

AUDIT REPORT

AUDIT OF INNOVATION MANAGEMENT

INTERNAL AUDIT FUNCTION AUDIT AND EVALUATION DIRECTORATE

APRIL 2012





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Cat. SB4-21/2012E-PDF ISBN: 978-1-100-20422-2

EXECUTIVE SUMMARY

Background

The Audit of Innovation Management was part of the 2010-2013 Risk-Based Audit Plan which was recommended for approval by the Departmental Audit Committee and subsequently approved by the Deputy Head in September 2010.

To continue to fulfill its mandate in an increasingly digital world, Library and Archives Canada (LAC) has embarked on an ambitious modernization exercise made up of 12 modernization innovation initiatives (MII).

The objective of the audit was to determine if the innovation management governance process and internal control procedures were adequate and effective to allow LAC to fulfill its modernization objectives.

Findings and Recommendations

Governance

A governance structure with clear roles and responsibilities for the management of innovation projects was formally adopted. Its effectiveness should be improved with the use of a challenge function supported by a formal and active mechanism to report and monitor progress.

Rigorous Approach

A rigorous structure for change management, project management and risk management was not available to support the implementation of the MIIs effectively. However, individual project management structures were established for some MIIs and provided a level of monitoring that enabled the achievement of a number of the innovation project deliverables.

An infrastructure and capacity for change management and project management, aligned with the needs of LAC, should be developed to support project managers and to demonstrate sound stewardship in project delivery at LAC.

The risk-management process for innovation initiatives should be reviewed regularly and documented appropriately to ensure that significant risks are considered, monitored and mitigated with appropriate measures.

Communication

A number of departmental communication tools were used during the MII development period to communicate information to employees. However, evidence shows that these measures had moderate success. Although the common direction of modernization was known to staff, the implications were not well understood. This had an impact on the degree of engagement staff had towards the Modernization initiative. Furthermore, managers were not equipped to ensure continuous engagement and communication with staff.

It is necessary to implement a strategy for managers and executives to support continuous communication and engagement of employees with respect to modernization.

Audit Conclusion

The audit concludes that an innovation management governance structure is in place, but improvements are required to the challenge function to support an effective governance process. Furthermore, internal control procedures need to be enhanced for sound stewardship to effectively achieve innovation objectives.

The establishment of the MIIs was a major step in the modernization of LAC. As LAC continues to innovate, care should be given to its evolving governance structure. A changing environment always presents major challenges including reaching the right balance between staff engagement and moving the agenda forward.

An extensive and regular internal consultation process among all levels of LAC's various sectors and corporate functions would foster creative thinking and encourage openness to new concepts. Modernization will only be accomplished by breaking down the functional silos and looking at LAC's mandate as a continuum where each sector has a role to play in achieving the objective.

Statement of Assurance

This audit engagement was planned and conducted to be in accordance with the Internal Auditing Standards for the Government of Canada. In my professional judgment as Chief Audit Executive, sufficient and appropriate procedures have been conducted and evidence has been gathered to support the accuracy of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit and against the audit criteria.

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Library and Archives Canada

Acknowledgements

Since the conduct phase of the audit, we understand that management has already initiated certain activities that will serve to address some observations mentioned in this report.

We wish to express our appreciation for the cooperation and assistance afforded to the internal audit team by management and staff during the course of this assurance engagement.

INTRODUCTION

Background

The Audit of Innovation Management (initially named Change Management) was part of the 2010-2013 Risk-Based Audit Plan which was recommended for approval by the Departmental Audit Committee and subsequently approved by the Deputy Head in September 2010.

The objects of the Library and Archives of Canada (LAC) are¹:

- 1. to acquire and preserve the documentary heritage;
- 2. to make that heritage known to Canadians and to anyone with an interest in Canada and to facilitate access to it:
- 3. to be the permanent repository of publications of the Government of Canada and of government and ministerial records that are of historical or archival value;
- 4. to facilitate the management of information by government institutions;
- 5. to coordinate the library services of government institutions; and
- 6. to support the development of the library and archival communities.

