

***Review of Information  
Products***

**Final Report**

***Evaluation and Data Development  
Strategic Policy  
Human Resources Development Canada***

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# *Executive Summary*

The Evaluation and Data Development Branch of the Strategic Policy Division conducted a study of information products within Human Resources Development Canada (HRDC). The study consisted of:

- a review of Information Management trends and current thought leadership;
- an assessment of lessons learned from other organizations facing similar challenges;
- a review of HRDC information and knowledge assets, needs and capability to meet these needs;
- a review of the effectiveness of external information products; and
- a report consolidating the results of the above work elements that proposes specific strategies to build and improve upon HRDC's Information and Knowledge Product practices.

The review concluded that HRDC has high quality information. The products are used extensively by internal staff and external clients. Many of the products are considered essential for conducting departmental business.

The review also discovered that information products are not readily shared among and across program/operational groups. There is poor understanding among staff about available products and there is insufficient training provided for many products. Typically, products are developed in an *ad hoc* manner, and information processes for product development are not well communicated. As such, the resulting products lack consistency in design and content. In addition, information and knowledge are not always easily accessible nor are they effectively shared across the Department. As a result, there is a tendency to build rather than adopt/adapt existing products due to the difficulties in determining what is already available.

In spite of the foregoing, the personnel of the department continue to produce high quality information products. They are meeting the demands and expectations of their clients, but are not able to benefit from the efficiencies associated with an Information and Knowledge sharing culture.



# ***1. Introduction***

Human Resources Development Canada (HRDC) has established a new vision that calls for the department to tailor information services to build community capacity and enable Canadians to manage key transitions in their lives. This vision points to a new role for HRDC as a key provider and partner in the development and dissemination of information. To meet this role, HRDC must enhance the quality and management of its information activities. To further the department's vision, the Evaluation and Data Development Branch of Strategic Policy identified the need to conduct a number of studies that collectively would contribute to an understanding of the department's Information and Knowledge Product practices in relation to best practices. These studies included:

- a review of Information Management trends and current thought leadership;
- an assessment of lessons learned from other organizations facing similar challenges;
- a review of HRDC information and knowledge assets, needs and capability to meet these needs;
- a review of the effectiveness of external information products; and
- a report gathering the results of the above work elements that proposes specific strategies.

## **1.1 Information Products (IP) Study**

The Review of Information Products study was conducted to help the department develop a corporate approach to information and knowledge product management. The study is comprised of four components:

1. A review of current thought-leading material regarding IM practices and activities, including an examination of best practices and lessons learned.
2. A review of governance and accountability of HRDC's information products.
3. A review of selected HRDC information products targeted specifically for external clients of the department.
4. A review of HRDC's internal information requirements and information product (IP) capabilities.

The objectives of the Information Product Review components are to:

- communicate IM concepts and experiences espoused and practised in other organizations;
- describe a preferred practice model for IP;

