

**The state of information management in the Agents of Parliament and
the role of the Treasury Board Secretariat**

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Administration.

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Executive Summary

Information management (IM) in government is increasingly becoming more complex. The IM systems and practices of the federal government's smallest organizations, the small departments and agencies (SDAs), will be assessed. The SDAs face challenges related to their limited capacities. As such, this report will assess the IM capacities of one cluster of SDAs, the Agents of Parliament. This report will also assess the Treasury Board Secretariat's (TBS) capability to provide effective policy and governance support to the SDAs. The origins of this project on IM in the SDAs was Library and Archive Canada's (LAC) 2017 deadline for transitioning to solely archiving electronic records of government organizations.

Project Objective

The primary objective of this research project was to determine the extent to which the Agents of Parliament are struggling with their IM issues and to provide recommendations for improving their IM. As the challenges faced by the Agents of Parliament are representative of the whole SDA community, this project also sought to determine the degree of effectiveness of the current horizontal policy and governance support of TBS for the SDAs.

Methodology

This research project used qualitative methods for research and analysis on the six Agents of Parliament. The "human component" of IM was used as the theoretical framework. There are three variables of the human component that provided methodological direction to this research project. Primary research was conducted through interviews with senior management officials in the Agents of Parliament. Secondary research was done by using academic sources and public sector literature.

Definition - Information Management (IM): In this report, IM refers to the management of electronic records and other forms of electronic documentation. IM takes into account the life cycle of information, from creation, to transmission, and disposal. It concerns the management of information of corporate interest for the success of an organization and the sound management of information that is pertinent to the performance of the individual employee. IM is also the communication and exchange of information, which produces reports, notes, emails, and spreadsheets. It is a performance-enhancing practice for the effective movement of information to those who require it.

It is also important to highlight standard IM and IT. IM of physical documentation shares characteristics with electronic IM; however, standard IM focuses on the dissemination, and disposal of physical records. Standard IM involves more space and physical infrastructure, like cabinets and shredders, instead of software. As such, standard IM has its own unique challenges. With regards to information technology (IT), IT remains the technological infrastructure that facilitates the creation and storage of information.

Theoretical Framework. The framework consisted of three variables. The first variable was interoperability; within and between organizations, reflecting how IM systems and processes work together and complement the existing legacy IM applications. The second variable of the human component was focussed on the usability of organizations' IM, where usability was defined in terms of whether employees' IM tools and resources allow them to effectively use their IM systems. Sound IM systems reduce the frequency of misused and lost data and allow important information to be made available when necessary. Lastly, the third variable was concerned with employee acceptance of IM systems. Effective implementation of IM systems requires a re-conceptualization of employees' understanding of the way in which they manage their information. As such, the three variables of the human component theoretical framework shaped the parameters of the analysis and the drafting of the report's final recommendations.

Primary Data: Interviews. In-person interviews were conducted. Government reports on the SDAs presented a variety of issues and challenges faced by the SDAs, yet the reports did not address IM as a stand alone internal service issue. As the Agents of Parliament are arms-length organizations, they are not bound to report on policy compliance. As such, many reports could not directly assess their particular areas of concern. The interview consisted of ten questions (see Appendix 1). The questions encouraged participants to convey their understanding of IM and to convey their unique perspectives on their individual relationships with TBS. Senior management in the Agents of Parliament were contacted to participate in the interviews. Specifically, senior officials whose responsibilities included corporate affairs were contacted, as it was deemed that they would be most suitable to answer on behalf of their respective organizations. One Agent of Parliament declined to participate. Of the remaining five organizations, eight individuals agreed to participate in the interview process.

Secondary Data. Secondary data provided most of the information used in this research report. The sources of data fell into three main categories. The first and largest category of secondary data was Government of Canada sources. The second category came from foreign government sources. The final and third category of research came from the scholarly literature, which formed the basis for the literature review.

Key Results

The original assumption that the Agents of Parliament have limited IM capabilities was not strongly substantiated by the research. The interview participants expressed confidence in their organizations' abilities to meet the 2017 LAC deadline for transitioning to archiving electronic records. Irrespective of the evident capacity challenges in the Agents of Parliament, the interview participants stated their organizations would have enough time to become compliant with the new policy of archiving solely electronic documentation. In addition, the participants demonstrated awareness of the significant influence they have, as senior management, on their employees' attitudes towards sound IM practices. This significance was noted in the Agents of Parliament that have already placed more priority on improving their IM processes, such as the one organization where IM is included in the annual performance assessments of their senior management. Amongst the participants, collaboration is a

subject matter that evoked varying degrees of support; there was concern that without additional support, these small organizations may not have sufficient resources to enter into shared services agreements while continuing to pursue their mandated services. Interestingly, each of the participating Agents of Parliament assigned priority to IM, with ratings varying from medium-high to high. Moreover, the interviews convey the participants' interest in additional support from TBS to enhance their IM capacity, while continuing to maintain their arms-length autonomy.

With respect to the issues surrounding the limited capacities of the SDAs, their outdated IM systems may further erode existing capacity. Government-wide measures, like the newly created Shared Services Canada (SCC), were crafted to address the rising costs of internal services. However, these measures have yet to include the participation of the SDAs. Most SDAs do not have the resources to individually modernize their own aging IM systems. In addition to the limited scope of modernization measures, the interview participants note the limited leadership on IM that TBS has provided. IM leadership could be enhanced if TBS's delivery of its policy and governance support were to adopt more of a facilitator role. The facilitator role could take on a devolved-centralized approach in order to expand the current capacities of the Agents of Parliament. There is an opportunity for further TBS facilitation, as participants did express interest in sharing some of their internal services, particularly IM. Any new facilitator role that would promote IM practices in the SDA community should consistently reflect the linkage that exists between the management of organizations' information holdings and the pursuit of organizations to better meet their mandated demands. As such, the three subsequent recommendations provide opportunities for TBS to improve its current facilitation of sound IM practices.

Recommendations

Lastly, four recommendations are provided that are intended to improve the work environment of the Agents of Parliament with broad implications for all SDAs.

Recommendation 1: TBS consult with the SDA community to develop “cluster-specific” IM best practices and guidelines. This recommendation addresses the need to enhance existing IM guidelines for the SDAs. As the responsible central agency, TBS is in a position to improve the support services that are given to the SDAs, through the provision of new IM resources. The limited capacity of most SDAs makes it difficult to conduct and pay for the same calibre of professional development that is available to larger federal organizations. Thus, TBS should conduct consultations with the individual SDA clusters. Based on the data gathered in the consultations, TBS would then draft IM best practices and guidelines that are tailored to each SDA cluster.

Recommendation 2: Expand the Interchange Canada program to include exchanges within government. This recommendation addresses the need to improve information sharing amongst the Agents of Parliament. Interchange Canada is an existing TBS program that was created to improve linkages between the federal public service and other Canadian employment sectors. Public servants may take secondments in other employment sectors. Currently, Interchange Canada is not available for exchanges within

the federal government. The Agents of Parliament face similar challenges, due to their arms-length status and operating structures. These organizations' senior management would benefit from the IM experiences and lessons learned from their counterparts. With respect to IM and other internal services, different approaches are applied across this cluster. Thus, an exchange where not only personnel but also best practices are shared would be invaluable.

Recommendation 3: Expand and modify the Management Accountability Framework (MAF) to be better used as a voluntary/self-assessment tool for the Agents of Parliament and other arms-length statutory organizations. This recommendation addresses the need to improve the Agents of Parliament's existing assessment tools. As a result, direct buy-in from TBS senior officials, primarily from the Expenditure Management Strategies sector (EMS), will be required. EMS is the designated authority on the MAF assessment tool and conducts rounds of MAF for the majority of government organizations. Arms-length organizations, like the Agents of Parliament, are not subject to the MAF. As the Governance Directorate, within the Governance Sector, is the designated TBS authority for the provision of policy and governance support to the SDAs, it would be in a position to take the lead on this initiative at TBS.

Recommendation 4: Conduct research on the remaining two Agents of Parliament, the Office of the Auditor General and Elections Canada, to further identify relevant best practices. This report did not investigate the Office of the Auditor General and Elections Canada due to project constraints. These two Agents of Parliament are the largest organizations in their SDA cluster. Both organizations may have adopted unique IM practices. TBS may leverage the findings in this report by extending the research to include both of these organizations. TBS should consult with senior management in Elections Canada and the Auditor General. The findings from these organizations may reveal innovative solutions and best practices for IM. Upon the completion of the consultations with these two organizations, TBS could provide the findings to the other Agents of Parliament, further increasing awareness of sound IM practices.

Therefore, the findings and recommendations of this research project will strive to improve the existing position of TBS to provide sound policy and governance support to the SDAs, in particular the Agents of Parliament.

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Key Words

AKAM: Awareness, Knowledge, Access and Motivation Model

AGIMO: Australian Government Information Office

AoM: Area of Management

CIEC: Conflict of Interest and Ethics Commissioner

CIOB: Chief Information Officer Branch

CIO: Chief Information Officer

FTE: Full-time-equivalent

GAO: Government Accountability Office

HoIT: Heads of Information Technology

HR: Human resources

ICT: Information communication technology

IM: Information management

IT: Information technology

LAC: Library and Archives Canada

MAF: Management Accountability Framework

OCED: Organization of Co-operation and Economic Development

RDIMS: Records, Document and Information Management System

SDA: Small department and agency

SSC: Shared Services Canada

TAM: Technology Acceptance Model

TBS: Treasury Board Secretariat

TRA: Theory of Reasoned Action

Introduction

In this electronic era, information management (IM) in the public sector is acquiring new and complex dimensions. Frequently, IM is fused with its counterpart, information technology (IT), as IM-IT. As IM is inextricably linked to IT, it cannot be completely divorced from IT. Nevertheless, this research project will focus on IM systems and practices of the federal government's smallest organizations, known as the small departments and agencies (SDAs). It will be conveyed throughout this report that SDAs face a myriad of challenges associated with their limited capacities, including poor IM. Broadly, the findings in this report will have implications for the whole SDA community. However, the wide variety of mandates of SDAs does not permit them to be all individually discussed. As such, one cluster of SDAs, the Agents of Parliament, and their IM challenges will be the cluster that is referenced in the report.

In addition, this research project has been conducted for the Governance Directorate of the Treasury Board Secretariat (TBS). TBS is the central agency that is the authority on federal IM policy. The Governance Directorate supplements this authority, as it is the TBS division that provides policy and governance support to crown corporations and SDAs. Thus, the goal of the research project is to produce findings and recommendations that will contribute to the Governance Directorate's understanding of the challenges faced by the Agents of Parliament and to improve their IM practices and those of the larger SDA community.

The catalyst for conducting research and analysis on IM in the SDAs was Library and Archive Canada's (LAC) 2017 deadline of no longer accepting federal organizations' physical documentation and transitioning to solely archiving electronic records. LAC will transition to solely archiving electronic records. As SDAs face challenges with their internal services, like IM, it was argued that a research project would be an appropriate mechanism that could improve TBS's understanding of the SDAs, particularly the Agents of Parliament, and in turn assist these organizations in preparing for the 2017 deadline.

In order to facilitate the presentation of the scholarly and government findings, the report will be divided into five chapters. The first chapter, the background, will briefly highlight the Governance Directorate. It provides policy and governance support to federal crown corporations and SDAs. The background will also convey the chosen definition of IM and the six selected Agents of Parliament: 1) The Office of the Conflict of Interest and Ethics Commissioner, 2) The Office of the Information Commissioner, 3) The Office of the Commissioner of Lobbying, 4) the Office of the Commissioner of Official Languages, 5) the Office of the Privacy Commissioner, and 6) the Office of the Public Sector Integrity Commissioner. In addition, the background will provide a broad overview of the SDAs and Agents of Parliament.

Following the background, the second chapter on research methods will be conveyed. Qualitative methods for research and analysis are the only employed methods. The "human component" of IM will be used as the theoretical framework. This theoretical

framework may be explained through its three broad variables: interoperability, usability, and acceptance. The human component will provide methodological direction to the report. It will be conveyed that primary research was conducted, via interviews with senior officials in the Agents of Parliament. As well, secondary research was done by using academic journals and public sector literature at the federal level. In addition, this chapter will convey the project's scope and limitations to enable the reader to understand the parameters of the research and analysis on IM practices of the selected SDA cluster.

Chapter three, the literature review, will distance itself from the selected SDA cluster, the Agents of Parliament, and will broadly discuss IM in the public sector. It will be argued that electronic IM is a relatively new field and that it is an expansive concept that touches upon many organizational areas like human resources (HR) and risk management. A discussion of the prominent elements of IM will inform the Governance Directorate of the broader trends of public sector IM. The literature review will be divided into seven sections, which will discuss the dominant areas of IM that were observed in the literature. The first section will discuss how the field of IM is viewed by scholars and the public sector. The second section will specifically address the human component, which is also the basis for the employed theoretical framework. In the third section, the role of IM within the federal government will be assessed. The fourth section will discuss inter-departmental collaboration and IM interoperability. This section will note the increasing need for interoperability between IM systems of different organizations. The fifth section will discuss the increasing use of electronic systems for producing and disseminating government information and some of the new associated challenges. The sixth section will convey IM's role in risk management. Lastly, the final section of the literature review will describe the Agents of Parliament and their unique IM environment.

The literature review will highlight the common and unique perspectives of what constitutes the field of electronic IM in the public sector. The fourth chapter, the findings and discussion will discuss the state of IM in the Agents of Parliament. There will be three sections in this chapter: 1) government findings, 2) primary research, and 3) discussion and analysis. Government findings will assess an array of government IM literature, which includes the following: TBS reports on SDAs, Agent of Parliament annual reports, and reports from Agent of Parliament organizations in three Westminster jurisdictions. Following the section of government findings, the primary research will be assessed. Interviews with senior management in the Agents of Parliament were conducted. The findings from the interviews will contribute to achieving a higher level of awareness of the challenges associated with IM in this SDA cluster. The primary research findings will be divided into eight themes based on the prominent elements that were observed in the interviews. Lastly, this chapter's discussion and analysis section will synthesize the government findings and primary research, which will provide direction to the proceeding chapter on recommendations.

In chapter five, four recommendations will be highlighted. They are designed to improve the existing work environment of the Agents of Parliament, with implications for all SDAs. As IM has a multitude of elements, the recommendations will address different, yet related, areas of IM. It is anticipated that in the short-term, the recommendations will

not be cost-neutral. TBS's existing expenditure levels may be able to absorb the costs of the parts of the recommendations that fall within its authority. For each recommendation, there may also be some implementation costs for the Agents of Parliament.

Whichever division of TBS takes the lead on the selected recommendation(s), discussions will need to occur to determine what existing financial flexibility is present to incur the costs of a new initiative. New costs will result from expanding the current level of central agency support and IM resources. It is unlikely that additional full-time equivalent positions (FTEs) will be needed to support any of the recommendations. The first recommendation will seek to develop SDA "cluster-specific" IM best practices and guidelines. This recommendation will address the need to enhance IM guidelines for the SDA community. As the responsible central agency, TBS is in a position to improve the support services that are given to the SDAs, through the provision of new and tailored IM resources. The second recommendation will seek to expand the Interchange Canada program to include senior management exchanges within the federal government. The second recommendation will broadly address the need to improve information sharing amongst the Agents of Parliament. Interchange Canada is an existing TBS program, which was created to promote stronger ties between the federal public service and other employment sectors in Canada through secondments. The third recommendation will seek to expand and modify the Management Accountability Framework (MAF) to be better used as a voluntary, self-assessment, tool for the Agents of Parliament. This recommendation will address the need to improve the Agents of Parliament's assessment tools. Arms-length organizations, like the Agents of Parliament, are not subject to the MAF. The fourth recommendation will seek to expand the research to include the Office of the Auditor General and Elections Canada, the remaining two Agents of Parliament. These organizations may have adopted unique IM practices. TBS may leverage the findings in this report by extending the research to include both organizations. TBS should consult with Elections Canada and the Auditor General. The findings from these organizations may reveal innovative best practices. Furthermore, TBS could provide the findings to the other Agents of Parliament, further increasing awareness of sound IM. Thus, it is anticipated that the report's findings and recommendations will better position the Governance Directorate to provide sound policy and governance support to the SDAs.

Chapter 1: Background

The Governance Directorate of TBS is mandated to provide department advice, assist with management frameworks, and draft organizational-wide priorities for federal crown corporations and SDAs. Prior to the recent round of government budgetary cuts, in which TBS was included, the Governance Directorate had created the SDA Liaison Division. This separate team within the directorate was created due to the perceived need to address the distinct challenges faced by SDAs. By June 2012, the SDA Liaison Division was reconsolidated with the rest of the Directorate.

The SDAs, in particular the Agents of Parliament, face unique challenges due to their size and mandates. As the Governance Directorate is tasked with the horizontal policy and

governance support for SDAs and crown corporations, the numerous policy and program-related challenges cannot be addressed simultaneously.

The SDAs have formed the Community of Federal Agencies, with their own internal web portal, and this community contains several sub-organizations that have sought to take on particular SDA issues (Office of the Auditor General, 2008):

- the Group of Heads of Federal Agencies (HFA)
- the Small Agencies Administrators' Network (SAAN)
- the Small Agencies Finance Action Group (SAFAG)
- the Personnel Advisory Group, and (PAG)
- the Heads of Information Technology (HoIT)
- the Security Advisory Network for SAs (SANSA)

Amongst Westminster parliamentary democracies, Canada is the only country that has taken measures to identify its small organizations and attempt to address their challenges. The United Kingdom has no formal, government-wide, identification of its smallest organizations. Considerable time was exhausted to determine that no publically available documentation, classifying the different sizes of public organizations, existed. The British Treasury defines itself as a small department, with its current compliment of 1,050 permanent staff (HM Treasury, 2004). This figure is above what Canadian models espouse and demonstrates a diverging perspective on “small” in government.

Multiple versions of what constitutes an SDA throughout the federal government have been drafted. However, for the purposes of this paper, the definition that has been more consistently employed by TBS will be used: any federal organization that has fewer than 500 full time employees (FTEs) and or annual expenditures of less than \$300 million (Office of the Auditor General, 2008). The Governance Directorate, within TBS, has taken additional steps to place the 52 SDAs into clusters, in order to streamline support and to identify areas of commonality (TBS a, 2011):¹

Table 1: The SDA clusters (TBS a, 2011)

Cluster	Number	Example organization
Tribunals	10	Transportation Appeal Tribunal of Canada
Agents of Parliament	8	Office of the Privacy Commissioner of Canada
Grievances, Investigations, and Reviews	9	Veterans Review and Appeal Board
Regulatory Bodies	11	Canadian Radio-television and Telecommunications Commission
Research, Education, Promotion	4	Canadian Polar Commission
Economic Development Agencies	3	Atlantic Canada Opportunities Agency
Research Granting Agencies	3	Social Sciences and Humanities Research Council
Legal Administration and	3	Registrar of the Supreme Court of

¹ Please note: The Governance Directorate of TBS has recently lowered the annual budgetary threshold for SDAs from \$300M to 75M; however, TBS has yet to redefine the parameters of the SDA clusters.

Support Services		Canada
Collections	2	Library and Archives Canada
Secretariats	2	Canadian Intergovernmental Conference Secretariat
SDAs with Top Secret Requirements	3	Security Intelligence Review Committee
SDAs with Unique Operating Mandates	2	Office of the Governor General
Total	52	

Across the sixty organizations, there is over 12,155 FTEs. It is important to note, this figure is based on data that was released prior to the ongoing cost containment (TBS a, 2011). Collectively their total operating costs are approximately \$3.1 billion. Therefore, they have a collectively modest impact on the federal purse.

The Agents of Parliament cluster is the specific focus for this paper, although the findings are intended to be broadly applicable to most SDAs. TBS identifies eight Agents of Parliament, of which the present research examined six, the Office of the Auditor General and the Elections Canada being excluded, due to resource and time constraints.

Library and Archives Canada 2017 deadline

In 2017, Library and Archives Canada (LAC) will no longer accept hard copies of documentation for archiving. As a result, there may be a need to develop, individually and collectively, information management strategies to meet this deadline. In doing so, the Governance Directorate now has less than five years to improve the horizontal policy and governance support of the Agents of Parliament (Library and Archives Canada, 2010).

The selected organizations for the research project

- 1) **The Office of the Commissioner of Lobbying** administers the *Lobbying Act*. Through the Act, the Commissioner is mandated to maintain the public Registry of Lobbyists, to develop training programs to foster awareness of the legislation, and to conduct reviews and investigations to ensure the lobbying of federal public office holders is compliant with the Act (2012).