To continue to fulfill its mandate in an increasingly digital world, LAC has embarked on an ambitious modernization exercise. In March 2010, a document entitled *Shaping our Continuing Memory Collectively: A Representative Documentary Heritage*² set the vision and the strategy for achieving LAC's modernization objective which is to generate increased interest and access to its holdings, as allowed by technological progress and the existing legal framework. This involved updates to the business processes, a re-positioning and re-structuring of the mechanisms used to deliver LAC's mandate as well as a review of policies to enhance clarity and strengthen accountability. The strategy focused on upgrading digital access to all holdings and increasing institutional collaborative agreements.

As stated in the 2011-2012 Report on Plans and Priorities, the modernization strategy was designed to generate the following outcomes:

- Canadians will identify with Canada's documentary heritage and see it as personally relevant;
- LAC will demonstrate a more disciplined, holistic and transparent approach to acquisition decisions with more effective use of resources;
- LAC will have a more responsive and agile organizational approach;
- LAC will be the steward of a documentary heritage collection that we can sustain; and,
- Memory institutions across Canada will collaborate to meet the need of Canadians for a more cohesive approach to Canada's documentary heritage.

To achieve these outcomes, LAC is guided by the following key corporate priorities³:

- Using a more collaborative approach to fulfill LCA's mandate. A number of networks of libraries, archives and other institutions share the responsibility for documentary heritage;
- Redefining how LAC selects items to be acquired, based on how well they represent the whole of Canadian society;

¹ Taken from the *Library and Archives of Canada Act*.

² www.collectionscanada.gc.ca/obi/013/f2/013-449-e.pdf

³ 2011-2012 LAC's Report on Plans and Priorities

- Improving access to its holdings by making descriptions simpler and more relevant;
- Ensuring digital as well as analogue preservation; and,
- Building LAC's capacity to manage and fully carry out its mandate.

As part of the modernization strategy, 12 modernization innovation initiatives (MIIs) were initiated. They are summarized in Appendix C.

Objective and Criteria

The objective of this audit was to determine if the innovation management governance process and internal control procedures were adequate and effective to allow LAC to fulfill its strategic priorities and modernization objectives.

The audit criteria for this audit engagement encompass the following:

- An effective governance structure is established to manage innovation;
- The organization has a formal and rigorous approach, including risk management, to manage innovation activities. It has implemented control measures to identify significant issues that could hinder the successful implementation of innovation management practices; and,
- The approach to innovation management is well communicated, understood and implemented by management.

Scope

The scope of this audit covers the 12 MIIs, including all activities that support project management and change management within the organization. The audit period was from January to November 2011 (excluding the summer months, when no work was done).

Methodology

The audit fieldwork was conducted in accordance with the Treasury Board Secretariat of Canada (TBS) Policy on Internal Audit, which stipulate that the standards of the Institute of Internal Auditors apply to the Public Service sector. These standards require that the audit be planned and performed in such a way as to obtain reasonable assurance that the audit objective is achieved.

The audit included various audit procedures considered necessary to provide a reasonable assurance. These included but were not limited to the following:

- Review of all MIIs, but the following six were selected for a more in-depth analysis: # 1, 2, 4, 7, 8 and 10;
- Review of relevant TBS and Departmental policies on the subjects of project management, change management and risk management;
- Review and analysis of documentation related to the MII including project charters, meeting records of decisions, presentations and reports on deliverables;
- Review and analysis of the processes in place to monitor and report on the progress and deliverables for the MIIs selected for in-depth review; and,
- Interviews with project leads and other key personnel.

FINDINGS AND RECOMMENDATIONS

Governance

Criteria: An effective governance structure is established to manage innovation.

Finding: A governance structure for the management of innovation projects was formally adopted. Its effectiveness could be improved with the use of a challenge function supported by a formal mechanism to report and monitor progress.

Our assessment of the governance structure was based on the Office of the Comptroller General's (OCG) Core Management Controls and the expectation that the following elements would be in place:

- Decision-making bodies providing direction and oversight;
- An effective accountability framework with clear roles and responsibilities;
- Regular reporting on achievement of deliverables; and,
- Evidence of a challenge function being exercised.