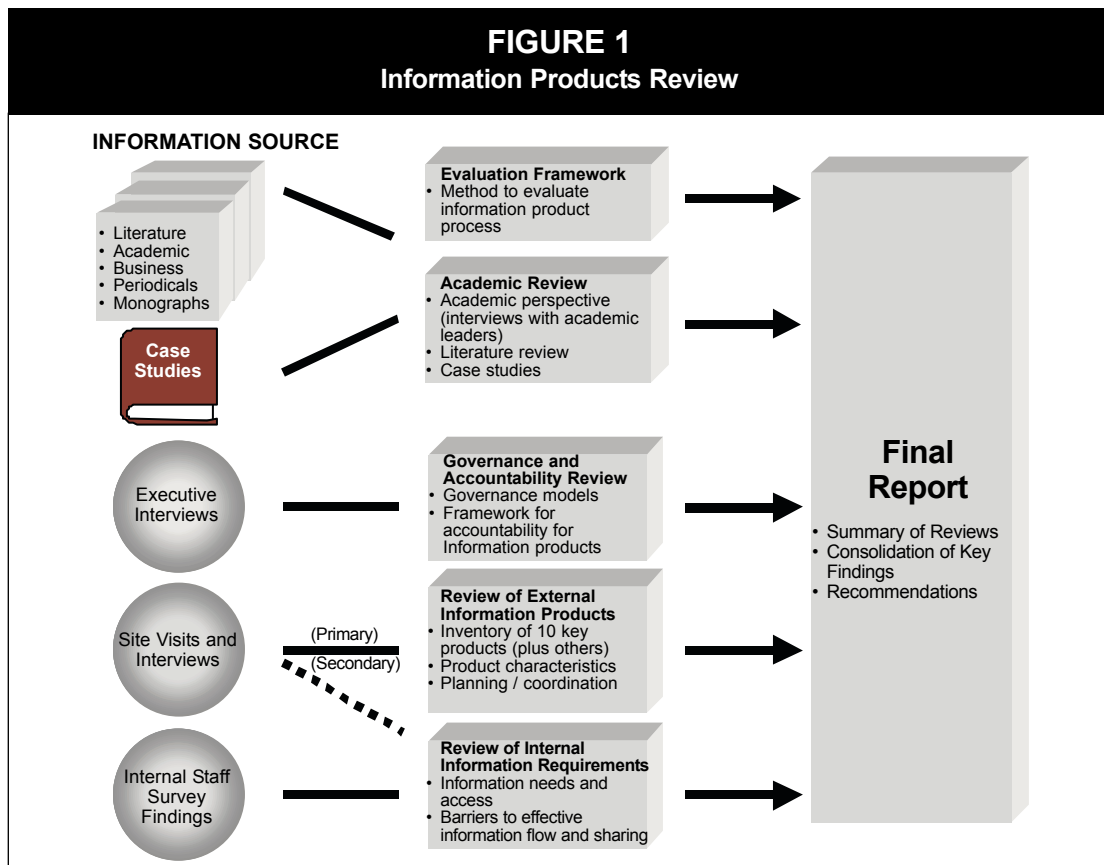
- provide a means to assess the current success of the IP environment within the department (i.e., development of an evaluation framework);
- establish reasonable expectations for the IM environment of the department;
- describe representative information processes within the department that identify key opportunities and challenges in the development of information products;
- identify required steps for improving IP capabilities; and
- describe the lifecycle of selected information products within the department, from needs identification to creation, management, dissemination, evaluation and renewal.



## 2. Research Review

### 2.1 Objective

The objective of the research review was to identify principles and best practices from academia and business that can be applied to the department to help in the management of information and knowledge. Specifically, the objectives were to examine available research on Information Management, including critical success factors and evaluation methodologies. The review examined the use of information campaigns to influence behaviour and decision-making and explored and assessed reasonable expectations for information-based programs.



### 2.2 Process

There are two primary components to this study: a research review (covering a review of literature and consultations with professors from various universities), and case study analysis of both private and public sector enterprises. In addition, the study records insights gained from interviews with business leaders that contribute to both the research review and the case studies.

The research review presents current thoughts and trends in the area of Information and Knowledge Management from recent well-recognized publications and academic leaders at selected Canadian universities. In contrast, the case studies seek to understand the private and public sector's perspective on best practices and lessons learned in Information and Knowledge Management.

Together, these components of the research review provide general insight into the issues that other organizations are currently facing in the area of Information and Knowledge Management. This insight will assist HRDC in realizing its information product delivery objectives.

## **2.3 Selected Observations of the Review**

### ***What is Knowledge Management?***

Knowledge, information, and data are terms that are often confused. *Knowledge* is derived from *information*, which comes from *data*. "It is important to emphasize that data, information, and knowledge are not interchangeable concepts. Organizational success and failure can often depend on knowing which of them you need, which you have, and what you can and can't do with each."<sup>1</sup>

Ikujiro Nonaka, a leading author on knowledge management, recognizes that "knowledge is not simply a matter of processing objective information. Rather, it depends on tapping the tacit and often highly subjective insights, intuitions, and hunches of individual employees and making those insights available for testing and use by the company as a whole."<sup>2</sup>

The Knowledge Management Consortium (KMC), an independent organization composed of members from both the academic community and industry, defines Knowledge Management as "the handling, directing, governing, or controlling of natural knowledge processes within an organization in order to achieve the goals and objectives set by the organization for these knowledge processes". Knowledge processes in organizations are those intended to (1) produce knowledge, (2) acquire knowledge, and (3) transmit knowledge. Knowledge Management then focuses on the control of knowledge processes to provide agents within the organization with the required knowledge to effectively perform their jobs.

### ***Challenges in Implementing Knowledge Management Programs***

The most difficult obstacle in implementing Knowledge Management is the cultural resistance due to the control of information. "A key to successful implementation is the shift from [the belief that 'knowledge is power'] to an attitude that 'knowledge *sharing* is

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<sup>1</sup> Davenport, Thomas H., et Laurence Prusak. *Working Knowledge: How Organizations Manage What They Know*, Boston: Harvard Business School Press, 1998, p.1.