- 2) **The Office of the Conflict of Interest and Ethics Commissioner** administers the conflict of interest rules, based on the *Conflict of Interest Act*, for public office holders and Members of the House of Commons (MPs) to maintain the confidence of the Canadian public in the conduct of federal elected and appointed officials. In addition, this organization provides advice to MPs and publically appointed office holders on their obligations under the Act. The Conflict of Interest and Ethics Commissioner reviews reports of liabilities, income and activities of MPs and publically appointed office holders, maintains registries of publicly declarable information. As well, this organization conducts investigations into alleged contraventions of the legislation by Members of Parliament and the approximately 2,800 publically appointed office holders (Conflict of Interest and Ethics Commissioner, 2012).

- NOTE:** The Conflict of Interest and Ethics Commissioner is an independent Officer of Parliament; however, the status of this organization is different from the Agents of Parliament who are part of the executive arm of the federal government. This organization is an entity within Parliament. For the rationale of its inclusion in this research project, please see the Methods section.
- 3) **The Office of the Information Commissioner** provides arms-length oversight of the administration of the federal freedom of information, based on the *Access to Information Act*. The Commissioner promotes greater access to government information and assists institutions with access to information approaches. This Agent of Parliament assists individual and organizational complainants that believe a federal institution has contravened their rights under the legislation. As well, this organization conducts investigations and monitors federal organizations' performances under the Act (Information Commissioner, 2012).
 - 4) **The Office of the Official Languages Commissioner** is mandated to take all measures within its authority to ensure that the objectives of the *Official Languages Act* are met: the equal status of English and French in the federal government; and the preservation and development of official language communities. The Commissioner is mandated to support the linguistic duality of English and French in both the public service and in society. Under the Act, the Commissioner may conduct audits to assess federal organizations' compliance. It also reviews complaints and provide recommendations. This Agent of Parliament may also intervene before the federal courts in proceedings related to the official status or use of either official language (Commissioner of Official Languages, 2012).
 - 5) **The Office of the Privacy Commissioner** provides oversight of both the *Privacy Act*, which covers personal information-handling practices of federal organizations, and the *Personal Information Protection and Electronic Documents Act* (PIPEDA), which covers private sector privacy law. The mission of this Agent of Parliament is to promote and protect the privacy rights of individuals. The *Privacy Act* applies to personal information held by federal organizations. With regards to private sector privacy law, the Commissioner may investigate all complaints except in provinces that have adopted similar privacy legislation: Alberta, British Columbia, Quebec, and Ontario. The Commissioner conducts privacy investigations and publishes reports with recommendations to federal and private sector organizations. The Commissioner has the power to pursue legal action where issues that were investigated remain unresolved (Privacy Commissioner, 2008).
 - 6) **The Office of the Public Sector Integrity Commissioner** is mandated to establish an independent mechanism for federal public servants and members of the public to reveal wrongdoing in the federal government. This Agent of Parliament has the authority to investigate alleged wrongdoing and complaints. Under the *Public Servants Disclosure Protection Act*, the Commissioner

safeguards public servants from reprisal for revealing wrongdoings and or cooperating in its investigations (Public Sector Integrity Commissioner, 2012).

Chapter 2: Methods

This research project used qualitative methods for research and analysis on the six Agents of Parliament. The “human component” of IM will be used as the theoretical framework. There are three variables of the human component that will provide methodological direction to this research project. Primary research was conducted through interviews with senior management officials in the Agents of Parliament, using a standard set of questions. Secondary research was done by using academic sources and public sector literature. Specifically, government IM literature from the national level was employed. In addition, the scope and project limitations will be conveyed to enable the reader to understand the parameters of the research and analysis on IM practices within the SDA cluster, the Agents of Parliament.

Definitions

- **Information Management (IM):** For the purposes of this research project, information management (IM) specifically refers to IM of the federal government’s electronic records and other forms of electronic documentation. The definition of IM in this report is a compilation of nine different sources.

In this digital age, information is now a strategic government asset. IT remains the technological infrastructure that facilitates the creation and storage of information. However, IM is conceptually similar to the internal services of finance and HR. IM takes into account the full life cycle of information, from creation, to transmission, and to archiving and disposal. It concerns the management of information of corporate interest for the success of an organization and the sound management of information that is pertinent to the performance of the individual employee. IM is also the communication and exchange of information, which produces reports, notes, emails, and spreadsheets. It is a performance-enhancing practice for the effective and efficient movement of information to those who require it. Thus, this concept surpasses the mechanical processes of scanning physical documents or transferring information onto websites. (Pearce, Rao, Xin, & Xu, 2011, p. 504; D. Brown, 2010, p. 1; Detlor, 2010, p. 2446; Woolf, 2010, p.50; Ceeney, 2009, p.342; Roberts, 2001, p. 689; Gunraj, & Kernaghan, 2004, p. 529; Meijer, 2007).

- **Small Department and Agency (SDA):** TBS’s Governance Directorate has been in the process of drafting an official definition of what constitutes an SDA. Thus far, federal organizations are considered to be SDAs if their annual budgets are less than \$300M. The approximately 52 SDAs have been divided into a number of clusters based on similar mandates, such as regional economic development organizations, and the Agents of Parliament (TBS, 2012). For a complete list of all 52 SDAs, please see Appendix 2 on page 72.

Rationale for selecting the Agents of Parliament

During the preliminary research stage, there were a series of discussions concerning the selection of an appropriate SDA cluster. Despite the commonalities amongst the SDAs, each cluster has challenges that are unique to their work environment. With the collaboration of senior officials in the Governance Directorate, the Agent of Parliament cluster was selected. The Agents of Parliament were selected for several reasons:

1) The unique operational environment that is bestowed to them by their statutory arms-length status has made it more difficult for TBS to ascertain their collective level of compliance with central agency policies. 2) Despite their small sizes, in terms of annual budgets and FTEs, these organizations play a pivotal role in ensuring accountability and transparency in the federal government.

It is important to note the rationale for the inclusion of the Conflict of Interest and Ethics Commissioner (CIEC), as it is not an Agent of Parliament. Due to its small size and independent function of ensuring accountability and transparency of the House of Commons, the Governance Directorate deemed its inclusion to be appropriate. In terms of similar size and operational challenges, its inclusion would be complementary to the documentation from the Agents of Parliament. In addition, this research project will only discuss five Agents of Parliament, excluding the CIEC. Within the SDA cluster, the Agents of Parliament, there are seven Agents of Parliament. The Office of the Auditor General and Elections Canada were excluded. Due to limited project resources and their large annual budgets and staff complements, these organizations were omitted. This report will focus on the smaller five Agents of Parliament. The rationale for the exclusion was reviewed and approved by the Governance Directorate during the preliminary research stage.

Theoretical Framework

As the Office of the Privacy Commissioner stated in its information management audit, changes have been taking place in the realm of IM; yet, there was no management plan to address the “human component” of these technological changes (Privacy Commissioner, 2010). Addressing the human component will be the underlying theoretical framework that guides the present approach. The framework consists of three main variables, which were selected from the article, “The Challenges that the Recent Focus on Information Management is Presenting to Senior Leaders in the Public Sector (Gurses, Ozok, Wei, & Wu, 2009, p. 237).” The first variable is interoperability. Between and within organizations, IM systems and practices work together and complement the existing legacy applications. The second variable is concerned with the usability of organizations’ IM, where usability is defined in terms of whether employees’ IM tools and resources allow them to effectively use their IM systems. Sound IM systems reduce the frequency of misused and lost data and allow important information to be made available when necessary. Lastly, the third variable is concerned with employee acceptance of IM systems. Effective implementation of IM systems requires a re-conceptualization of employees’ understanding of the way in which they manage their information. Thus, the variables of the human component theoretical framework will also inform the drafting of the report’s recommendations.

Research Methods

Primary Data: Interviews. Primary research was conducted in the form of in-person interviews, with the exception that one Agent of Parliament responded to the interview questions by email. The goal of the primary research was to ascertain the degree in which the academic findings were reflective of the on-the-ground reality of the Agents of Parliament and the rest of the SDA community. During the scan of scholarly literature, there was a noticeable gap regarding the particular impacts of IM within small public sector organizations. In addition, federal government reports on the SDAs provided a broad cross section of issues in the SDAs, yet the reports did not address IM as a stand alone internal service issue. As the Agents of Parliament are arms-length organizations, with considerable autonomy over their internal services, they are not bound to report on policy compliance. As such, many reports could not directly assess their particular areas of concern.

The interview questionnaire consisted of ten questions (see Appendix 1). The questions were designed to encourage the participants to convey their understanding of IM, within the confines of their organizations, and to convey their perspectives on the existing level of assistance provided by TBS and the relationship between their organizations and TBS. Senior management officials in all six organizations were contacted to participate in the primary research. Specifically, senior officials whose responsibilities included corporate affairs were contacted, as it was deemed that they would be most suitable to answer on behalf of their respective organizations. According to publically available organizational charts, IM-IT functions were within these organizations' corporate divisions. Prior to contacting the senior management officials, a list of fifteen individuals was prepared. The Governance Directorate reviewed and approved the inclusion of the fifteen individuals. Upon approval of the list, all fifteen individuals were contacted via email with a standardized information letter requesting their participation. One Agent of Parliament declined to participate. Of the remaining five organizations, eight individuals agreed to participate. One individual was unable to participate in an in-person interview and agreed to complete the interview questionnaire via email.

Secondary Data. The secondary data provided the majority of the research for this project. The data may be divided into three categories. The first category was Government of Canada sources. The second category came from foreign government sources. The final and third category of research came from the scholarly literature, which formed the basis for the literature review.

Government of Canada. The scanned information management policies and guidelines stemmed from TBS, as it is the authority for this policy area. In addition, a large quantity of TBS reports, broadly concerning the SDA community, was referenced. The next largest portion of federal information came from the Agents of Parliament. The documentation from the Agents of Parliament may be divided into several categories: annual reports, strategic plans, and internal audits. A minority came from Library and Archives Canada's public website. Several reports from the Office of the Auditor General were included, which broadly addressed the internal services of the SDAs.

Foreign Government Sources. Sources from three Westminster Parliamentary Systems were included: Australia, New Zealand, and the United Kingdom. The rationale for including these countries is their similar political and bureaucratic structures. This would ensure sources from these jurisdictions would be applicable to the Canadian context, as these jurisdictions contain similar arms-length organizations to the Canadian Agents of Parliament. Documentation from six counterparts of the Canadian Agents of Parliament was included; as the foreign agents of parliament organizations are similar in size and mandate, information on their internal services supplemented the available documentation from TBS SDA reports and Agents of Parliament documentation. The annual reports and other internal audits from the Agents of Parliament were necessary to inform the drafting of the interview questionnaire. The available documentation from the Agents of Parliament did provide sufficient information on the extent to which IM processes were conducted in a formal or an informal manner.

Scholarly Sources. The largest concentration of sources was derived from the scholarly literature. There was a variety of sources that have been incorporated into this research project. Scholarly literature that was concerned with the private sector was excluded. As there are different resource and environmental constraints in the private sector, it was argued that literature on private sector IM was inappropriate. One focus on retrieving scholarly literature was to retrieve literature that was published in North America and within the aforementioned selected countries. The literature encompassed a geographic range that was limited to North America, the United Kingdom, Australia, and New Zealand. The researcher and the Governance Directorate determined that for this exercise, this geographic range would encompass scholarly literature that would have direct applicability to the Canadian context. Lastly, scholarly journals, which were written in English, were exclusively used.

Scope and limitations of the research

Scope of the research project. The research into public sector IM was conducted within a ten-year window, 2002-2012. The rationale was that due to the rapid evolutionary pace of IM and IT, policies that were created prior to the early 2000s were outdated. In most cases, current IM-IT policies are less than five years old. Within the ten-year window, only national-level governments were reviewed. The sub-national level was excluded as having different needs, resource constraints and jurisdictional challenges. IM literature from the private sector was excluded. The rationale is that private sector entities have different resource constraints and responsibilities. In addition, time constraints only permitted interviews with senior management in the Agents of Parliament. As IM overlaps with HR, a small degree of research was concerned with HR. However, the proposed recommendations to improve information management in the SDA community may have some affect on HR policies.

Limitations. During the research process, several limitations became apparent. Since the Agents of Parliament are not bound to the same reporting and monitoring requirements as line departments, documentation was limited. As a result, determining the extent to which the Agents of Parliament were compliant with central agency policies was challenging. Since there has been limited documentation, in comparison to line departments, the

findings from the interviews were leveraged as a means to gauge the level of TBS policy compliance. There was a void in the scholarly literature. There was a marginal degree of literature which focussed on IM within small public sector organizations. The majority of the IM scholarly literature discussed IM systems and practices of the largest public sector organizations. This limitation was mitigated by leveraging the general trends and observations from the scholarly literature, the TBS reports on SDAs, and the Agents of Parliament annual reports.

As stated previously, qualitative methods for research and analysis were the principal employed methods. The human component theoretical framework directed and informed the literature review, as well as the findings and discussions section. Both the primary and secondary research was conducted within the ten-year window of 2002-2012, due to IM's rapid pace of change. The interviews with Agent of Parliament senior management officials assisted in mitigating the gap in the limited information and provide additional direction in drafting the final recommendations. Academic sources and public sector literature from the federal government, as well Australia, New Zealand, and the United Kingdom, formed the basis of the research component of this project. The following section, the literature review, addresses the prominent elements of IM that were observed throughout the scanned literature.

Chapter 3: Literature Review

The study of information management (IM) in the electronic age is a relatively new field. IM is an expansive concept that touches upon many facets of an organization: HR, case management, finance, risk management, interoperability and so forth. It is particularly challenging to place definitive parameters on what constitutes IM. It is easy for researchers to fall victim to IM's all-encompassing nature. Yet, this literature review will broadly focus on the governance role that IM plays within the public sector, with a significant focus on its impact on the federal government's small departments and agencies (SDAs).

The literature review is divided into seven sections reflecting the seven most dominant areas of IM indicated in the scholarly and government literature. The first section discusses how scholars and the public sector view the field of IM. The second section focuses on the human component, noting that employees' behaviours and attitudes towards IM systems and processes have an impact on organizational success. In the third section, the role of IM within the federal government is discussed. The fourth section places inter-departmental collaboration and interoperability in the limelight. It will be noted that IM and IT services in the federal government are being pooled. This section will discuss the increasing need for interoperability for organizations' IM systems. The fifth section will discuss the increasing use of electronic platforms for producing and disseminating government information and some of the new associated challenges. The sixth section will strive to discuss IM's role in risk management. IM has been taking a greater place at the table when risk management and related strategic planning have been

undertaken. A sub-section will discuss internal IM coordination within an organization. Lastly, section seven will discuss the SDAs and their unique IM environment.

Section 1: Defining the field of IM

Information and its management lie at the centre of all decision-making processes of the modern public administration (D. Brown, 2010, p. 1). Brown argued that despite the increasing attention to IM, the attention has not been consistent (2010, p. 4). D. Brown, among others, defends this lack of consistent attention the IM field of study is not yet a fully formed discipline within public administration (D. Brown, 2010, p. 4). The field of IM is fragile both organizationally and conceptually (D. Brown, 2010, p. 16). In addition, Orna suggests that most Western governments struggle to fully grasp IM because they are unable to define it due to its dynamic social and economic implications (2008, p. 551). Other studies have indicated that there has been little emphasis on the user aspects of IT and have described problems that ensue due to lack of acceptance and misuse (Gurses, Ozok, Wei, & Wu. 2009, p. 235). The user aspects will be further explored in the forthcoming sections.

One may argue that the field of IM is not stagnant, nor is it evolving in a political or socio-economic vacuum. From the outset of the Chief Information Officer Branch (CIOB), within TBS, there has been tension between the need for efficiency and innovation and between the CIOB, as the steward of IM-IT discipline (D. Brown, 2009, p. 14). An underlying issue was the relationship between IT and IM and whether both should be within the CIO's mandate and, if so, to what degree should they be linked (D. Brown, 2009, p. 16). IM, as a driving force for our knowledge-based federal government, is slowly maturing, but it has yet to fully meet its operational and conceptual potential (D. Brown, 2009, p. 14). The government's inability to assign monetary value to the information that it generates relates to the ongoing challenges with IM reaching its potential (Orna, 2008, p. 558). It would be plausible that assigning monetary value to information would keep the attention of politicians. The difficulty may stem from the mistrust that many in the public sector have of the qualitative nature of information and the intellectual demands of the processes for converting a qualitative concept into a quantitative concept (Orna, 2008, p. 555). As well, information is far less tangible as a public sector resource, compared to other goods and services. Since IM is not as clearly defined as tendering a contract, it will mean different things to different managers across government (Gunraj, & Kernaghan, 2004, p. 529).

Another important facet in defining electronic IM is that it is far more vulnerable than the traditional form of using paper, as it is not a tangible item. There are many reasons for this vulnerability, such as: electronic information is created at a much faster pace than physical information; it is created and stored on a range of devices that each require different operational processes; and multiple electronic versions of the same information often exist (National Archives, 2011). Thus, this produces something that is more elusive in the eyes of civil servants and arguably creates an entrenched lack of understanding of its stewardship. Now the concepts of structured and unstructured data are likely terms that most laypersons have not encountered. Structured data are exemplified by the kinds

of information often maintained in financial or HR systems. The information is entered into pre-defined fields, such as name, and date of birth. There are numerous tools to manage the related risks for this type of data, as it is more clearly defined (TBS b, 2011). Unstructured data is more elusive, as it is information that is found in all working documents, and emails. Data like “name,” and “date of birth” are well understood and recorded because of their simplicity. Unstructured data is the information that more often is a vital component for sound organizational management (TBSa, 2007). High-quality information is no longer a luxury, but a necessity for organizations such as the Agents of Parliament, to adequately pursue their mandates. Integrating IM considerations into all aspects of a public organization’s business enables the information to be more efficiently used and recognized in the same light as any financial or real property asset (TBSa, 2007). Many of the aforementioned scholars would concur that the tensions amongst IM’s elements and the lack of linkages between the technology and the generated information are inhibiting IM.

IM Theoretical frameworks. Scholars have attempted to provide parameters around IM. The modernization theories that are circulating within academia provide models of how countries advance economically as well as socially. Yet, there is a gap, as many of these theories do not include factors related to the application and level of use of IT (Azari & Pick, 2011, p. 51). One reason that may explain this is that research into electronic IM is a fledgling field and there is no set agreement in terms of the primary methodological approach (Gil-Garcia et al., 2010, p. 142). This brings us to the digitization of government, which refers to the use of information and communication technologies (ICT) by public sector organizations to conduct their operations (Meijer, 2007). As a result, this implies that IM, within the electronic realm, is far broader than simple transitions such as putting information onto government websites (Meijer, 2007). Social contexts determine how organizations use technologies and ICTs will be used differently in different political systems (Meijer, 2007).

One of the most prolific theories concerning IM is the Technology Acceptance Model (TAM). Over the past several decades, TAM-related articles made up over 10% of all journal space in the information systems field (Lundmark, Saraste, & Westelius. 2008, p. 95). The basic principles of TAM postulate that most of the variance for an individual’s intention to use a new information system is related to its Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) (Lundmark, Saraste, & Westelius. 2008, p. 95). In TAM’s simplest, two-factor, form a user is considered to ask himself / herself what benefits are derived from use (PU) and at what costs (PEOU), financial and / or psychological. According to Lundmark, Westelius, and Saraste, weaknesses exist, as this model only works well under specific conditions; if all employees in an organization have the same level of access to a (new) IM system, have the same level of training in the system and there are no special managerial approaches to increasing motivation to use the system, then PU and PEOU are the best predictors of the intention to use the system (Lundmark, Saraste, & Westelius. 2008, p. 124). Scholars have argued that if users do not have the ability to use new technology to access information, they will inevitably not perceive the new system as useful (Dwivedi, Kumar, Kumar, & Shareef, 2011, p. 20). This is where a modified form of TAM has taken root, the Theory of Reasoned Action (TRA), as

proposed by Fishbein and Ajzen in 1975. TRA was rooted in psychology. It tries to explain human behaviour in terms of the relationship between the individual and his or her social environment (Ouadahi, 2008, p. 202). This variation of TAM espouses a rational view of acquiring new behaviours, as it argues that individuals will systematically use any available information and then determine the appropriate behaviour based on their environment (Ouadahi, 2008, p. 202). Throughout the research for this literature review, TRA was cited on only two occasions, neither of which provided concrete examples of TRA in action. As such, it was difficult to substantiate IM as a rational concept, when IM itself is not quantitative or one-dimensional.

Another theoretical model that has been used is the “Awareness, Knowledge, Access and Motivation Model (AKAM),” which has been primarily applied to public information use (Lundmark, Saraste, & Westelius. 2008, p. 105). Lundmark, Westelius, and Saraste argued that AKAM was not as straightforward as TAM because it stressed more the transfer of knowledge between individuals rather than the transfer of information. The main element of AKAM is motivation, which is not only necessary for ease of use but also for the accumulation of knowledge. Unlike TAM, AKAM is a model that focuses on the various requirements that need to be met in order for a system generate knowledge instead of attempting to explain the variance in a user’s intention to use an information system (Lundmark, Saraste, & Westelius. 2008, p.124). It is evident that both TAM and AKAM seek to explain necessary elements of IM and the contributing factors for an individual’s use of IM systems.