The Business and Integration Strategy (BIS) office provided project management support and ongoing monitoring of all MII projects to ensure coordination and oversight. The responsibility for developing MIIs and delivering results was delegated to the Director General (DG) project leads within different sectors of the organization. At the Management Board (MB) meeting of December 13, 2010, the BIS presented a governance structure for the MIIs entitled *The Way Forward*. The main features of this governance included the following:

- The MB is responsible for oversight and decision-making and will monitor MIIs using the Quarterly Corporate Dashboard;
- The Assistant Deputy Ministers' Committee is responsible for decision-making (delegated by MB) and horizontal issues (raised by the Director General Committee on Business and Integration Strategy (DGBIS)); and,
- The DGBIS Committee is responsible for reviewing and validating deliverables, incorporating enabling functions and identifying issues for escalation.

One of the first steps taken by the BIS office was to ensure that each MII had a project charter in place. The charters established an accountability framework as the roles and responsibilities of project members and committees were clearly spelled out. Based on a review of the charters, the overall project accountability was generally shared between the project sponsor, usually at the ADM level, and the project lead at the DG level. Project-specific working groups and steering committees were also established for most MIIs. The individual MII committees served to break down the MII outcome in activities and concrete deliverables.

The charters were not prepared with the same level of care since there was limited time between the announcement of the MIIs and the development of the charters. This resulted in obtaining preliminary-level information for resource estimates and summary-level risk assessments. Furthermore, the charters did not serve the intended purpose as they were rarely revisited for updates or for monitoring purposes.

With regard to the MB responsibilities, the meeting records showed that a number of deliverables were presented, discussed and approved. They ranged from intermediary deliverables such as discussion papers, strategy proposals and policy framework, to final deliverables such as the whole-of-society model.

The MB used the Quarterly Corporate Dashboard as the official tool to report on MIIs. Every quarter, project leads reported on the status of the MIIs they were responsible for. The Dashboard provided high-level information on achievement of deliverables.

Finally, the governance structure also included oversight through the regular or extended versions of the ADM management team meetings, and the Departmental Audit Committee was also kept abreast of progress on the MIIs.

Challenge Function and Reporting

As set in the charters, the DGBIS had to ensure horizontal integration, dependencies, issue management, risk management, resource allocation and project implementation.

To follow MII progress, a departmental reporting instrument was created in SharePoint: the MII Report Centre. Its purpose was to provide a platform for updating and sharing deliverables. A review of the content of the MII Report Centre indicated that a number of deliverables were posted on the site. However, the extent of the information available on the MII Report Centre depended on due diligence of the project team and certain MII sites contained more information than others.

A review of the DGBIS meeting records of decisions showed that the project leads made regular presentations on the status of their MII. The records also demonstrated that discussions took place and suggestions were made on the recommended course of action. However, interviews confirmed that presentations and discussions took place with limited challenge performed over the MIIs.

No formal reporting instrument was in place to allow the DGBIS to actively challenge and monitor related issues. An appropriate reporting instrument would provide management with better information for decision-making.

Recommendation 1:

A rigorous reporting mechanism should be developed to support active monitoring and challenge role.

Rigorous Approach

Criteria: The organization has a formal and rigorous approach, including risk management, to manage innovation activities. It has implemented control measures to identify significant issues that could hinder the successful implementation of innovation management practices.

Finding: A rigorous structure for change management, project management and risk management was not available to support the implementation of the MIIs. However, individual project management structures were established for most MIIs and this provided a level of monitoring that enabled the achievement of a number of the innovation project deliverables.

Our assessment to determine if the organization has implemented a rigorous approach and appropriate control measures was based on the expectation that elements of project management, change management and risk management were in place.

Change Management

In February 2010, the LAC Organizational Change Management Framework came into effect. It was developed by the BIS office. In June 2011, the responsibility for change management was transferred to the Human Resources (HR) division. The purpose of the framework was to ensure that change at LAC would be undertaken in a strategic, planned and consistent manner using project management techniques and practices. During the conduct phase, we noted that most interviewees were not aware of this framework nor did they know who was responsible for the change management function.