<sup>2</sup> Nonaka, Ikujiro, *The Knowledge-Creating Company*, Boston: Harvard Business School Press, 1991.

power'.<sup>3</sup> To facilitate the shift in culture, many organizations have found success through positive reinforcement of contributors and a reward structure for those who create, store, and share information and knowledge. Managing the organization's readiness to share experiences and improve existing processes through these experiences is a significant change leadership issue.

### ***Benefits of Knowledge Management***

An organization with effective Knowledge Management practices knows who should be consulted in order to solve a problem or obtain information; this is accomplished quickly and efficiently. There are no inaccessible islands of expertise due to internal 'silos' or poor communication. Leading consulting firms spend 5 to 12 percent of their annual revenues on Knowledge Management, which is commonly considered a core process.<sup>4</sup>

Quantifiable indicators (e.g., return-on-investment) do not easily capture the benefits achieved through Knowledge Management initiatives. Qualitative measures such as how well ideas align with the organization's vision and strategic goals determine the true value of knowledge. Key benefits from Knowledge Management initiatives include intellectual capital formation and knowledge sharing. HRDC has the potential to realize significant benefits through the application of Knowledge Management concepts to the organization.

### ***Potential Impact of HRDC Information Campaigns***

Understanding the effect of information campaigns on influencing the behaviour and decision making of Canadians is akin to understanding the effect of advertising campaigns on consumers. Advertisers develop metrics and techniques to measure the effectiveness of their advertising campaigns. Similarly, appropriate metrics are required to understand the effect of information campaigns on Canadians.

Available measures of behavioural change and the effects of information campaigns on decision-making are largely qualitative. While these qualitative measures can be valuable, efforts should be made to develop objective, quantitative measures. Best practices suggest that quantitative performance measures selected for measuring the effectiveness of information campaigns should be *relevant, reliable, timely*, and have value. Efforts should be made to understand the long-term effects of change when trying to measure the effect of information campaigns through moral suasion.

Research shows that HRDC can expect to achieve success in the area of IM/KM as their clientele are in search of the information they have to share. However, the culture of the organization must be tuned to encourage the sharing of information by breaking down islands of information, reinforcing and rewarding proponents of information sharing, assessing value based on outcomes rather than cost alone, and marketing the information that is available for the department. With the rapid growth of the Internet, HRDC can

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<sup>3</sup> Frick, V., *Obstacles to Knowledge Management*, Gartner Group Research Note, January 23, 1998.

<sup>4</sup> Harris, K., Hunter, R., *KM on a Mini-Budget: How Much is Just Enough?* Gartner Group Research Note, July 27, 1998.

expect results similar to what Industry Canada received with Strategis if the department focuses on their client needs and seriously implements alternative delivery channels for routine transactions.

The research found that organizations that firmly adhere to IM/KM principles will achieve success in meeting client informational needs. It was recognized that the “up-front” financial impact was offset by rewards associated with the effective implementation of IM/KM principles. This can only be achieved if the department sets realistic and measurable objectives, conducts pilot operations to test hypotheses, and subsequently builds on their successes.

## 2.4 Key Findings of the Review

The critical success factors for implementing effective, sustainable Knowledge Management initiatives include:

- **Ensure strong advocacy/sponsorship from senior management.** Such sponsorship is required to advance the state of Information and Knowledge Management.
- **Address cultural resistance.** Resistance to change in IM/KM initiatives is the most common barrier to the success of the initiative.
- **Measure the ROI on IM/KM initiatives properly.** Knowledge Management benefits are difficult to measure, and the investment is often longer-term than the project work. Measure only what matters. Short-term indicators can measure whether programs and services are meeting expectations, but the more important social indicators must employ summative evaluation techniques which use experimental and quasi-experimental design in order to identify and quantify impacts.
- **Keep it simple.** Begin with a “proof of concept” to demonstrate the concept of IM/KM.
- **Generate awareness.** To generate awareness of and dependency on the information as a business tool is a challenge, but it is required for the success of the initiative.
- **Take your time.** To build the required cultural changes and funding mechanisms for future growth, users of the information products have to “see” results that develop over time.
- **Ensure the proper skill set of Knowledge Managers.** These Knowledge Management specific skills include classification, organization, facilitation, mentoring, and the discipline to create and manage new content.