However, these models are not all encompassing. For example, TAM is valid only under specific conditions. TAM is a valid approach if all users in a given population, or organization, are equally aware of a system, then PU and PEOU are the preferable indicators of users’ intention to use the system. The AKAM strives to be broader, it recognizes perceived usefulness and ease, yet the flexibility of AKAM also considers motivation (Lundmark, Saraste, & Westelius. 2008, p. 124). The scholars who are noted in this review discussed motivation, as a theoretical concept, on a limited basis. Arguably, AKAM, despite its own imperfections, strives to capture that elusive "human component" of IM. It was the Office of the Information Commissioner that has been one of the very few organizations to explicitly acknowledge the human component in IM. How do you convince employees to use new IM system, but more importantly how do you encourage them to adopt the values behind a new system and its related policies? As the TRA model states, individuals will have a stronger desire to demonstrate behaviour that is conducive to properly using new information systems if they feel it is expected by many other individuals in their working environment, (Ouadahi, 2008, p. 202). Thus, if there is a general expectation to incorporate new information systems, employees may be more motivated to adopt them. This is one area where TAM, the dominant IM theoretical model, is lacking. Organizations may wish to adopt a whole-of-organization approach to encouraging all participants to internalize new IM behaviours. TAM has not provided insights into what “usefulness” is or how exactly it may be applied to real-world contexts (Kanat & Ozkan, 2011, p. 504).

Another important IM theoretical concept is that of “life cycle”. The concept was introduced in the late 1980s to early 1990s to convey that managing records is a far more continuous process than previously considered, where information is passed from one platform to another (Farneth, 2011, p. 2777). The continuum aspect explains the multitude of uses that the same piece of information may have for corporate operations, such as: data for performance measurement, annual and quarterly reports, briefing materials, and so forth (Farneth, 2011, p. 2777). What exactly does this mean for the federal government? Information is now visible on multiple platforms, stored in multiple versions, with countless individuals accessing it. If information may be viewed as a circle, then it is logical to assume that during the lifespan of a particular piece of information, from its inception to its removal, it will be transferred through multiple authorities. The questions that this raises, surrounding IM roles and responsibilities, will be discussed further on.

In this period of transition from the dominance of physical information to electronic, there are multiple perspectives on the field of electronic IM. According to Detlor, the personal perspective on IM is chiefly concerned with the management of information that is relevant to the individual (2010, p. 2446). Farneth expanded this to include the organizational perspective, which is concerned with the complete life cycle of information from creation to deletion. Therefore, the application of the organizational perspective would entail an interest in the value derived from sound IM practices to avert risk, and the added value of existing services to an organization (Detlor, 2010, p. 2446). The organizational perspective would thus take a more macro approach to the underpinnings of IM. Contrary to this, the personal perspective reflects a micro approach, as it refers to how an individual creates, learns, organizes, and uses information for individual use (Detlor, 2010, p. 2446). Information used for personal use may likely encompass things such as work schedules, and informational updates from an organization to its employees. One would argue that the personal perspective on IM is an integral component of the much more expansive organizational perspective. This is a gap in the analysis of the corporate operations of public sector organizations. With the infancy of the electronic IM field of study in mind, the scan of literature revealed few links from the employee’s understanding and use of IM to the organization’s collective understanding.

As it was stated, the fledgling field of electronic IM has many moving parts. Unstructured data is one of them. Although it is a vital component for sound organizational management, it is harder to secure than structured data. The theoretical acceptance model (TAM), which is one of the theoretical concepts of IM, attempts to understand how individuals adopt new information systems. Information is now available on multiple devices, stored in multiple versions, with countless individuals accessing it. To better understand electronic IM now requires a greater awareness of the values behind its processes, including the human component.

Section 2: The human component

Within the human component, there are several areas of note. Firstly, it has been difficult for the federal government to quantify the total approximate indirect costs of IM systems

related to human factors, such as training, misuse of technology, health factors, and so forth. Secondly, organizational performance of public sector organizations is also gaining prominence. Yet, the ability for SDAs to perform at the same level as their larger counterparts remains a challenge. Related to corporate knowledge, scholars argue organizational behaviour towards IM needs to better reflect the more complex reality of electronic information. Lastly, there is a renewed interest in the way in which communication and professional development affects the adoption of IM processes.

Contrary to the historical support for IM, it is important to briefly highlight the government's strong interest to document the financial costs of IT. In 2005, the federal government spent over \$5 billion on its IT requirements (Auditor General, 2010). Since 2005, the financial costs have steadily risen. However, the present research was unable to find, either from scholarly sources or from government sources, any approximate financial estimates on the costs associated with training and professional development of employees, nor any costs associated with misuse of IT systems. The financial costs associated with IT over the next decade may be as high as \$37 billion in direct costs. The 2007 Corporate Administrative Services Review is one example where an effort was put into ascertaining the approximate indirect costs. It stated that indirect costs, over the next decade, may exceed \$75 billion, impacting HR, and financial services (TBS, 2005). This study did not break down the figures. Importantly, there was no reference to the direct costs associated with employee IM training, professional development, lost information, and misuse of IM systems. By the federal government's own account, IM is now viewed as critical to managing financial and HR; and the government intends for all organizations, including the Agents of Parliament, to ensure their IM meets corporate goals to deliver federal services and programs (TBS, 2006). However, it may be difficult for public sector organizations to determine the full value of effectively managing their information if they are unable to quantify the costs and benefits.

Organizational performance. Networked computing and the internet have fostered a growing recognition by Western governments that their knowledge base strongly defines their role in the knowledge-based economy (D. Brown, 2010, p. 1). With the reduction in traditional industries, such as manufacturing, it is not surprising that many scholars have called on the government to view its knowledge base as a socio-economic resource. Lately, public sector information policy development at national levels has been steadily active. In North America, there has been a drive to update government-wide IM best practices (State Services Commission, 2008). Contrary to this rapid increase in IM policy development, a continuous challenge in organizational success of information systems is government's inability to grasp the linkages between the technology and its broad impact on organizational performance (Bharosa, Janssen, Lee, Yang, & Rao, 2011, p. 405). For the majority of studies in information systems, they have been primarily centred on the private sector, where corporate decisions are made with far fewer external and internal restraints (Bharosa, Janssen, Lee, Yang, & Rao, 2011, p. 405).

Electronic IM is seen to offer considerable potential to create completely new public sector service models that may not only enhance the dissemination of government data but also the use of it (Bertot, Jaeger, & Shuler, 2010, p. 13). Shuler, Jaeger, and Bertot argue that it is within new technological capacities that provide the opportunity for public

sector organizations to rethink their service models (Bertot, Jaeger, & Shuler, 2010, p. 10). Organizations, like those in the SDA community, may be in the best position to rethink how they fulfill their mandates, as they struggle with their current service models. The federal government itself has acknowledged there is a more challenging operational environment for the SDAs, including the Agents of Parliament. For example, there is a shortage of qualified personnel in key functions (TBS, 2005). The SDAs are the smallest organizations and are disproportionately affected by understaffing. Vacancies in HR and IM-IT would likely encourage a continuing loss of corporate knowledge (Trougakos, Webster, & Zweig, 2012).

Organizational behaviour (attitudes towards IM). Corporate knowledge is closely linked to organizational behaviour and over the last forty years, the public sector has applied ICTs, such as data processing, to their operations. However, this has resulted in old processes and organizational forms being encoded into the new software that retains the corporate knowledge (Roberts, 2011, p. 679). Roberts argues that despite the best efforts of IT experts, the government has largely failed in addressing the large bureaucracy that has developed to plan and control IT (Roberts, 2011, p. 679). The same limits and life cycles do not apply to electronic information; electronic information may be more easily transferred and manipulated than its physical counterpart. As such, with a diminishing amount of physical information, will the federal government and its SDAs face a unique array of challenges to change employee behaviours? More scholars have argued that organizations cannot coerce employees into transferring their knowledge to the rest of the organization (Trougakos, Webster, & Zweig, 2012, p. 64). The attitudes that cause inefficient information transfer continue to persist (Trougakos, Webster, & Zweig, 2012, p. 64). With the shift to electronic IM, the challenge is now about placing more focus on managing the processes that affect employees' organizational behaviour (Detlor, 2010, p. 2450). Many scholars argue that more research into the failures of organizational knowledge transfer is warranted. Yet there is a greater emphasis in existing literature on enhancing knowledge sharing (Trougakos, Webster, & Zweig, 2012, p. 81). Connely et al's findings reflect what was apparent from the literature scan. A greater focus has been placed on improving IM and knowledge transfer, and far less on identifying the root causes of IM failures within the public sector.

ICT is viewed as an important catalyst for organizational change (Gil-Garcia et al., 2010, p. 140). However, relying on the technology to be the catalyst creates a false sense of security. Many breaches and failures of information systems are caused by process failures and / or employees not understanding their IM roles and responsibilities (Ceeney, 2009, p. 342). Ceeney argues governments may implement policies and processes, but if their organizational culture and values related to IM are not reflective of the reality of electronic information, then this lack of understanding may lead to information security issues (2009, p. 342). There have been researchers who emphasized that the adoption of new information systems is more than a technological concern, as it is affected by countless factors, including social, organizational, and economic issues (Dwivedi, Kumar, Kumar, & Shareef, 2011, p. 18). With reference to the theory of planned behaviour (TPB), which stems from TAM, our cultural values affect the successful implementation of new technologies (Dwivedi, Kumar, Kumar, & Shareef (2011, p. 19).

Thus, the attitudes of employees largely shape the success of adopting the new technologies, and in turn how information is managed.

Communication. The adoption of new and favourable behaviours towards IM needs to be communicated to employees. In the realm of IM, communication seems to be an integral component of the degree to which employees may understand new technologies and information systems. There is a tendency to blame employee resistance to new systems on implementation failures, yet in reality it may be a failure of leadership, with senior management being unwilling or unable to convey the significance and the implications of adopting new technologies and the related IM processes (Kringas, & Stewart, 2003, p. 685). Governments may introduce new rules but rules must be understood for full compliance (Heinzman, 2007, p. 578). Those who are applying new policies to their daily operations need an understanding of the values that drive the new policies (Heinzman, 2007, p. 578). Kringas is of the opinion that behaviour changes when the context changes. Does an organization create new processes without buy-in from those who will be required to implement them (Kringas, & Stewart, 2003, p. 686)? According to Ouadahi, IM training must develop employees' skills and confidence in applying new IM processes and technologies; moral and technical support from senior management is seen as a successful determinant of employees' use of new systems. (Ouadahi, 2008, p. 211).

Professional development. Successful organizations engage in the professional development of their employees. As such, scholars have discussed a variety of perspectives in which professional development and IM may be better intertwined. According to D. Brown, one lens through which organizational and technological change may be seen is the socio-technical philosophy (2010, p. 3). It is centred on the premise that focusing solely on social issues or technical issues is insufficient (S. Brown, 2009, p. 4). One may argue that the field of IM is where the application of a socio-technical lens is most appropriate. The Department of Finance and Deregulation in Australia, TBS's counterpart, has stated that leadership, policy and governance changes are required to shift public sector practices in order to make government information more accessible (Finance and Deregulation, 2009). With regards to the role of senior management, the Department of Finance and Deregulation has encouraged agencies to support employee-initiated proposals to foster more engagement and participation to improve the IM and IT reality (Finance and Deregulation, 2009). The inclusion of greater employee participation in the design and implementation of IM professional development may further improve IM acceptance and provide government with additional opportunities to better tailor training programs and materials.

This section conveyed an understanding of the intertwined aspects of the human component. It has been difficult to quantify the approximate costs of IM, as across government there have been a myriad of different IT systems. Organizational performance is gaining prominence, as public organizations are becoming more reliant on sound management of their information systems and this remains an inherent challenge for SDAs. A shift in organizational behaviour, which goes beyond the mechanical application of new IT, is warranted to reflect IM's significant impact on organizational

outcomes. Lastly, the correlation between the role of communication and professional development and improving employees' attitudes towards IM was noted.

Section 3: Role of IM in the public sector

Considering the human element in IM tends to encourage a micro perspective. In contrast, this section intends to broadly discuss the role that IM plays across government. The particular role that TBS plays, as a central agency, will also be discussed.

Role of IM in the Government of Canada. The role of IM in the federal government has become central. As TBS is a central agency, CIOB is the lead on IM and IT policy. The original configuration of CIOB was project-driven and was accompanied by a limited role in IM policies, while the rest of TBS maintained more robust controls on financial and HR across government (D. Brown, 2010, p. 11). A decade after its creation, CIOB's mandate was expanded to take a more systematic approach in leading IM processes (D. Brown, 2010, p. 11). This evolution of CIOB is reflective of the government's new understanding of the far-reaching implications of IM. IM has been a new area of government oversight. It is a natural presumption that CIOB will continue to evolve as the IM environment changes.

Returning to the IM life-cycle, TBS adopted this approach to IM from the archival community, in 1983, with the passing of the *Access to Information Act*. The government's IM life-cycle model includes four stages: the acquisition of information, the use of information, maintenance and preservation beyond initial use of information, and its ultimate disposition (D. Brown, 2010, p. 3). Since the original four stages were applied, TBS has added three stages: planning before acquiring information, the organizational structure of information after acquisition, and evaluation after disposition (D. Brown, 2010, p. 3). This life-cycle is an example of the more complex reality of public sector information. In a skilled-based labour market, information and knowledge acquisition is being awarded greater recognition. For the end of the life-cycle, Library and Archives Canada (LAC) established rules which govern the disposition of all records. This includes government departments screening out archived records not required for their operations, and the transfer of archives of value to LAC for preservation (D. Brown, 2010, p. 3).

Roles and Responsibilities of TBS. TBS was created in 1965, upon its separation from the Department of Finance (D. Brown, 2009, p. 6). Under recommendations from the Glassco Commission, the new central agency was an attempt to combine financial and personnel management under one roof. An early challenge of TBS was the overarching need to strike a balance between managing the government as one entity, and managing individual and unique organizations (D. Brown, 2009, p. 6).

One defining feature of the Post-Gomery era is the *Federal Accountability Act*. Roy believes this act has given TBS an enlarged central agency capacity to be more assertive across government. Nonetheless, the act has placed TBS in a difficult and dualistic role of maintaining control and acting as a catalyst for change in public administration (Roy, 2008, p. 543). This assertive role contrasts with that of the Department of Finance and

Deregulation in Australia. The Australian Finance Secretary has delegated to all line departments the powers of providing policy support and reviewing the financial reports and budget estimates of all the small agencies within their departmental portfolios (Finance and Deregulation, 2009). TBS continues to provide horizontal policy and governance support to the SDA community. Additional research would be needed to ascertain the effectiveness of the less assertive Australian model and its impacts on IM. Despite TBS acknowledging the risk with the governments' countless aging IT systems, there has been no formal assessment of the issue from a government-wide IM perspective nor have there been any consultations with federal organizations, particularly SDAs, to develop government-wide solutions (Auditor General, 2010). TBS has defined "shared services" as a means of streamlining common corporate and administrative systems amongst departments and agencies to improve quality and effectiveness through economies of scale (Office of the Auditor General, 2008).

Furthermore, the role that IM plays in government has steadily increased to capture the government's legislation on transparency and accountability, such as the *Federal Accountability Act*. TBS now finds itself with a more assertive central agency role and thus far is using this role to find across government new economies of scale on the internal services front.

Section 4: Interoperability, and information sharing between organizations

The role of IM in government, specifically the role of TBS, was highlighted. This section conveys more layers of IM that exist within and between federal organizations.

Throughout the scan of IM literature, political and bureaucratic support, interoperability, information sharing, and knowledge transfer amongst government organizations emerged as dominant themes. As such, national culture and other factors such as legal dimensions should be taken into account when deploying new cross-government information systems (Feltz, Hitzelberger, & Otjacques, 2007, p. 47). This echoes what previous scholars argued when discussing the need to understand employees' behaviours; they cannot be taken out of a cultural context. In the federal government, electronic information is often stored in multiple versions and antiquated mainframes continue to be the mainstay for many organizations (D. Brown, 2010, p. 7). The continuous use of aged IT once again is indicative of the outdated attitudes and behaviours that permeate public administration. Older technologies may arguably hold greater risk to government operations and reputation.

Political and Bureaucratic support. New approaches to IM are part of the expansive shift to Gov 2.0. that not only the federal government is pursuing but also the majority of provincial and municipal governments. Gov 2.0.'s open government philosophy aims to use the capabilities of Web 2.0. in order to ameliorate the interactions between federal organizations (Gil-Garcia, 2010, p. 147). One related component of this shift to Gov. 2.0. is the intent to streamline government processes, as senior public servants and politicians have called for the creation of shared services organizations (Gunraj, & Kernaghan, 2004, p. 537). A shared service approach has been deemed necessary to merge internal services that are provided by individual departments, thereby granting participating departments

room to concentrate on their core services and less on administrative processes (Gunraj, & Kernaghan, 2004, p. 537).

The establishment of Shared Services Canada (SSC) is the result of this senior level desire to increase interoperability. SCC is one year old, continues to evolve, and will initially assume responsibility for the 44 largest departments' and agencies' email systems, network services, IT support and data centres (TBSa, 2011). This is a tremendous undertaking. It is premature to ascertain the level of success that pooling of IT services will have. In addition, it should be iterated that changing employees' attitudes and behaviours has received less attention compared to the straightforward processes of updating IT infrastructure. So far SCC has not formally stated when or if it will extend its mandate to include any SDAs. This may be a gap in the internal support provided in the federal government, and academia may find new opportunities to study the IM internal disparities of government once the larger organizations receive support from SCC.

Another facet of integration between organizations is the potential rise of administrative concerns related to responsibility and accountability of services. Some scholars believe that central agencies, such as TBS, should take a leading role in coordinating federal organizations to ensure a desired level of consolidation is acquired (Mofleh, Strachan, & Wanous, 2009, p. 9). According to UK-based research, strong political pressure by leading central agencies has been inconsistent (Eppel, Lips, & O'Neil, 2011, p. 257). Eglene, Dawes, and Schneider echo this sentiment. They found that British government organizations were ranked higher for success when there is explicit support from senior politicians. Information system projects that have better implementation conditions enjoyed better political support (Dawes, Eglene, & Scheinder, 2007, p. 106).

There is a plethora of research concerning other areas of public administration and political support, such as social programs. It is plausible that due to the immaturity of the IM field of study, scholars have yet to study the dynamics between IM success and political support. The Australian government received IM support from senior politicians with the creation of the Australian Government Information Management Office (AGIMO). Its practices reflect similar attitudes to its Canadian counterpart, CIOB (Askounis, Charalabidis, & Sarantis, 2011, p. 119). Despite its function being to provide broad policy and regulatory direction on IM and IT, thus far the AGIMO has not created a formal strategy for cross-government collaboration, even though there is a framework to facilitate such collaboration (Askounis, Charalabidis, & Sarantis, 2011, p. 119). With the limited available research on the Australian government's level of IM success, one should ask what is the current level of support for a whole-of-government approach? There are existing resources, yet attitudes are not reflective of the new and multi-faceted reality of IM.

Interoperability: The term “interoperability” was frequently encountered in the reviewed literature, especially in government documentation. Thus, this is one of the most important sub-sections of this literature review. TBS policy has adopted an approach to facilitate an enhanced sharing of information amongst organizations; The

Policy Framework for Information and Technology adopts a “whole-of-government” approach as a means to provide “timely access to seamless and integrated information (TBSb, 2007).” This raises a valid point about the issue of federal organizations’ independence and determining the appropriate characteristics of a central agency. As IM has evolved at an increasingly rapid rate, the role of TBS --whether to be an enabler, an innovator, a facilitator, or some combination of all of these-- has come into question.

Information is now handled in numerous, independent, information systems and this information can now be cross-referenced and merged with other information in order for governments to provide more seamless and integrated services (Feltz, Hitzelberger, & Otjacques, 2007, p. 30). The provision of seamless and integrated services is an idea that continues to surface in the latest IM literature. The literature may be a reflection of the broader societal trends of convergence. Interestingly, government organizations have now been positioned to fund their IM and IT projects largely from their own budgets and this predicament has forced many organizations to out-source and seek various forms of inter-organizational arrangements (Gunraj, & Kernaghan, 2004, p. 536). This particular observation provides a different perspective to the increasing trend in shared services. Many organizations, with reference to SDAs, may not only want to increase collaboration on IM and other internal services but they may not have any other option if they wish to fulfill their mandates.