In May 2010, LAC conducted an assessment⁴ on change, for which it received a level two rating, stating that some elements of change management were being applied in isolated projects. The assessment identified areas requiring improvement in order to build a change management capability at LAC:

- The current vision is not clearly understood and the strategy to achieve it has not been clearly defined;
- LAC has a history of promising more and delivering less with respect to change programs;
- Communication improvements are required (transparency, frequency, clarity);
- The meaningful engagement of employees toward change is lacking at all levels;
- Organization-wide consistency and collaboration is lacking; and,
- Modern tools for employees to work with are lacking.

At the time of the audit, limited progress was made to address the results of the survey. In addition, LAC still had three actions left to address under the Management Accountability Framework specifically related to change management.

MII 5 was created to develop and implement a workforce strategy and an engagement strategy for employees (including change management). At the time of the audit, there was no progress toward the development of the engagement strategy for employees, since the HR Directorate concentrated its efforts on developing the competencies needed in a modernized LAC.

⁴ Prosci Change Management Maturity Model

Project Management

The Strategic Planning, Infrastructure and Operations Branch (SPIOB) was responsible for project management in May 2011 (previously under BIS). An important principle of project management is to ensure that an appropriate capacity for managing projects exists and is aligned with the risk and complexity of the projects. LAC does not currently have a policy on project management or instruments required to support its managers responsible to deliver on their MII projects. The SPIOB conducted a benchmarking exercise on project management in the summer of 2011 to identify best practices in place in federal institutions.

The modernization exercise undertaken by LAC was ambitious because it included 12 distinct innovation initiatives. There were also several horizontal issues and interdependencies between projects which made it difficult for most projects to progress independently. We observed that some staff were affiliated with several MIIs and it became difficult to set individual priorities and allocate time to the most urgent or deserving project. In addition, some projects that were initiated had to be delayed because pre-requisite work from another dependent MII was not completed. Although a Gantt chart was developed for the MIIs, there was no evidence that it was used to help prioritize and sequence MIIs in a logical manner.

The MIIs did not receive any new financial or human resource allocations. It was understood that they were to be completed within each sector's allocated budget. The resource estimates included in the charters were made of portions of budgets, and the allocated full-time equivalents came from a number of organizational units. Careful planning and tracking of project costs is another important aspect of project management. At a Finance Committee meeting in December 2010, it was recommended to create project codes to keep track of salaries and operations and maintenance expenses related to the MIIs. However, this was not successfully implemented as the project leads were unable to tract expenditures to the required level of details. This situation made it difficult to keep track of expenditures and conduct a variance analysis.

Another requirement of project management is that clear outputs and outcomes be defined at the outset of the project. This aspect varied from project to project based on the nature and complexity of the expected outcome. In some cases the availability of intermediary outputs (such as research papers, frameworks, models, pilot tests) with associated timelines ensured that progress could be demonstrated even if the ultimate outcome was not yet defined or achieved. Interviews with project leads as well as a review of MII documentation confirmed that a number of deliverables were achieved.

An effective change management infrastructure and project management capability will reinforce the ability to meet MII project objectives.

Risk Management

The project charter template provided to project leads for completion included a project risk management section. While the inclusion of the risk management section was seen as a good practice, the evidence demonstrated that the analysis that went into the process was generally superficial. A review of the charters demonstrated that, in many cases, the template was not fully completed, with elements such as probability and impact not addressed. In other cases, there were no mitigating measures proposed for risks with an overall high rating or the mitigating measures proposed were not always aligned with the assessed level of risk. For example these risks:

"Resistance to workforce and engagement changes" and "Inadequate capacity to deliver" were assessed as low in some cases and given inadequate mitigating measures. Interviews confirmed that limited efforts went into developing the risk section.

One of the important requirements of the departmental Handbook on Integrated Risk Management for Managers is the need to monitor the effectiveness of mitigating strategies. Interviews confirmed that the risk-management section of the project charters was not revisited for most MIIs and there was no evidence that any monitoring or follow-up was conducted to either review the original assessment or evaluate the effectiveness of the measures in place.

An environment with an appropriate risk-management framework will provide management with a solid and up-to-date understanding of the internal and external factors that may expose their modernization objectives to risk.

Recommendation 2:

An infrastructure and capacity for change management and project management, aligned with LAC's needs, should be developed to support project managers and to demonstrate sound stewardship in project delivery at LAC.

