The use of Information and Communication Technology in Parliament

Benefit Cost Analysis

Department of Information Systems and Management Parliament of Sri Lanka March 2008

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Executive Summary

In recent years, Parliament has begun to exploit advances in Information and Communication Technology (ICT) to support its many functions and modernize the institution. Contributions made by the Information and Communication Technology Agency (ICTA) of Sri Lanka and the UNDP have facilitated this process and helped Parliament in applying ICT in the parliamentary and administrative activities. However, the progress of such activities has slowed down due to cultural, institutional, and situational factors.

In this context, this report assesses benefit vs. cost of the use of Information and Communication Technology (ICT) in Parliament. Towards this objective, this report adopted a more or less cohesive view of the institution consisting of macro analysis, stakeholder need analysis, and alternative approaches in achieving the envisaged objectives, etc.

The macro analysis was conducted via two techniques namely external & internal audit. The external audit was undertaken with the view of identifying and evaluating trends and events beyond the control of the institution. The external audit unearthed potential opportunities available for the institution and threats the institution must cope with. In contrast, an internal audit was carried out that focuses on identifying and evaluating the strengths and weaknesses in the functional areas of the institutional activities.

A contemporary framework for parliament evolved by the IPU is discussed before identifying the stakeholder needs. The contemporary framework is followed by an analysis of information collected via formal interviews. The existing practices are scrutinized in detail with the view of finding gaps and weaknesses in respect of key stakeholders. Thereafter, the envisaged process improvements that are in line with the contemporary framework and the ICT strategy evolved by E&Y are delineated.

Accordingly, three alternative approaches are discussed with the view of realizing the benefits and the envisaged institutional objectives. The approaches are:

Base Case Option

This option assumes that the current practices will be continued with the view of reaching the envisaged objectives of Parliament. The Base case option, therefore, presents the nature of the existing system in Parliament.

Operational Approach Option

This is a more structured way of applying solutions compared to the previous approach. If Parliament is to adopt this approach, it will be ICT enabled and tools implemented. Tools will be implemented function-wise giving more attention in improving functions in isolation.

Strategic Approach Option

The strategic approach assumes that Parliament adopts a more or less cohesive approach in deploying ICT tools with the view of reaching its envisaged objectives.

Each approach is scrutinized in terms of benefit vs. cost in a more holistic and detailed manner. The outcome of the analysis shows that the first two approaches are not in favor of the institution with the view of achieving the envisaged objectives.

In contrast, the strategic approach facilitates the institution in realizing the envisaged objectives. The approach is viable in tangible terms. Even more, it guarantees a number of intangible benefits, most of which are essential ingredients of a contemporary parliament.

Table of Contents

Acknowledgement			•••		iii
Executive Summary					iv
Strategic Approach Option					v
Table of Contents		•••	•••	•••	vii
List of Tables					ix
List of Figures	•••	•••	•••	•••	x
List of Acronyms	•••			••••	xi
1. Introduction				•••	1
Overview	•••	•••	•••	•••	1
Objectives	•••	•••	•••	•••	1
Method of study	•••	•••	•••	•••	2
Background	•••	•••	•••	•••	3
Benefit Cost analysis	in brief	•••	•••	•••	6
Key Assumptions/ Li	mitations	•••	•••	•••	6
2. Macro analysis					7
Introduction	•••	•••	•••	•••	7
Parliament of Sri Lar		•••	•••	•••	7
Political, Economic, S	Social, or Tecl	hnological (PI	EST) analysis	•••	7
Political forces	•••	•••	•••	•••	8
Economic forces	•••	•••	•••	•••	8
Social forces	•••	•••	•••	•••	8
Technological for	rces	•••	•••	•••	9
Organizational analy	sis	•••	•••	•••	10
Key issues and probl	em identifica	tion	•••	•••	11
Parliamentary service	es	•••	•••	•••	11
Preparation of Hansa	rd	•••	•••	•••	11
Administrative service	ces	•••	•••	•••	11
Physical access to Par	liament	•••	•••	•••	12
Catering & Housekee	eping	•••	•••	•••	12
Finance and supplies	6	•••	•••	•••	12
Identification of the	problem	•••	•••	•••	12
3. Need analysis					13
Introduction	•••	•••	•••	•••	13 13
	 of a Darliam	•••	•••	•••	13 13
High-level definition		ent	•••	•••	
Defining e-Parliamer		•••	•••	•••	13
Parliament, ICT, and		2	•••		14 15
The Parliamentary Co		o a democratic	information	society	15
Detail gap identificat		•••	•••	•••	20
Envisaged process in	-		•••	•••	29
Enhancing the Dialog	g between Pa	rliament and	the Public	•••	41

4. High level options analysis				43
Introduction	•••	•••	•••	43
Base case option	•••	•••	•••	43
Cost estimate/ Cost benefit – Base	case option	•••	•••	44
Operational approach option	•••	•••	•••	47
Strategic approach option	•••	•••	•••	48
Process perspective	•••	•••	•••	48
Institutional growth perspection	ve	•••	•••	49
Stakeholder perspective	•••	•••	•••	50
Financial perspective	•••	•••	•••	50
Cost estimate/ Cost benefit – The	Strategic app	roach option	•••	51
5. Recommendations				57
Introduction	•••	•••	•••	57
Strategic direction	•••	•••	•••	57
Selecting the suitable approach	•••	•••	•••	57
Recommendations	•••	•••	•••	57
Managerial recommendations	•••	•••	•••	58
Technical recommendations	•••	•••	•••	58
Human resources development	•••	•••	•••	59
Conclusion	•••	•••	•••	59
List of reference				60
Appendix 1:			•••	61
Appendix 2:				62

List of Tables

Table 1: The institutional opportunities vs. threats .	•••	10
Table 2: The institutional Strengths vs. Weaknesses	•••	10
Table 3: Framework: the parliamentary contribution to d	lemocracy	16
Table 4: Gaps in current practices - Petition .	•••	21
Table 5: Gaps in Current practices – Motion .	•••	22
Table 6: Gaps in current practices - Questions & Answer	rs	22
Table 7: Gaps in current practices – Order Book/ Order I	Paper/ Adde	ndum 23
Table 8: Gaps in current practices – Hansard .	•••	24
Table 9: Gaps in current practices – Bills & Acts .	•••	25
Table 10: Gaps in current practices - Committee Minute	s/Committe	e Reports 26
Table 11: Gaps in current practices - Human Resources	Managemen	t 27
Table 12: Gaps in current practices – Financial Managem	nent	27
Table 13: Gaps in current practices – Members' Services		28
Table 14: Gaps in current practices – Security Manageme	ent	29
Table 15: Gaps in current practices – Catering & Housek	eeping	29
Table 16: The envisaged benefits – Petitions .	•••	30
Table 17: The envisaged benefits – Questions & Answer	s /Motions	31
Table 18: The envisaged benefits – Order Book/ Order P	aper process	s 33
Table 19: The envisaged benefits – Hansard process .	•••	34
Table 20: The envisaged benefits – Bills/Acts process .	•••	36
Table 21: The envisaged benefits – Committees process.	•••	37
Table 22: The envisaged benefits – Document Preservati	ion process	38
Table 23: The envisaged benefits – Human Resources M	lanagement	process 38
Table 24: The envisaged benefits – Financial Informatio	n process	39
Table 25: The envisaged benefits – Security Managemer	nt process	40
Table 26: The envisaged benefits - Catering and Housel	keeping Mai	nagement 41
Table 27: Cost estimate/ Cost benefit	•••	45
Table 28: Expenses incurred in 2007	•••	45
Table 29: Approximate usage of office space vs. cost .	•••	46
Table 30: Activity - benefit for indexing	•••	49
Table 31: Expected savings - stationery, postage, printing	g, telephone	1
catering, & office space etc	•••	52
Table 32: Expected savings on the staff	•••	53
Table 33: Cost estimate/ Cost benefit – The Strategic app	oroach	54

List of Figures

Figure 1: Analysis of interview results – MPP	•••	•••	19
Figure 2: Analysis of interview results – the staff	•••	•••	20

List of Acronyms

ASGP	- Association of Secretaries-General of Parliaments
CAHDE	- Council of Europe's Ad hoc Committee on E-Democracy
COPE	- Committee on Public Enterprises
DMS	- Document Management System
E&Y	- Ernst & Young
FOSS	- Free and Open Source Software
ICT	- Information and Communication Technology
ICTA	- Information and Communication Technology Agency of Sri Lanka
IPU	- Inter-Parliamentary Union
IT	- Information Technology
MP	- Member of Parliament
MPP	- Members of Parliament
PAC	- Committee on Public Accounts
SGP	- Secretary General of Parliament
UNDP	- United Nations Development Program

1. Introduction

Overview

In recent years, Parliament has begun to exploit advances in Information and Communication Technology (ICT) to support its many functions and modernize the institution. Contributions made by the Information and Communication Technology Agency (ICTA) of Sri Lanka and the UNDP have facilitated this process in applying ICT in the legislative and administrative activities. However, the progress of such activities has slowed down due to cultural, institutional, and situational factors.

ICT has become an essential tool in supporting the work of legislative bodies throughout the world. As they have grown in sophistication, ICT have acquired the necessary flexibility to assist parliaments in their most important responsibilities: making laws, overseeing the executive, and communicating with citizens.

In this context, this report is concerned with justifying the use of information and communication technology in Parliament in terms of benefits vs. cost. With this view, the report describes briefly the recent history of ICT initiatives in Parliament, internal and external environment of the institution, current practices in terms of core parliamentary and administrative activities, envisaged improvements in line with e-Parliament best practices, and three approaches Parliament may adopt pursuing the envisaged objectives.

"Few people would disagree that transparency and accessibility are two of the key objectives of a democratic parliament. ICT offers us an important means of achieving these objectives and we should do everything in our power to seize these opportunities."

> Anders B. Johnsson, Secretary General, Inter-Parliamentary Union Opening address at the World e-Parliament Conference 2007

Objectives

The task in hand is to prepare a comprehensive benefit cost analysis vis-à-vis the use of information and communication technology in Parliament. The writers were of the view that the analysis should be done in a holistic manner in order to yield a balanced outcome. This report, therefore, scrutinizes not only the internal perspectives of the institution but also its external and global aspects.

The report is primarily concerned with three objectives:

- Identify gaps in Parliament in terms of core parliamentary and administrative functions
- Propose suitable improvements congruent with the institution
- Evaluate suitable approaches and delineate the best approach with the view of achieving the envisaged objectives of Parliament

Method of study

To compile this report within a short period, the information collection channels were confined to few techniques namely systematic observations, brainstorming, formal and informal interviews, documentary evidences etc. The information was then analyzed with the view of identifying issues, gaps, and problems.

The analysis of the macro environment reveals four perspectives of the institution: strengths, weaknesses, opportunities, and threats. This understanding helps finding suitable strategies the institution may select pursuing with the view of capitalizing on the opportunities.

A comprehensive need analysis was carried out with regard to parliamentary and administrative activities for which information was collected through several sources: documentary evidences, formal and informal interviews, brainstorming etc. Thereafter, the envisaged process improvements were outlined in line with the emerging e-Parliament model and the findings of the systems study conducted by Ernst & Young.

Finally, three alternative approaches are discussed with the view of achieving the envisaged status of Parliament. Each approach is assessed in terms of benefit vs. cost for which financial information was collected from the Director Finance and the Government Printing Department.

"We Secretaries General have a specific commitment to maintain in our respective parliaments that is to make efforts to open the dialogue between our members and officials who work with ICT. At the Riksdag, ever since we started the computerization process, members have shown a considerable interest in getting involved in the issue of ICT development. This has taken place in various forums of expert and reference groups, where it has been possible to convey the members' views and wishes directly to the relevant officials working with ICT development."

Anders Forsberg, President of the ASGP and Secretary General of the Parliament of Sweden Opening address at the World e-Parliament Conference 2007

Background

This section outlines the recent development and activities initiated in Parliament vis-à-vis the use of ICT. Comprehending the background context is significant with the view of streamlining the future course of activities as well as making a balanced approach towards the objectives of this report.

Parliament has initiated large-scale ICT activities sequel to the 'e-Sri Lanka' program, a strategic initiative that comes under H.E. the President.

In November 2002, the Government of Sri Lanka (GoSL), launched a national development initiative, 'e-Sri Lanka', with the objective of using Information and Communication Technology (ICT) to foster social integration, peace, economic growth and poverty reduction. The Information and Communication Technology Agency of Sri Lanka (ICTA), which became operational in July 2003 under the Information and Communication Technology Act, is the implementing organization of this program.

The ICTA and Parliament of Sri Lanka mutually agreed to implement the e-Parliament project as one of the pilot projects under the e-Sri Lanka development program to make the services of Parliament more efficient and effective via Information and Communication Technology.

E-Parliament project includes an official web site and a system study for Parliament of Sri Lanka. Accordingly, ICTA mobilized the services of Ernst & Young, a reputed consultancy firm in Sri Lanka, to carry out an ICT survey in Parliament. The study culminated with an ICT strategy.

Since the e-Parliament project is a complex one, the system study consultant suggested implementing the project in a phased out manner. It was also assumed that Parliament should coordinate with several donors in order to raise the funds required to implement those projects. Accordingly, the following ten projects were identified.

- 1. ICT Awareness Training Project
- 2. Communication Infrastructure Project
- 3. Document Management System
- 4. Messaging and Scheduling Project
- 5. Information Security Policies
- 6. Human Resource Management System
- 7. Financial Information Management System
- 8. Physical Access Management System
- 9. Hotel Management System
- 10. Archiving Information System

Sequel to the e-Parliament project, the department of information systems and management was setup in Parliament and entrusted with the responsibility of ICT management in Parliament.