As such, interoperability is one concept that has received significant attention. Amongst Westminster parliamentary systems, Australia has developed a robust information interoperability framework. The Australian government, through its AGIMO, recognizes that a complete understanding of the multitude of legal and privacy obligations that will enable government organizations to be better positioned to make the appropriate information holdings accessible internally and externally (AGIMO, 2009). The AGIMO’s information interoperability framework is a reflection of the literature. It reiterates what many scholars have argued, as cultural and technological factors need to be considered when developing inter-organizational IM initiatives (AGIMO, 2009). Decision-makers need to know that if they do not assess the different cultural aspects and ownership issues across organizations, this limited understanding will likely lead to a reduced level of information sharing and further result in a general unwillingness amongst participating organizations to provide future financial and HR (AGIMO, 2009). The AGIMO conveys a logical presumption; interoperability and information sharing is vital for successful public administration and a limited appreciation for government organizations’ different priorities could likely have many long-term effects. The AGIMO further stated that a lack of understanding of participating agencies in interoperability projects might inhibit agency control or autonomy (AGIMO, 2009). As there is a multitude of organizations within the federal government, issues surrounding autonomy and control may have differing connotations depending on the type and size of organization. SDAs like the Agents of Parliament are structured to be arms-length, thus any potential project that seeks to increase interoperability may need to address issues of autonomy and control.

The AGIMO is critical of the lack of whole-of-government strategic planning for data centres. It acknowledged that such an absence will force the government into many ad hoc investments that may cost \$1 billion more than a coordinated approach, over a 15-year period (Finance and Deregulation, 2008). The AGIMO's report concluded that the existing model for high level agency autonomy, with the ability for self-approved opt-ins to whole-of-government initiatives, has led to inferior outcomes and poor financial returns (Finance and Deregulation, 2008). The Australian report further stated there needs to be a balance between agencies' capability to act autonomously and the development of cross-government approaches that is now underway in the United States and the United Kingdom (Finance and Deregulation, 2008). In this regard, governments may strive for cross-government approaches that are implemented in a tailored fashion, which best suits the needs of the individual organizations.

As there is a lack of research into the IM reality of small public sector organizations, governments like the federal government have taken up some of the slack. One of TBS's reviews of SDAs noted that SDAs do not have sufficient capacity to properly meet their mandates, while striving to be compliant with the many TBS accountability and reporting requirements (TBSa, 2011). Another challenge for SDAs relates to their corporate functions. Like the rest of the government, SDAs have many legacy computer systems that do not address existing business needs. In addition, the lack of interoperability has exacerbated the challenges to adequately meet TBS reporting requirements (TBSa, 2011). In the SDA community, which has approximately 60 organizations, there are 18 case management systems, 11 records management systems, and at least 6 access to information systems (TBS a, 2011). Naturally, each system will require different training and influence the working environments of the employees. Efforts to reduce the number of different IM-IT systems may result in a number of benefits: a potential increase in interoperability, better economies of scale for the SDAs, and improved inter-organizational information sharing.

Inter-departmental sharing: Related to interoperability, the topic of inter-departmental information sharing is visible throughout the literature. There has been a shift within public organizations from an older model emphasizing information protection to one that now fosters information sharing. IT systems are not a solution unto themselves and, individuals' attitudes towards IM need to evolve as does their technology. Even the federal government pursued an agenda to expand shared services, despite its own internal reports which acknowledge that TBS's corporate administrative shared services (CASS) does not address the capacity issues of SDAs and their unique business risks, nor will it formally include them for the next several years (Office of the Auditor General, 2008). Despite the challenges faced by the SDAs, they have taken a number of steps to share information. As it was discussed in the background chapter, the SDAs have since formed the Community of Federal Agencies, with their own internal web portal, and this community contains several sub-organizations that have sought to take on particular SDA issues (Office of the Auditor General, 2008):

- the Group of Heads of Federal Agencies (HFA)
- the Small Agencies Administrators' Network (SAAN)

- the Small Agencies Finance Action Group (SAFAG)
- the Personnel Advisory Group, and (PAG)
- the Heads of Information Technology (HoIT)
- the Security Advisors Network for SAs (SANSA)

Despite their discussions on common challenges, the Community of Federal Agencies has not yet formally addressed IM related issues. However, the HoIT Committee has recently announced its intention to include IM concerns. Another challenge that may need to be addressed, through multiple venues, is that different SDAs have defined their IT services differently and allocate different costs to those IT models. Interestingly, some SDAs have expressed concern that the quality of internal services could decrease if they were to adopt a shared services solution. Regardless of these concerns, there are already some examples of shared services. The Canadian Human Rights Commission (CHRC) has a long history of providing shared services, in areas of finance, HR, and IT to the Law Commission of Canada (1997-2006), the Indian Specific Claims Commission (since 2005), the Public Service Labour Relations Board (since 2006), to the Public Sector Integrity Commissioner since April 1 2008 (Public Sector Integrity Commissioner, 2011). The CHRC decided to enter into these arrangements to increase its own capacity and expertise (Public Sector Integrity Commissioner, 2011). This is a logical method for improving internal services. By providing shared services to other SDAs, the CHRC may be better positioned to justify an increase in funding, to boost its reputation, and to refine the expertise of its own staff.

Bennet argued that collaboration amongst government organizations should be viewed as a continuum ranging from informal/ad hoc associations, through information exchanges, to more formalized initiatives for shared services delivery (Eppel, Lips, & O'Neil, 2011, p. 256). This observation provides a broader perspective on information sharing. As it was eluded, some of the SDAs are hesitant to pool resources for fear of a reduced quality of service; as well, there may be security concerns to pool resources related to the sensitive nature of the work of their individual organizations. The challenge as well as the benefit of such arrangements is that they may be tailored to best suit the organizations' particular needs. Yang and Maxwell have consistently iterated that beliefs in information ownerships, corporate identity and characteristics of information are crucial factors that will influence the nature of inter-organizational information sharing. With the literature in mind, these particular elements of IM have not garnered much research amongst scholars (Yang, & Maxwell, 2011, p. 173). These anomalies demonstrate areas for future research. Thus far, issues surrounding privacy and legal concerns have been the prevailing areas of study for inter-organizational information sharing. They are most important, but the more tacit elements should not be overlooked.

This section noted a series of IM challenges that affect information sharing amongst federal organizations. Additional layers of IM were highlighted. Some organizations, like the Agents of Parliament, may be concerned about loss of autonomy. Others may express concern over a lack of understanding of the different values, roles and responsibilities, and privacy and security needs of individual organizations. These items, including the

concerns surrounding the myriad of different legacy IT systems, have inhibited federal organizations to enhance their interoperability.

Section 5: The increasing use of electronic platforms for generating government information

Despite the aforementioned challenges that scholars have discussed, concerning information sharing and interoperability, many in academia have noted the rapid increase in the generation of electronic information. As of 2006, over 80% of the federal government's electronic information was unmanaged and stored in unstructured formats making retrieval untimely. This has resulted in a massive duplication of documentation across organizations (Park & Zwarich, 2008, p. 469). By 2002, the overall proportion of ICT spending in the federal government doubled from the previous decade (Ouadahi, 2008, p. 201). This dramatic increase in funds directed to ICT stresses the massive requirements that are needed to maintain basic operations. The federal government has stated that electronic information is being produced at rate that is compounding on an annual basis and without the capacity for sound IM, federal organizations are at a risk of losing their ability to identify and retrieve information that may be necessary for decision-making (TBSb, 2011). With the rapidly increasing generation of information there comes an equivalent increase in information requests. For the United States Government, the number of information requests has increased by 71% between 2002-2004 and the amount of pending information requests that are carried over from one fiscal year to the next has risen by 14% since 2002 (GAO, 2005). Access to information is not of a particular focus to this research paper, but the implications of information request backlogs are of interest. This may be where many scholars and government decision-makers alike have placed their focus. An organization's inability to address information requests and the inability to retrieve information for its own purposes are interconnected. One may ask, if an organization, like an SDA, cannot access information for its own purposes in an efficient manner how will this impact their external reputation and their ability to meet citizens' information demands? Koontz is of the opinion that with a steadily increasing demand in information, strong oversight of access to information legislation will need to expand to ensure U.S. agencies remain responsive (GAO, 2005). This may be directly applied to the Canadian context.

With the rise of electronic information, information security breaches are inevitable as the government's information holdings are migrating to electronic platforms, increasing threats to national security (TBS, 2005). Another concern in the United States relates to the increasing use of Web/Gov 2.0. technologies, and federal agencies may face new challenges in determining if information that is generated and received, by means of new technologies, constitutes archival worthy material (GAO, 2010). We see again that new technologies cannot be implemented in a public administrative vacuum. These new technologies themselves have raised new concerns that must be addressed before these technologies can be used to their maximum potential.

TBS's 2003 Policy on the Management of Government Information was one of the first government documents to view information as a valuable asset. However, financial and HR management continues to dominate policy discussions for internal services (Gunraj,

& Kernaghan, 2004, p. 529). This continued dominance of the traditional forms of internal services could possibly inhibit the government's effort in changing the scope of internal services to include IM. A concrete example of the impacts surrounding the rapidly evolving nature of IM is the Information Commissioner's use of the Integrated Investigations Application (IIA), which has been used since 2004. Within several years of its implementation, the Office of the Information Commissioner determined that the IIA could no longer generate the information that senior management needed for decision-making (Privacy Commissioner, 2010). They attributed this inability of the IIA to serve its purpose to two factors: the technological potential of the information system had been reached, and many data fields in the IIA had been improperly used (Privacy Commissioner, 2010). Within the context of this paper, the second factor is of the greater concern. It is well understood that technology has a shelf life. Yet, it is plausible that had employees properly used the IIA's data fields it could have been used for a longer period or during its lifespan it could have provided the Information Commissioner with additional benefits. Again, this raises the prospect that technologies themselves are not well suited to fix problems, without sound understanding of their various uses. The proliferation of personal computing devices and the ensuing explosion of electronic information have enhanced the relevance of IM in the federal government

It has been noted that the proportion of funds allotted to IT, including IM, has grown tremendously since the 1990s. The example of the IIA further conveys the limitations of technology when employees do not fully understand that poor management of their information holdings affects the use of the technology.

Section 6: Risk Management, and trends in integrating IM with an organization's strategic planning/mandate

As the volume of electronic information in government continues to rapidly increase, the ability of federal organizations to align their increasing IM demands to other organizational functions has received greater attention. Risk management and strategic planning are two important corporate functions of public organizations. Many organizations have public documents detailing risk management plans and short to long-term strategic plans enabling organizations to better pursue their mandates. As IM is pervasive throughout an organization, it was determined that it was necessary to explore to what extent it has seeped into these corporate functions.

Risk Management. Risk management is a crucial aspect of an organization and should not only be a technical function but a process that protects an organization and its ability to pursue its mandate (Benyong & Brock, 2008, p. 67). Integrating IM into risk management planning remains a challenge as many organizations face problems deriving monetary value from investments in IM (Bush, Lederer, Li, Palmisano, & Shaskank, 2009, p. 446). This further raises the challenge of quantifying what often is a qualitative internal service. How can you risk manage something that cannot be straightforwardly laid out? D. Brown provides some of the reasons why IM may not be as widespread as it should be in risk mitigation. IM and IT are not "vote-getters," and there has never been a coordinated approach from Parliament to consider IM or IT issues, despite being regularly subject to damning reports by the Auditor General (D. Brown, 2010, p. 7). The history of weak recognition of IM and its undervaluation by decision-makers is a

challenge that should be overcome. This lack of integrating IM into organizations' risk management planning is a serious concern, as the federal government is the largest holder of information in Canada (D. Brown, 2010, p. 1).

Gil-Garcia et al. have conveyed that the federal government has defined some strategies for it to reach its Gov. 2.0. targets. Some of the strategies include improving departmental IT capacity, and requiring organizations to follow CIOB guidance on managing IT risks and reporting issues (Gil-Garcia et al., 2010, p. 149). In New Zealand, the Office of the Ombudsmen, which serves the New Zealand Parliament, has integrated IM into its risk management planning. The Ombudsmen integrated IM in order to ensure it is in compliance with the *New Zealand Public Records Act*, and will replace its computer hardware on a 4-year cycle (Ombudsmen, 2009). The Office of the Ombudsmen provides similar functions as the Canadian Agents of Parliament. Even though its risk management documents highlight the need to include IM, it is not apparent that actual strategies have been assembled to tackle the human component. Regularly replacing aging hardware will help reduce risks, but it was not apparent that IM training, tools, and guidelines will be updated on the same 4-year cycle to keep pace with new technologies. If the Ombudsmen's ICTs are replaced regularly, Park and Zwarich would argue the need to specify guidelines for assigning retention periods to its emails, as there is now inherent administrative, legal, and corporate value in them (Park & Zwarich, 2008, p. 470). With continuous replacement of technology and a lack of updating IM processes, would there be a risk of losing information contained in old electronic devices?

The National Archives in the United Kingdom has echoed what scholars have stated, that in order for IM policies to be effective, it is essential that they are developed with full agreement from organizations' senior management and buy-in from the various branches and teams (National Archives, 2004; Bush, Lederer, Li, Palmisano, & Shaskank, 2009, p. 447; TBS, 2010). In the UK, National Archives is aware that sound IM risk management would not be effective if support was not spearheaded from the top. In addition to the absence of support from senior management, simply disseminating policies on email guidance, for example, will not be sufficient to guarantee email protocols are consistently employed; upon the full support of senior management, the creators of such policies will then need to concern themselves with determining how to promote, train, and gain acceptance of the policies from all segments of the organization (National Archives, 2004). Despite the many challenges faced by SDAs, their small sizes may be one advantage when striving to reinforce acceptance of new IM processes

Strategic Planning. Arguably, risk management cannot occur without the occurrence of strategic planning. In Hall's opinion, strategic planning provides a framework that enables organizations to better assess and adapt to their changing environments. Primarily, this type of planning is a corporate function that allows organizations' services and programs to be aligned with their mandates (Hall, 2007, p. 297). The lack of integration of IM with strategic planning, across the public sector, may explain why many IT implementations are unsuccessful (S. Brown, 2009, p. 5). Despite its very small size, the Office of the Public Sector Integrity Commissioner has recognized that sound

IM improves security and trust internally; however, its 2010-2013 strategic plan placed a greater emphasis on understanding the appropriate technologies that are needed to meet its future needs and retain corporate knowledge (Public Sector Integrity Commissioner, 2011). Although this organization demonstrated an understanding for the need to preserve and enhance access to its corporate knowledge, there appeared to be a lack of documented guidelines or tools that specifically addressed the use of IM. This reflects the continued dominance of concentrating efforts on technologies. With the increase in electronic information, the successful use of electronic records is more reliant than analogue records on assessments for preservation (National Archives b, 2011). This further reflects the need for IM's inclusion in strategic planning.

Public sector organizations are critically dependent on their information holdings (Hicks, 2007, p. 234). In contrast, when organizations fail to align their information systems to their strategic plans it can result in wasted financial and HR, lost business opportunities, and unfavourable performance (Bush, Lederer, Li, Palmisano, & Shaskank, 2009, p. 447). The culmination of these conditions may erode an organization's reputation. In the context of the Agents of Parliament, with their arms-length status, an erosion of reputation will affect their standing and ability to meet the public's expectations. In 2008, over two-thirds of managers in the British civil service believed poor IM was impacting productivity and it was argued that this has thus far cost the UK public sector £21B worth of lost productivity (Ceeney, 2009, p. 343). These managers demonstrate that the role that IM plays is gaining greater acceptance in the British public sector. As well, this finding highlights that poor management of information and not just inefficient technology inhibits productivity.

Defining Roles and Responsibilities. We have seen that a common challenge has been getting buy-in and understanding from employees. With this in mind, the need to understand roles and responsibilities in implementing and monitoring IM policies is another vital element. In New Zealand, The Office of the Ombudsmen acknowledged, in its 2010-2013 Statement of Intent, that damage to its credibility or reputation is a particular concern. A damaged reputation would inhibit individuals and other organizations from seeking recourse through the Ombudsmen, and New Zealand public organizations would be less inclined to accept its recommendations (Ombudsmen, 2010). In 2009, Library and Archives Canada (LAC)'s "Directive on Recordkeeping" came into force, which stipulates that recordkeeping is the responsibility of program managers in federal organizations, and that compliant recordkeeping entails defining information resources and placing business value of information holdings in relation to an organization's mandate (Armstrong & Smith, 2009, 183). Here, we see the gradual progression towards the laying out of a solid IM foundation in the Agents of Parliament. LAC is well positioned to see information trends and challenges, as well as providing archival expertise. Unfortunately, it was not possible to find LAC documentation that sheds light on a contextual understanding of the particular recordkeeping and archival challenges faced by the SDA community. Within the SDA community, most have been able to identify an IT senior official who has the authority to brief senior management on IM risks and can develop IM guidance materials. Yet, the majority of SDAs discuss IM on an as-needed basis (TBS b, 2011). The available documentation indicated that while

designated officials have been given IT responsibilities, the challenge may be to expand the scope of officials' duties to include more issues associated with IM. In light of the structural limitations on SDAs imposed by their small sizes, there may be only a single manager who may be responsible for several internal services, including IT and IM. Thus, expertise in IM matters may not be fostered, given the limited time that these managers may have to dedicate to IM (TBS, 2009).

Internal organizational and coordination of IM. In this review, various elements of IM have been discussed, such as defining roles and responsibilities, information sharing and inter-organizational sharing. Yet, another element, more on the micro level, should be discussed. The internal coordination of IM is worth noting, as the level of success for inter-organizational information sharing may be impacted by the internal information sharing practices. At the organizational level, determining data security risks and legal risks is needed and this demands collaboration amongst the managers of an organization's various business, policy and program divisions (Benyong & Brock, 2008, p. 75). Trougakos, Webster, and Zweig, recognize that one way to improve internal information sharing is for managers to increase their employees' perceptions of trustworthiness of their colleagues in the organization's different divisions in order to emphasize a shared identity (2012, p. 84). This complements what previously has been discussed with regards to shifting employees' understanding of IM. Many individual SDAs would be divided into multiple sub-units and it is these sub-units that would require a consistent IM approach from one sub-unit to the next to maximize an organization's transformation agenda.

TBS reports acknowledge the vulnerability of SDAs with regards to their lack of internal capacity to meet all government requirements (Yang, & Maxwell, 2011, p. 171; Public Sector Integrity Commissioner, 2009). As noted above, the impact on IM success that senior management has within organizations has been repeatedly stressed. Undoubtedly, enhanced internal coordination will stem from a more active leadership. Some individual SDAs use multiple enterprise-wide applications, while others have not consistently deployed and enforced guidelines, which have resulted in some records being inconsistently stored on personal drives and shared drives (TBS b, 2011). It is difficult to ascertain the level of information, particularly of a highly classified nature, that has been rendered inaccessible or ineffective due to inconsistent approaches to electronic recordkeeping by individual SDAs. Referring to Yang and Maxwell, IM practitioners should be aware of not only the downward pressures of IM but also the upward pressures from individual employees (Yang, & Maxwell, 2011, p. 171). Electronic information is not bound by the same parameters as the physical. The level of information sharing within an organization may likely impact the level of success of information sharing between different organizations. One may argue that the intra-divisional information sharing is a new area of research in the field of IM that warrants further study.

The sixth section has broadly discussed how corporate functions of public organizations are not often viewed along with IM. The scholars included in this review have largely stressed the significance of risk management and strategic planning. With organizations' increasing creation of electronic information it seems that IM demands have garnered

greater attention. Lost or misused information may have negative impacts on organizational reputation. Government literature has stated that SDAs are faced with capacity issues, including a limited number of officials with the necessary IM expertise.

Section 7: Agents of Parliament

Unlike the previous six sections, this section will specifically focus on the Agents of Parliament and their unique working environment that stems from their arms-length status. In addition, a broader understanding of government efforts to address issues faced by SDAs will be conveyed. Despite their small size, the Agents of Parliament perform a vital oversight function of the federal government. According to Pond, one factor that has increased Parliament's dependence on these organizations is that most Westminster legislatures are poorly equipped to supervise their bureaucracies (Pond, 2010, p. 26). Stilborn goes further, stressing that the independent advice from the Agents of Parliament supports Westminster democracies and therefore their arms-length status remains justified (2010, p. 41). Both Pond and Stilborn highlight the contemporary Parliament's fiscal constraints and the mounting oversight responsibilities to ensure accountability and transparency. The reports that are conducted by these organizations are a complementary component of parliamentarians' role to oversee government (Chaplin, 2011, p. 85).

A fundamental reason why the Agents of Parliament exist is that they, embodied in their commissioners, are independent of all three branches of government. Historically, they have been entrusted with broad oversight responsibilities and increasingly are seen by the public as instruments needed to restore Canadians' trust in government (Chaplin, 2011, p. 42). These organizations stand alone amongst the rest of the SDA community. Each one was created under different legislation and under different circumstances. Each Commissioner has been provided particular functions and powers. Yet, with the public's eroding confidence in the government, this has led these organizations to be viewed as having a purpose to defend the common good (Chaplin, 2011, p. 75). The Conflict of Interest and Ethics Commissioner may be the most unique amongst these organizations. When the office was created, it was established within Parliament and reports to the Prime Minister's Office (Chaplin, 2011, p. 83). Regardless of whom these organizations report to, the perceived independence and oversight functions of these organizations will likely place additional pressure from the public on these organizations.