## 3. *External Information Requirements Review*

### 3.1 Objective

One objective of the Information Products review was to understand the impact of current information products. Ten information products were chosen for evaluation from nine distinct HRDC business units. These products were selected as a representation of existing information products across the department. The scope of the selected information products focused on products targeted primarily towards employer and youth client groups. The products were examined for their effectiveness in helping people make better decisions during key transition phases in their lives.

### 3.2 Process

Discussions with key HRDC personnel focused on the processes relating to the development or delivery of the selected information products, as well as the function of the associated business units themselves. The project team worked with staff from National Headquarters (NHQ) and regional units to gather details relating to these focus areas. Templates were developed and used to gather specific details from staff for each information product, including product objectives, delivery mechanisms, target clients, expected product lifecycle, and development and dissemination costs. Where possible, documentation relating to the associated business units (e.g., business plans, organization charts) were also collected. Details on other information products in the business units (i.e., beyond the ten selected products) were also gathered and these were assimilated to form an extended inventory of products. Finally, perspectives from HRDC employees and partners covering other Information Products issues were recorded during the interviews. These perspectives were integrated into the analysis and subsequently into the final report.

The ten selected products and associated business units are:

- *Canada Prospects* — Human Resources Partnerships Directorate (Career and Occupational Information unit), Human Resource Investment Branch (HRIB);
- *Children's Benefits Factsheet for Students Aged 18-25* — Income Security Programs (ISP) Communications unit, ISP;
- *Compliance Policy for Canada Labour Code Parts II & III* — Client Education and Training unit, Labour;
- *Human Resource Office for Employers* — Labour Market Information Services Division, HRIB;

- *Job Futures* — Occupational Projections and Macroeconomic Studies Division, Applied Research Branch;
- *Motiv8* — Strategic Services and External Relations Directorate, BC/Yukon Region;
- *On the Move* — Pan Canadian Activities Branch, New Brunswick Region;
- *ROE Guide for Employers (1998)* — Insurance Program Services unit, Insurance;
- *Youth Employment Initiatives Folder Kit* — Youth Initiatives Directorate, HRIB;
- *Youth Resource Network of Canada* — Youth Initiatives Directorate, HRIB.

### **3.3 Selected Observations of the Review**

#### ***Product Development Processes***

The following statements characterize the product development processes in HRDC.

1. There is limited communication between departmental offices, often resulting in confusion over the desired approach to design and deployment of the information product. This diminishes the effectiveness of information product programs.
2. Information product design can be influenced by complex legislative requirements. This makes information dissemination and collection difficult.
3. The design of information products for multiple partners increases the complexity of the design process, as there is a need to satisfy multiple, and sometimes conflicting, objectives through a single information product.
4. HRDC partner-developed information products often leave HRDC with a lack of visibility in the community and, hence, little recognition of the contribution made by the department.
5. HRDC headquarters does not augment regional budgets to develop and deploy new or unplanned information products. This puts pressure on the budgets and capacities of the regional or HRCC operations.
6. The department does not have a clearly understood and approved governance structure and approach to information product management.
7. The development of indexed information sources (i.e., selected web pages). is a key component of information dissemination on the Internet and is meeting success where applied.

## ***Product Delivery Mechanisms***

The following statements characterize the information product delivery mechanisms in HRDC.

1. In some cases, information product owners do not communicate the delivery objectives and targeted recipients of their products to the HRDC employees and partners who are in direct contact with the clients using the product.
2. The limited availability of information indexes and catalogues of the departmental information products results in unnecessary product development within the department.
3. The Internet has allowed for a more flexible approach to information design, development and dissemination. This allows the department to maintain up-to-date information more effectively than is possible through traditional paper-based products.
4. The department, on occasion, has developed products that are distributed over a single medium. But the diverse nature of the target client base requires the use of multiple information product delivery channels and media to ensure all clients have equal access to the same high-quality information.
5. Internet skill levels vary as do attitudes towards its acceptance as a tool to enhance program delivery. Hence, the departmental areas that have experience in the use of the Internet are more readily able to benefit from this media than areas where HRDC employees do not use this tool on a regular basis.
6. There is little coordination of the numerous Internet sites across the department. This has resulted in duplication of effort to maintain sites, and redundant and potentially inconsistent information being available on a variety of sites.

## ***Performance Management***

The following statements address performance management issues.