At the request of Parliament, UNDP initiated the Parliament modernization project, an initiative based on the observations of two international expert missions mobilized by the UNDP. The two groups of international consultants identified ICT as one of the key areas, which need comprehensive and urgent attention. In keeping with the recommendation of the mission report,

which was transformed as the Parliamentary modernization project, the UNDP undertook to implement the first and second projects of the ICT strategy namely ICT Awareness Training and Communication Infrastructure projects.

The ICT Awareness Trianing Project is now completed.

This project was commenced with the view of providing the necessary basic skills at all user levels of Parliament to enable them to cope with the demands for IT skills that would be required in implementing the rest of the ICT projects.

The project was jointly sponsored by the ICTA and UNDP. With their assistance, a state of the art training centre was setup in Parliament, which has the capacity of conducting training for 25 persons.

The project focused on two user groups: MPP & the staff. More than 400 employees successfully completed the program. Though several attempts were made to complete the training for MPP, all such attempts failed due to their time constraints and work obligations.

The Communication Infrastructure Project is being implemented.

The project focuses on setting up a state of the art communication infrastructure in Parliament including the chamber, committee rooms, and ministerial rooms. This project also provides secure and reliable remote access facilities.

Successful completion of the project brings the following outputs which are again imperative for successful implementation of all other downstream information systems outlined in the ICT strategy.

- Network connectivity to chamber, ministers' rooms, committee rooms, all sections within the Secretariat
- High availability of the Network
- Disaster recovery
- Remote access through secure dial-up connections
- Secured & authenticated access to all infrastructure services and resources
- Cater to data, voice and video communication requirements of Parliament

This project commenced in mid 2006 with the financial assistance of UNDP. To date about 75% of the work has been completed and it has come to a standstill due to lack of direction.

Endorsing the progress made so far in Parliament, ICTA has already pledged their financial commitment to the third project, the Document Management System project (DMS).

The functions of Parliament require a significant amount of documents to be circulated, reviewed, and authorized by various individuals of Parliament. At present, this takes place manually on printed copies, which results in considerable usage of stationery and time. On the other hand, this scenario inhibits a proper document tracking and version control procedure.

Successful completion of the DMS improves productivity in the following sub-systems, which are significant in executing parliamentary and administrative activities effectively.

- Workflow requirements
- Document management requirements
- Records management requirements
- Web content management
- Archival requirements

The other ICT components outlined in the strategy need to be implemented early in order to achieve the envisaged benefits, which are elaborated in a subsequent section of this report. Even more, all these projects are interconnected in technical terms as well as in satisfying the user needs. Therefore, all the projects outlined in the above are equally important to achieve the benefits discussed in this report.

In addition to the above scheduled activities, the following projects have been initiated with available resources.

In the past, Parliament used several applications to compile multilingual documents and these applications had been found to be incompatible with each other and highly dependent on the vendor. To avoid these difficulties, universally standardised Unicode compatible applications were introduced to compile parliamentary documents with multilingual support. This is considered to be a major breakthrough and most of the Parliamentary documents are now compiled in Unicode. According to ICTA, Parliament is one of the government institutions who took early measures in adopting Unicode.

Furthermore, several applications have been developed to facilitate daily routine needs of certain sections of the Secretariat. These routine works are considered to be critical and hence these applications have been identified as urgent needs of the time.

These sections are:

Finance Department Establishments Office Committee Offices Members' Services Bills Office

Software applications for Committee Offices and Members' Services are now running while a fraction of the Human Resource Management application and Financial application has already been developed and is scheduled to be launched soon. An application program for the Bills Office is being developed. It is noteworthy here that these applications have been developed with the view of improving operational perspectives of the Secretariat until the envisaged strategic components are implemented.

In terms of ICT management in Parliament, Deputy Secretary General provided direction and leadership for all ICT initiatives. However, during the latter part of 2006, the Secretary General of Parliament requested an audit on the ICT activities in Parliament from the Auditor General, which caused the implementation to be interrupted until the outcome of the audit was available. As a direct result of this, the ICT activities have come to a standstill and progress of the projects have been delayed for more than a year.

Benefit Cost analysis in brief

The application of ICT can allow both qualitative and quantitative improvement in the way Parliament works: facilitating improved access to information and services and having a direct effect in both intra and extra Parliamentary work. Accordingly, proper ICT convergence can bring down the recurrent costs and improve the quality of services.

With this view, Parliament needs to view the initial cost as an investment for improving internal weaknesses. Towards a modern Parliament, the investment means that the institutional readiness to support critical parliamentary activities such as preparing and managing complex documents, recording and publishing the legislative activities that occur in plenary sessions in near real-time, and enabling enhanced communications between Parliament and the Public. Even more, the envisaged benefits need to be viewed in four different perspectives: process improvement, institutional growth, stakeholder satisfaction, and cost effectiveness.

The following are some of the benefits that the use of ICT can bring about for its stakeholders.

MPP can access electronic data stores and document repositories that hold confidential information on Parliamentary and Committee proceedings through the intranet from anywhere at anytime. Even more, they can submit documents to Parliament while they serve their constituencies and participate in legislative functions and constitutional affairs using computers at their convenience. They can communicate with the Public and other institutions via e-mail, discussion groups, blogs etc.

The Public can communicate with MPP and the Secretariat electronically through the web portal through which the Public's confidence in their representatives and the image of the institution would be improved. The Parliamentary web portal can provide them with access to parliamentary information such as Hansards, Bills to be passed, Acts of Parliament, and Amendments to Acts of Parliament, Committee Reports, and Annual Reports of public enterprises at their convenience.

All administrative units and offices within the Secretariat can be interconnected through a communication network supported by state-of-the-art technologies. All the functional departments can be supported by a Document & Workflow Management System that would integrate the processes into its operation and ensure integrity, efficiency, and effectiveness of information exchanged across functional boarders in a seamless manner. Even more, other institutional functions can be drastically improved and resources can be managed effectively via proper ICT integration.

On successful completion of the ICT initiatives, the stated benefits can be realized. Further more, Parliament can perform its activities in a much more cost effective manner in contrast to current practices; however, the institution needs to exploit external opportunities and follow recommendations outlined in this report.

Key Assumptions/Limitations

To prepare a report of this nature, a questionnaire survey should have been conducted covering all the stakeholders; however, due to time constraint information channels had to be confined to informal and formal interviews, brainstorming, and documentary evidences etc.

2. Macro analysis

Introduction

This section is concerned with examining the macro environment of the institution, for which two commonly used techniques were adopted namely external & internal audit. The external audit was undertaken with the view of identifying and evaluating trends and events beyond the control of the institution. The external audit unearthed potential opportunities available for the institution and threats the institution must cope with. In contrast, an internal audit was carried out that focuses on identifying and evaluating the strengths and weaknesses in the functional areas of the institutional activities.

Parliament of Sri Lanka

Parliament is the apex of all representative bodies, and is the sovereign legislature in the country. Its purpose is to exercise effective supervision through its procedures ensuring the effective functioning of the Government.

Parliament performs three primary functions namely legislation, oversight over executive, and representation. In this context, Parliament Secretariat is expected to initiate, coordinate, and execute parliamentary activities and to maintain an effective and efficient Parliament Secretariat. Towards this direction, Parliament Secretariat itself plays a significant and pivotal role.

Parliament serves three categories of stakeholders: the Public, MPP, and the staff. In addition to these stakeholders, various government institutions and independent institutions such as provincial councils, ministries etc interact with Parliament on a regular basis. All these stakeholders have different needs at different levels of intensity.

In this context, particularly with the advancement of globalization and technology such as internet, Parliament is faced with several challenges in terms of providing services to its stakeholders. For example, the public now expects more transparency in parliamentary practices and faster responses to their queries predominantly using internet technology. Even more, MPP now need to interact with Parliament on an anytime anywhere basis for various informational and collaborative needs.

Political, Economic, Social, or Technological (PEST) analysis

This analysis is useful for understanding the institutional context and justifying the need for 'ICT investment in Parliament'.

"One can no longer deny the transformative effects of the information revolution on our global society and its impact on governance systems. New technologies have helped to empower citizens and media to take part in public life; to increase the dialogue among state institutions and society at large; to assist countries in responding to international calls for standards of accountability, transparency, and participatory governance; and to encourage international exchanges and cooperation in many sectors."

Sha Zukang, Under-Secretary-General for Economic and Social Affairs of the United Nations Opening address at the World e-Parliament Conference 2007

Political forces

Today parliaments around the world are expanding their powers and making themselves more effective, and they do this through organizing to modernize, expanding their formal powers, using their powers more effectively, building internal capacity, and reaching beyond their walls for help.

It is not always necessary for legislatures to expand their powers; often they simply need to use their powers more effectively and creatively. For example, the Committees have potential to pressurize various elements in the government to reduce corruption by publicizing the findings and Committee reports.

In today's world, Parliaments are becoming both a collaborative and an international enterprise. In that respect, it resembles the legislative process itself, which requires communication and cooperation from different parts of the legislative body to achieve effective results. In addition, collaboration facilitates common approaches, advances open standards, and enables parliaments to learn from each other's experiences (Source: Karamagioli E., Berntzen L., Challenges and barriers of e-Parliament schemes for MPP).

Economic forces

With the escalating war in the country, the government has curtailed budgetary allocations earmarked for various activities, which in turn has demanded the institution to reduce wastage and manage its resources effectively.

It is a fact that the public sector institutions rely on the government budget allocation for various development activities. However, Parliament has the privilege of working with donor agencies such as UNDP & World Bank to carry forward its development activities.

Social forces

Several parliaments are improving the way they communicate with, and listen to society. Several have established different measures such as publishing newsletters for use both inside and outside parliaments; and publications on parliaments for children and adults.

Effective parliaments do not just speak to society; they also listen. Several parliaments have learned to tap the expertise of civil society organizations in order to build up their own expertise (Source: A discussion paper, ICT in parliaments current practices, future possibilities).

The public has shown greater interest on what is happening in Parliament particularly over the last decade. Emerging global trends such as globalization and technological advancements have greatly attributed to this phenomenon. Migrant workers, expatriates, and constituents living in remote cities are finding extremely difficult to interact with Parliament particularly on subject matters interested to them. Even more, with the advancement of internet and globalization, the public now expects more from Parliament than ever before. These emerging needs have posed greater challenges on the institution to improve the way its activities are being done.

In terms of MPP, they now need access to information irrespective of time or location. They may need to interact with the officials of the Secretariat on an anytime anywhere basis to serve their constituents better.

Technological forces

Information and communication technology (ICT) has become essential in supporting the work of legislative bodies throughout the world. As these technologies have matured and grown in sophistication, they have acquired the necessary flexibility and capabilities to assist legislatures in their most important responsibilities: making the laws that guide the nation; conducting oversight of the executive; and communicating with the citizens. In today's "wired world", parliaments must capitalize on the benefits of ICT to function effectively, to interact with the public, and to collaborate with other Parliaments around the world (Source: ICT in Parliaments - Current Practices, Future Possibilities - World e-Parliament Conference 2007).

As parliaments employ new technologies, they must address many of the issues that are inherent in the global effort to achieve an equitable and inclusive information society that strengthens the democratic process. These include ensuring all citizens access to information, harnessing the newly emerging tools for participation, and maintaining a transparent legislature whose actions and decisions can be known and understood in a timely way. The ways in which parliaments apply technology in their own environment will reflect their commitment to these ideals and influence the nature of the information society within their country. It will also impact on their ability to cooperate with other parliaments and to contribute to global efforts (Source: ICT in Parliaments - Current Practices, Future Possibilities - World e-Parliament Conference 2007).

The development of ICT will transform the ways in which Parliament operates together with its representative function. The potential of transforming Parliament to an "e-Parliament" centres on three main areas:

- Increased administrative efficiency & effectiveness
- Improved information access and dissemination
- Enhanced interaction with citizens

At the same time technology must be employed creatively; otherwise it merely becomes a more modern way of doing the work of the legislature, perhaps more efficiently but not necessarily more effectively.

Given this context, it is definitely true that ICT can be used to make parliaments more efficient to give greater access to government services and to make parliamentarians more representative. (World e-Parliament report, 2008)

Many parliaments around the world have fully utilized information and communication technologies not only to e-enable conventional parliamentary practices but also to disseminate such information to their stakeholders timely and effectively.

In a nutshell, the Political, Economic, Social, Technological analysis reveals that the external context is in favor of the modernization activities with the view of capitalizing on the opportunities. Table 1 summarizes the opportunities vs. threats of the institution.

Opportunities	Threats
 To move towards a community 	 Adverse world, regional, or national
focused Parliament of excellence	economic, political, or security situation
 To meet emerging national consensus towards institutional effectiveness 	 Government budgetary allocation
 To support growing Information Technology penetration 	 Natural disasters such as floods
 To be on par with modern parliaments To provide timely and accurate information to the stakeholders To maintain a cost-effective Parliament 	 Terrorist attacks

Table 1: The institutional opportunities vs. threats

Source: Systematic observations

Organizational analysis

A simple 'Strengths vs. Weaknesses' matrix was used to assess the organizational context. Table 2 highlights the institutional Strengths vs. Weaknesses.

There is growing dissatisfaction among the employees as to how various activities are being facilitated. Furthermore, poor institutional culture has attributed to the growing dissatisfaction. Bureaucratic dysfunctions and poor communication habits have compounded 'poor institutional culture'.

The training and development facilities are either low or not properly utilized towards staff development. The overall value of human resources is highly underestimated and the resource is poorly managed. Even more, there are weaknesses in the manner other institutional resources and facilities are being managed.