The character of these organizations and their commissioners are considered to be above the political fray and their ethics are purposed to safeguard the most basic standards of an accountable and transparent civil discourse (Chaplin, 2011, p. 108). This may lie at the heart of the responsibility that has been increasingly thrust upon them. This arms-length status is also shared by the Agents of Parliament. Radwanski, a former Privacy Commissioner, believed that Parliament created his organization not only to oversee privacy laws but to serve as the champion of privacy rights of Canadians (Bennett, 2008, p. 232).” This epitomizes the expansive role of these arms-length entities. In an electronic age of rapid convergence of information technologies, their roles may go well beyond what was originally intended.

Bennett has stated that the Agents of Parliament are now expected to perform seven interrelated roles: ombudsman, auditor, consultant, policy advisor, negotiator, educator, and enforcer (2008, p. 237). This may encompass more roles than deputy heads of much larger organizations are expected to perform. Given the capacity challenges of most SDAs, will SDAs be able to meet these new demands in addition to their mandated duties? The Public Sector Integrity Commissioner (PSIC) acknowledges that, given its arms-length mandate, this independence involves some risk; in some extreme cases, some organizations or individual deputy heads may believe central agency rules do not apply to them (2009). PSIC went further to state that, as a group, the SDAs are systemically vulnerable to serious mistakes (Public Sector Integrity Commissioner, 2009). Thus far it has been difficult to find reputable scholarly or government literature that seeks to strike a balance for organizations like the Agents of Parliament, between being compliant with the rules and providing an independent oversight function.

In contrast, the management frameworks that are emanating from central agencies are inhibiting public administrators' abilities to adequately fulfill central agency expectations (Clark & Swain, 2008, p. 454). This may inveterately constrain the Agents of Parliament, who were established to ensure public administration standards are applied across government while concurrently struggling with applying high standards of accountability and transparency to themselves. They are not legally bound to many of the reporting requirements of TBS Policies. For example, the *Policy on Evaluation*, the *Policy on Information Management*, and the *Policy on Internal Control* all explicitly exempt them and do not provide TBS with the authority to enforce compliance. This has placed the burden of following the spirit of these policies solely on the shoulders of the deputy heads, the commissioners (TBS b, 2009; TBS, 2007). The reporting exemption from these policies guarantees that they are not within direct purview of central agency scrutiny. The *Policy of Evaluation* dictates that SDAs are responsible for designating a head of evaluation (TBS b, 2009). This requirement does not take into account that, due to the small number of available staff, SDAs may not have the luxury of dedicating one individual to a single policy or management area (Auditor General, 2004). In addition to the capacity issues that the majority of SDAs face, the Agents of Parliament are a unique cluster that may require central agency support on IM that does not infringe upon their autonomy. This literature review has conveyed that IM is not an autonomous function, but rather interconnected with all aspects of an organization. The new field of electronic IM has been harder for governments to understand and quantify, in part because of the more complex qualitative nature of unstructured data. TAM has been one of the most influential theoretical approaches, seeking to explain factors that allow users to adopt new IM systems. Discussion on the human component noted that many scholars have recommended attention to organizational behaviour, beyond the mere mechanical application of IT. New federal legislation has been centered on increasing transparency and accountability. There are now more management layers that accompany the disposition of information. Presently, TBS finds itself with a more assertive central agency role. This role may accompany the desire by senior officials to increase inter-departmental collaboration on areas like IM, in a drive to find better economies of scale. Economies of scale may be required, as the creation of electronic information compounds annually. Scholars in this review have stated that technologies are not the only challenge,

but the way in which employees understand the technologies and their related roles and responsibilities remains a challenge. This relates to risk management and strategic planning. More scholars and bureaucrats are calling for IM to be better integrated into these corporate functions. Lastly, it was conveyed that issues, such as poor IM, disproportionately affect SDAs and many are inhibited by their limited capacities.

Chapter 4: Findings and Discussion

The literature review chapter highlighted some of the common and unique perspectives of what constitutes the fledgling field of electronic IM in the public sector. In this chapter the current state of IM in the federal government will be broadly discussed. In order to thoroughly dissect IM's multitude of elements, the Findings and Discussion chapter will be divided into three sections: 1) government findings, 2) primary research, and 3) discussion and analysis. Government findings will include a broad array of government literature pertinent to IM, which includes the following: TBS reports on the SDAs, Agent of Parliament annual reports, and reports from agent of parliament organizations in three Westminster parliamentary jurisdictions. Following the section of government findings, the results of the primary research for this project will be reported. A series of interviews, with senior management in the Agents of Parliament, was conducted. The interviewed senior management officials were equivalent to the director and director general levels. The findings from the interviews are instrumental in achieving a higher level of awareness of the existing work environment and challenges associated with IM in this cluster of SDAs. The primary research findings will be divided into eight themes, which will further examine the most prominent elements that were observed throughout the interviews. Lastly, this chapter's discussion and analysis section will conduct further analysis on both the government findings and primary research in order to provide clear direction to the proceeding recommendations section.

Section 1: Government Findings

The intent of the section on government findings will be to make note of government-reported facts of the current state of IM in the Agents of Parliament. Central agency reports from TBS will provide a high-level overview of IM within the SDAs, while, documents and annual reports of the Agents of Parliament will convey specific details concerning the conditions of IM for this SDA cluster. Since the Agents of Parliament are not subject to many central agency reporting requirements, the findings from the Agents of Parliament documents are limited, compared to line departments. As such, their findings will be supplemented with references from the Agent of Parliament counterparts in three jurisdictions that use the Westminster parliamentary system: Australia, New Zealand, and the United Kingdom. The rationale for including arms-length, watchdog, organizations from these countries is that their bureaucratic and political structures are similar to Canada's. As well, the inclusion of findings from these countries' arms-length organizations was believed to provide further opportunities to assess IM trends and best practices from a more global perspective. The government findings are reported in three sub-sections: issues related to the reporting burden, the limited organizational capacity in the Agents of Parliament, and existing IM processes. The sub-sections aim to identify IM

challenges that are unique to Agents of Parliament, while continuing to be conscious of the general trends across the SDAs.

The Reporting burden. This section is smaller, compared to the proceeding two sub-sections, as there was limited documentation concerning reporting burden, with respect to the Agents of Parliament. Nevertheless, the burden of reporting is one of the most significant concerns across the SDA community, and it is important to highlight this as a challenge faced by most SDAs. The burden of central agency reporting requirements is not a recent concern. TBS senior officials have been aware for nearly a decade that the SDAs have had difficulties with fully complying with central agency reporting requirements. Reporting burden has been discussed in a series of government studies, in 2003, 2004, and 2007. The 2003 study estimated that SDAs were individually required to produce over 107 reports to central agencies per fiscal year. The large volume of required reports is not unique to the SDAs; however, the larger departments, like Aboriginal Affairs and Northern Development, are equipped with more staff to complete these reporting requirements. In 2007, the Small Administrators Advisory Network (SAAN), which is one of the SDA community bodies, commissioned a report, indicating no visible change in the number of required central agency reports (Office of the Auditor General, 2008). With the limited capacity of most SDAs, this large quantity of obligatory reports has had a disproportionately larger impact on their operations and financial resources. The following sub-section will speak directly to the limited capacities that are faced by the Agents of Parliament and more broadly the whole SDA community.

Limited Capacity. As previously noted, limited capacity is an area of concern for the SDAs. There are a variety of issues related to limited capacity. Three of the most frequently reported areas of concern are internal services, merging and consolidation of organizations and individual services, and issues related to staffing limitations. Each of these three areas convey that internal services are encroaching on organizations' abilities to pursue their mandated functions, as resource limitations have resulted in reduced flexibility to allocate resources to other priorities (TBS, 2010).

The increasing costs of internal services have prompted discussions of shared services, within some circles of government. Most SDAs have considered consolidating resources for IT and IM, on a case-by-case basis. Thus far, evidence of shared services amongst SDAs has been limited. One example is the Canadian Human Rights Commission's (CHRC) long history of provided shared services, in areas of finance, HR, and IT to the Law Commission of Canada (1997-2006), the Indian Specific Claims Commission (since 2005), the Public Service Labour Relations Board (since 2006), to the Public Sector Integrity Commissioner since 2008. The CHRC decided to enter into these shared services arrangements to increase its own capacity and expertise (Public Sector Integrity Commissioner, 2011). This is an interesting yet not illogical method for improving its own internal services. By providing shared services to other SDAs, the CHRC may be now better positioned to justify an increase in funding, boosting its reputation, and refining the expertise of its own staff that provide these services.

It appears that one barrier to pursuing shared services, amongst any group of federal organizations, has been defining the parameters of shared services. For the SDAs, shared internal services may likely focus on transactional and operational services that are not core business functions; previous studies have identified some of the following services that would be applicable to SDAs, including the Agents of Parliament: pay and benefits, standard reporting requirements, and data management (TBS a, 2011). As TBS's governance and operational support continues to evolve, the scope and parameters of shared internal services may be better defined. The government is at an important juncture, as it is in the midst of creating the organization Shared Services Canada (SCC), which will acquire responsibility for some of the largest federal organizations' internal services. However, there is no indication that SCC will support the SDAs.

The effects of rising costs for internal services are not unique to Canada. While Canada's approach largely consists of the creation of SCC, other Westminster jurisdictions have adopted other consolidative measures to address internal services, like IM. In the United Kingdom, the Parliamentary and Health Service Ombudsmen (PHSO) is a merged entity of the former statutory bodies of the Parliamentary Commissioner for Administration and the Health Service Commissioner for England (Parliamentary and Health Service Ombudsman, 2012). It continues to conduct investigations on government departments and investigations in the National Health Service of England (Parliamentary and Health Service Ombudsman, 2012). It was unclear as to what was the catalyst for merging these two organizations. With reference from the literature, these formerly separate small organizations may have faced similar capacity challenges as the SDAs. PHSO has a more robust complement of 391 Full Time Equivalents (FTEs) (Parliamentary and Health Service Ombudsman, 2012). It is plausible that combining the two organizations resulted in economies of scale and improved efficiencies in delivering internal services.

The merging of operational and program functions is not the only model that has been adopted by arms-length organizations in Westminster parliamentary systems. In Australia, the Merit Protection Commissioner (MPC), similar to the Canadian Conflict of Interest and Ethics Commissioner, has undergone a consolidative process similar to SCC's relationship with its client departments. The MPC is co-located within the much larger Australian Public Service Commission (APSC). APSC employees provide most of the internal services, such as payroll, to the MPC. As a result, the MPC is in a better position to dedicate its resources to pursue its mandate (Merit Protection Commissioner, 2011). It was difficult to determine the level of autonomy that the MPC had to forgo in the process; yet it remains another model of how internal services of multiple organizations may be consolidated. Taking into consideration the similar size of Australia's federal bureaucracy, Australia has far fewer arms-length, watchdog, organizations. In Australia, the Commonwealth Ombudsman is a super agent of Parliament. Within its large organizational structure, there are five distinct sub-ombudsmen offices: the Defence Forces Ombudsman, the Immigration Ombudsman, the Law Enforcement Ombudsmen, the Postal Industry Ombudsmen, and the Taxation Ombudsman (Commonwealth Ombudsman, 2009). Most of the aforementioned organizations would fall within the definition of an SDA used here. As such, a comparative analysis could be conducted to assess the effectiveness of IM policies in this

larger organization compared with its smaller and more specialized Canadian counterparts.

In Canada, the more specialized Agents of Parliament have relatively small complements of permanent trained staff. Individually, they are faced with the challenges of mitigating the disproportionate effects of the “grey tsunami,(the period in which the majority of the baby boomers are eligible for retirement)” which will increasingly be felt across the public service (Bertot, Jaeger, & Shuler, 2010, p. 31). There are potential risks for a loss of corporate knowledge when these organizations’ employees retire or leave. The ability of the Agents of Parliament to adequately retain information of significant corporate value as their employees retire or seek other employment is a challenge that may be mitigated through enhanced IM practices and awareness. In New Zealand, the Office of the Ombudsmen acknowledged the serious risk of loss of its “intellectual capital” when employees leave. In addition to reforming their training programs for new employees to more effectively fill the intellectual gaps left by former employees, the Ombudsmen intends to develop a knowledge management strategy to improve the accessibility and storage of key business information (Ombudsmen, 2010). The Ombudsmen identified another factor that further heightens the need to develop and implement sound IM practices. Its senior and most experienced employees are being headhunted by the larger New Zealand public sector organizations, which have the financial resources to pay more and to offer more career advancement opportunities (Ombudsmen, 2011). This salient fact highlights the work environment that of SDAs, including the Agents of Parliament. Smaller organizations are unable to compete with larger government organizations with greater resources (Ombudsmen, 2011). However, neither Agent of Parliament reports, nor any external report on them, make links between their operational environment, IM, and the challenges associated with retention.

Existing IM processes. With regards to existing IM processes, most SDAs’ recordkeeping systems are inconsistently used by employees (TBS b, 2011). In the literature review, it was frequently documented that a lack of IM integration into an organization’s risk management and strategic planning would limit the value associated with IM. With regards to IT, the majority of the SDAs, including the Agents of Parliament, were not measuring performance of their IT assets, required by the TBS Policy Framework for Information and Technology. However, this burden should not solely rest on the SDAs’ shoulders. TBS has developed preliminary IT performance indicators, in consultation with the SDAs, yet these indicators have not been formally communicated to the SDA community; the 2010 internal audit, “Horizontal Internal Audit of Information Technology Asset Management in Small Departments and Agencies,” found no evidence that they have been used by the SDAs (TBS b, 2010). The lag in communicating these performance indicators to the SDAs may have further increased the challenges of complying with central agency policies.

Despite the small sizes of these organizations, it should be noted that there were indications of formalized IM processes. Over half of the Agents of Parliament have reported they have internal structures in place to address IT and IM issues (Commissioner of Lobbying, 2011; Privacy Commissioner, 2010; & Commissioner of Official

Languages, 2010). Two important facets of IM approaches were observed. The first is that one office, the Privacy Commissioner, has a dedicated IM/IT Division (Privacy Commissioner, 2010). Despite its relatively small size (under 200 FTEs), the Privacy Commissioner may have reached the critical mass to enable dedicating some IM functions to a specialized division. The second was the perspective on IM taken by the Information Commissioner in viewing IM as one of its highest priorities and as a key enabler of the organization's core business functions. The Information Commissioner considers IT and IM to be intertwined and has authorized a single governance structure, the organization's Executive Committee, to manage both. Its IM-IT Directorate has responsibility for the delivery of IM and IT activities (Commissioner of Official Languages, 2010). Further research into the Information Commissioner's IM practices is warranted, in order to determine how this strong organizational support for IM is matched with the organization's internal operational IM processes (Commissioner of Official Languages, 2010). Arguably, the business value that is bestowed to IM is reflected in the level of IM support that is provided through training and professional development. Two organizations stood out, in terms of the level of IM training. The Privacy Commissioner has an established employee training in response to the changing privacy landscape. Due to the interconnectedness of privacy and IM, it is understandable that this particular organization would support IM training in areas like leadership and other specialist areas of IT (Privacy Commissioner b, 2010). Similarly, the Information Commissioner conveys an organizational attitude that espouses the significant value of IM. All employees and managers were required to take IM training that included information classification training (Information Commissioner, 2010). In addition to the Information Commissioner's training modules, it has initiated discussions with other SDAs on opportunities to leverage IM and IT best practices and experiences. It was difficult to find formalized IM internal processes in the other Agents of Parliament.

With regards to an increasing interest in IM, there remain gaps in the available documentation on operations. Even amongst the Agents of Parliament with formal IM processes, a lack of detailed procedures was noted. Amongst the largest of these organizations, there is a lack of linkages for tracked information across their various divisions; the Records, Document and Information Management System (RDIMS) that most federal organizations use, has not enabled integration between an individual organizations' internal divisions (Privacy Commissioner, 2010). The "human component" is one particular element that was reported on a limited basis. Many of the Agents of Parliament are in the process of implementing "change management activities," such as new and streamlined case management systems, but there was limited documentation detailing communications plans for not only implementing changes in administration but also instigating shifts in employee attitudes towards IM (Privacy Commissioner, 2010). The limited documentation may reflect the inconsistent use of information systems. Thus, the combined effects of inconsistent use of electronic storage devices and the potential retention challenges may produce severe risks of loss of corporate knowledge. This is a niche area of IM in the SDAs that warrants further research and analysis. In addition, it was quite difficult to detect the existence of formalized IM plans amongst the Agents of Parliament in the three foreign jurisdictions. Information was available which addressed organizations' long-term strategies for IT

service renewal, but little focus was directed to IM. Therefore, the work that has been undertaken by TBS and the SDA community has not been visibly duplicated in other jurisdictions. As a result, this may complicate matters. For the foreseeable future the federal government will not be able to compare best practices with other Westminster jurisdictions, as Canada appears to be the only Westminster Parliamentary System that is undertaking formal initiatives to address the operational challenges of its smallest organizations. However, this confirms that the existing efforts of TBS are unique amongst its Westminster counterparts. The primary research section, which follows, will seek to resolve some of the questions that stem from the limited documentation of the Agents of Parliament.

Section 2: Primary Research- Interviews with the Agents of Parliament

The primary research, which took the form of individual interviews, was deemed necessary to supplement the limited available documentation. Most TBS reports on the SDAs did not directly discuss the unique challenges of the Agents of Parliament. Prior to conducting the interviews, senior management officials in all six organizations were contacted to participate in the primary research component of the project. Senior officials of corporate affairs divisions, which include IM-IT, were contacted as the most suitable to answer on behalf of their respective organizations. Fourteen individuals from the six Agent of Parliament organizations were contacted via email. The goal was to have ten senior officials participate in the interviews. In total, eight individuals from five organizations agreed to participate. Below, the number of participants and their organizations are listed (Commissioner of Official Languages, 2011; Privacy Commissioner, 2011; Public Sector Integrity Commissioner, 2011; Commissioner of Lobbying, 2011; Conflict of Interest and Ethics Commissioner, 2012).

Table 2: List of the participating Agents of Parliament

Organization	Number of Participants	2011 Full-time-equivalent (FTEs)
The Office of the Commissioner of Official Languages	One	162.6
The Office of the Privacy Commissioner	Two	160
The Office of the Public Sector Integrity Commissioner	Two	29
The Office of the Lobbying Commissioner	Two	28
The Office of the Conflict of Interest and Ethics Commissioner	One	26

A copy of the interview questionnaire is provided in Appendix 1. The findings from the ten interview questions will not be individually addressed. Instead, findings are grouped within eight themes that emerged from the interviews:

- 1) The characteristics of IM in the Agents of Parliament.
- 2) TBS IM support and the organizations’ challenges with the IM and IT policies.

- 3) Capacity for IM strategic planning and barriers to aligning IM with organizations' mandate & preparation for Library and Archives Canada's 2017 deadline.
- 4) Senior management support for employees to improve their IM skills.
- 5) Collaboration within the Agents of Parliament.
- 6) The Agents of Parliament exemption from many TBS reporting requirements and its impact.
- 7) Rating IM as a priority.
- 8) Gaps in support that could be filled to better support the Agents of Parliament.

1) The characteristics of IM in the Agents of Parliament. Three different perspectives on what IM encompasses within these organizations were discussed by the participants (see Table 3). Each perspective addressed a different layer of IM: the mechanical, the multi-faceted, and the internally focused layer. As such, the characteristics of IM were one of the most pervasive themes to emerge in the interviews, as an organization's attitudes towards IM may have a significant impact on all IM processes and affect their views of their information holdings. With regards to the first layer that was noted, several officials reported that their IM included a variety of processes, from safeguarding of their electronic data to the creation and disposal of records (Public Sector Integrity Commissioner, interview, July 4, 2012). The organizations went into some depth about these processes. Yet, their organizational perspective did not include the non-tangible, attitudinal, characteristics of their IM, but instead focused on the mechanical and procedural elements of IM.

Another official captured a more multi-faceted second layer by stating that their IM has "several flavours (Privacy Commissioner, interview, July 25, 2012)." Contrary to many of the findings from the government reports, there are some participants who have placed considerable priority on IM. For some, IM is at the core of what they do, as a substantial component of many of their legislative mandates is to collect and manage information from complainants and stakeholders (Conflict of Interest and Ethics, interview, August 9, 2012; & Official Languages Commissioner, interview, July 3, 2012). This was a surprising finding, as it was difficult to extract this level of support for IM from either government reports or from Agents of Parliament reports. In addition, several participants identified the "why," which conveyed more of the attitudinal element of IM. The aforementioned participants' responses reflected that multi-faceted layer of IM. They seemed to understand that in order for IM to work in this electronic age, their work environments would need to become more collaborative. It was acknowledged that employees would need to understand "why" new technologies and processes are to be implemented and employee attitudes would need to shift to better reflect the new internal services (Official Languages Commissioner, interview, July 3, 2012; Privacy Commissioner, interview, July 25, 2012; & Lobbying Commissioner, interview, July 13, 2012).