1. Little evidence was found of formal performance measures for the information products, suggesting that performance management is not an intricate part of the information product lifecycle.
2. The department's approach to devolution and co-management results in a need for information product performance indicators that are sufficiently flexible to accommodate the various needs of partners and target clients across the provinces.
3. Electronic information products appear to have more effective performance measures than paper-based information products.

## **Target Clients**

The following statements relate to target clients.

1. Information needs vary from office to office, and national/regional headquarter information products do not necessarily address the unique needs of the local target clients. This results in the development of additional products to address gaps.
2. There is a distinct variance in the level of support and tools available for Human Resources Centres Canada (HRCCs) to respond to client demands for similar information across the country. This may affect the department's ability to provide a consistent level of information and related services across the country.

## **3.4 Key Findings of the Review**

The primary observation for the selected information products is that, in most circumstances, information products are developed based on sound program-related priorities. Typically, they are designed and developed in isolation by headquarters and/or regional program areas and are then distributed to the organizations that ultimately deliver the products to the target clients. The active participation by program “front-line” staff in product development is often omitted, and the benefits of their key input in the early stages are lost. Additional communications with “front-line” staff would add value to any product that is designed to inform and assist clients.

The need for communication extends to national distribution strategies, as regional office and HRCC staff are sometimes surprised when new products arrive without any supporting material to help them understand the purpose of the product and its intended impact. In addition, a complete inventory and catalogue of current information products does not exist. As a result, regional and HRCC personnel may disseminate products that are obsolete, or custom-develop products locally that are already available from National Headquarters (NHQ). Local production of external information products is not explicitly budgeted for, and is funded from scarce local program and operating budgets.

Internet delivery of external information products provides a new and creative window for HRDC, as this mechanism is gaining acceptance as a communications medium for the department to communicate with clients. Some of the benefits that Internet technology brings to HRDC include increased flexibility in updating information, more effective performance indicators of the use of information products through systematic performance measures, and increased awareness and exposure. Information dissemination via the Internet has been successfully implemented by a number of business units. Their success has encouraged other business units to deliver products via the Internet. However, the issue of universal accessibility must be given due consideration, and alternate forms of communication must complement existing Internet communications the department provides to its clients and partners. As well, attention must be paid to the training and development of staff to ensure the realization of the potential benefits of Internet use for program delivery. In addition, coordination of the proliferation of Internet sites must be carefully managed to minimize the potential for redundant information. This safeguard



will eliminate the potential for multiple sites recording and reporting similar, and maybe even conflicting information. Moreover it will ensure consistent products, messages and levels of service.

In many cases, local offices create information products to meet local needs. However, there exists a distinct variance in the level of support and tools available in different offices across the country. As a result, some offices have very sophisticated information products and others have more utilitarian ones. This results in varied levels of client service. The lack of widespread standards, clearly articulated governance structure, and policies on the production of information products for HRDC clients also contribute to this problem.



## ***4. Internal Information Requirements Review***

### **4.1 Objective**

An HRDC employee survey was conducted to gather feedback from staff about their day-to-day use of information products. Key objectives of the survey included developing profiles of: information product usage, the quality of information products, problems around accessing information products, information product training, and general attitudes towards information sharing within HRDC.

### **4.2 Methodology**

A self-administered mail survey was sent to a random sample of 2,150 HRDC staff representing all levels, functional areas and locations within the department. Participants were asked to complete the questionnaire and return it via a self-addressed, postage-paid envelope. The survey instrument was distributed in both official languages and all responses were anonymous.

For the purpose of the survey, information products were defined as any formalized structure or source from which staff derived information for internal use, and/or to provide to clients. Examples of information products include: databases, information releases, groups or individuals that provide answers to staff questions, Internet/Intranet web sites, published information, and/or other formal sources. It was recognized that asking employees to comment on each of the wide range of information products available to them would be problematic. Although some general questions were included, for the most part respondents were asked to focus their answers on the single information product most *critical* to their work.

Approximately one-third of survey questionnaires were completed and returned. While this is an acceptable rate of response, it is by no means high. Given the response rate, a non-response survey was conducted to profile the characteristics of employees that did not respond and to determine their reasons for not participating. The non-response survey found that, due to internal mail problems, 42 percent of non-respondents had not received the original employee survey. Taking this into account, the true response rate to the employee survey was actually close to 50 percent.

### **4.3 Selected Observations from the Survey**

The following points highlight key observations from the employee survey.

#### ***General Profile of Products Used***

- The most commonly used information products are references to Acts, regulations, codes, administrative rules, procedures, and individual client records. Information

products related to human resources and external products represent a second tier of most often-used products.