Strengths	Weaknesses
 Political affiliation 	Bureaucratic dysfunctions
 Availability of training programs 	 Appraisal process is considered as an annual ritual
 Availability of a well-equipped training centre 	 Poor public relations
 Dynamic and knowledgeable workforce 	 Unfavorable culture
 Information and Communication Technology infrastructure 	 Employee alienation
	 Poor communication practices
	 Poor Human Resource Management practices

Table 2: The institutional Strengths vs. Weaknesses

Source: Systematic observations

The overall macro analysis reveals that the institution must first improve its weaknesses for which the external opportunities must be exploited. Sequel to this, the institution may exploit its strengths with the view of capitalizing on the opportunities. These two activities may happen in parallel; however, it is imprudent pursuing the latter option without improving the internal weaknesses. The benefits discussed in this report, therefore, have direct bearing as to how Parliament evaluates its strategic position in terms of the four perspectives discussed in the above.

Key issues and problem identification

This section identifies few institutional issues that are entrenched in its current practices. Careful scrutiny of them leads to identification of the underlying problem.

Parliamentary services

MPP and the Public have to rely on ineffective methods to access parliamentary information such as publications, Acts and amendments to Acts, Committee reports etc. MPP have to submit Petition/ Motion/ Question to Parliament in person. The only way to monitor progress of an ongoing Bill/ Motion/ Question is by contacting relevant staff. Most of the Parliamentary documents are stored in hard copy format and hence it hinders access to them as and when required. And also it consumes lot of valuable office space.

In addition, Parliamentary documents with historic value in the library tend to decay with time. For example, the Hansard belonging to good old days are decaying and it is high time urgent attention is paid to preserve them. Even more, it is practically impossible to access these documents as and when required.

Moreover, MPP are finding extremely difficult to use the library in conducting research or referring library resources.

Preparation of Hansard

The department of Hansard heavily relies on the Government Printing Department during the production process. The documents that are in hard copy format and that are to be included in Hansard need to be word-processed and proofread by the Government Printing Department. This approach greatly attributes to the delay prevailing in the production. It takes about one to one and a half weeks or even more to complete the document.

About 1300 copies of Hansard are printed; however, they hardly reach the desired stakeholders on time. Tracking previous versions are also extremely difficult and ineffective.

Administrative services

People management practices are inefficient and ineffective. Attendance is marked in a manual register. Personnel details are maintained in hard format and manually updated. The management finds extremely difficult to access employee details as and when required. The performance appraisal form does not measure what it is supposed to measure. Furthermore, the employee training and development activities are given less priority.

Physical access to Parliament

An applicant requesting for a pass should fill a printed application and then the application is hand delivered to the Serjeant-at-Arms. Lateness of letter delivery delays the pass issuing process. Access control system is not in use. There is no efficient mechanism to capture attendance information on visitors, MPP and staff. Issuing / renewal of temporary passes and staff identity cards are now done manually and tend to be error prone.

Catering & Housekeeping

Lunch cards are printed and distributed to staff in order to monitor staff meals. However, this does not give a correct figure on the number of packs needed per day in advance, which leads a huge wastage of food and other resources. There is no proper monitoring mechanism for lunch card issuing.

Current inventory control mechanism is not efficient. All documents receipts / inventory books / stocks / registers are maintained manually and sometimes causes officers to make error prone decisions.

Finance and supplies

Although there are a few programs used in the Department of Finance, most of the processes are done manually and this causes lots of time consumption & paper wastage. Loan balances and salary deductions can only be checked in-person from the Department of Finance.

Purchasing and inventory control activities are done manually and this causes calculation errors, paper wastage, and delay.

Identification of the problem

The preceding section is a granular analysis of some issues identified in the processes of the institution at present.

Although lack of effectiveness and efficiency are the focal points, difficulties in accessibility, transparency, costs, and resource consumption could also be highlighted. The analysis also reveals collaboration problems with external and internal entities as well as communication problems, data & process redundancies and availability issues. Some of these introduce error proneness and insecurity of data. Furthermore, the present context is not conducive for information retrieval, tracking, forecasting, and predicting trends or patterns, while timely information dissemination to relevant stakeholders has suffered greatly.

The lack of an integrated solution which constitutes of proper ICT communication infrastructure, data storage, secure document management & other information management functionality, etc could be cited as the foremost reason for the afore-mentioned chaotic nature.

3. Need analysis

"As parliamentarians, you realize as much as I do how favorably we value the importance of information and communication technology (ICT), which has impacted on our life over the past few decades and took mankind into leaps of progress with an accelerated pace that knows no boundaries.

Ladies and Gentlemen, we live in a world where illiteracy is increasingly defined as certainly not the lack of ability to read and write but rather the inability to understand, communicate or make use of information and communication technology. This goes across the board from aerospace to households. This goes from the hands of skilled labor to the fingertips of our children and grandchildren.

In fact, if William Shakespeare was sitting among us today, he would have said... to "e" or not to be. And that my friends would be the real question."

Ahmed Fathy Sorour, President of the People's Assembly of Egypt Opening speech at the inauguration of the Global Centre for ICT in Parliament

Introduction

This chapter focuses on identifying the stakeholder needs and proposing suitable process improvements. Towards this objective, a contemporary framework for parliament evolved by the IPU is presented. The contemporary framework is followed by an analysis of information collected via formal interviews. Thereafter, the existing practices are scrutinized in detail with the view of finding gaps and weaknesses in respect of key stakeholders. Lastly, the envisaged process improvements that are in line with the contemporary framework and the ICT strategy evolved by E&Y are delineated.

High-level definition of e-Parliament

Defining e-Parliament

What is e-Parliament is still being discussed at various workshops and forums. The following definitions are extracted from recent workshops and reports compiled by e-Parliament experts.

E-Parliament is the use of ICT by elected representative assemblies, their members and political and administrative staff, in the conduct of their tasks, actively involving its citizens; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

Comprehensive e-Parliament regards elected assemblies at international, national, regional and local levels, has many stakeholders : members, political and administrative staff, electors, citizens, media ; and actively involves and takes into account the interests of, all stakeholders including in particular those of citizens; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

The **concepts** of e-Parliament take into account the realities of today's information and communication society and provide tools to members, staff and administration of assemblies as well as to electors, which are similar to tools used in the citizens' everyday life, in order to place parliament prominently in the citizens' and electors' life and their working habits; (CAHDE Workshop on eParliament, Vienna, 12 December 2007)

E-Parliament is primarily for better information and communication management of members, staff and administration, and for citizens' contacts; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

ICT in e-Parliament can enable and improve good governance of elected assemblies: efficiency, inclusiveness, openness and accountability; reduce unnecessary bureaucracy and provide user-centred services, increase transparency and accountability, and also encourage better communication and co-operation between all stakeholders; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

Methods of e-Parliament include, *inter alia*, holding informal consultations, placing proposals in the Internet and seeking the opinions of citizens, promoting transparency throughout the whole institutional system, making it possible for citizens to exercise widespread control more effectively, *i.e.* to engage in active citizenship; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

Applications of ICT allow both qualitative and quantitative improvement in the efficiency and effectiveness of parliaments, facilitating new access forms to the information and services provided and having a direct effect in both intra and extra parliamentary work; (CAHDE Workshop on e-Parliament, Vienna, 12 December 2007)

The key word in e-Parliament is still Parliament. Therefore, e-Parliament should be regarded as a complementary concept describing the institutional approach to applying modern technologies. Yet, this concept is continually evolving as new technologies arise, innovative ICT applications in the parliamentary environment emerge, and the evolution of the global information society advances (World e-Parliament report, 2008).

Parliament, ICT, and the Information Society

As stated, the external context is evolving fast in terms of all aspects of the society: political, economic, social, and technological in which the free flow of information, ideas and knowledge exchanged across the communities are having a profound impact on the way the society functions.

Technological and scientific advances have significantly changed the way that information is gathered, stored, processed, and disseminated. Evidence of this is seen in all sectors of society, including business, entertainment, education, and public services. Given the pace of

technological change, one cannot predict with any certainty what new capabilities may emerge for individuals to communicate and share information and what new societal developments may be possible to achieve.

In the words of the World Summit on the Information Society (WSIS), the global challenge is to harness the potential of ICT to achieve common development goals and, "to build a peoplecentred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life" (World e-Parliament report, 2008).

The Parliamentary Contribution to a democratic information society

As outlined in the IPU's guide to good practice *Parliament and democracy in the twenty-first century,* "Parliament makes a vital contribution to democracy at many levels simultaneously. Within the institutions of government, it is the representative body through which the will of the people finds expression, in which their diversity is manifested, and in which the differences between them are debated and negotiated. At its best, parliament embodies the distinctive democratic attributes of discussion and compromise, as the means through which a public interest is realized that is more than the sum of individual or sectional interests. Moreover, the effectiveness with which parliament carries out its central functions of legislation, budgetary control and oversight of the executive is essential to the quality of democratic life. In carrying out these tasks it works together with the associations of civil society, and has the distinctive responsibility of safeguarding the individual democratic rights of citizens. It can only do all this, finally, if it observes democratic norms, by showing itself open, accessible and accountable to the electorate in its own mode of operation" (Parliament and democracy in the twenty-first century: A guide to good practice, Inter-Parliamentary Union, 2006).

In line with the above, the same publication sets out the key characteristics of a democratic parliament as follows:

- Representative: that is, socially and politically representative of the diversity of the people, and ensuring equal opportunities and protections for all its members;
- Transparent: that is, being open to the nation through different media, and transparent in the conduct of its business;
- Accessible: this means involving the public, including the associations and movements of civil society, in the work of parliament;
- Accountable: this involves MPP being accountable to the electorate for their performance in office and integrity of conduct;
- Effective: this means the effective organization of business in accordance with these democratic values, and the performance of parliament's legislative and oversight functions in a manner that serves the needs of the whole population.

This framework has been translated into Table 3 where "democratic values and requirements are set out in the first two columns. The third column itemizes the possible procedural means and institutions through which these values may be realized. At the same time, the basic values outlined in the framework provide a clear sense of direction and set of criteria that enables us to recognize what a democratic parliament might look like" (Parliament and democracy in the twenty-first century: A guide to good practice, Inter-Parliamentary Union, 2006).

Basic objectives Possible procedural and institutional Requirements or values. means for the realization of these objectives or values A parliament that is: Representative An elected parliament that is Free and fair electoral system and socially and politically process; means of ensuring representative, and committed representation of/by all sectors of to equal opportunities for society with a view to reflecting its members so that they can national and gender diversity, for carry out their mandates example by using special procedures to ensure representation of marginalized or excluded groups. Open, democratic and independent party procedures, organizations and systems. Mechanisms to ensure the rights of the political opposition and other political groups, and to allow all members to exercise their mandates freely and without being subjected to undue influence and pressure. Freedom of speech and association; guarantees of parliamentary rights and immunities, including the integrity of the presiding officers and other office holders. Equal opportunities policies and procedures; non-discriminatory hours and conditions of work; language facilities for all members. Transparent A parliament that is open to Proceedings open to the public; prior the nation and transparent in information to the public on the the conduct of its business business before parliament; documentation available in relevant languages; availability of user-friendly tools, for example using various media such as the World Wide Web; the parliament should have its own public relations officers and facilities. Legislation on freedom of/access to information

Table 3: Framework: the parliamentary contribution to democracy

Basic objectives or values. A parliament that is:	Requirements	Possible procedural and institutional means for the realization of these objectives or values
Accessible	Involvement of the public, including civil society and other people's movements, in the work of the parliament	Various means for constituents to have access to their elected representatives Effective modes of public participation in pre-legislative scrutiny; right of open consultation for interested parties; public right of petition; systematic grievance procedures Possibility for lobbying, within the limits of agreed legal provisions that ensure transparency
Accountable	Members of Parliament who are accountable to the electorate for their performance in office and for the integrity of their conduct	Effective electoral sanction and monitoring processes; reporting procedures to inform constituents; standards and enforceable code of conduct. Adequate salary for members; register of outside interests and income; enforceable limits on and transparency in election fundraising and expenditure
Effective (a) At all levels:	Effective organization of business in accordance with these democratic norms and values	 Mechanisms and resources to ensure the independence and autonomy of parliament, including parliament's control of its own budget. Availability of non-partisan professional staff separate from the main civil service. Adequate unbiased research and information facilities for members; parliament's own business committee; procedures for effective planning and timetabling of business;
		systems for monitoring parliamentary performance; opinion surveys among relevant groups on perceptions of performance.

Basic objectives or values. A parliament that is:	Requirements	Possible procedural and institutional means for the realization of these objectives or values
(b) At the national level:	Effective performance of legislative and scrutiny functions, and as a national forum for issues of common concern	Systematic procedures for executive accountability; adequate powers and resources for committees; accountability to parliament of non- governmental public bodies and commissions.
		Mechanisms to ensure effective parliamentary engagement in the national budget process in all its stages, including the subsequent auditing of accounts.
		Ability to address issues of major concern to society; to mediate in the event of tension and prevent violent conflict; to shape public institutions that cater for the needs of the entire population.
		For parliaments that approve senior appointments and/or perform judicial functions: mechanisms to ensure a fair, equitable and non- partisan process.
(c) In relation to the international level:	Active involvement of parliament in international affairs	Procedures for parliamentary monitoring of and input into international negotiations as well as overseeing the positions adopted by the government; mechanisms that allow for parliamentary scrutiny of activities of international organizations and input into their deliberations; mechanisms for ensuring national compliance with international norms and the rule of law; inter-parliamentary cooperation and parliamentary diplomacy.
(d) In relation to the local level:	Cooperative relationship with state, provincial and local legislatures	Mechanisms for regular consultations between the presiding officers of the national and sub-national parliaments or legislatures on national policy issues, in order to ensure that decisions are informed by local needs.