Recommendation 3:

The risk-management process for innovation initiatives should be reviewed regularly and documented appropriately to ensure that significant risks are considered, monitored and mitigated with appropriate measures.

Approach well communicated

Criteria: The approach to innovation management is well communicated, understood and implemented by management.

Finding: Communication on the modernization Initiatives was issued by senior management on a regular basis. Although the common direction of modernization was known to staff, the implications were not well understood. This had an impact on the degree of engagement staff had towards the Modernization initiative. Managers were unable to ensure continuous communication and engagement of staff with respect to modernization.

Our assessment was based on the OCG Core Management Controls and the expectation that internal communication elements would be in place to better engage staff in the modernization exercise.

A number of departmental communication tools were used during the MII development period to communicate information to employees. "Speak Easy" sessions were held and several emails were issued by LAC senior management (Assistant Deputy Ministers and Deputy Head) on a variety of modernization topics during the period of the audit. These communication initiatives provided staff with updates on MII projects and opportunities to express their views and concerns. However, evidence showed that these measures had moderate success.

In addition, two surveys were conducted. The first, directed to LAC employees, took place in May 2010, in the early stages of the modernization exercise. Its purpose was to assess the

departmental capability to handle change management. The second survey, sent to archivists, followed in March 2011, when the MIIs were underway. The results of both surveys demonstrated that employees were aware of the organization's common direction but did not understand it, felt disengaged from the change process and required improvements in communication.

Interviews confirmed that modernization has been a top-down exercise whereby initiatives were determined with limited consultation with mid-level managers. Communications could be improved through a more extensive and regular internal consultation process among all levels of LAC's various sectors and corporate functions, including Strategic Research. Such consultation would foster creative thinking and encourage openness to new concepts. Modernization will only be accomplished by breaking down the functional silos and looking at the LAC's mandate as a continuum where each sector has a role to play in achieving the objective.

Employee engagement, consultation and communication during a major organizational change are also the responsibility of managers. During the interviews, managers admitted falling short in this regard. Employees who were part of the MII project committees had an opportunity to express their views and participate in the decision-making process. However, another portion of the staff remained unengaged.

Recommendation 4:

Implement a strategy for managers and executives to support continuous communication and engagement of staff with respect to modernization.

APPENDIX A - MANAGEMENT ACTION PLAN

Internal Audit Recommendations	Management Response to Recommen- dation	Action(s) to be undertaken	Estimated Completion Date	Responsibility
A rigorous reporting mechanism should be developed to support active monitoring and challenge role.	Agree.	Beginning in 2012-2013, the Project Management Office (PMO), reporting to the DG Strategic Planning, Infrastructures and Operations Branch (SPIOB), will monitor progress on major innovation using a dashboard and rigorous reporting tools.	Q1 2012-2013	DG SPIOB
		Beginning in 2012-2013, the Chairs of the Business Operations Committee (BOC) and the Senior Management Committee (SMC) will ensure the challenge function is exercised.	Q1 2012-2013	Chairs of the BOC and SMC
		The Corporate Secretariat will be responsible for documenting the challenge function and related decisions.	Q1 2012-2013	Corporate Secretariat

Internal Audit Recommendations	Management Response to Recommen- dation	Action(s) to be undertaken	Estimated Completion Date	Responsibility
2. An infrastructure and capacity for change management and project management, aligned with LAC's needs, should be developed to support project managers and to	Agree.	The DG, SPIOB, will present options for project management and change management to the BOC, who will make a recommendation to the SMC in Q4 of 2011-2012.	Q4 2011-2012	DG SPIOB
demonstrate sound stewardship in project delivery at LAC.		The chosen model should be in place for Q2 of 2012-2013.	Q2 2012-2013	DG SPIOB
LAO.		In 2012-2013, the PMO will supply procedures and tools to support consistent project management, and will offer formal training and awareness sessions to staff. The PMO will also monitor progress on major projects.	Q1 2012- 2013	DG SPIOB
3. The risk- management process for innovation initiatives should	Agree.	The risk management process will be integrated in the project management model.	Q2 2012-2013	DG SPIOB
be reviewed regularly and documented appropriately to ensure that significant risks are considered, monitored and		Director Generals will ensure that risks, in their business areas, are well documented, mitigated with appropriate measures and reviewed regularly.	Q1 2012- 2013	DGs
mitigated with appropriate measures.		The DG, SPIOB will ensure that training, in project risk management, is available to staff and will monitor risk through the dashboard.	Q1 2012- 2013	DG SPIOB