Internal services like IM, finance and HR are important to a public organization. In the case of one organization, they conveyed the third level of IM that included a strong internal dimension. This organization reported that effective documentation of internal

decision-making is another crucial element of their overall IM strategy (Conflict of Interest and Ethics, interview, August 9, 2012). It is evident that this organization is acutely aware of the impact of inaccessible information and the misuse of their information. Arguably, this level of IM is heavily linked to the multi-faceted level. Thus, the third level is more accurately a close offshoot of the second. The impacts of lost decision-making documentation may have a greater impact on their overall operations, in comparison to the much larger federal organizations.

Table 3: Three different perspectives on what IM

Perspective	Summary	Number of Organizations
1: Mechanical	This perspective is concerned with meeting the potential of the operational processes of IM: securing records and disposing of records.	1
2A: Multi-faceted	This perspective acknowledges that IM is a core component of administration. It is influenced by employee attitudes and the values behind IM processes need to be internalized.	2
2B: Internally-focused	This perspective identifies the need to effectively capture an organization's internal decision-making processes.	1

With regards to the smallest federal organizations, the Office of the Lobbying Commissioner has had a unique opportunity to digitize many of internal services. The interview with the participants from the Lobbying Commissioner revealed that they had participated in a pilot project, as the secondary research was unable to find any formal documentation on it. The pilot project was co-led by TBS and Library and Archives Canada (LAC). The intent of the pilot project was to digitize the Lobbying Commissioner's physical archives and provide technical assistance to become a paperless work environment. This TBS-LAC pilot, the Digital Pilot Project, was an opportunity for this very small organization to acquire considerable assistance in digitizing their physical records and acquiring new software and hardware, like tablets. As a result, they have become completely electronic (Lobbying Commissioner, interview, July 13, 2012). This is a unique finding, as it is contrary to the government and scholarly findings, which stated that small organizations are the most disadvantaged. It demonstrates that the provision of additional support enabled this small organization to become more self-sufficient in the current digital era.

Therefore, the interviews assisted in better understanding the unique and common characteristics of IM in the individual organizations. The layers of IM reflect the depth of the different perspectives of the organizations. This enhanced understanding will be helpful to the development of recommendations.

2) TBS IM support and the organizations' challenges with the IM and IT policies.

In addition to determining these organizations' preparedness for LAC's 2017 deadline for solely archiving electronic documentation, the justification for pursuing this project was the perceived need to improve the existing relationship between TBS and the SDAs and to mitigate the IM barriers that are broadly faced by the SDA community. All of the participants identified a general understanding of TBS IM policies. As well, there was a broad sense of discontent with the existing support that TBS provided to the SDA cluster. Several participants acknowledged the support that LAC provided through various webinars and in-person consultation on recordkeeping and archiving assistance (Public Sector Integrity Commissioner, interview, July 4, 2012; & Official Languages Commissioner, interview, July 3, 2012). One organization's position on existing TBS support was positive. TBS had shown leadership on presenting the new GC Docs software, which will replace RDIMS. The same two participants stated that they could always find TBS contacts at the bottom of site for each policy (Public Sector Integrity Commissioner, interview, July 4, 2012). With regards to TBS policy, it is evident that the majority of the Agents of Parliament are not only aware of the Management Accountability Framework (MAF) but conduct their own internal MAF assessments. MAF is one of the primary assessment mechanisms that TBS uses to evaluate federal organizations on a range of areas from IT to delivery of programs and services. According to one participant, they conduct "self-inflicted" MAF assessments as this tool helps them ensure they follow central agency practices (Public Sector Integrity Commissioner, interview, July 4, 2012). This finding is reflective across all Agents of Parliament. While TBS is not mandated to conduct MAF on these organizations, the participants acknowledged MAF as a useful tool and benchmark for their own internal purposes.

In addition to acknowledging the usefulness of MAF, the participants stated the small sizes of their organizations have presented many capacity challenges. They possess a general awareness of TBS policies but challenges associated with funding and staffing have made the implementation of central agency policy difficult (Public Sector Integrity Commissioner, interview, July 4, 2012; Official Languages Commissioner, interview, July 3, 2012; & Lobbying Commissioner, interview, July 13, 2012). In the SDAs, employees, particularly senior management, may take on multiple functions (Lobbying Commissioner, interview, July 13, 2012). Several of the organizations were firm that they have received no IM support from TBS (Public Sector Integrity Commissioner: interview, July 4, 2012; Privacy Commissioner, interview, July 25, 2012; & Official Languages Commissioner, interview, July 3, 2012). From the collective perspective of the Agents of Parliament, existing TBS solutions have proven to be cumbersome (Public Sector Integrity Commissioner, interview, July 4, 2012; Privacy Commissioner, interview, July 25, 2012). In addition, another participant echoed this sentiment by stating that it can be difficult to make decisions without clear direction from TBS (Public Sector Integrity Commissioner, interview, July 4, 2012). The participants from another Agent of Parliament provided a similar viewpoint; there is no IM support from the centre for SDAs. As they participated in the pilot project, they acknowledged that they received "full attention;" however, the two participants stated that if their organization had not taken the initiative to get involved in the pilot project, there would have been little regular

IM support from TBS. As one participant stated, it takes more than policies and guidelines to change the way employees manage their information. Accessible tools and support for the organizations' daily activities and decisions were noted (Conflict of Interest and Ethics, interview, August 9, 2012). Thus, the way in which TBS approaches the SDA community would need to adopt sizeable reforms. In this current period of financial restraint, TBS would need to rationalize new approaches to Cabinet if increased costs are a component. Arguably, in the short-term, additional costs would be required for an expanded support function. While streamlining the SDAs' corporate functions would reduce costs to taxpayers and improve services.

3) Capacity for IM strategic planning and barriers to aligning IM with organizations' mandate & preparation for Library and Archives Canada's 2017 deadline. Due to the diversity in mandates and organizational sizes of the Agents of Parliament, the findings are similarly diverse. As a result, the roles that IM has in strategic planning and risk management varies across the different Agents. In the smallest Agents of Parliament, both of which have fewer than thirty employees, IM planning has taken on an informal tone; "just getting things done," was the attitude expressed by one organization, where there are many other priorities that require their limited resources. In contrast, the larger organizations in this SDA cluster, which have over one hundred employees, have IM aligned with their mandates and have developed IM/IT strategic plans (Official Languages Commissioner, interview, July 3, 2012; & Privacy Commissioner, interview, July 25, 2012). Despite its small size of fewer than thirty employees, the Office of the Commissioner for Lobbying will have a new strategic plan which will include IM, to be implemented by the end fall 2012 (Lobbying Commissioner, interview, July 13, 2012). This may reflect that an expanded TBS support function, the Digital Office Pilot Project, resulted in a very small organization having corporate and IM functions that are streamlined and aligned with its operations. The Office of the Commissioner for Official Languages has adopted a long-term review function for their IM needs. They periodically look at how the investigative and ombudsman role of the organization is evolving and assess the IM needs of their work environment (Official Languages Commissioner, interview, July 3, 2012). This lens is unique amongst the Agents of Parliament.

One participant iterated a statement that is quite indicative of the work environment for the majority of the SDAs. This official was of the opinion that he must constantly wear "two hats", one for information privacy and the other for security (Privacy Commissioner, interview, July 25, 2012). This comment reflects the reality that in most SDAs with fewer employees, many individuals must adopt multiple functions simultaneously. Another factor that has proven to be a significant role in organizations' IM preparedness has been the support from senior management, as had been discussed in the literature review. The Chief Information Officers (CIOs) of several Agents of Parliament have had considerable involvement in pursuing strong IM agendas (Privacy Commissioner, interview, July 25, 2012). With regards to the organizations that have senior management as IM supporters, there was a sense of IM's vast impact, including organizational reputation. Due to the small sizes of these organizations, the strong support from senior officials would carry substantially more weight.

Interestingly, when participants were asked about barriers for IM, they stated their individual organizations faced no barriers. However, there was consensus that most SDAs face capacity challenges, as demands escalate with regards to coverage of their mandates (Public Sector Integrity Commissioner, interview, July 4, 2012; Privacy Commissioner, interview, July 25, 2012; Official Languages Commissioner, interview, July 3, 2012: & Lobbying Commissioner, interview, July 13, 2012). With regards to capacity challenges, there is a lack of expertise in many corporate functions, such as IM (Official Languages Commissioner, interview, July 3, 2012OL: & Privacy Commissioner, interview, July 25, 2012). In essence, the capacity challenges are barriers for the Agents of Parliament. It is presumed that the term “barrier” may not be one that is frequently used and “challenge” may express a less negative connotation. Despite the difficulties associated with financial and personnel capacity, there is a need amongst the Agents of Parliament that they must be “audit-proof,” as there is widespread sentiment that they must maintain higher standards than the rest of the government (Lobbying Commissioner, interview, July 13, 2012).

With regards to LAC’s 2017 deadline, there was very little evidence that the interview participants were unprepared. Both the Lobbying and the Public Sector Integrity organizations, by-products of the Gomery Commission and the Accountability Act, are less than five years old. Thus, they have the unique advantage of being created during the electronic era. They have little physical documentation that will require electronic archiving (Public Sector Integrity Commissioner, interview, July 4, 201: & Lobbying Commissioner, interview, July 13, 2012). As these two organizations are young, their corporate culture may be in a better position to adopt new approaches to IM in comparison to the larger and more established Agents of Parliament. With regards to some of the larger organizations, both Official Languages and the Privacy commissions were confident their organizations would be in a position to meet the 2017 deadline (Official Languages Commissioner, interview, July 3, 2012: & Privacy Commissioner, interview, July 25, 2012). This degree of confidence for meeting the 2017 deadline was not expressed in government reports, nor was it discussed in these organizations’ available reports. Thus, this is an important finding to convey to TBS, as a sound level of preparedness will affect the type of new support that is provided over the next five years, prior to the 2017 deadline.

4) Senior management encouraging employees to improve their IM skills. The role of senior management and professional development has a pivotal impact on employees’ attitudes and behaviours towards IM. The support of senior officials can be a deciding factor in the success of training programs. The majority of the participants echoed the scholars’ sentiments. Several of the Agents of Parliament provide their employees with mandatory IM security training (Public Sector Integrity Commissioner, interview, July 4, 2012: & Privacy Commissioner, interview, July 25, 2012). Despite the mandatory training, these participants did not go into depth regarding the level of success these courses have in comparison to voluntary training. Another participant noted a more unique approach to IM training; one-on-one coaching is available to all employees. This ensures that employees have opportunities to internalize the values behind the new IM

policies and practices ((Privacy Commissioner, interview, July 25, 2012). This participant's response epitomized the academic argument that IM is not a mechanical process that is devoid of values. Training that emphasizes the "why," may have greater success. In addition, this further demonstrates that there is senior management in this Agent of Parliament who understands that in order for new information technology to be successfully implemented the values behind it, the "human component," must be understood. Despite the existing training opportunities that are provided to employees, it is argued that a disproportionately higher percentage of their budgets are directed to internal services in comparison to large federal organizations. This may inhibit their ability to pursue their individual mandates.

Another participant provided a unique view to training and professional development. Training needs to be tailored and incremental, in order to allow employees time to integrate new processes into their daily operations (Lobbying Commissioner, interview, July 13, 2012). It is clear that there is an increased understanding that it takes time to adjust to new processes. Two participants, from the same organization, stated that in training employees for new processes there will be some failures and it is important to have built-in mechanisms that may mitigate them. Adaptation to a fully electronic work environment is hard for many employees. Some participants noted that amongst other fellow senior management there has been some resistance to new approaches to IM (Official Languages Commissioner, interview, July 3, 2012: & Public Sector Integrity Commissioner, interview, July 4, 2012). The resistance from senior officials will likely have a disproportionately larger impact in these small organizations. During the interviews there were no discussions concerning potential impacts that stem from the resistance of senior management. There was a greater focus on training employees.

Interestingly, two participants stated that maintaining their favourable reputation was key to their organization's operations (Public Sector Integrity Commissioner, interview, July 4, 2012). If their information holdings were compromised it would damage their ability to interact with stakeholders and complainants. As well, it would also affect the reception of their findings by Parliament. As an additional example of a concern with maintaining reputation, one participant stated her organization has recently elevated the role of IM in the professional development of their employees. Every employee across the government must have annual performance assessments (PA). The PAs establish performance targets and training opportunities. For this organization, IM has been included in the annual PAs of the senior management. This is due to the organization's view that IM should be treated as a corporate asset. This participant was of the opinion that the senior managements' attitudes toward IM "trickle down to all directors, managers, and junior employees (Official Languages Commissioner, interview, July 3, 2012)." By placing IM in its' senior management's annual PAs, this may result in greater awareness of sound IM practices and a reduction in information holdings being compromised. In another organization, all employees are strongly encouraged to take training courses. When asked why this encouragement has been successful, the two participants acknowledged the strong IM support and the direct role of the organization's senior officials, particularly the Commissioner and the Chief Information Officer (Privacy Commissioner, interview, July 25, 2012). Therefore, the interview participants were largely aware that, as senior

management officials, they and their fellow senior officials have significant influence on their employees' attitudes towards IM. This significance was demonstrated in the organizations that have placed greater priority for improving their IM processes.

5) Collaboration within the Agents of Parliament. With regards to improving internal services, like IM, the pooling of resources amongst federal organizations is a growing trend. With constrained budgets and escalating costs, shared services have become a greater priority. Participants' responses about collaboration varied more than originally anticipated. Despite the growing trend of collaboration in government, it was assumed that there would be very little existing collaboration amongst the Agents of Parliament. In contrast to this expectation, the Public Sector Integrity Commissioner has a shared services agreement with the Canadian Human Rights Commission, to take advantage of the latter's greater IM-IT expertise (Public Sector Integrity Commissioner, interview, July 4, 2012). Beyond this pre-existing collaboration, the rest of the organizations presented more complex answers. There have been discussions amongst the Agents of Parliament to determine what would be their shared services (Official Languages Commissioner, interview, July 3, 2012; & Lobbying Commissioner, interview, July 13, 2012). According to one participant, the chief driver for collaboration would be to strengthen their collective identity as arms-length organizations. This follows a letter that was jointly written by some of them to the Speaker of the House Commons, indicating their interest for sharing internal services. (Official Languages Commissioner, interview, July 3, 2012). Some organizations demonstrated a broad interest in sharing a full range of internal services, while others strongly supported collaboration on particular internal services such as procurement, recordkeeping training, and email systems (Privacy Commissioner, interview, July 25, 2012; & Lobbying Commissioner, interview, July 13, 2012). One participant stated that collaboration would take considerable resources and require strong commitment from all deputy heads of the participating organizations (Lobbying Commissioner, interview, July 13, 2012). In addition, there are layers of complexity surrounding who would have authority over the shared services (Lobbying Commissioner, interview, July 13, 2012). As such, any future collaborative effort may be inhibited, as these small organizations may not collectively or individually have sufficient resources to simultaneously create shared services agreements while pursuing their individual mandates. Therefore, TBS may wish to investigate opportunities where it could facilitate shared services agreements in order to find further cost efficiencies for the federal government.

6) The Agents of Parliament exemption from many TBS reporting requirements and its impact. One area of concern for central agencies has been the challenge associated with the autonomy of arms-length organizations, like the Agents of Parliament, because they are exempt from many of the TBS reporting requirements, making it difficult for TBS to monitor policy compliance. As such, government reports of SDAs may have broad implications for the Agents of Parliament but do not directly comment on their performance and compliance with central agency policies. Collectively, the Agents of Parliament are aware of TBS policies. For many of them, their intent is to follow the "spirit" of the policies (Public Sector Integrity Commissioner, interview, July 4, 2012). One participant noted her organization was familiar with the most recent

horizontal IM audit on SDAs (Public Sector Integrity Commissioner, interview, July 4, 2012). They may adopt recommendations from such SDA reports, if the findings are applicable to their organization. Thus, the Agents of Parliament do not operate in a vacuum and take an active interest in TBS reports and audits and trends that concern the SDA community.

When asked about their autonomy and its implications, there was consensus. The participants stated their autonomy enhances their compliance (Official Languages Commissioner, interview, July 3, 2012). One participant noted that that full compliance in every policy area is not cost effective (Official Languages Commissioner, interview, July 3, 2012). As it was discussed above, many of the participants noted the usefulness of MAF. They apply the areas of management to themselves and conduct their own internal self-assessments (Official Languages Commissioner, interview, July 3, 2012; & Privacy Commissioner, interview, July 25, 2012). This will likely be an area of opportunity where TBS may provide additional expertise and assistance to these organizations that already desire to maintain the same standards as the rest of the federal government. In addition, this autonomy has granted them an opportunity to “do things for themselves and to think of their own needs (Lobbying Commissioner, interview, July 13, 2012).” As one participant stated, this “creates incentives from within” to improve their work environment as they see fit (Lobbying Commissioner, interview, July 13, 2012). It would not be in TBS’ interest to reinvent the wheel. Yet, TBS has the expertise and resources to enhance their work environment and improve the resources that are already deployed by the Agents of Parliament.

7) Rating IM as a priority. Despite the dynamic nature of IM in the public sector, it was important to try to capture the importance of IM for each organization. The participants were asked to rate IM in their organizations on a scale: low priority, medium priority, or a high priority. The ratings are reported in Table XXX below. This was an opportunity to cross-reference the tone and complexity of the participants’ previous responses to determine if they reflected the rating of their IM. One participant said, “it depends on who you talk to within the organization (Official Languages Commissioner, interview, July 3, 2012).” Another participant said that IM security is a high priority and tracking of information is medium (Public Sector Integrity Commissioner, interview, July 4, 2012). It could be inferred that depending on the area of IM, any of the three ratings would be applicable. As a result of the complexities surrounding IM, about half of the participants could not select only one rating for their IM. Some of these participants gave more fluid responses and rated IM as medium-high. These complex responses reflect the numerous elements of IM that were discussed in the literature review. Simply, there is no consensus on IM’s exact role within these individual organizations (Official Languages Commissioner, interview, July 3, 2012). This lack of internal consensus may be troublesome, as subordinate employees may not be receiving consistent communication from their senior management, concerning the values and justification for using IM systems.

With regards to the value of IM, participants from two of the Agents of Parliament firmly believed that their mandates are a strong factor for rating their IM as a high

priority (Privacy Commissioner, interview, July 25, 2012: & Lobbying Commissioner, interview, July 13, 2012). One of those two organizations participated in the Digital Office Pilot Project. Thus, it could be stated that enhanced IM support from the pilot project strengthened the organization’s awareness that sound IM practices may have a substantial impact on the effectiveness of internal operations. No organization ranked IM as low, including the organizations that have already adopted more electronic approaches to IM. Moreover, the contrast between those who provided equivocal ratings and those who were more absolute is an area for further investigation by TBS. As TBS is the authority on IM policy, it has a responsibility to ensure not only that compliance is achieved but that organizations across the government adopt similar stances towards IM.

Table 4: Participating Agent of Parliament IM ratings:

Organization	Rating
Office of the Conflict of Interest and Ethics	High
Office of the Commissioner of Lobbying	High
Office of the Commissioner of Privacy	High
Office of the Public Sector Integrity Commissioner	Medium-High
Office of the Commissioner of Official Languages	Medium

8) Gaps in support that could be filled to better support the Agents of Parliament.

Lastly, the participants noted areas where they would support further involvement from TBS. All of the participants wanted not to reduce their arms-length status. Collectively, they are interested in improving their work environment and relationship with TBS. Given the lack of resources and expertise within the SDAs, some of the participants would like TBS to adopt more of a coordinating role to make IM and IT policy experts more accessible to the Agents of Parliament (Official Languages Commissioner, interview, July 3, 2012: & Public Sector Integrity Commissioner, interview, July 4, 2012). As previously discussed, the SDAs have created a series of committees that are meant to provide additional direction and expertise to the SDA community. The Heads of IT (HoIT) body has only recently included IM on their agenda. Due to this recent inclusion, TBS may wish to provide IM guidance and resources to HoIT to further its agenda (Official Languages Commissioner, interview, July 3, 2012). One participant stated that there are some policies that they must comply with and there are others that should be more for “good practice (Official Languages Commissioner, interview, July 3, 2012).” This was an interesting statement. It indirectly conveys that these organizations do not have the capacity to fully implement all policies, while maintaining sufficient resources to meet the needs of their mandates. Formally accommodating this type of tailored request for the individual 52 SDAs would not be feasible; however, TBS may wish to examine the policies on a case-by-case basis for each SDA cluster, such as the Agents of Parliament.