(Source: Parliament and democracy in the twenty-first century: A guide to good practice, Inter-Parliamentary Union, 2006) It is evident that ICT is one of the important tools that Parliament can use as it seeks to realize these values and objectives.

Analysis of interview results conducted with key stakeholders

As stated, qualitative information was collected via formal interviews. Due to time constraint, only a selected sample of MPP and the staff were interviewed. The lists of persons interviewed are given at Appendix 1 and 2 respectively.

The interview questions were open-ended and carried out to identify their perception and views with regard to the following aspects:

- Whether there are gaps in the current activities
- Whether ICT could be used with the view of improving the current 'weak status'
- Whether Standing Orders or administrative procedures should be altered to accommodate process improvements, if needed
- Whether the key stakeholders are willing to acquire ICT awareness to use such tools effectively

Figure 1 depicts the outcome of the analysis - MPP.

Q2: Current processes could be improved by Q1:There are gaps in the current activities using ICT 6% 0% Agræ Agree Disagree Disagree □Neither agree Neither agree nor disagree nor disagree 100% 94% Q3: Standing Orders or administrative Q4: Willing to acquire ICT aware ness procedures should be altered if needed 6% 🗖 Agree 25% ∎Agræ Disagree 0% Disagree Neither agree nor disagree Neither agree 94% 75% nor disagree

Figure 1: Analysis of interview results - MPP

Source: interview results

Figure 2 depicts the outcome of the analysis - the staff.

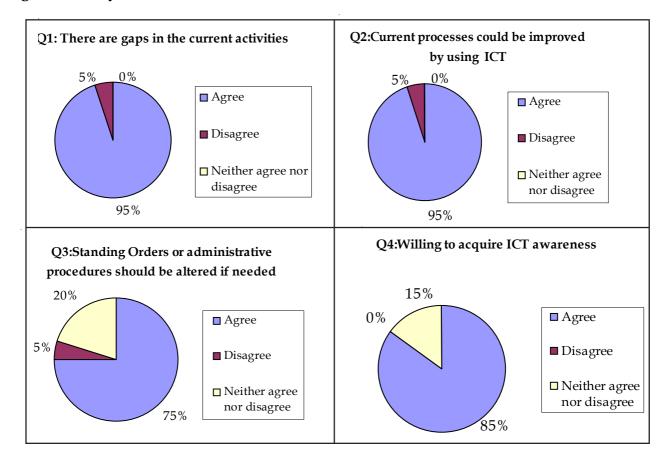


Figure 2: Analysis of interview results - the staff

Source: interview results

The overall analysis shows that the key stakeholders are of the view that the ICT tools must be used intensively with the view of improving current practices. Even more, they are of the view that the standing orders and other administrative procedures must be changed, if needed.

Detail gap identification

This section identifies the weaknesses/gaps prevailing in current practices in terms of key stakeholders, which conceal the democratic parliamentary values discussed in the contemporary framework.

Petition

A petitioner wishing to present a petition should follow the procedure under the Standing Order 25 A. Accordingly, a duly signed petition has to be handed over by a MP to the Speaker through the SGP. Specific guidelines are laid down relating to its admissibility. Upon approval being granted by the Speaker, it is returned to the MP concerned in order to present it in Parliament. After such presentation, it is referred to the Committee on Public Petitions (Source: Wijesekera P., Parliamentary Practice in Sri Lanka, 2001).

The following table depicts some of the issues identified in terms of stakeholders.

Table 4: Gaps in current practices - Petition

МРР	The Public	Staff
It is necessary to come to Parliament and submit the petition to the Committee Office in person.	It is inconvenient to handover petitions, check the progress of the Petition.	Current petition lodging, processing, taking minutes, and reporting system has many drawbacks and this causes a huge delay in the chain.
There is no alerting mechanism to take actions promptly.		Tracking petitions is highly time- consuming and less efficient because all the documents related to the petition process flow in hard format.
No sound tracking system to track the progress of a petition.		Retyping and redoing a document / letter or part of a document is common practice, which delays the petitions process.
Inconvenient to contact a petitioner.		Communication with related parties is done through by post or over the phone.
		Searching for a keyword / phrase or full text is an extremely time consuming task.
		Facilities provided for pre- preparation of committees are inadequate.
		Matching for similar type of petitions is done by searching through a log / registry.

Motion

MPP generally hand over Motions to the Table Office or SGP. Table Office manually keeps record of Motions and takes further actions on it according to the Standing Orders.

The following table highlights major issues recognized in terms of key stakeholders.

МРР	The Public	Staff
It is necessary to come in person to Parliament and submit a Motion to Table Office/SGP.	There are only few facilities to access information regarding Motions and progress of a Motion.	Search for Motions is done through a log / registry. This causes delay in the process.
No effective method to track or monitor the		No fast tracking system for Motions
progress of Motions other than by contacting officers in Table Office		Have to retype documents as all documents regarding Motions are in hard format.
		Going through subject matters and categorizing is done manually by an officer filtering the records in the log/register.

Table 5: Gaps in Current practices - Motion

Questions & Answers

Questions may be for written or oral answers. They are handed over to the SGP/Table Office to be included in the Order Book. On an average day, 10 to 15 questions are listed in the Order Paper for answer by the relevant Ministers. It is the duty of the Speaker to decide on the admissibility of questions in accordance with the Standing Orders (Source: Wijesekera P., Parliamentary Practice in Sri Lanka, 2001).

Table Office maintains a registry for this purpose. They need to be filtered and searched sequentially for similar questions submitted before. The approved questions are forwarded to the Order Book/Order Paper manually. Written answers to questions are sent to Hansard Department in hard copy format.

Some of the issues encountered in respect of stakeholders are given in the following table.

Table 6: Gaps in current practices - Questions & Answers

МРР	The Public	Staff
It is necessary to come in person to Parliament and submit Questions to Table Office.	Access to Questions and Answers are tedious and highly ineffective.	Questions are submitted in hard format and retyping and editing is needed before being included in the Order Book/Order Paper.
Only method to track and search the status of the Question is by contacting the Table Office.		Have to make corrections and editing by reading through Questions manually while lodging the Question in a logbook / registry. However, this is error prone and inefficient.

MPP	The Public	Staff
Access to previously raised		Checking for status and similar
Questions & Answers is		type Questions is now done by
tedious and highly		searching through the logbook
ineffective.		and this is lot more time
		consuming and inefficient.

Order Book / Order Paper / Addendum

Order Book, Order Paper, and Addendum are public documents. The documents are prepared in all three languages and circulated in hard copy format to all Ministries, Government Departments and other relevant institutions in order to enable their officers to brief Ministers on matters which may arise in Parliament for their attention. The Order Paper is delivered to MPP every day on which Parliament meets and contains the business to be taken up on that particular day.

Some of the issues encountered in respect of the stakeholders are given in the following table.

Table 7: Gaps in current practices – Order Book/ Order Paper/ Addendum				
MPP	The Public	Staff		
Obtain the documents in hard copy format, which needs to be delivered or physically collected from Parliament	Access to these documents are ineffective.	All communication with the SGP/ officers takes place in a conventional way and retyping is very common practice.		
Tracking and searching the documents for Motions/ Questions are tedious and ineffective.	Tracking and searching the documents for Motions/Questions are tedious and ineffective	Paper wastage is very common.		
Access to previous reports is difficult.		Keyword /full text search is not supported in this existing system.		
		The documents are delivered in hard copy format; incurs huge cost on postage		
		Tracking is highly time-consuming since almost the entire document flow is in hard format.		
		Have to manually prepare mailing envelops. This is time consuming and might cause errors in addresses.		
		Since approval is obtained manually, there is a possibility of documents / letters remaining unattended.		

Hansard

Hansard is an enduring record of the business transacted in Parliament each day. The speeches in the Hansard are recorded in the language in which they are delivered. Every word spoken in Parliament is taken down by a Hansard Reporter, transcribed and then submitted to the Editors. At the end of the day, after the editing and dovetailing of the shifts have been done, a master copy is prepared and transmitted to the Government Printer for printing.

In addition to the verbatim, Parliamentary Series, Reports of Committees, the Order Book, Addendum, and Order Paper too form part of the parliamentary records. All reports and papers tabled before the House too form part of its records. The documents that are in hard copy format that are to be included in Hansard are word-processed and proofread by the Government Printing Department.

The Hansard department is also supplemented by an Indexing unit comprising of Indexing Officers who index all matters discussed in Parliament, Member-wise and subject-wise. The cross-referencing is an aid to MPP as well as those interested in the affairs of Parliament to more easily access the required matter or subject.

The following are the major issues identified in the Hansard process in view of each stakeholder.

МРР	The Public	Staff
Have to wait for one and a half weeks to receive the 'uncorrected' version.	It takes about two weeks for the Public to obtain the document.	Hansard production chain takes place in two different locations: Parliament and Government Printing Department. This causes a huge delay in the overall production process.
Tracking and searching of the Hansard is tedious and ineffective.	Even though 1300 copies are printed, only few in fact reach the public.	Reporters capture verbatim and produce the Hansard with a lot of retyping work.
Access to previous reports is difficult.	Tracking and searching the Hansard is tedious and ineffective.	Photocopying same document for editing and proof reading is common practice, and leads to huge paper wastage.
Indexing facility is not available with the 'uncorrected version'.	Access to previous reports is difficult.	Reporters are finding it difficult to share documents such as Committee Reports and Questions prepared by other offices in the Secretariat.
		Difficulties in disseminating the Hansard to needy stakeholders effectively
		Manual Indexing is less effective since it does not support a compre- hensive indexing facility.

Table 8: Gaps in current practices – Hansard

Bills & Acts

All the Bills to be presented in Parliament are classified as Government Bills and Private Members' Bills. Main function of the Bills Office is the processing of Bills presented to Parliament and guiding same through all stages of the Bill until the certification of the Speaker, after which it becomes a law. A manual Bill register is maintained to enter Bill numbers and other important details related to the Bill. Amendments approved at the committee stage are incorporated manually by copying, cutting and pasting documents for the purpose of accuracy. Number of copies of the draft Bill is reviewed, amended and is retyped for corrections.

Bills Office has to ensure the correctness in all three languages of all the Bills, Ministers' Reports and Committee Reports to be presented to Parliament and also the final Assent Copies of the Speaker and final Acts before they are printed.

Key issues identified with regard to the Bills process are given below stakeholder wise.

МРР	The Public	Staff
Cannot access Bills and amendments to Bills as and when required.	The Public are not aware of the Bills that are to be presented in Parliament in advance.	The process is coupled with inefficiencies and most of the time double work exists due to retyping.
Monitoring progress or status of Bills is tedious and ineffective.	There is no effective method to notify the Public on the draft Bills being discussed in Parliament and the Bills being challenged in supreme court.	Generally, Bills registry is maintained to track Bills / versions but this is error prone and tracking its content changes is time consuming.
Finding Acts and amendments to Acts are tedious and ineffective.	Finding Acts and amendments to Acts are tedious and ineffective.	This registry manually needs to be searched for a particular piece of information. Content changes are difficult to be tracked since the registry is in hard copy format. Communication with various stakeholders takes place in hard copy format.
		There is no effective archiving facility to store old Bills and no faster search / retrieve mechanism.

Table 9: Gaps in current practices – Bills & Acts

Committee Minutes/Committee Reports

Committee Offices convene committee meetings, schedule meetings, choose venue, notify attendees, distribute reference material / documents and note down hearings.

Information for committee proceedings are provided manually. Committee minutes are documented in an offline mode. These documents/reports are sent to Government Printing department in hard copy format for typesetting and printing. PAC & COPE communicates with the treasury and the Office of the Auditor General via conventional communication methods.

Major drawbacks in this process are as follows.

МРР	The Public	Staff
Find it difficult to access committee information such as Agenda, Venue, attendees, reference materials, minutes etc.	Limited openings to express their view in Committees	Tracking and searching for committee information is a time consuming task since these information is maintained in a registry in hard format.
Find it difficult to access documents relevant to the issue scheduled to be discussed on a particular meeting.	Less chances to access Committee documents such as Committee Reports as and when required.	Experience difficuties in notifying relevant information to concerned parties .
Find it difficult to track progress or monitor status.	Find it difficult to track progress or monitor status.	Since committee proceedings are supported manually, various activities such as preparing reports etc takes a long time.

Table 10: Gaps in current practices - Committee Minutes/Committee Reports

Human Resources Management

The staff of the Parliament Secretariat consists of approximately 850 employees and all matters relating to recruitment, daily attendance, promotions, dismissals, service records, facilities and staff quarters are administered by the Administration Department predominantly via conventional tools.

The following are some of the issues identified in Human Resources Management in respect of the stakeholders.

MPP	The Public	Staff	
Do not 1 satisfact service.	eceive ory level of	Human resources management practices such as recruitment and selection, performance management, reward management, training & development etc are far below the accepted level.	
		The management finds it difficult to access employee details as and when required as the information are in hard format.	
		It takes considerable time and human resources to maintain physical files and reports.	
		Performance appraisal form is ineffective.	
		There are no clearly defined job profiles.	
		Inter-departmental communication is poor; weak institutional culture; etc .	
	Information sharing among the functional departments For example the department of catering does not know ho staff have reported to work prior to preparing meals.		

Table 11: Gaps in current practices - Human Resources Management

Financial Management

The department of finance plays a key role in the financial management of Parliament. The most important function is to formulate and control the annual budget of Parliament in order to carry out the business of the institution without any interruption. It is also responsible for the payment of salaries, allowances and other entitlements to MPP and Parliament staff, and provision of other financial benefits to them on time.

The following are the major issues identified in the Financial Management process in view of each stakeholder.