Internal Audit Recommendations	Management Response to Recommen- dation	Action(s) to be undertaken	Estimated Completion Date	Responsibility
4. Implement a strategy for managers and executives to support continuous communication and engagement of staff with respect to modernization.	Agree.	The DG, Communications will develop a comprehensive internal communication strategy with supporting tools to help managers and executives with staff engagement.	Q3 2012-2013	DG, Communications
		Director Generals, Directors and Managers will use these tools to ensure continuous engagement and communication with staff. Director Generals will put in place good management practices to promote open communication.	2012-2013	DGs
		The Director of Human Resources will assess the need to offer training to managers and executives to help them engage their staff.	2012-2013	Director HR

APPENDIX B - RISK RANKING OF RECOMMENDATIONS

The following table presents the recommendations and assigns risk rankings of high, moderate or low. Risk rankings were determined based on the relative priorities of the recommendations and the extent to which the recommendations indicate non-compliance with Treasury Board policies.

Recommendations	Risk Level
A rigorous reporting mechanism should be developed to support active monitoring and challenge role.	Moderate
 An infrastructure and capacity for change management and project management, aligned with LAC's needs, should be developed to support project managers and to demonstrate sound stewardship in project delivery at LAC. 	Moderate
3. The risk-management process for innovation initiatives should be reviewed regularly and documented appropriately to ensure that significant risks are considered, monitored and mitigated with appropriate measures.	Moderate
Implement a strategy for managers and executives to support continuous communication and engagement of staff with respect to modernization.	High

APPENDIX C – LIST OF INNOVATION INITIATIVES

MII	TITLE	DESCRIPTION	RESPONSIBILITY
1	Partnership Collaboration Approach	By APRIL 2011 LAC will have implemented an emergent external engagement strategy.	Acquisitions
2	Documentary Heritage Value Acquisition Criteria Whole-of-Society Approach	By April 2015 LAC will have fully implemented a coherent `whole-of-society` approach to determine the best evidence of Canadian Society in order to appraise, preserve documentary heritage of all kinds (public, private, published, un-published,etc,) and to determine where it should be best placed.	Acquisitions
3	Federal Government Approach to Disposition	BY APRIL 2011 LAC will begin to apply a whole-of- government appraisal framework to guide the development of RDAs.	Acquisitions
4	Systematic Relevancy Review - Acquisition and Appraisal Strategy	BY APRIL 2011 LAC will conduct a systematic review of the relevancy of its holdings based on its mandate and using a whole-of-society appraisal approach.	Holdings Management
5	HR Engagement Strategy	BY APRIL 2011 LAC will have developed and begin implementing a workforce strategy and will have implemented engagement strategy for employees.	Chief Financial Officer
6	Business IT Architecture	BY SEPTEMBER 2011 LAC will develop business architecture reflective of modernization and ensure that IT priorities are closely aligned with modernization.	Holdings Management
7	IT and Digitization	BY APRIL 2012 LAC will have modernized its reprography by providing all copies in digital format only and re-purpose content to make it available online.	Holdings Management
8	Revision of Service Approach	By April 2011 LAC will have developed a tiered approach to serving Canadians (citizen services).	Resource Discovery
9	Making Collections Discoverable	BY APRIL 2014 LAC will have shortened the time between acquisitions and access and will ensure that all of their holdings are discoverable.	Resource Discovery
10	Review LAC Service Model	BY DECEMBER 2011 LAC will have reviewed its service to DH institutions/organizations, in the context of its Pan-Canadian approach.	Resource Discovery

11	Trusted Digital Repository Preservation Model	By APRIL 2017 LAC will become a trusted digital repository, providing assurance that Canada's digital documentary heritage is being preserved for the long term.	Holdings Management
12	Metadata Framework	BY EARLY 2011 LAC will develop and propose a single metadata framework, leveraging meta-data created by creators, donors and users.	Resource Discovery