Two participants raised one concern that has implications that extend beyond the SDAs to all federal organizations. In general, email systems have greatly expanded in capacity. Many employees’ emails now hold vast amounts of information that are of a sensitive nature and necessary for maintaining corporate knowledge (Privacy Commissioner,

interview, July 25, 2012). This has direct implications for access to information requests. Related to this concern, many of these organizations are facing serious staffing challenges as the “grey tsunami” approaches. One participant noted that his organization will face, in the next five years, a 40% to 50% combined rate for employees who will seek employment elsewhere or retire (Privacy Commissioner, interview, July 25, 2012). With such a high percentage of employees leaving the organization in the near future, the misuse and loss of information may have dire consequences for these organizations’ corporate knowledge and business continuity. As a result, another participant stated that TBS needs to give additional direction to the IM community for them to develop the capacity to provide more support to address the specific needs of the SDA community, such as more tailored IM guidance (Lobbying Commissioner, interview, July 13, 2012). As such, this theme affirmed that the participants desire additional resources from TBS to enhance their current IM capacity, while maintaining their arms-length status.

The arms-length status of the participants’ organizations was a prominent feature throughout the interviews. Each interview was an opportunity to grasp an in-depth understanding of their unique work environment. The findings conveyed some of the unique and common characteristics of the IM processes in the Agents of Parliament. The participants’ organizational perspectives on IM captured the different layers of IM. Despite the participants’ varying perspectives on what constituted IM, there was a general interest to see TBS expand its current level of IM support. Certain participants were more critical of the existing level of support and others made note that some central agency support existed.

Contrary to original expectations, the participants were confident that their organizations would meet the 2017 LAC deadline for electronic records. Despite the capacity challenges in the Agents of Parliament, all of the participants considered that their organizations would have enough time to become compliant with the new policy of archiving solely electronic documentation. This finding will change the tone of the recommendation chapter from one of targeted improvements to a broader perspective concerned with enhancing the overall IM capacity of these organizations. In addition, the participants demonstrated awareness of the significant influence they have, as senior management, on their employees’ attitudes towards IM. This significance was noted in the organizations that have placed greater priority for improving their IM processes, such as the one where IM has been included in the annual performance assessments of senior management. Amongst these senior officials, collaboration was a subject that evoked varying degrees of support. Overall, there was concern that without additional support, these small organizations may not have sufficient resources to concurrently enter into shared services agreements while pursuing their mandated services. Similarly to the participants’ different perspectives on the characteristics of their IM, each of the participating organizations assigned different levels of priority for IM. Lastly, the interviews conveyed the participants’ interest in additional support from TBS to enhance their IM capacity, while continuing to maintain their arms-length autonomy.

Section 3: Discussion and Analysis

The discussion section will conduct an assessment of the primary research findings, the government reports and the scholarly literature. Primary research echoed many of the arguments that scholars conveyed, such as the complexity of IM. There is a growing awareness that IM needs to be integrated into an organization's corporate functions and IM training should foster a shift in employee attitudes. As such, the discussion section has been divided into five areas of analysis: implementation challenges, role for central agencies, collaboration of internal services and information sharing, IM training and professional development, and values behind IM. Each section will focus on a specific area that emerged from both the literature review and the interviews. This analysis will strengthen the argument that IM is multi-faceted and requires multiple measures to improve the existing working environment for the Agents of Parliament and the whole SDA community.

IM Implementation Challenges. There is a host of challenges that relate to the implementation of electronic IM systems. Presently, many Western governments are faced with the opportunity and challenge to enhance their corporate functions. In terms of organizational performance, the federal government is inhibited because of the large number of aging IT systems. The outdated systems may not work together if and when organizations enter into shared service agreements to consolidate internal services (Gurses, Ozok, Wei, & Wu. 2009, p. 237). There are two risks that stem from aging IT systems: security and usability. These two challenges should be assessed simultaneously. Many internal service transactions involve material of a sensitive nature. The misuse and poor understanding of such IT systems would increase the information security risk. The usability of the IM systems requires sufficient guidance to support users' to effectively complete the tasks and to mitigate the occurrence of misuse (Gurses, Ozok, Wei, & Wu. 2009, p. 238). One challenge related to usability is the acceptance of IM systems, as successful implementation of new systems requires a re-conceptualization of government internal services (Gurses, Ozok, Wei, & Wu. 2009, p. 238). Issues surrounding usability, acceptance, and security were interwoven into most of the interview participants' responses. With regards to security, there was little direct discussion. Participants indirectly addressed the issue of security through the lens of organizational reputation. The Agents of Parliament are aware that Canadians hold them to high standards. Similarly to scholars, senior government officials are becoming increasingly responsive to the requirement to shift employees' attitudes on IM and incorporate IM into the professional development of their respective organizations. Ceeney takes a different angle. She argues that the major challenge is not only to convince subordinates to adopt new IM practices but to convince senior management that managing their information holdings is conceptually no different from other internal services that are integral to an organization, such as HR, or finance (Ceeney, 2009, p. 342). There was consensus amongst the participants that they play a significant role in shaping their employees' attitudes towards IM; however, only three participants indicated that there was also a need to shift the attitudes of senior management. Some participants stressed that "time" is a factor to successfully train employees. There remains a large portion of employees who "don't really get information management (Official Languages Commissioner, interview, July 3, 2012)." The participant's response reflects the need to ensure that guidelines and

resources for new and even existing IM systems take into account the usability of IM systems.

In addition, issues related to limited capacity may aggravate the above challenges in the SDAs. The global financial crisis, which lingers in most Organization for Economic Co-operation and Development (OECD) countries, has prompted many governments to apply fiscal restraint on operations, to varying degrees of severity (AGIMO, 2011). The current fiscal restraints have placed additional pressures on the Agents of Parliament. All of the participants indicated that they were equally subject to the government's cost containment measures. In organizations that are already faced with limited IM-IT expertise, some participants emphasized the budget cuts that resulted in a reduced workforce. They do not possess enough staff that have the appropriate expertise to manage all corporate and legislative functions (Official Languages Commissioner, interview, July 3, 2012). As a result, some participants noted the pre-existing capacity issues that have been exacerbated by the cuts to their budgets. Two participants stressed their organization's budget "is maxed out," and internal service demands are growing rapidly. These cuts are occurring at a time when there are heightened expectations for the Agents of Parliament. There is a general concern that the costs of these organizations' internal services could overshadow their core business functions, thereby compromising their mandates (Lobbying Commissioner, interview, July 13, 2012). Furthermore, the limited capacity of the SDAs may be further reduced in the long-term by their antiquated IT and IM systems and the potential effects of the government's current cost containment measures.

The central agency role in advancing IM. The role of TBS remains prominent when considering the consolidation and collaboration of federal organizations' internal services. The federal government has noted that unless it can better foster and monitor the development of IM, the potential for government-wide improvements in IM will be reduced (Office of the Auditor General, 2008). The Agents of Parliament shared this view, as they perceived TBS policies to be historically geared toward the large federal organizations, like Transport Canada or the Department of Fisheries and Oceans, who have the finances and capacity to effectively absorb new central agency requirements (Privacy Commissioner, interview, July 25, 2012). In addition to retuning TBS policies, policy compliance needs to be clearer for SDAs. One participant acknowledged that TBS should provide solutions that may be practically applied by the SDAs (Lobbying Commissioner, interview, July 13, 2012). It may be assumed that the supporting documentation and resources, which traditionally accompany policy, have also been drafted to more readily suit the needs of the larger federal organizations that possess more robust complements of HR, IM-IT and administrative staff to fill the corporate functions.

In 2008, the Office of the Auditor General released a report which noted that the mechanisms that are being used to address the modernization of aging IT infrastructure, such as shared services, will be difficult to implement by individual organizations (Auditor General, 2010). Thus, strong and consistent coordination and leadership by TBS, through its internal divisions of the Chief Information Officer's Branch (CIOB) and the Governance Sector (GOS), is necessary to fully implement those mechanisms

(Auditor General, 2010). Since this Auditor General report, the government has begun to create Shared Services Canada (SCC). However, as it was previously stated, limitations remain with respect to the scope of SCC's mandate. Despite SCC taking responsibility for the IT operations and IT procurement of the largest organizations, it will not assume responsibility for those services of the SDAs. Through the authority of the TBS President (Minister), TBS has the ability to direct Parliament to expand the scope of SCC's mandate to include either all or certain clusters of the SDA community. At present, it is unlikely that this direction would be well received, as the organization continues to form. However, as the SCC matures organizationally, it would develop the technical expertise that could be applicable to SDAs. In the long-term, TBS may wish to use the SCC as another technical resource to enhance the capacities of various SDAs.

For some in the Agents of Parliament, recordkeeping demands are a particular area that is driving their internal policies. TBS has provided some leadership in this area, as it is of increasing priority (Official Languages Commissioner, interview, July 3, 2012). Yet, some interview participants stated leadership was inconsistent. Some Agent of Parliament officials believed that presently there has been no IM support. As a result, an inconsistent image has been painted, in which central agency support is strong in some areas and weak in others. According to one interview participant, only when his organization got involved in the Digital Office Pilot Project did TBS give them more support (Lobbying Commissioner, interview, July 13, 2012). Participation may be constrained if organizations are under the assumption that they will be asked to participate and expend resources, while continuing to meet their mandates without being provided with new resources.

With regards to TBS support, the Agents of Parliament would be interested in arrangements that safeguard their arms-length status while increasing their capacity to follow TBS policy. As such, Nicholas Joint devised a concept in the United Kingdom that has applicability for the federal government. Joint has argued for a devolved-centralized approach. A devolved-centralized approach seeks to combine the benefits of centralized solutions, such as better economies of scale, with the benefits that derive from devolved solutions, which include more tailored and localized initiatives (Joint, 2009, p. 4). This may be more challenging than what the academic literature espouses. Yet, this is an innovative approach. During the research process of this report, Joint appeared to be the only individual that discussed this type of hybridized solution to internal services, like IM. One may argue that the government finds itself in a pendulum motion going between periods of heightened centralization and periods of significant decentralization. This research project intends to convey recommendations that strive for a balanced approach. There is a role for central agencies to facilitate an improved work environment. There is also a role for organizations to individually and collectively devise solutions that work best for their particular needs. Another interview participant supported the notion that the Agents of Parliament should play a more active role in monitoring themselves (Official Languages Commissioner, interview, July 3, 2012). This is one area that was not discussed in central agency reports and audits. Yet, this notion demonstrates the desire to convey to the public that the Agents of Parliament want to conduct their operations in an accountable manner. Simultaneously, this sentiment conveys that the Agents of

Parliament do not desire to be placed under the umbrella of TBS, but would be willing to collaborate in a manner that grants them additional capacities. With this in mind, a devolved-centralized approach to improving IM is warranted. Central agency assistance should be targeted to the community of organizations that need a particular support. TBS has the capacity to enact the facilitator role and to encourage the SDAs, like the Agents of Parliament, to participate in central agency-facilitated initiatives (Joint, 2009, p. 5). Therefore, the inconsistent leadership on IM that TBS has shown could improve if it adopts more of a facilitator role, similar to Joint's devolved-centralized approach, in expanding the limited capacities of the Agents of Parliament.

Collaboration of internal services and information sharing. Amongst the Agents of Parliament, some interest has been expressed for collaborating on internal services. The benefits of collaboration and sharing of internal services was discussed in the scholarly literature. In addition, government reports have increasingly promoted not only the benefits but also the necessity for organizations to consolidate and collaborate on their corporate functions, in order to streamline the pursuit of legislative mandates. When collaboration occurs on specific items like IM and IT, failures have historically been commonplace. Reasons for failure include the following: absence of strategy, poor project management, overreliance on IT as the solution to the problem, and lack of internal ownership (Askounis, Charalabidis, & Sarantis, 2011, p. 117). These reasons for failure illustrate the gap between the scholarly literature and the IM perspectives of the interview participants. The aforementioned factors for failure may be widespread, yet these failures do not explicitly take into account how they are impacted by the potentially limited understanding of new IM behaviours by employees. Interestingly, some of the interview participants were more aware of the value-laden dynamics of IM than some of their counterparts in academia. Adopting new behaviours to serve new internal processes is a very slow process and there remains considerable resistance (Official Languages Commissioner, interview, July 3, 2012); this statement on adopting new behaviours continued to address the more elusive "human component" of these processes and technologies. Again, there is the recognition amongst some in the Agents of Parliament that phased and tailored IM training is an integral part of the solution. Employees need time to adjust and more importantly, employees should have direct input into the creation of training and outreach activities (Lobbying Commissioner, interview, July 13, 2012).

As most of the discussion concerning collaboration has focused on the inter-organizational level, there was also some discussion in the literature that focused on the need for improved internal information sharing and communication. Amongst the Agents of Parliament, there are attempts to foster synergies between internal divisions in order to enhance the use of information to streamline decision-making. In the latest strategic plan of one Agent of Parliament, new inter-branch and intra-branch development assignments will be offered to employees to provide them with a broader depth of experience and exposure to the whole organization (Privacy Commissioner, 2011). This type of internal placement for employees would likely improve internal information sharing, as employees would develop a more holistic understanding of the linkages between the individual divisions of their organizations. Poignantly, one interview participant noted that the business side of the organization is not driving IM but rather, it is being driven

from the more technical IT division (Official Languages Commissioner, interview, July 3, 2012). As a result, there is no internal consensus on the drivers for IM. This lack of consensus on the drivers and values behind IM may likely result in either failed implementation of IM-IT projects or inconsistent communications on IM from individual senior management officials.

A commonly perceived benefit of shared internal services is the mitigation of the isolation that defines the work environment of many SDAs. However, there are outstanding issues of whether the organizations have the legal authority to share their internal services (Public Sector Integrity Commissioner, 2009). Despite this brief acknowledgement in a government report, there has been no other direct assessment to determine if federal organizations have the necessary legal and legislative authorities to consolidate internal services. This reflects another gap in the literature. Scholars have encouraged shared internal services, yet the legal issues of consolidating the administrative and corporate functions have thus far garnered limited scrutiny.

Thus far, many of the Agents of Parliament have been informally collaborating on defining the exact parameters of their individual internal services, the number of employees assigned to those services, and determining which services would be shareable (Official Languages Commissioner, interview, July 3, 2012). This is indicative of the desire, amongst these organizations, to find economies of scale and to improve the quality of their individual services. Concurrently, there is hesitation on proceeding if a shared services agreement were to commence under existing conditions. Collaboration would require considerable effort and commitment from senior management (Privacy Commissioner, interview, July 25, 2012). As many senior officials in the Agents of Parliament are already performing multiple roles, the risks of being overwhelmed and sidetracked from their core service during collaboration initiatives are likely. Internally, the Agents of Parliament would need to ensure that internal service authorities are well defined (Privacy Commissioner, interview, July 25, 2012). This is an area where they have capacity. Yet, digital continuity of electronic information is most at risk when changes occur in the management processes. Information and information holdings will need to be managed meticulously during periods of transition and the usability of such systems will also need to be ensured (National Archives, 2011). The complexities of such transitions to collaborative and shared services arrangements will be cumbersome for these small organizations, unless TBS assists in facilitating the implementation and the professional development associated with new IM systems. Moreover, it has been conveyed that the issues that would inhibit successful collaboration in shared services persist. Within organizations there may not be consensus on the drivers of IM, while government and scholarly literature have yet to discuss the potential legal barriers for consolidating internal services. Despite the aforementioned challenges, an opportunity exists for additional TBS facilitation due to an established interest amongst some of the Agents of Parliament to enter shared service agreements.

IM training and professional development. Another component of IM that was discussed in the literature review was IM training and professional development. Historically, IM has been placed in the same box as IT where, much like IT, once it has

been installed, the problems are thought to be largely solved. As IM embodies the dynamic “human component,” access to training to accommodate an organization’s particular needs is crucial (TBS, 2010). In one Agent of Parliament, they regularly provide IM guidance to all employees to better assist them with the familiarization of existing and new IM processes (Privacy Commissioner, interview, July 25, 2012). The participant from this Agent of Parliament was also of the opinion that information management is a valuable resource that provides benefits to an organization when it is designed with the objective to strengthen the organization’s mandate (Orna, 2008, p. 556). Some of the interview participants understood that in order for IM, as a daily practice, to be fully integrated into an organization’s culture, they would need to change to reflect the current reality and challenges of electronic information (Lobbying Commissioner, interview, July 13, 2012). In the smallest Agent of Parliament, they are currently promoting a “culture of sharing of information (Lobbying Commissioner, interview, July 13, 2012).” This statement represents a significant change in the way in which public organizations, of any size, view their information. It is important to note that during the research for this project, there was little government documentation that indicated that the large federal organizations have undertaken initiatives, like the aforementioned Agent of Parliament, to radically re-conceptualize how they view the management of their information. Despite the numerous capacity challenges of these SDAs, their small sizes may also be an advantage. Large organizations may likely have better economies of scale, but SDAs may be able to communicate desired changes and IM practices more expeditiously. This one advantage for small organizations was not observed during this project’s research process and warrants further investigation to determine how small organizations could take advantage of their smaller size.

According to Aucoin and Heintzman, continuous learning is a prominent dimension of a public organization’s form of accountability. It ensures employees are aware of the latest ethical practices and means to conduct internal services. Professional development and training has been acquiring greater attention within many circles of the federal government (Barrette, Beauregard, Cornei, & Lemyre, 2008, p. 337). It is understood that new IM processes, among a series of internal services, require new ways of thinking. Therefore, training cannot be a one-time occurrence, as this would unlikely result in sustained shifts of attitude. This shift of attitude will need to occur from the top-down and from the bottom-up. Amongst many senior officials, within the Agents of Parliament, some have whole-heartedly embraced new approaches to IM, while others remain more resistant (Official Languages Commissioner, interview, July 3, 2012). SDAs do not have the capacity to actively provide continuous professional development and to engage in discussions on collaboration initiatives and pursue their mandates without interruption. In one Agent of Parliament, an important element of the senior management’s role is outreach and training for their employees (Lobbying Commissioner, interview, July 13, 2012). This is another shift in the way in which senior managers view themselves. The literature review noted that new trends are promoting a stronger and more interactive role for senior management concerning their employees’ professional well-being. These new trends of acquiring IM skills and competencies fall within the technology acceptance model (TAM), which is one of the more widely applied IM-IT adoption theories (S. Brown, 2009, p. 5). This theoretical model looks at the factors surrounding ease of use

for the user. Employees are not mechanical instruments and thus require environments that positively foster the adoption of the new values and the integration of new processes into their daily operations.

Values behind IM. The values behind new IM processes are arguably some of the most important concepts to comprehend. Viewing IM as a value-laden concept is relatively new. The process of managing an organization's information commences with internalizing the values behind the IM processes and recognizing that they are to serve the business needs of an organization in the same manner as HR and financial services (National Archives, 2011). Prior to initiating the interviews with the senior officials, it was presumed that one challenge facing these organizations was a lack of or inability to understand central agency policies, specifically the policies and directives related to IM and IT. The findings that were presented in the numerous government reports and audits seemed to describe organizations that were lacking in capacity to implement many TBS policies. According to one interview participant, the Agents of Parliament are aware of the critical policies, yet their capacity to implement and disseminate them internally is challenging (Official Languages Commissioner, interview, July 3, 2012). This shifted the tone of the research project to one that is concerned with the means to foster integration of new IM processes and less on the means to simply better engrain central agency policies. Senior management, with assistance from TBS, have a duty to promote new approaches to IM, as employees will need to see practical alignment between their daily operations and the values behind the promoted processes (Kringas, & Stewart, p. 687). As such, the survival of a public organization rests on its capacity to adapt to changes in its environment. Successful adaptation is dependent on the ability of individual employees to internalize the values behind new approaches, which will keep their organization afloat. The sharing and exchange of information is critical to an organization. Another interview participant noted that effective management of information enables employees to readily access particular data to more effectively do their jobs (Official Languages Commissioner, interview, July 3, 2012). Improving the manner in which an employee conducts his or her individual tasks would serve to better meet an organization's mandate. Thus, this participant conveyed the linkage between the management of an organization's information holdings and its impact on meeting their mandated demands.

Furthermore, it has been conveyed that the interview findings largely echoed the arguments made in the literature review. We have seen that the various IM components are inter-dependent, as the success of one rests on another. With respect to the issues surrounding the limited capacities of the SDAs, their antiquated IT and IM systems and the potential effects of the government's current cost cutting measures may further erode existing capacity. Government-wide measures, like the creation of Shared Services Canada, have been developed to address the high costs of internal services; however, the scope of these government-wide measures needs to include the full participation of the SDAs. As the Auditor General's report noted, individual federal organizations do not have the resources to modernize their aging IT and IM processes. In addition to the limited scope of existing government-wide modernization measures, the inconsistent leadership on IM that TBS has demonstrated could be improved if the delivery of its

policy and governance support adopted more of a facilitator role. This facilitator role could incorporate a devolved-centralized approach to expand the existing capacities of the Agents of Parliament. As a result, there is an opportunity for additional TBS facilitation due to the interest amongst some of the Agents of Parliament to share some of their internal services, including IM. Any new facilitator role to promote sound IM practices in the SDA community would need to reflect the vital linkage between the management of federal organizations' information holdings and the need for organizations to fulfill their mandates. The following chapter will discuss four recommendations that will take into account the aforementioned items in the findings and discussion chapter. The recommendations will strive to improve the IM landscape of the Agents of Parliament, on a number of different yet interrelated fronts.