MPP	Staff
It is necessary to make a request to the finance	Manual registers are maintained for salary payments
department in order to obtain past salary details, deductions and loan balances.	The petty cash register is maintained manually.
	Loop applications are propored on proprinted forms and
Letter of pensions is prepared manually .	Loan applications are prepared on pre-printed forms and signed by the relevant authorities.
	Loan Register is maintained manually.
	Separate stock books / inventory registers are maintained for general, catering and engineering stocks, under the purview of separate storekeepers.

Table 12: Gaps in current practices – Financial Management

MPP	Staff	
	Receipts and issues are entered manually in the manual stock/inventory books.	
	It is necessary to make a request to the finance department in order to obtain past salary details, deductions and loan balances.	
	The prevailing practices may cause manual calculation errors, unnecessary paper work and huge stationery usage.	

Members' Services

The Members' Services Office handles all matters relating to the Members' housing complex at Madiwela, the holiday bungalow at Nuwara Eliya, and telephone, postal, internet and other facilities provided for MPP.

The following are the major issues identified in the Members' Services process in view of each stakeholder.

Table 13: Gaps in current practices – Members' Services

МРР	Staff
Access to relevant information is extremely difficult since MPP need to come to Parliament and check with relevant officials.	Most of the processes are done manually and this is error prone and inefficient.

Security Management

Admission of strangers to the precincts of Parliament is controlled by the Department of Serjeant-at-Arms. The Serjeant-at-Arms manages overall security in Parliament and ensures that it is free from the risk of violence, accident, fire etc with the assistance of the Parliament Police division. Serjeant-at-Arms is in charge of the Members' record of attendance, and decides on the seating plan in the House, allocation of office rooms, committee rooms, interview rooms, facilities and their administration.

Department of Serjeant-at-Arms is also responsible for issuing gate passes, staff identity cards and visitor passes.

The following are the major issues identified in Security Management in view of each stakeholder.

MPP	The Public	Staff
Do not have a convenient method of recording attendance.	Lateness of letter delivery delays the pass issuing process and only	Access control system is not in use, therefore no proper technique to track information on attendees to Parliament.
	conventional methods are used for communication with checkpoints. Hence, visitors to Parliament may have to stay for a long time at the entrance or reception until cleared for admission to the premises.	Multiple types of passes are printed to cover all required possibilities.
		No efficient method to track information regarding issuing / renewal of passes, and equipment etc.

Table 14: Gaps in current practices - Security Management

Catering and Housekeeping

Number of meals needed on a particular day cannot be obtained beforehand and past data is not available in order to forecast the amount needed. Issues in all catering outlets are done manually. Lunch cards are printed and distributed to staff in order to monitor staff meals. However, this does not give a correct figure on the number of packs needed per day in advance, which leads to huge wastage of food & other resources. There is no proper monitoring mechanism for lunch card issuing.

Current inventory control mechanism is not efficient. All documents receipts / inventory books / stocks / registers are maintained manually and this sometimes causes officers to make error prone decisions.

Table 15: Gaps in current practices - Catering & Housekeeping

Staff
All activities including costing, maintaining inventories take place manually, this causes a huge waste of resources, and unavailability of a statistical forecasting system tends to overproduce the number of meals needed on a day.

There is no proper system for lunch card issuing.

All documents receipts / inventory books / stocks / registers are now maintained manually and this sometimes causes officers to reach erroneous decisions.

Envisaged process improvements & benefits

This section presents envisaged process improvements and the benefits available to the stakeholders in the improved status of Parliament. The process improvements are suggested in line with the framework discussed at the beginning of this section and the findings of the systems study. Even more, the proposed process improvements contribute in not only mitigating the weaknesses identified but also capitalizing on the opportunities discussed in the above.

In order to achieve the envisaged improvements, an overly eccentric thought process compared to the present context needs to be adopted. Since most processes are interlinked and dependent on many others, a complete solution instead of several autonomous elucidations needs to be envisaged. This will necessarily be a widespread integrated system modelled according to a properly devised strategy. Hence, the institution and its functions will be fully IT enabled, and it is expected that the organizational governing regulations are updated accordingly.

The above-mentioned 'improved' status will require extensive re-engineering of current business processes with support from the top management and other stakeholders themselves. This system will also make use of latest technology and standards to gain the needed technical prowess. Three different approaches are discussed as options later during this report in order to achieve this envisioned status. Which approach is the most suitable and viable for the previously mentioned will also be evaluated and highlighted.

Petitions

The envisaged system can have an efficient mechanism to capture petitions electronically through the website to the Parliament Committee Office as well as to the MP selected by the petitioner. MP can be informed of the receipt of it with a pop-up message on his/her Personal Computer/Mobile Device. MP can also have the facility of placing his approval electronically.

Committee Office staff can have a mechanism to inform the petitioner on the retrieval of the petition. Staff can exchange information and documentation with relevant Ministries of the Government, institutions, relevant functional departments/sections, Hon. Speaker via a common interface using electronic methods in all three official languages. This system provides tools to allow Petition Committee staff to process received petitions, remove duplicates and remove previously submitted petitions, reject spam petitions, respond to petitions and input petitions into legislative creations such as the Order Book, Order Paper etc.

Electronic petition can have its own discussion forum, where visitors and signatories can discuss the petition and surrounding issues online. Public will also be able to track the status of their petitions through the web.

Table 16: The envisaged be MPP	nefits – Petitions The Public	Staff
Can submit petitions electronically from any location.	Handing over the petition, contacting MP and checking the progress can be done electronically.	Can easily and efficiently track the status of the petition.
Can contact the petitioner and convey the outcome immediately.	Petitioners can submit support documents to the Parliament electronically.	Searching for a document by giving a word or phrase can be done very quickly.

The table below cites the envisaged benefits of the Petitions process.

MPP	The Public	Staff
MPP are provided with more reliable and direct information on what the most important issues are.	Can track the progress and outcome of petitions.	Lodging a petition, calling related parties, processing the petition, notifying the parties involved, creating agendas, summoning meetings, taking down proceedings and creating minutes can be done using electronic methods very efficiently.
Can track the progress of petitions.		Communication with related parties can be done easily.
		Not necessary to retype

Questions & Answers / Motions

Questions/Motions can be submitted electronically from any where at any time to the Hon. Speaker/SGP. The electronic question store can be searched using full text searches/key word searches online to ensure Question has not been raised during the current parliamentary session. Relevant MP can check status of the Question from any location. The finalized Questions/ Motions can be queued/scheduled and can be extracted to the Order Book/Order Paper. It will also be possible to compare Questions with newly submitted Questions.

Written Answers for Questions can be sent to Parliament by the Ministry electronically, while the facilities to indicate the receipt of a response to a Question from a Ministry also can be available. System can prompt when a response to a Question is due with adequate notice and trigger reminders.

Facilities to receive Adjournment Motions directly from the MPP and to record the details and categorize them according to the subject matter can be made possible. Ability to search for previous Adjournment Motions, to see whether the same subject has been raised previously (during the same session of the Parliament) and capability to reject them is also available.

The table below depicts benefits of the improved process.

МРР	The Public	Staff
Can electronically submit Motions/Questions to Parliament.	Allows citizens to quickly view Questions/Answers related to them on the internet.	Can generate letters using electronic templates.
Can track and search the status of a Motion/ Question from anywhere at anytime over the internet.	Can track Motions and access to related information effectively and efficiently.	Can search for previous similar type Motions/Questions electronically.

Table 17: The envisaged benefits – Questions & Answers / Motions

MPP	The Public	Staff
Can communicate with the ministries and the Committee office more productively.		Can search the status of a Question/ Motion at any time without going through log entries.
		Re-typing is not necessary.
		Can receive responses to Questions from the relevant Ministries electronically.
		Since there is a pre-defined document flow it will not bypass any of the steps.
		System reduces duplication of work and cost for printing large number of documents for checking purposes.
		Increases accuracy and efficiency

Order Book/ Order Paper

Order Book/Order Paper can be generated automatically. Information to be included in the Order Book/Order Paper can be sent electronically from the relevant parties. Order Book can be updated electronically; hence, an always-updated Order Book will be available. Addendum will be extracted from the Order Book for reference purposes for a given date. The Order Book/Order Paper will be available through the web site.

This system can provide the capability of transmitting document(s) to the Government Printer and document(s) would be indexed appropriately for reference and retrieval purposes. The document can be available to be accessed through the intranet by authorised personnel.

System can have facilities to forward the final draft to the Office of the Secretary General for final approval and then to forward the draft with the approval of the Secretary General to the Table Office.

A mailing list can also be attached with the Order Paper containing mailing addresses of the MPP. Moreover, the MPP can receive the final copy of the Order Paper for the next sitting day in electronic format.

The envisaged benefits of the Order Book/ Order Paper process are given in the table below.

MPP	The Public	Staff
Can search by giving keywords electronically.	Can access the Order Book/ Order Paper with search facility.	Can access the Order Book/Order Paper electronically and search for any given keyword.
Can track Order Paper very efficiently as and when required.	Can access previous documents as and when required.	Can access the electronically updated Order Book without re- printing with amendments.
Can access updated Order Book electronically from anywhere at anytime		Since there is a predefined document flow, staff need not think of the flow of the document.
over the internet.		It will reduce time and paper wastage.
		All the mailing can be done electronically.

Table 18: The envisaged benefits - Order Book/ Order Paper process

Hansard

Capturing the speeches given by MPP in any of the three languages can be done in an effective manner by implementing a voice recognition system or a more effective word processing software package.

Reporters can use standard formats and wordings as templates to insert standard proceedings of Parliament to the text. Documents to be included in the Hansard can be taken as softcopies electronically from the relevant parties and inserted into the text by reporters. Reporters/ Editors can edit directly on the softcopy simultaneously.

Editor can track the changes made by each of the staff involved in the preparation of Hansard such as initial recording, the changes made by a reporter and the changes made by each editor. It can also allow evaluation of reporters by statistics on the type of mistakes they make.

The Hansard Department will be able to send the finalized Hansard to the Printer, where the Printer does not need to make changes to the content of the document. MPP can input corrections with regard to his/her speech electronically and send back to the Hansard Department immediately. Facility to locate a Hansard by date, keyword, volume, session, etc will be available.

The index is created and formatted automatically parallel to the final editing/printing by the software. This system can track the timing of events according to the Order of Business such as time, name of the MP and time taken by each political party. Subject index will be available for searching over the internet.

The table below depicts the expected benefits of this process.

Table 19: The envisaged l	benefits – Hansard process
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MPP	The Public	Staff
Can receive the uncorrected version of the Hansard within 24 hours with search facility.	The latest Hansard/ Volume will be available on the web, avoiding the need to buy a hardcopy.	Reduces (or no) typing requirement.
Can make his/her corrections to the speech electronically and send back to the Hansard Department.	Can search the Hansard by MPP, Date, Title of the speech or by giving any keyword on the web.	Saves time spent on compiling the script.
Can access the corrected Hansard with search facility.	Hansard can be made available on the following day.	Avoid duplication of work and cut down the time spent at the Government Printer.
Can provide immediate information on events that took place in the		Not necessary to print 1300 copies of Hansard, so no paper wastage.
House on a given day as requested by MPP.		Assistant Editors can track speeches of the proceedings by using the keyword search facility.
		Editor can make an evaluation of his staff members by the statistics on the type of mistakes done by each Reporter/Assistant Editor.

"We urge governments, using the potential of ICTs, to create public systems of information on laws and regulations, envisaging a wider development of public access points and supporting the broad availability of this information."

Tunis Commitment, para. 17, World Summit on the Information Society

Bills/Acts

The envisaged system provides measures for drafting and managing proposed laws and their accompanying amendments in a more effective and efficient manner.

Bills Register and all documents relevant to a particular Bill can be maintained in electronic format so that proposed and approved amendments can be included electronically. The review of amendments of the Bill could be done using electronic methods by related parties and thereby reducing the number of versions being printed by the Government Printer. Bills awaiting presentation / in progress (at different stages) / waiting for Supreme Court Decision and Acts can be published on the web.

System can have the ability to construct an e-file containing all electronic documents referred to the Bills Office from the Office of the Secretary General according to the Standing Orders for the respective types of Bills and according to provisions of the Constitution. All documents relevant to a particular Bill to be presented in Parliament can be held within the e-file while this file can be adequately indexed for retrieval / reference purposes. Further, the ability to obtain printed copies of documents held in the e-file of the Bill can be made available to authorized personnel in either / all of the languages.

The compiled document(s) (draft Bill) can be electronically transmitted to the Government Printer and the compiled document printed by the Government Printer in electronic format can be accessed when necessary.

Information relating to a Bill can be stored adequately and indexed for ease of retrieval through keyword searches or full text searches.

Finalized copy of an Act of Parliament can be transmitted to the Government Printer if required and the copy of the Act can be published on the web and forwarded to the Library for reference and retrieval.

In brief, the envisaged system for managing bills has a number of characteristics, including:

Workflow: This allows Bills to be moved automatically and smoothly among the key stakeholders and organizational units responsible for preparing and distributing them. Workflow also includes the ability to control versions so that authorized changes by one person or office are not overwritten by another.

Accommodations of all versions of Bills: The system maintains all versions of proposed Bills.

Exchange and integration of documents and information: To have the complete legislative history of an Act, the envisaged system can integrate relevant documents and information related to a specific measure, such as amendments, plenary votes, status steps, and committee reports and activities, etc.

Accommodation of Bills with special formats: The system accommodates different types of Bills such as the Appropriation Bill.

Authentication of users: High level of security procedure for ensuring the accuracy and authoritativeness of the text of the Bill is available for example by requiring both a fixed password and a constantly changing password or a physical token.