- Many employees spend significant amounts of time using information products in their jobs. Half the respondents spend up to 75 percent of their time relying on one or more information product. Much less time is spent on contributing to information product development.
- For most employees, critical information sources come from their department or from other government departments. Across the department, there is no single, critical type of information product.
- Electronic access is the most dominant means of access to information. However paper access is also common and, to a lesser degree, personal contact and telephone communication are also used.
- The greatest demand for information product use is in the service of external clients.

### ***Critical Products: Quality and Satisfaction***

- Employees rely heavily on those products identified as critical. Two-thirds of employees use information products to achieve more than half of their work goals.
- In general, employees are satisfied and positive about the quality of the critical information products. Technical support and product flexibility are the most serious concerns when concerns are expressed.
- Employees do not see excessive overlap among the information products. They have a strong commitment to the information products they use. The reasons cited include the accessibility, availability and relevance of these products.
- Overall, satisfaction with critical information products is high because of the perceived quality of these products.

### ***Product Training***

#### **All Products:**

- The most significant barriers to training are lack of time and lack of available training courses. Budget constraints are a big factor in the survey responses.
- Most employees felt that training in the use of available information products, both technically and in terms of how to use and interpret the information, was significantly lacking.

## **Critical Products:**

- Most of the critical products tend to be complex in terms of content, access and information being transmitted. Many critical information products are electronic and require mainframe computers with customized software that is not always user friendly. This is particularly true of client records and information products used to service external clients. Most employees feel they need training to derive maximum benefit from these information products.
- One in five employees is not able to get the training they need to fully use the information products critical to their work.
- Satisfaction with information products is closely correlated with positive ratings of training received. Those that felt the training was good, also felt that the products were good.
- Although availability of training on information products is limited, the training that is received is perceived as being very useful. Those that rated the training received highly had a higher job satisfaction.

## ***Problems with Critical Products***

- Over half of employees surveyed reported some type of problem with critical information products, although only 15 percent report that they experience problems frequently.
- Availability and accessibility of the information products are the most frequently encountered problems.
- More than half the respondents indicated a lack of sharing information across the department. Concerns are expressed about the lack of communication, or knowledge of what information products exist, and about conflicting roles and responsibilities for information products within the organization.
- Only half the employees see HRDC as promoting information sharing. There is a positive link between a lack of problems with critical products, satisfaction in training and the view of the department as promoting information sharing.

## ***HRDC Employee Attitudes***

- Almost one in three employees feel they do not have the right information tools to do their job, that they cannot work effectively, or that HRDC does not provide good information to its employees. Employees' outlook in this area is positively influenced by the perceived quality of critical information products, the product training or overall satisfaction.
- About 30 percent of employees have low levels of confidence that they have skills to meet the demands of the next five years.

- Less than half the employees believe that they are encouraged to be innovative in their work.
- Employees show only moderate confidence in HRDC's ability to continuously improve the way it serves its clients and the way it does its business.
- Those who view critical products as low in quality tend not to view the department as a unified organization.
- Satisfaction and pride in work are closely linked with perceived quality of information products.

#### **4.4 Key Messages from the Survey**

Overall, the survey results indicate a positive acceptance of the value of the information products — users are satisfied with the information products they currently have. The study findings reflect the extreme importance of information products to the conduct of business within the department — most employees have a heavy reliance on information products. The overall satisfaction in the information products is an indicator of many positive attitudes about the department and employee job satisfaction. This satisfaction is most noticeable affected by training in use of the product, and product accessibility and availability.

Of those who responded to the survey, there is a reported high usage of information products. Employees expressed the opinion that the department should emphasize better use of existing products instead of allocating resources to the development of new information products. Many groups create customized information products to meet their service delivery requirements. However, they do not effectively share the knowledge gained throughout the organization.

Employees are not adequately informed about what information products are available. Often, users are unaware of existing products that may serve their needs, and expend unnecessary resources to develop customized information products. Information products often draw upon various sources for information, including other government agencies, as well as internal sources. Many staff use information products, but few contribute to them. A small proportion of the population is responsible for a large proportion of the content in current information products.

There have been some complaints about the accessibility of information to client records which are accessed electronically through non-user-friendly terminal screens. This information is only available via dedicated workstations, which do not provide adequate flexibility. Feedback gathered from the survey suggests that efforts should be made to improve user training in accessing such client records. Although some training exists, employees who deal with client records and use products to serve external clients feel inadequately prepared. Training is also needed for other key products that add value to everyday work, and which are accessed frequently.