Chapter 5: Recommendations

The following four recommendations are intended to improve the existing work environment of the Agents of Parliament, with broad implications for all SDAs. As the interview findings indicated that the Agents of Parliament are confident that they will be able to meet LAC's 2017 deadline, the recommendations will be directed more to improving their existing IM systems and practices. Each recommendation will address different, yet interconnected, areas related to IM. In the short-term, these four recommendations will not be cost-neutral. The ongoing cost containment measures in TBS were taken into consideration during the drafting of the recommendations. The recommendations would not require new funding and TBS' existing resources and staff would be reallocated. However, it is argued that TBS's existing budget may be able to individually absorb the costs of the parts of the recommendations that fall in its authority. As such, there may also be costs for the Agents of Parliament that participate in the selected recommendation(s). Whichever internal division of TBS spearheads the selected recommendation, discussions will need to occur to determine what existing financial flexibility is present to incur the costs of a new initiative. New costs will result from expanding the current level of central agency support and IM resources. It is unlikely that new full-time equivalents (FTEs) will be required to support the recommendations. Consideration has been taken to ensure the recommendations are aligned with the government's current climate of fiscal restraint.

Recommendation 1: TBS (GOS & CIOB) consult with the wider SDA community to develop "cluster-specific" IM best practices/guidelines

This recommendation addresses the need to enhance IM guidelines for the SDAs. As the responsible central agency, TBS is in a position to improve the support services that are given to the SDAs, through the provision of new IM resources. The limited capacity of most SDAs makes it difficult to conduct and pay for the same calibre of professional development that is available to larger federal organizations. Thus, TBS should conduct consultations with each of the SDA clusters. This would be done in a series of steps. As well, it should be noted that this recommendation takes into account the current cost containment measures in TBS. This recommendation would not require new funding.

Existing resources and TBS staff would be reallocated to implement it. Below, the steps have been laid out chronologically.

1: The TBS internal divisions of GOS and CIOB would take the lead on this initiative. A team would need to be assembled from employees of both GOS and CIOB. Firstly, one middle or senior management official would be selected, as the team lead. The team lead would support GOS and CIOB senior management in determining the number and the selection of employees for the team.

2: TBS would initially meet with the HoIT Committee, as they are the SDA body that represents the IT and IM functions of the SDAs. The consultation would take place through workshops with each of the SDA clusters, which would capture the general attitudes of SDA employees towards IM. TBS officials would work closely with HoIT to guarantee that the intended content in the TBS-facilitated workshop discussion sections captures the IM reality across the SDAs.

3: Upon assembling the joint team, TBS would draft the materials for the workshop discussion sections, which would take into account the consultations with HoIT. The individual discussion sections should be designed to allocate approximately 45 minutes for discussion. The workshop would be broken down into themed discussion sections, which capture the different areas of IM.

4: Upon completion of the workshop materials, TBS would seek feedback from HoIT to ascertain if the discussion sections generally meet their needs.

5: Once feedback has been incorporated into the workshop materials, TBS would contact senior management in each SDA to inform them of the upcoming workshops. Due to the collectively large number of employees across the SDAs, four or five employees with middle-management experience from different internal divisions of each SDA would be selected. Selecting employees from multiple internal divisions would allow TBS to gather responses that represent whole organizations. In the case where SDAs have very few employees, a smaller number of representatives would be sufficient.

To reduce costs, workshops would be done for each of the SDA clusters. This would also be an opportunity for SDAs with similar mandates to hear from one another's IM experiences. Depending on the number of participants per workshop, one or two TBS employees would be sufficient to facilitate the workshops. As such, multiple workshops could occur simultaneously. This would further reduce the lag between developing the workshops and collecting and collating the workshop data.

Development of Cluster-specific IM best practices and guidelines. Once the workshop data has been collected and collated, the TBS team would proceed with drafting preliminary IM best practices and guidelines, taking into account the diversity amongst the 52 organizations. The body of the final document containing the best practices and guidelines will be standardized. The standardized document would then be modified for each SDA cluster. The workshops with each cluster would provide the TBS team with the

necessary details to tailor the document to reflect the unique needs of each SDA cluster. The workshops with each of the SDA clusters would provide TBS with the IM nuances that could be incorporated into the cluster-specific documents, furthering the relevance of the document for the employees in each cluster.

It is advised that the final document contain links to all current IM, IT, and recordkeeping policies and directives. As TBS has already developed preliminary indicators for compliance with TBS IT policy, these indicators could be included. Yet these indicators have not been formally communicated to the SDA community. As well, it is important that the document speak to the users about why IM is an invaluable part of their organizations.

Deployment of the resource. The TBS team would conduct presentations for each SDA cluster. It would be cost-effective to bring multiple organizations together for the individual presentations. The presentations would focus on how the guidelines and other tools within the document may be applied to the individual organizations' IM training and professional development. Post-delivery, TBS would consult with SDA senior officials six months after the presentations. This could be followed by a secondary consultation, which would occur an additional six months later, to ascertain the effectiveness of the new guidelines and to determine how senior management in each SDA cluster have incorporated it into their internal operations. The two follow-up sessions would allow TBS to make adjustments to the guidelines, if necessary.

Recommendation 2: Expand the Interchange Canada program to include exchanges within government

This recommendation broadly addresses the need to improve information sharing amongst the Agents of Parliament. Interchange Canada is an existing TBS program. It was created to promote stronger linkages between the federal public service and other employment sectors outside the public service. It allows federal employees to take secondments in another employment sector to improve knowledge sharing and business practices. As well, it should be noted that this recommendation takes into account the cost containment measures within TBS. This recommendation would not require new funding, as the existing Interchange Canada program would be leveraged to reduce the financial impact on TBS. Existing resources and TBS staff would be reallocated to implement it.

Presently, this program is not available for exchanges within the federal government. It has been conveyed that information sharing between and within organizations is increasing. The individual Agents of Parliament face similar challenges, due to their arms-length status and operating structures. These organizations are not in a position to individually hire dozens of new staff; however, each senior management would likely benefit from the experiences and lessons learned from their counterparts. With respect to IM and other internal services, the primary research revealed that different approaches are applied across this cluster. Thus, an exchange where not only personnel but also best practices are shared would be invaluable.

Initially, exchanges would occur between senior or middle management officials from the corporate service branches, which include IM-IT. These officials would likely be the most familiar with IM operations and challenges. Yet, the benefits of an exchange of employees would extend beyond the internal services domain. Depending on the success of the initial exchanges, exchanges from other internal divisions could occur.

Initiating an assignment between two senior or middle management officials, from different Agents of Parliament, could use the existing Interchange process. As GOS is the responsible TBS division, it could assist interested officials from one or more Agents of Parliament by identifying secondment opportunities. In the assignment identification process, GOS and the Agents of Parliament would need to identify any security and legal barriers for secondments. Once these issues have been addressed, GOS and the Agents of Parliament would then determine the approximate length of time that would be appropriate for secondments, either a six-month or one-year period.

Upon the completion of the details for informally establishing the interchange parameters, GOS would approach the Interchange Canada Program, which is located in TBS' Office of the Chief Human Resources Officer (OCHRO) (150). GOS would need to convey to OCHRO the benefits of an expanded Interchange Program. It is likely that an expanded program would require the support of TB Ministers. Once OCHRO's support has been secured, GOS and OCHRO would need to collaborate on a Treasury Board submission that would present the rationale for an expanded program in a climate of fiscal restraint. The facilitator role of TBS, provided through OCHRO, would unlikely require new funding to coordinate the exchange of Agent of Parliament officials. Expanding this program would have the added benefit of elevating TBS' presence amongst these organizations without being perceived to be interfering in their arms-length environment. Through its facilitation of the expanded program, TBS would be able to more easily assess the Agents of Parliaments' use of central agency policies without forcing them to report on compliance. Depending on the length and parameters of individual assignments, the Agents of Parliament may require time to be set aside for the participating officials to become familiarized with their new (temporary) organization. It is unlikely that the costs incurred by the Agents of Parliament would be significant, as the program would permit only one individual to be placed in another organization per secondment. It is expected that these exchanges would strengthen the collective identity of the Agents of Parliament, as it would result in a greater understanding of each other's corporate services and individual mandates. As well, this recommendation would assist in streamlining information sharing amongst the organizations. However, in the current fiscal environment, assignments and interchanges may be less likely as participating SDAs may not have sufficient funding to provide training and other professional development resources to employees on assignment.

Recommendation 3: Expand and modify the Management Accountability Framework (MAF) to be better used as a voluntary/self-assessment tool for the Agents of Parliament and other arms-length statutory organizations

This recommendation addresses the need to improve the Agents of Parliament's existing assessment tools. As a result, direct buy-in from TBS senior officials, primarily from the

Expenditure Management Strategies sector (EMS), will be required. EMS is the designated authority on the MAF assessment tool and conducts rounds of MAF for the majority of government organizations. Arms-length organizations, like the Agents of Parliament, are not subject to the MAF. As the Governance Directorate, within the Governance Sector, is the designated TBS authority for the provision of policy and governance support to the SDAs, it would be in a position to take the lead on this initiative at TBS. As well, it should be noted that this recommendation takes into consideration the cost containment measures within TBS. This recommendation would not require new funding and existing resources and TBS staff would be reallocated to implement it.

Currently, many Agents of Parliament are using the MAF template as a self-assessment tool. Many of the interview participants acknowledged that MAF complements their internal audits and evaluations on services, like IM. As MAF is a well-established assessment tool, it is understood by the Agent of Parliament community. As such, it would be appropriate for this existing resource to be modified to better suit their internal assessment functions.

GOS would initiate consultations with the individual Agents of Parliament to gain a more in-depth understanding of the extent in which they apply MAF. Consultations would determine which MAF sections, Areas of Management (AoM), are applied. Consultations would convey to what degree the MAF self-assessments are formally conducted. In addition, consultations should reveal how many staff are involved, the length of time, and the degree in which senior management are involved.

GOS would then collaborate with EMS to create a modified MAF assessment tool that incorporates the feedback from the Agents of Parliament. The modified MAF may be weighted more heavily in some AoMs and less in others. A separate collaboration process with CIOB would be beneficial, once a draft modified MAF is complete. Discussions with CIOB would assist in determining if a modified self-assessment tool would be sufficient for the Agents of Parliament to become more aware of their progress in advancing their individual IM systems and in complying with TBS IM policy.

Once the modified MAF has been completed, TBS (GOS and EMS) officials would have the opportunity to conduct presentations to the Agents of Parliament to explain how the new tool could be applied in the most cost-effective manner. This may provide a secondary benefit to TBS. The Agents of Parliament would remain at arms-length. However, by presenting the new assessment tool it would be an opportunity for TBS to become more aware of the on-the-ground realities of these organizations. This enhanced two-way line of communication would improve TBS's organizational understanding of this SDA cluster and its ability to provide policy and governance support.

Therefore, it is anticipated that in the long-term, the Agents of Parliament would have a collectively enhanced understanding of IM and an improvement in IM processes that will assist in streamlining internal operations. As well, it is expected that if one or all of the recommendations are implemented, information will become more secure and reaching

the potential of IM systems will be obtainable and more cost-effective. However, it is difficult to accurately determine the exact amount that would be saved. This is one of the primary challenges with these recommendations.

Recommendation 4: Conduct research on the remaining two Agents of Parliament, the Office of the Auditor General and Elections Canada, to further identify relevant best practices

This report did not investigate the Auditor General and Elections Canada due to project constraints. These two Agents of Parliament are the largest organizations in their SDA cluster. Recently, both organizations have been involved in high-profile audits and investigations, such as the fighter jet procurement and elections fraud. As such, the Government and Opposition, the media and the public likely place considerable scrutiny on their findings. Arguably, this may prompt both organizations to ensure they have sound IM practices. TBS may leverage the findings in this report by extending the research to include both of these organizations.

It is recommended that TBS consult with the senior management in Elections Canada and the Auditor General. With respect to the current cost containment measures within TBS, the existing interview questions that were used for the interviews with the other Agents of Parliament may again be used in the consultations with these two organizations. As well, this recommendation would not require the allocation of new funding for TBS, including staff. The responses from these organizations may reveal additional innovative solutions and best practices that have been undertaken by both organizations. As well, TBS may provide them with access to this report so that they may gain a greater awareness of the challenges and best practices of their fellow Agents of Parliament.

Upon the completion of the consultations with Elections Canada and the Auditor General, TBS may wish to draft an addendum to this report whereby TBS could include the specific findings and best practices that are employed by these two organizations. Furthermore, TBS could provide the addendum to the other Agents of Parliament, further increasing awareness of sound IM and the collective identity of the Agents of Parliament.

Conclusion

As the majority of the SDAs face a host of challenges, the Agents of Parliament must additionally contend with a unique work environment that is based on their arms-length status. As a result, the findings and final recommendations have been framed in a manner that took into consideration this SDA cluster's operational autonomy. Each of the report's chapters noted a breadth of IM, from the prominent IM elements in the literature to particular IM challenges faced by the Agents of Parliament in the findings and discussion chapter.

The methods chapter confirmed that qualitative methods were chosen to conduct the research and analysis of this research project. It was the "human component" that was selected to be the theoretical framework, as it was argued that it appropriately captured the multi-faceted nature of electronic IM in the public sector. It influenced the parameters

of the findings and discussion chapter and provided direction to the literature review. The seven sections of the literature review directly and indirectly conveyed the different variables of the human component: interoperability, usability, and acceptance.

This literature review reinforced the understanding that IM is not an autonomous function. IM is a strategic internal service and is interconnected to all functions of a public organization. It is now evident that electronic IM is a relatively new field and it has been a challenge for national level governments to understand and quantify it. One common rationale for the difficulty in understanding IM relates to the more complex qualitative nature of unstructured data: emails, spreadsheets, and briefing notes. The technological acceptance model (TAM) was noted as one of the most influential theoretical concepts. TAM seeks to explain factors that allow users to adopt new IM systems. The discussion on the human component was touched by many scholars who supported shifting organizational behaviour away from a mechanical application that is commonly associated with IT. The literature also indicated that TBS finds itself with a more assertive central agency role, post-Accountability Act and post-Gomery Report. This assertive role may accompany the desire by senior TBS officials to increase inter-departmental collaboration on IM. More scholars are now of the opinion that poorly used information technologies are not the primary challenge, but the way in which employees understand the technologies and their related roles and responsibilities remains a serious challenge. The heightened awareness of the challenges associated with employee understanding of IM systems aligned well with the human component theoretical framework. The framework also informed the discussion surrounding risk management and strategic planning in public sector organizations. The literature further highlighted that more scholars and bureaucrats have called for IM to be integrated into these corporate functions. In the current period of cost containment, aligning internal services like IM to risk management and strategic planning may further mitigate the effects of constrained budgets. Importantly, the government literature conveyed that poor IM has disproportionately affected SDAs and many are inhibited by their limited capacities to adequately address the management of their information holdings.

The government's findings on the SDAs' management of their information holdings and the findings from the Agent of Parliament interviews reflected the arguments made by scholars. With regards to the issues surrounding the limited capacities of the SDAs, their outdated IM systems and the potential affects of the government's current cost containment measures may further erode existing capacity. Government-wide measures, like the creation of Shared Services Canada (SCC), were crafted to address the escalating costs of internal services. Yet, the scope of these cross-government measures should expand to include the full participation of the SDAs. As the Auditor General noted, individual organizations do not have the resources to modernize their aging IT and IM systems. In addition to the narrow scope of existing cross-government modernization measures, the interview participants noted the inconsistent leadership on IM that TBS has demonstrated. IM leadership could be improved if TBS's delivery of its policy and governance support adopted more of a facilitator role. The facilitator role could take on a devolved-centralized approach in order to expand the current capacities of the Agents of Parliament. There is an opportunity for additional TBS facilitation, as several interview

participants from the Agents of Parliament expressed interest in sharing some of their internal services, particularly IM. Any new facilitator role that would promote IM practices in the SDA community should consistently reflect the linkage that exists between the management of organizations' information holdings and the pursuit of organizations to better meet their mandated demands.

The four proposed recommendations sought to strengthen the Agents of Parliament's ability to meet their mandated demands by improving and expanding the existing TBS IM resources. In the long-term, it is expected that the Agents of Parliament, and broadly the SDA community, would have a collectively enhanced understanding of IM that would result in and an improvement in IM processes and assist in streamlining internal operations. As well, it is expected that if one or all of the recommendations are implemented, the Agents of Parliament's information holdings will become more secure and the potential of IM systems will be more attainable. As it takes time for employees to effectively internalize new best practices and behaviours towards IM, it may be difficult to quantify, in the short-term, the degree to which the individual recommendations will have improved the current state of IM. Furthermore, consistent facilitation of sound IM practices from TBS may be a deciding factor for fostering a strong understanding and support of IM from the Agents of Parliament. In the near future, the federal government may be in a position where it may be able to provide leadership to other Westminster jurisdictions on matters related to mitigating the operational challenges of national level governments' smallest organizations.

Appendix 1: Interview Questions for the Primary Research

- 1) What does IM (information management) encompass in your organization?

- 2) Treasury Board Secretariat provides support to SDAs on horizontal issues, such as: case management, shared services, and governance support. From the perspective of your organization, has Treasury Board Secretariat provided effective support in information management? How would you describe the support they have provided to your organization?

- 3) Are you aware of the current Treasury Board Secretariat IM and IT policies? What are some of the general challenges that your organization faces with incorporating the IM and IT policies?

- 4)
 - a. How does your organization review its IM needs? Does your organisation have the capacity to develop IM strategic plans?

 - b. How does IM assist your organization in achieving its mandate? Are there any barriers to aligning IM policies with your organisation's mandate?

- 5) Does your organization's senior management encourage employees to improve their IM skills? Provide examples, such as mandatory training courses, internally available guidelines, discussing IM with employees during their annual reviews, and etc?

- 6) Would your organization be amenable to collaborating with other Agents of Parliament on the following items: records management, information technology procurement, sharing professional development resources (funding, and training), human resources, and/or the development of common IM resources?

- 7) As the Agents of Parliament are exempt from many Treasury Board Secretariat reporting requirements, has this factor inhibited compliance or has this allowed your organization to adopt an innovative approach to implementing Treasury Board Secretariat policies?

- 8) To what extent is your organization aware and prepared for Library and Archives Canada's 2017 deadline for when paper-based information will no longer be archived and replaced by electronic information?

- 9) Lastly, how would you rate IM, as a priority for your organization? Please explain.
 - i) Low priority
 - ii) Medium priority
 - iii) High priority

- 10) Are there things that would you like to see from Treasury Board Secretariat, in terms of IM support? Are there are any gaps that could be filled to better support your organization?

Appendix 2: List of current Small Department and Agencies

Note: The list of Small Departments and Agencies is based on the budgetary threshold of \$75M.

Assisted Human Reproduction Agency of Canada	National Energy Board
Canada Industrial Relations Board	National Film Board
Canadian Artists and Producers Professional Relations Tribunal	National Parole Board
Canadian Centre for Occupational Health and Safety	National Round Table on the Environment and the Economy
Canadian Environmental Assessment Agency	Northern Pipeline Agency
Canadian Forces Grievance Board	Office of the Commissioner of Lobbying
Canadian Grain Commission	Office of the Commissioner of Official Languages
Canadian Human Rights Commission	Office of the Communications Security Establishment Commissioner
Canadian Human Rights Tribunal	Office of the Co-ordinator, Status of Women
Canadian Intergovernmental Conference Secretariat	Office of the Correctional Investigator
Canadian International Trade Tribunal	Office of the Governor General
Canadian Northern Economic Development Agency	Office of the Information Commissioner
Canadian Polar Commission	Office of the Privacy Commissioner
Canadian Radio-television and Telecommunications Commission	Office of the Public Sector Integrity Commissioner
Canadian Transportation Accident Investigation and Safety Board	Patented Medicine Prices Review Board
Canadian Transportation Agency	Public Appointments Commission Secretariat
Commission for Public Complaints Against the RCMP	Public Service Labour Relations Board
Copyright Board	Public Service Staffing Tribunal
Courts Administration Service	Registrar of the Supreme Court of Canada
Farm Products Council of Canada	Registry of the Competition Tribunal
Financial Consumer Agency of Canada	Registry of the Public Servants Disclosure Protection Tribunal
Financial Transactions and Reports Analysis Centre of Canada	Registry of the Specific Claims Tribunal
Hazardous Materials Information Review Commission	Royal Canadian Mounted Police External Review Committee
Indian Residential Schools Truth and Reconciliation Commission	Security Intelligence Review Committee
Military Police Complaints Commission	Transportation Appeal Tribunal of Canada
National Battlefields Commission	Veterans Review and Appeal Board

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