The table below depicts some benefits of the improved process.

MPP	The Public	Staff
Would be able to receive valuable input from the Public in respect of Bills being scrutinized in Parliament.	Can get information about Bills to be passed in Parliament and can express their views.	Reduces duplication of work and cost for printing large number of copies for different versions (content amendments).
Details of Bills and Acts can be easily tracked very efficiently without having to contact Bills Office.	Bills and Acts can be easily tracked by students and interested individuals of the general public in an efficient and effective	Bills and Acts can be easily tracked by officials of the Parliament.
Would be able to access an e-file of a particular Bill as and when required.	manner.	Increases accuracy and efficiency.
Can search Bills/Acts by giving any keyword on the web.		Confidentiality, integrity, and authenticity of the documents can be improved.

Table 20: The envisaged benefits – Bills/Acts process

Committees

The committee proceedings can be automated where MPP can access relevant documents prior to the proceedings. The minutes can be captured using a template while the committee investigations are in progress. The Committee Office can access the necessary documentation such as the Auditor General's Reports and Annual Reports etc on-line.

MPP can be provided with prior access to documents relevant for the issue scheduled to be discussed at a particular meeting. The meeting schedules and agendas can be made available on the web and sent electronically to the relevant MPP.

Voice/Video recordings of committees can be made available for electronic reference. Authorized MPP / officials can review draft Committee Reports/Minutes electronically. Committee Reports/ Minutes /voice/video clips of committee proceedings can be made available on the web so that authorized users can access them from anywhere at anytime in the language of their choice.

The system can make available the floor plan of the Committee Rooms with advance reservations and availability according to date and times.

The following table summarizes the envisaged benefits to stakeholders.

MPP	The Public	Staff
Can access committee information electronically (Agenda, Venue, attendees, reference materials, minutes) on an anywhere anytime basis.	Can quickly view Committee Reports/ proceedings online.	Scheduling meetings, choosing the venue, notifying attendees, distributing reference material / documents and reporting can be done electronically without maintaining manual files and registers.
All the supportive documents to the committee can be accessed electronically from any location.	Can submit supportive documents electronically when there is a requirement.	Document flow can be automated according to pre-defined rules which enables effective and effi- cient document exchange.
Pre-preparation for the committee can be done very effectively.	Can track Committee Reports very effectively and efficiently.	Tracking and searching for committee information can be done electronically without going through manual registers.
Can search Committee Minutes/Reports etc effectively and efficiently.	Can search Committee Reports effectively and efficiently.	Preparation of Committee minutes is very easy and accurate since staff can access the voice clip(s) online.
Facilitates access to previous Reports/ Minutes effectively.	Facilitates access to previous Reports with enhanced search facility.	Communication among related parties outside Parliament can be done electronically.
		An efficient automatic triggering and message alerting system to notify information to relevant parties will be available .
		Committee Reports can be prepared early.

Table 21: The envisaged benefits - Committees process

Preserving Parliamentary Documents

Parliamentary documents carrying historic value such as Hansard, Minutes, Reports etc can be archived and published on the web with advanced search facilities.

The Archival System can support the creation, storage, and use of finding aids. (E.g. thesaurus, pick lists, data dictionaries). Archival of documents can be customized to occur automatically according to a given criteria or manually.

The table below gives the envisaged benefits of this process.

MPP	The Public	Staff
Can easily search the contents of preserved documents.	The public such as university students, researchers can obtain	Can access and search for information for their research reports.
Will be more useful as many documents/ information are interconnected.	valuable information easily.	Can preserve documents for future use via open standards.

Table 22: The envisaged benefits - Document Preservation process

Human Resources Management

Introduction of a proper Human Resources Management System can improve productivity of the staff. The envisaged system includes several subsystems such as recruitment and selection, training and development, reward management, performance management etc. These modules enable Parliament to create a productive workforce via motivation and developing their capabilities.

Parliament can do the recruitment and selection activity much faster than now. This enables filling vacant positions effectively and efficiently.

Personnel details of the staff can be maintained electronically. The system can provide a single store for all relevant information. Important documents such as educational qualifications, birth certificates (mainly paper-based personnel file) can be maintained electronically. Increment dates, retirement dates can be notified automatically. All the documents can be sent according to a planned flow to the correct receiver with an alert.

Attendance details of both MPP and the staff can be captured and stored electronically. Leave details can be calculated automatically. It will also be able to generate reports capturing the attendance history of a given employee.

The following table highlights the envisaged benefits in human resources management practices.

MPP	The Public	Staff
improv	bect better and ed services from	Can reduce time taken to maintain registers and paper wastage. Can reduce duplication of work.
the staff		Overall human resources management practices can be improved.
		Contributes to employee motivation and development
		Can cut down the staff allocated to maintain personnel files/ related activities.
		Top management can access employee details at any time without going through personnel files .

Table 23: The envisaged benefits - Human Resources Management process

MPP	The Public	Staff
		All the staff related details such as Insurance, Bus Pass, Railway Season Tickets, Training Details, Staff Telephones and Hospital Facilities can be maintained easily.
		Catering department can get the correct figure of attendance in the morning and estimate the preparation of food, thereby reducing the wastage of food
		The human resources can be aligned with the institutional objectives

Financial Information System

The financial information related to the MPP and staff can be processed electronically. Salary calculations and Loan deduction calculations and all other allowances and deductions are calculated automatically. The documents are exchanged electronically while most of the documents can be approved electronically. Most of the transactions can be done electronically. Briefly, all payments and transactions can be done effectively and efficiently.

This system maintains a common stock and inventory database for all departments/sections. The requesting department/section can submit their request electronically. Most of the reports can be generated automatically.

The system can schedule and manage vehicle repairs, insurance and accident details effectively.

The following table lists envisaged benefits of the Financial Information process.

MPP	The Public	Staff
Can obtain past salary details as well as the current pay slip electronically.	The vendors and contractors can access tender documents and submit bids electronically.	Facilitates better management of financial resources.
Can check loan balances		Document exchange can be improved.
without making a request to the Finance Department.		Can reduce unnecessary paper work, human calculation errors, data duplication errors, etc.
		Storekeeper can get an alert when a requisition is raised or when the stock level has reached the re-order level.
		Can submit requests electronically therefore less paper work and improved efficiency.
		Can manage tender and procurement procedures productively .

Table 24: The envisaged benefits - Financial Information process

Security Management

Issuing, renewing of passes for equipment / items carried & vehicles can be done electronically in an efficient and secure manner. Since everything can be stored, tracking and searching past information on passes & attendees can be possible. Validating and approving this information while tracking visitor information, security clearance, member attendance and issue of keys can be done more promptly. Entry points can have electronic communication between them while an access control system will be in operation.

These improvements will lessen the time people may have to stay at the entrance or reception until cleared for admission to the premises.

The table below lists expected benefits of the Security Management process.

МРР	The Public	Staff
Parliament will become more secure.	Lessens time they have to spend at an entrance or checkpoints.	Ability to quickly issue and/or renew passes
		Can search for past information in an efficient manner.
		Validating of visitor information can be made easier.
		Can manage security related resources more effectively and efficiently.
		Facilitates effective 'key management'.

 Table 25: The envisaged benefits - Security Management process

Catering and Housekeeping Management

Number of lunch packs needed on a specific day can be obtained beforehand and if needed past data can be analyzed to forecast the amount needed. An efficient electronic inventory control mechanism will be available. Also, an electronic lunch card monitoring system will be implemented. Document receipts / inventory books / stocks / registers can be maintained electronically.

A tracking system which records transactions, expenses, information of room services & lockers can be maintained electronically.

Given below are the envisaged benefits of the Catering and Housekeeping Management process.

MPP The P	ublic	Staff
Can obtain a qu	ıality	Ability to forecast amount of food needed
service.		Reduces wastage of resources.
		Ability to forecast and manage stock items more effectively
		Facilitates management reports; leads to effective management of the resources.

Table 26: The envisaged benefits - Catering and Housekeeping Management

"Informing citizens about the work of parliament is not just a concern for independent media, however, but is a responsibility of parliaments themselves. Over the past few years, parliaments everywhere have been making strenuous efforts to inform and educate the public about their activities, and to engage their interest and attention. In this they have been helped by the rapid development of new forms of communication such as the Internet, which also facilitates an interactive relationship between representatives and citizens rather than just a one-way communication. Citizens cannot hope to influence parliaments unless they are first fully informed about what they are doing; neither will they be able to hold their representatives properly to account."

Parliament and democracy in the twenty-first century: A guide to good practice, Inter-Parliamentary Union, 2006

Enhancing the Dialog between Parliament and the Public

In addition to improving existing practices, there is a growing concern in many legislatures that unless effective channels of communication are established between the institution and their citizens, as well as among legislators and their constituencies, there could be a risk of further erosion of public's trust in the legislative body.

The growth of ICT and the newest web applications that allow user generated content have already started to alter the traditional relationship between citizens and their elected officials. In order to respond to these developments, parliaments must define new strategies to avoid marginalization in today's public sphere. When developing an e-Parliament vision some see the potential to add new means for informing and interacting with citizens in order to reengage the electorate in parliamentary affairs, in the hope that the negative trends in public satisfaction and participation in elections can be reversed. While the use of interactive technologies alone is not enough to rebuild political trust, it may be an important instrument for addressing this problem (World e-Parliament report 2008).

Several techniques are now available that can be effectively deployed for this purpose.

E-mail

As e-mail has become a more universally available and widely used form of communication, Parliament can provide public e-mail addresses on the web site to allow direct contact with MPP and the officers. E-mail provides the potential for good two-way communication, enabling citizens to establish a dialogue with their MP without necessarily going through conventional channels.

Online discussions and Blogs

Online discussion groups/forums and Blogs can be effectively used for soliciting comments and suggestions from the public on specific proposals or general topics etc. This feedback could be easily moderated too if needed.

4. High level options analysis

Introduction

The preceding chapter revealed several deficiencies prevailing in the institution in terms of core parliamentary and administrative activities. Even more, it showed how ICT can improve the situation with the view of achieving the institutional objectives. This section discusses three options that help the institution reach the desired status of Parliament from its present status. This analysis helps Parliament in selecting the best approach.

"The vision we had in the Riksdag and in several other parliaments some tentwenty years ago, to make our official parliamentary documents and information available to the public has, in many senses, been realized. A key goal in these efforts has been to make the work and decisions of parliament transparent to the public, and thus to create opportunities for greater understanding and dialogue on political developments. Freedom of expression and information have been crucial in this process."

Anders Forsberg, President of the Association of Secretaries General of Parliaments Opening address at the World e-Parliament Conference 2007

Base case option

This option assumes that the current practices will be continued with the view of reaching the envisaged status of Parliament. The Base case option, therefore, presents the nature of the existing system in Parliament.

The Base case option has been identified as less productive & effective by practice due to a number of reasons.

As stated, the existing document handling practices are slow as it takes a long time to turnaround documents from one location to another. It is also error prone as documents could be misplaced, damaged, miss-delivered or miss-sorted. Besides, errors could easily be introduced when the data from one computer is entered into another computer. For the organization, the process is laborious and wasteful on resources, as it requires repetitive handling of a large volume of paperwork and re-entry of data from one computer to another.

Even though there are ad-hoc applications to facilitate some processes identified in the need analysis, the existing system has not been enhanced accordingly. These ad-hoc programs do mere storing / retrieving / searching or sorting of data and there is no inter-process communication among the programs so that output of one process can be shared by another. And also no process has been partially or fully automated using these applications. There are

a large number of processes, which are still manually done without any support of computer programs. These processes cause an overall delay, are inefficient in their operations and prone to human error. Therefore, processes supported by programs have no significant process improvements either.

For example, the Hansard process can be cited to support the fact that the process needs to be greatly improved to reach the envisaged objective.

- Currently Hansard takes a long time to be printed (about two weeks).
- Hansard department cannot produce the Hansard on the following day.
- Hansard compiling takes place in two different locations (the Government Printing Department and Hansard Department).
- All documents (Questions, Answers, Tabled documents) to be included in the Hansard need to be manually forwarded to the Hansard department. This is time consuming and error prone. There is no electronic mechanism to share those documents with the Hansard department.
- 80% of printed Hansards i.e. about 1000 copies do not reach the desired stakeholders.
- Even though Hansard department has been provided with Rs. 5 million worth of computers and other accessories together with the Hansard program, process improvement gained is negligible.

Hence, although there has been a considerable amount of investment on the Hansard department, it is very clear that the current practices need to be equipped or enhanced with a fully functional and featured solution to reach the envisaged objectives.

Cost estimate/ Cost benefit - Base case option

In the manual system, there is no initial cost and employees handle all processes possibly with or without the support of computer programs. Even though, the computer programs attribute in improving the operational perspective, their contribution towards improving current practices are negligible. The recurrent costs incurred can be discretely identified and such cost components are namely stationary, printing, photocopying, maintenance and delivery, binding, etc.

It is a well-known fact that all most all the processes are inherently adhered to delays, inefficiencies, and ineffectiveness, extraordinary overheads, erroneousness, and unnecessarily waste of money and time.

Taken as a whole it is obviously clear that the benefit gained compared to the cost incurred is negligible.

The following two tables depict benefit vs. cost in terms of current activities, which can be improved via ICT. This analysis assumes that the number of employees and Parliament building and other infrastructure facilities remain unchanged.