## ***5. Information Products Governance and Accountability Review***

### **5.1 Information Products Governance Framework within HRDC**

The information gathering and analysis exercise provides an understanding of the governance of information products within the department. Externally oriented information products were emphasized, although internal information products were also considered. For the purpose of this exercise, the governance of information products included:

- providing direction and vision for information/knowledge management;
- driving decision-making (through policies and procedures);
- facilitating communication;
- defining core information/ knowledge management values; and
- providing funding and other resources for infrastructure.

The following four generic governance models were used as a basis of discussion:

- **Centralized:** An individual or function controls most of the organization's information. Individual contributing programs develop information but do not disseminate information directly to the client.
- **Decentralized:** Business unit managers control their own information environments relying on common info-structure for deployment. Individual contributing programs develop information and disseminate information directly to the client.
- **Ad hoc:** All information providers "fend" for themselves in the sourcing and distribution of information. No information champion and individual contributing programs develop information independently.
- **Hybrid:** Low level of central control and a high level of local autonomy. Information champion coordinates information dissemination; contributing programs continue to distribute some information products directly to clients.

These models provided a starting point for interview discussions. The intent of the review was to characterize and assess information product governance in the department, not to simply match a branch's Information Products approach to a generic model. It is important to note that notions such as centralized and decentralized are dependent upon the level and perspective of an individual (e.g., a working-level information product owner may consider their model to be centralized; however, from a group perspective, the governance may be decentralized). The characterizations of the governance models reflect the input of approximately 10 interviews. As such, this review is not a comprehensive review of

governance models for all functions within the department, but rather a polling of sample functions to understand their governance model(s), and to gain an appreciation for the departmental IM governance model.

## **Key Messages**

Governance of information products at HRDC can best be characterized as ad hoc. Interviews indicate that there is no single information champion for the governance of information products. In many cases HRDC clients must access several programs and/or several information products to fulfill their information needs.

Autonomy of information product ownership requires a delicate balance. Information product owners recognize the need for common standards but emphasize the need to retain local flexibility of information product development to build products that they consider to best reflect the needs of their clients.

## **Future Considerations**

Interviewees identified a number of future considerations regarding the governance of information products including:

1. Any future governance structure should support a “client-centred” approach. The current structure is program-centric at NHQ, and more client-centric in the regions. Clients prefer single points of contact. At times, program and departmental boundaries can impede clients from easily accessing information. This implies the need for either enhanced coordination or product rationalization.
2. Moving to a highly centralized governance structure would not be effective. There is sufficient complexity (products, clients, channels, and regions) to justify specialized focus and a degree of flexibility. A centralized approach may impede the responsiveness to changing client needs. There is a need for enhanced coordination rather than dramatic centralization.
3. Information product governance can become more effective. There is a need for improved internal coordination (e.g., shared vision and priorities; improved communication and information sharing; improved proactive corporate services such as communications and IT). As well, improved coordination with external partners and improved information product standards and processes (e.g., increased awareness of and adherence to standards; enhancements to standards) is required. An improvement in information product management practices is essential, which includes integration with the departmental planning framework, integration with the departmental accountability for results framework and common criteria for evaluating new and existing products.



## Options for Moving Forward

A number of elements that should be included in the future governance model for information products include:

- a focal point for action with a clear mandate and sufficient resources and authority;
- appropriate representation and involvement across the department;
- clear and consistent communication of direction and expectations;
- recognition of the significant proportion of the department’s business that is focused on client transactions versus information products.
- increased coordination between the department’s large information-related initiatives (e.g., iNET and Information Strategies); and
- integration of departmental planning and management (e.g., accountability for results framework).

The following diagram summarizes some options for future governance models, including reconstituting the Information Strategy Working Group (ISWG), creating a central information bureau, and forming a formal secretariat.

