS ICT

8.1 What is your general opinion about ICT in the government sector? *(More than one answer is possible)*

1. ICT can help to improve the performance of government organizations in many ways[ ]
2. ICT can be useful for improving some areas of the government service [ ]
3. ICT can be useful only if situation in other areas such as poor management, corruption, political influence etc. also improves [ ]
4. ICT can provide friendly, speedy, transparent and trustworthy [ ]
5. ICT cannot improve the situation in government service [ ]

8.2 If you think that ICT can be useful, in what areas the highest contributions can be made? Rank 3 of them according to the importance.

1. Improving the efficiency of government sector [ ]
2. Improving the quality of government services [ ]
3. Reducing the corruption in government sector [ ]
4. Minimizing the harmful political interventions [ ]
5. Reducing the discomfort to the public [ ]
6. Increasing the productivity of government organizations [ ]
7. Increasing the income of government organizations [ ]
8. Improving the working conditions of the organizations [ ]
9. Increasing the income and facilities of employees [ ]

10 ICT can provide friendly, speedy, transparent and trustworthy Govt. [ ]
11. Reduction in expenditure [ ]
12 Other (please specify)

8.3 Please indicate your extent of willingness to adopt/use ICT based tasks in official duties.

1. Very high	2. High	3. Moderate	4. Low	5. Very low

8.4 Could you outline the main reason for your answer?

……..
……,,,,,,,,

8.5 What are your major expectations on future improvements in government ICT services? (*Indicate the most important 3 expectations*)

1. Utilization of ICT to create an efficient and quality public sector [ ]
2. Information sharing of all government organizations [ ]
3. Utilization of ICT for convenience of the public [ ]
4. Computerization of the services offered by government organizations [ ]
5. Provision of adequate training on ICT to government officers [ ]
6. Develop the ICT usage in government organizations [ ]
7. Distribution of ICT equipment and facilities by the government [ ]
8. Other (please specify) .....

8.6 In your opinion what are the areas where new 'enabler' projects are needed to improve the government service? List them according to priority

Services/Projects	Rank
1.	
2.	
3.	
4.	
5.	
6.	
7.	

8.7 Express your opinion on usage of ICT for citizens, young and future generations

……

……

……

……

……

PART 3: ORGANIZATION SPECIFIC ICT ISSUES

9 EFFICIENCY OF PROVIDING SERVICES AND PROCESSING ADMINISTRATIVE MATTERS

9.1 List 5 major services offered by your organization. Give your rankings on the efficiency of service providing and ICT involvement in them by using the scale given below:

1. Very high	2. High	3. Moderate	4. Low	5. Very low

Service	Mode of delivery (*)	Efficiency Ranking	ICT Involvement Ranking	Average time taken to provide the service (hours/minutes)
1.				
2.				
3.				
4.				
5.				

(*) Over the counter – 1, Online - 2

9.2 Does your organization have a website?

1. Yes [ ] 2. No [ ] *(If no, go to Question 9.7)*

9.3 If yes, does it provide any on-line services?

1. Yes [ ] 2. No [ ] *(If no, go to Question 9.7)*

9.4 If yes, how is the response for these on-line services?

1. Very high	2. High	3. Moderate	4. Low	5. Very low	6. Do not know

9.5 Have on-line services provided any convenience for activities of your organization?

1. Yes [ ] 2. No [ ]

9.6 If yes, how?

……
……

9.7 Following are 3 major administrative processes involved in your organization. Give your rankings on the efficiency of providing service and ICT involvement in them by using the scale given below:

1. Very high	2. High	3. Moderate	4. Low	5. Very low

Administrative matter	Efficiency Ranking	ICT Involvement Ranking
1. HR management and development		
2. Salaries and other payments		
3. Management information system (MIS)		

10. INFORMATION NEEDS FOR DECISION-MAKING CAPACITY OF THE MANAGEMENT

10.1 List 3 major management decisions regularly taken by your organization (e.g resource allocation, policy etc.). List major information needs for these decisions (e.g. client information, market information etc.). How do you rank the current level of access to this information in your organization by using the scale given below:

1. Very high	2. High	3. Moderate	4. Low	5. Very low

Decision	Information need	Access
1.		
2.		
3.		

11 CAPABILITY TO ADOPT ICT BASED TASKS AND DAY-TO-DAY USE OF ICT IN THE ORGANIZATION

11.1 How do you assess your organizations capability to adopt ICT based tasks in general?

Hardware & Software Resource	Human Resource skills in ICT	Information sharing and access to information
1. Very good	1. Very good	1. Very good
2. Good	2. Good	2. Good
3. Moderate	3. Moderate	3. Moderate
4. Poor	4. Poor	4. Poor
5. Very poor	5. Very poor	5. Very poor

11.2 How do you assess your organizations capability to use ICT in day-to-day tasks?

Hardware and Software Resource	Human Resource skills in ICT	Information sharing and access to information
1. Very good	1. Very good	1. Very good
2. Good	2. Good	2. Good
3. Moderate	3. Moderate	3. Moderate
4. Poor	4. Poor	4. Poor
5. Very poor	5. Very poor	5. Very poor

12. COMMENTS AND REMARKS, IF ANY, YOU WISH TO MAKE.

The respondent could in his/her comments include among others (i) constrains (if any) for implementing ICTA re-engineering project activities in the Organization, and (ii) ways to overcome such constraints. *(Use additional sheet of paper, as required.)*

Thank you for spending you time and energy in providing the information.