Table 27: Cost estimate/ Cost benefit

Activity	Cost	Benefit/Weakness - Tangible
Petitions Motions Questions & Answers Order Paper / Order Book Hansard Bills & Acts Committee Minutes / Committee Reports Members' Services People Management Activities Catering and Housekeeping Security Administration Document Preserving Library	 These activities incur a lot of resources on the following lines: Paper cost Printing cost Postage Telephone charges Computers & other accessories Wastage of resources 	 Benefits are negligible; there are number of weaknesses as stated: Activities are slow Error prone Ineffective Unproductive Image of Parliament goes down Employees' talents, capacity may drop down Public interest over Parliament drops

Table 28: Expenses incurred in 2007

	Item	Copies produced	Total cost i	ncurred
1	Hansard	1,76,400	3,201,660	(printing cost)
2	Postal Charges – Express mail	-	4,080,805	
3	Postal charges - Normal mail	-	1,219,346	
5	Order Paper	1,12,800	2,932,800	(printing cost)
6	Order Book	800	1,28,000	(printing cost)
7	Addendums	18,400	9,74,400	(printing cost)
8	Committee Reports	4,500	2,34,000	(printing cost)
9	Minutes	4,900	4,29,200	(printing cost)
10	Stationery	-	13,206,943	
11	Telephone (Parliament Complex)		16,507,733	
12	Catering		54,290,220	
13	Book binding		158,025	
	(Hansard, Order paper, Order Book, Addendums, Minutes, Reports)			
	Total	-	97,363,132	

Even more, significant amount of valuable office space is used for storing Parliamentary documents. The following table depicts approximate usage and the opportunity cost.

Location	Items stored	Capacity (Sq. Ft)	Approximate Cost (Monthly) (1 Sq. Ft = Rs. 70 per month)	Approximate Cost (Annually) Rs.
Hansard	Hansard Volumes, Old Hansards, Labels, Tapes, Annual Reports, Indexes, Dictionaries and Slips	600	42,000	504,000
Table Office	Order Books, Order Papers, Addendums, Minutes, Annual Reports, Budget Speeches, Sessional Reports, Court Orders, Ballot Papers, Questions Registers and files	450	31,500	378,000
Establishments Office	Personnel Files, General Files, SAC Decisions, Cabinet Approval Reports, Applications, Public Administration Circulars	275	19,250	231,000
Bills Office	Acts, Act Volumes, Bill Files and Assent Copies	450	31,500	378,000
Committee Office	Petition Files, Final Reports, Verbatim	160	11,200	134,400
Consultative Committee Office	Committee Subject Files, Final Reports, Annual Reports	160	11,200	134,400
PAC & COPE	Annual Reports, Committee Files, Verbatim	400	28,000	336,000
Supplies & Services	Item files (order, repairs), Inventory and Stock Books, Supplier files, Annual Board of Surveys	120	8,400	100,800
Library	Hansards, Annual Reports, Parliamentary Series, Sessional Reports, Old News Papers, Estimates, New Laws, Committee Reports, Verbatim	1,500	105,000	1,260,000
	Total			3,456,600

Table 29: Approximate usage of office space vs. cost

Taken as a whole it is obviously clear that the benefit gained compared to the cost incurred is negligible due to the reasons such as ineffectiveness, inefficiency, error proneness, waste of resources etc. Even more, continuation of this approach does not contribute in achieving the envisaged institutional objectives either. Whether to bear with this or to take up a better approach is to be decided by the organisation itself. If a change is thought of, then a suitable and viable option needs to be chosen.

Operational approach option

As the preceding section reveals, the Parliament secretariat currently maintains a varied and incomplete approach when it comes to implementing ICT for the existing processes.

Named as the "Operational approach", this second option is a more structured way of applying solutions compared to the previous approach. Here ICT tools are deployed with the view of improving selected activities rather than focusing on the holistic view of the institution, while the organization's mindset remains more or less function oriented.

If Parliament is to adopt this approach, it will be ICT enabled and tools implemented. Tools will be implemented function-wise giving more attention in improving functions in isolation. In addition, staff and infrastructure needs too would be satisfied in the same manner when and as required. The preferred method of implementation may be ad-hoc or planned. Scale of IT enabling and setting-up of relevant and needed infrastructure will be immense in such an environment. Whether the investment made is productive and could be justified will be evaluated later in this report.

Most improvements cited within the 'need analysis' chapter can be implemented by the operational approach too. For example, when compiling the Hansard, functionality for capturing speeches via voice recognition, using templates, tracking changes, ability to search and retrieve, etc could be implemented using one or more standalone applications. The same is true for processes such as Committees, Bills, Petitions, Order Paper/Order Book, Archiving, etc.

However, this move fails to attain many objectives stated in the envisaged status of Parliament. Most prominent is its failure to improve organisational business processes, since the existing processes remain intact although facilitated by ICT. Elaborating the above example, it's clear that no process reengineering occurs, but only the addition of IT tools, equipment and may be staff. In other words, having isolated solutions when many business processes are interconnected where one process depends on another will in no way improve the effectiveness of the organisation itself. If a tool was developed for the Hansard indexing process, it will have no collaboration with other tools or systems thereby maintaining the existing flaws. In addition, it wouldn't either contribute in developing employee attitude or resourcefulness leaving out the human resource development point of view. In other words, it will merely become a modern way of performing work which may be in an efficient but not necessarily an effective way. This scenario is more or less same for all other processes stated in the 'need analysis' chapter.

Moreover, the consequences of this are inevitable and perilous. After some time the organisation would be left with a bunch of applications and more staff which wouldn't improve the productivity or efficiency of the business processes. Maintenance (modifications and improvements) of these ad-hoc systems would be a difficult issue either by in-house or third

party personnel. With existing staff retiring with no training or familiarisation passed onto new comers, and growing pressure to keep up with new technology and organisational requirements, this situation will be made more complicated and messy. If any solutions were out-sourced, contractual agreements are sure to hamper the development of these systems. Leaving this apart, if one is to think of a linked, strategy-driven, collaborative, organisationwide solution someday they would find themselves in a perplexed and tough situation. Because the huge investments made throughout the years would have to be justified if any operationalbased solutions are discontinued. Still after such a time the organisation would certainly realise the inability to justify the investments made through this approach as they find the situation to be neither effective nor efficient. In this context, it's always better to avoid this simple and impromptu approach rather than evading a more strategic and methodical, long-term solution which the organisation, its stakeholders, and the society will eventually benefit.

As to why an organisation would opt for this kind of an approach is also an interesting area of consideration. Inflexibility in modifying organisational regulatory components, substandard global trends, present social or industry opinions, inability to device "the" proper strategy due to resource and information constraints such as improper consultancy, inadequate brainstorming, etc may drive an organisation into making such a decision.

In this background, achieving the envisaged status could be greatly challenged if this approach is put into practice.

Strategic approach option

The strategic approach assumes that Parliament adopts a more or less cohesive approach in deploying ICT tools with the view of reaching its envisaged objectives. The already evolved ICT strategy could be utilized for this purpose; however, this approach requires the institutional resources & activities to be aligned with the strategy.

The proposed strategic approach includes four perspectives: process improvement, the institutional growth, satisfaction of the stakeholders, and financial betterment. In contrast to the other options discussed in the above, this approach improves all four perspectives of the institution that would definitely help the institution in moving towards the envisaged status. To realize these developments, however, effective management and sustained support from the key stakeholders are essential.

Process perspective

The strategic approach improves parliamentary and administrative activities in terms of effectiveness and efficiency perspectives appropriate for today's context. This approach requires the existing processes to be reengineered so that they focus on the needs and wants of the stakeholders rather than maintaining the existing functional perspectives.

For example, the existing indexing function is ineffective and laborious. Firstly, indexing facility is not available with the 'unedited version' of Hansard, the only version accessible to masses. Secondly, indexing is only available in English. Thirdly, indexing is done manually by reading the printed unedited Hansard volume, and writing down the index entries as they are found together with the column number. To improve this situation, the strategic approach improves the indexing facility by way of reengineering the facility through proper ICT convergence. The following table depicts 'activity-benefit' for indexing in the event Parliament selects the strategic approach.

Table 30: Activity - benefit for indexing

Activity	Current process	Proposed improvement	Intangible benefits	Tangible benefits
Indexing	Indexing is done manually by reading the printed uncorrected Hansard volume, and writing down the index entries as they are found together with the column number.	The index is created and formatted automatically by the software	 No need to wait for the uncorrected Hansard to be published - the index can be prepared parallel to the editing / printing. The entries can be translated with help of the software (e.g. Member names, common terms and/or translation tools). This would allow the index to be in all three languages. The index can be used for hypertext links when published on the web. No need to type-in all variations of the same index entry, as it can be automatically done by the software. Easily searchable Can be shared with internal and external parties. Adds value to the subject index, by providing a more accessible record of the parliamentary events to the general public. 	Requires a less number of Indexing Officers (the existing officers may be effectively utilized for other institutional activities)

The above table shows how the strategic approach improves the indexing process. The envisaged improvements fully align with the institutional objectives which may not be achievable with the other two approaches outlined above.

Institutional growth perspective

The strategic approach builds the institutional capabilities in terms of physical infrastructure and human competencies that guarantee the process improvements are continued towards the envisaged status of Parliament. The strategic approach guides the institution towards the development of internal capabilities so that the improvements discussed in the above will be sustained and continued towards the institutional objectives. The staff who are competent in parliamentary and administrative activities are pivotal to Parliament in today's context. They play a vital role in developing, managing, and maintaining ICT services and applications that are tailored to the needs of the key stakeholders and that support the objectives of the institution.

The ICT infrastructure is the foundation for all improved services. The ICT infrastructure provides the backbone on which other key activities depend. The strategic approach, therefore, assumes secure and reliable ICT infrastructure that includes state of the art hardware devices, network components, systems software, and application programs etc.

The strategic approach, therefore, not only focuses on the development of physical infrastructure, but also in developing human capabilities. In contrast to the other two options, this approach guarantees that the institutional improvements are continued.

Stakeholder perspective

The strategic approach focuses on satisfying needs and wants of the stakeholders.

For example, the process improvement discussed in the above 'indexing' meets the expectations of all the stakeholders. MPP and the Public may search the Hansard for speeches in terms of subject, date, keyword etc from anywhere at anytime they wish. Even more, they can do so in the language they prefer. In terms of the staff, they can do their work in a much more effective and productive manner. This approach leads to motivation of the staff, which in turn improves the institutional productivity.

In contrast to the other two approaches, the strategic approach primarily focuses on the stakeholders and their needs and wants. This approach, therefore, assures the stakeholders are satisfied in terms of their diverse information needs.

Financial perspective

The strategic approach allows Parliament to accomplish its activities in a cost effective manner in contrast to the other two options discussed above.

For example, Parliament now prints about 1300 copies of the unedited Hansard per Parliament sitting day amounting to Rs. 3,200,000.00 annually. This amount can be reduced significantly via publishing the document in electronic format. This approach, even more, provides more value to the stakeholders in contrast to the printed version and therefore, will become the preferred choice of them. Even more, the strategic approach helps the institution perform its activities with lesser number of staff.

This approach, therefore, contributes in conducting parliamentary and administrative activities in a cost effective manner.

Cost estimate/ Cost benefit - The Strategic approach option

The strategic approach, as stated, necessitates proper ICT infrastructure in terms of hardware, network, systems, operating systems, database management systems, and application programs necessary to provide technology-based support and staff with competencies needed to build and maintain the strategic components.

Therefore, initial investment incurs substantial amount of capital resources. However, Parliament has already exploited external opportunities towards this direction. For example, UNDP has already funded the ICT awareness and the network infrastructure projects. Even more, ICTA has pledged their financial commitment to the Document Management System project. If these two projects could yield the expected outcome, the writers are of the view that finding donors for the rest of the ICT strategy would not be difficult to Parliament.

Even in the event of Parliament facing difficulties finding donors for the rest of the projects, the department of information systems and management is capable of undertaking certain strategic components namely Human Resources Management System project, Financial Information Management System, and Hotel Management System for which the department may need to recruit/outsource a few additional technical positions.

The dynamic nature of technology means that hardware and software must be constantly upgraded or replaced. The pace of improvements and the emergence of new developments show no signs of slowing. Coupled with the growing demands for better services this means that the infrastructure must be continually refreshed. Desktop computers, laptops, and servers, for example, often reach the end of their usable functionality after a few years. The cost of maintaining and enhancing the infrastructure once it has been built is therefore a major part of the annual budget for ICT. Approximately 10% of the capital investment is required for maintenance after completion of the warranty period. Even more, it is assumed a 20% value depreciation for ICT infrastructure components annually.

The ICT strategic components carry three years comprehensive warranty i.e. the initial capital investment guarantees that the projects are maintained free of charge for a period of three years. Thereafter, Parliament needs to maintain the infrastructure.

In addition to physical resources, Parliament needs to invest on human resources, a key element recognized by all institutions that want to use modern technologies to achieve their highest goals. Competent parliamentary staff - able to bring ideas and proposals to the fore, implement ICT solutions and supervise external contractors when necessary – is a critical ingredient for the institutional success. Moreover, the sensitivity of the issues treated by the institution and its independence and autonomy makes this investment a necessity, requiring continuous attention, training and improvements. There are adequate opportunities Parliament could pursue towards this direction such as training facilities organized by IPU etc.

In contrast to the base case option, the strategic approach contributes in reducing the cost in several aspects: stationery, postage, printing, telephone, catering, number of employees, space etc. However, a proper climate survey must be conducted on completion of the strategy in order to obtain figures that are more accurate.

The following table depicts expected savings on stationery, postage, printing, telephone, catering, office space etc.

Table 31: Expected savings - stationery, postage, printing, telephone, catering, & office space etc

Item	Approximate saving in contrast to Base case option	Annual saving (Rs.)
Stationery	75%	19,805,365
Postage		
Printing		
Telephone	20%	14,159,590
Catering		
Book binding	75%	118,518
Office space	75%	2,592,450
	Total savings	36,675,923

Number of staff required for various document-handling activities such as recovering previous reports, compiling routine activities, delivering etc can be drastically reduced. Even more, process improvement is one of the key integral components of this approach, which in turn attributes in reducing human resources needed to operate such processes.

For example, a few employee categories can be cited to consolidate the fact.

Currently there are 57 Parliamentary Officers except for Assistant Directors and Principal Officers. On completion of the ICT activities, mainly the functional activities of the Establishments Office, Finance and Account Office, and Supplies & Services Office, a number of officers could be reduced. Following example can be cited to justify this argument.

Earlier the attendance system was done manually by six officers and recently the attendance process has been enhanced by a software application developed in-house. This application in fact reduced the number of staff needed for the attendance recording to three officers. It could be further reduced after implementing the strategic components.

Accordingly, number of Parliamentary Officers who engage with the above functions can be reduced approximately by 26%.

There are five Indexing Officers currently involved with the process. After implementing the strategic components, the document management system, the activity can be fully automated and the officers needed can be reduced accordingly.

There are about 77 Parliamentary Service Assistants (PSA) whose main duty is to support document-handling activities. After implementing strategic components, document flow takes place through the system and the staff can be reduced approximately by 20%.

There are six Dispatch Assistants whose main duty is to deliver documents to ministries, Government Printing Department, etc. After implementing the strategic components, most of the document delivery takes place through the system itself and therefore the officers required can be reduced by 50%.

Considering the above, the following table summarizes savings on the staff. It is important to emphasize here that Parliament may utilize the redundant officers on other parliamentary activities effectively.

Function	Location	Staff category	No. of staff at present	Possible no. of reduction	Apprx. annual saving (Rs.)
People management activities	Establishments Office	Parliamentary Officers	13	7	37,177 *12*7 (3,122,868)
Financial management activities	Finance & Accounts Office and Supplies & Services Office	Parliamentary Officers	20	10	37,177*12*10 (4,461,240)
Document handling within the premises	Parliament Secretariat	Parliamentary Service Assistants	77	14	31,380*12*14 (2,244,480)
Document dispatching	Parliament Secretariat	Dispatch Assistants	5	2	39,592*12*2 (5,771,840)
Hansard Indexing	Hansard	Indexing Officers	5	5	35,946*12*5 (2,156,760)
Total saving				17,757,188	

Table 32: Expected savings on the staff

The estimated capital investment for strategic components is depicted in the following table. For calculation purposes, the figures are extracted from the budget revision carried out by ICTA; however, the writers are of the view that the estimated figures could vary depending on the technology that will be deployed. For example, Free and Open Source Software (FOSS) has gained significant popularity during the recent past. In the event, if Parliament could adopt FOSS, the estimated cost may be reduced significantly.

As stated, in contrast to the capital investment, there are many tangible as well as intangible benefits Parliament could expect in return. Table 33 depicts the benefit cost analysis vis-à-vis the strategic approach.

Activity	Cost (Rs.)	Benefit
Communication Infrastructure Project	75,000,000.00	
Document Management System	66,000,000.00	
Messaging and Scheduling Project	17,000,000.00	
Information Security Policies	1,000,000.00	
Human Resource Management System	10,000,000.00	
Financial Information Management	28,000,000.00	
System		
Physical Access Management System	25,000,000.00	
Hotel Management System	8,000,000.00	
Archiving Information System	75,000,000.00	
Maintenance cost (after the warranty	30,000,000.00	
period)	(Annually)	
	Tangible Benefit (Rs.)	
Stationery		
Postage		
Printing		36,675,923
Telephone		
Reduction in wastage		
Office space		
Book binding		
Savings on Staff		17,757,188
Total (Approximate annual s	aving)	54,433,111
	Intangible Benefits	
	Parliamentary documents such as Bills, Petitions, etc can be moved automatically and smoothly among MPP, officers, organizational units responsible for preparing and distributing them.	
	The stakeholders can formulate more precise queries on Parliamentary documents timely and effectively.	
	The Secretariat can interact with MPP timely and effectively vis-à-vis important messages, reminders, and notices.	

Table 33: Cost estimate/ Cost benefit – The Strategic approach option

Intangible Benefits (continued)
MPP can monitor progress on parliamentary activities such as ongoing Bills, Petitions etc timely and effectively.
The gap between the public and Parliament can be reduced and the interaction can be improved.
The Public can be updated on Bills, Committee Reports etc effectively and efficiently.
The staff can be motivated and developed.
The staff can do their respective work in a much more productive manner.
The Public perception on the institution can be improved.

In brief, the strategic approach has many benefits compared with the investment. However, Parliament needs to view the initial cost as an investment for improving internal weaknesses, as highlighted in the macro analysis. Towards a modern Parliament, the investment means that the institutional readiness to support critical parliamentary activities such as preparing and managing complex documents, recording and publishing the legislative activities that occur in plenary sessions in near real-time, and enabling enhanced communications between Parliament and the Public. Even more, the strategic approach needs to be viewed through the four perspectives discussed above.

5. Recommendations

Introduction

This section distills the most important findings from the macro analysis; draws a conclusion on the right approach Parliament may adopt pursuing; and makes recommendations for how Parliament can fully exploit ICT in support of its objectives.

Strategic direction

The need analysis makes evident that there is a substantial gap between what is possible with ICT to support the values and goals of Parliament and what has been accomplished. The macro analysis reveals that the external context of the institution is very much in favor of the modernization via ICT convergence; however, the internal analysis reveals that the institution is internally weak.

In this context, the institution must first improve its weaknesses for which the external opportunities must be exploited. Sequel to this, the institution may exploit its strengths with the view of capitalizing on the opportunities. These two activities may happen in parallel; however, it is imprudent pursuing the latter option without improving the internal weaknesses.

Towards this direction, Parliament may seek assistance from donors, international organizations and particularly from other parliaments in order to develop the capacity to transform from the current weak status to its next level of an ICT enabled Parliament.

Selecting the suitable approach

The latter part of the report delineated three options that Parliament may pursue with the view of achieving the envisaged objectives. The first option – the base case approach – reveals that the current practices have many weaknesses and continuation of the same would not help the institution in achieving the objectives.

The second approach – the operational approach – may take the institution to the desired status; however, it has many drawbacks. As stated, its focus is on technical perspectives rather than improving processes or satisfying the stakeholder needs. Even more, this approach is very much costly as the institution needs to bear existing expenses as well as invest on ICT. The operational approach, therefore, is not recommended for Parliament.

The third approach – the strategic approach – certainly leads the institution in reaping the envisaged benefits. It facilitates many benefits compared with the investment; however, Parliament needs to view the initial cost as an investment for improving internal weaknesses. Even more, the strategic approach includes four perspectives that warrant sustainable improvement with view of realizing the envisaged objectives of Parliament.

Recommendations

The strategic approach can transform the way Parliament works. However, this approach is a challenging process mainly due to the institutional, procedural, and cultural challenges that it necessitates.

To realize the envisaged institutional objectives and to build a technical infrastructure that is directly supportive of the work of the parliamentary and administrative functions of the institution, there must be a shared vision among the key stakeholders in favor of the strategic approach. This vision and the ICT strategy must be endorsed by all of them and the implementation must be managed effectively.

The following recommendations are extracted from the 'World e-Parliament report 2008' that are exactly valid and congruent with the institution in the view of reaping the envisaged benefits.

The recommendations are grouped into two major categories, managerial and technical, and include separate notes on the importance of human resource development.

Managerial recommendations

- Engage all major stakeholders in establishing a vision for ICT in Parliament based on the values and goals of the institution, providing a shared view of priorities and leading to consensus on what needs to be achieved.
- Develop a strategic planning process that creates project plans, assigns management authority and responsibility, allocates resources, establishes deadlines, and ensures that its implementation is managed effectively.
- Consult Members of Parliament on an ongoing basis on priorities and technological solutions needed to support their representative and legislative tasks.
- Promote strong management by Secretaries General and other senior officers of the innovation process to ensure that resources are allocated appropriately; ICT projects are sustained over time, and meet their objectives.
- Invest in human resources, including by providing training for ICT specialists, other legislative and research staff, and Members.
- Advocate collaboration at all levels, internally among IT specialists and major operating units, between chambers, at regional levels, and on a global basis to enable sharing of resources, good practices, and expertise.

Technical recommendations

- Implement a Parliamentary information system, ensuring that it encompasses all Bills and amendments, plenary debates and votes, and committee documents and actions.
- Create an authoritative, accessible, and engaging website that is accurate and timely, provides a complete and understandable view of Parliamentary activities, offers multiple formats and channels of access, and contains the full range of institutional and legislative content.
- Adopt open standards and apply them to all legislative documents to facilitate wider citizens' access, the creation of a comprehensive legislative information resource that can be shared with others, integration of information and documents both internally and externally, and the establishment of a permanent digital archive.

- Build a technical infrastructure that is robust, flexible, secure and based on the strategic goals of *Parliament*.
- Build a coherent knowledge base for Parliaments that links all relevant internal and external information resources into an organized system that facilitates search and retrieval of needed information for Members, staff, and the public.
- Continue to explore opportunities for using technology to engage citizens and civil society, perform assessments of their utility, and adopt those that are found most useful for supporting fruitful interaction between parliament and the public.

Human resources development

Human resources are a critical success factor for effectively implementing ICT in Parliament. Knowledgeable staff from different departments are required to work together harmoniously to fully exploit new technologies. Those in the ICT departments and offices are called upon to ensure the delivery of critical components of the Parliament's infrastructure, while making sure that the organization is able to integrate its knowledge effectively. Investing in in-house ICT staff and in their training is critical if parliaments hope to keep pace with the use of technology in society. Library and research staff have been leaders in using ICT to enhance access to knowledge in support of parliaments. This is due to the knowledge and skill of the people providing these services and to their willingness to share information and experience with others, both within their own Parliaments and with colleagues from other Parliaments. However, moving to the next level of building a strong Parliamentary knowledgebase will require additional efforts at developing and sustaining human resources throughout the legislature. Accomplishing this necessitates strong political support from the parliamentary leadership.

(Source: World e-Parliament Report 2008)

Conclusion

The analysis shows that the ICT convergence is capable of transforming the institution to its next level. In this backdrop, the report reveals several tangible and intangible benefits available for the stakeholders. In tangible terms, the benefits are financially justifiable; however, the institution must exploit external opportunities with the view of finding initial capital investment. Even more, there are a number of intangible benefits which are essential to the existence of the institution particularly in today's context of the world. The report discusses three approaches the institution may consider in realizing the envisaged objectives out of which, the strategic approach is recommended which is adequately justified in terms of the four perspectives which are pivotal to reap the envisaged benefits and to achieve a sustainable outcome. Lastly but importantly, the report outlines the importance of adhering to the recommendations without which the benefits have no value or meaning.

List of reference

- A discussion paper, ICT in Parliaments current practices, future possibilities, Global Centre for Information and Communication Technologies of Parliament, World e-Parliament conference 2007
- Brewerton P. & Millward L., Organizational Research Methods, SAGE Publications ltd, 2001
- David, F., Strategic Management: concepts and cases, 10th edition, Prentice Hall of India, New Delhi, 2006
- Ernst & Young, ICT Strategy for Parliament, 2005
- Inter-Parliamentary Union (IPU)., Parliament and Democracy in the Twenty-first Century

 a guide to good practice. Geneva: Inter-Parliamentary Union, 2006
- Johnson J.K., The Role of Parliament in Government, World Bank Institute
- Karamagioli E., Berntzen L., **Challenges and barriers of e-Parliament schemes for MPs**, council of Europe CAHDE Workshop on e-Parliament Vienna, 12 December 2007
- Kingham T., e-Parliaments, World Bank Institute
- Wijesekera P., Parliamentary Practice in Sri Lanka, Parliament Secretariat, 2001
- World e-Parliament Report 2008, Global Centre for Information and Communication Technologies of Parliament

Appendix 1:

MPP interviewed

- 1. Hon. Ramalingam Chandrasekar, Deputy Chairman of Committees
- 2. Hon. Jeyaraj Fernandopulle
- 3. Hon. Athauda Seneviratne
- 4. Hon. Karu Jayasuriya
- 5. Hon. Champika Ranawaka
- 6. Hon. Mano Wijeyeratne
- 7. Hon. Hemakumara Nanayakkara
- 8. Hon. Joseph Michael Perera
- 9. Hon. Ravi Karunanayake
- 10. Hon. Sajith Premadasa
- 11. Hon. Nihal Galappaththi
- 12. Hon. Bimal Ratnayaka
- 13. Hon. Ranjith Aluvihare
- 14. Hon. Padma Udaya Shantha Gunasekera
- 15. Hon. Dayasiri Jayasekara
- 16. Hon. K. Pathmanathan

Appendix 2:

Staff members interviewed

- 1. Deputy Secretary General of Parliament
- 2. Assistant Secretary General of Parliament
- 3. Serjeant-at-Arms
- 4. Editor of Hansard
- 5. Co-ordinating Engineer
- 6. Director (Legislative Services)
- 7. Director (Finance)
- 8. Director (Administration)
- 9. Deputy Serjeant-at-Arms
- 10. Deputy Director (Administration)
- 11. Librarian
- 12. Chief Parliamentary Interpreter
- 13. Assistant Director Administration (Table)
- 14. Assistant Director Administration (Bills)
- 15. Assistant Director Administration (Establishment)
- 16. Assistant Director Administration (Supplies & Services)
- 17. Assistant Director Administration (Members' Services)
- 18. Assistant Director Administration (Committee Office)
- 19. Assistant Director Administration (Consultative Committee Office)
- 20. Assistant Director Administration (PAC & COPE)