<b>FIGURE 2</b>			
<b>Summary Options of Governance Models</b>			
Possible Options	<b>Reconstitute the Information Strategy Working Group (ISWG) with a New Mandate, Responsibility, and Authority</b>	<b>Create a Central Information Bureau</b>	<b>Form a Formal Secretariat</b>
Advantages	<ul style="list-style-type: none"> <li>• Ease to implement</li> </ul>	<ul style="list-style-type: none"> <li>• Focus and control</li> </ul>	<ul style="list-style-type: none"> <li>• Focused resources, mandate, and responsibility</li> <li>• Inclusive participation</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>• Lack of dedicated resources, authority, and responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Less inclusive participation</li> <li>• Less responsive to client’s particular needs</li> </ul>	<ul style="list-style-type: none"> <li>• Potential risk to autonomy and control.</li> </ul>

## 5.2 IP Accountability within HRDC

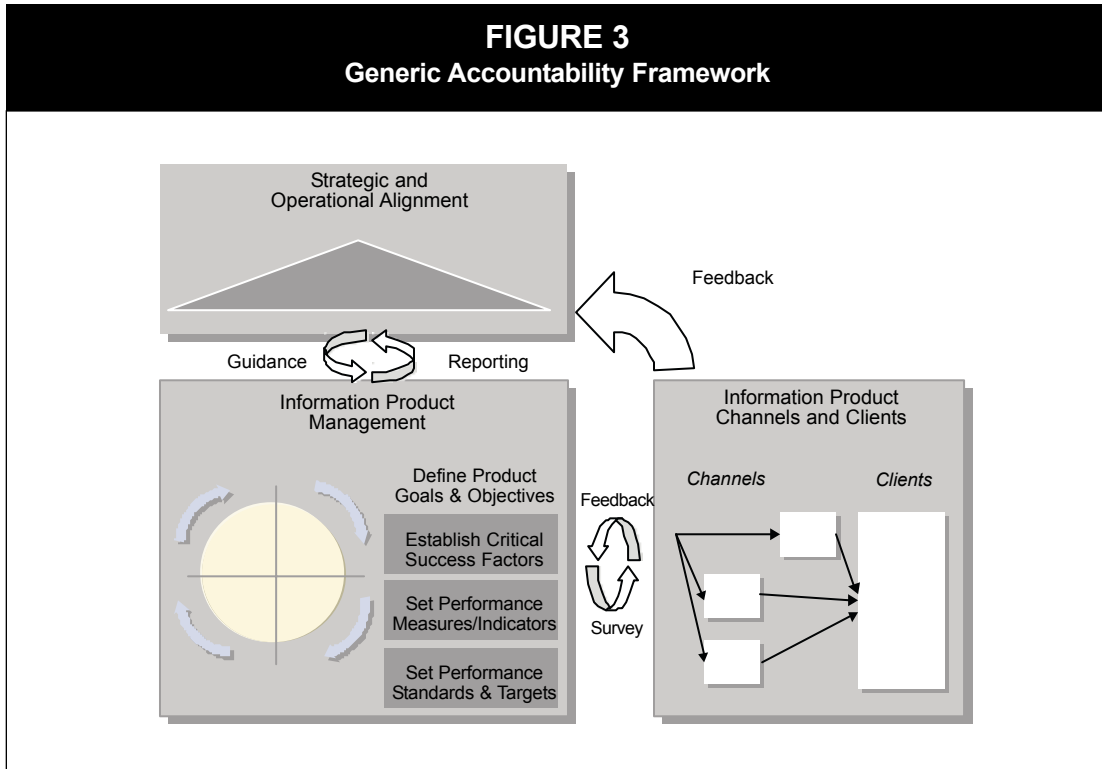
In the absence of an accepted departmental accountability framework for information products, a process was defined and an accountability for results (performance management) framework for information products was developed to address needs for better management of performance and related accountabilities of departmental information products.

For an information product accountability framework to be effective, it must demonstrate:

- a connection to organizational vision, mission, and strategy;
- a consistent application (measure the same things or same kinds of things);
- a connection to outcomes and results. The client is the cornerstone in most accountability frameworks, particularly in the public sector where a financial indicator on ultimate success does not exist;
- the use of balanced measures. At a minimum, balance client and financial aspects, but consider product innovation and people dimensions;
- a correlation of accountability for results with controllability;
- the integration of accountability into the planning process. Accountability for results is a device to improve future success. Lessons learned in the past are useful only in changing actions and behaviour in the future; and
- that it is cost effective.

## Generic Accountability Framework for Information Products

The information product accountability framework is illustrated in the following Generic Accountability Framework for Information Products. Accountability for results needs to reflect the strategic priorities, the needs of clients, and the information product management cycle.



The first element of accountability is alignment with the strategic priorities of the department. This accountability needs to be applied from the initial development of the information product, as well as on an ongoing basis in the planning cycle. This will ensure that the products delivered are directed, as a whole and not just individually, towards achieving the objectives and priorities of the department.

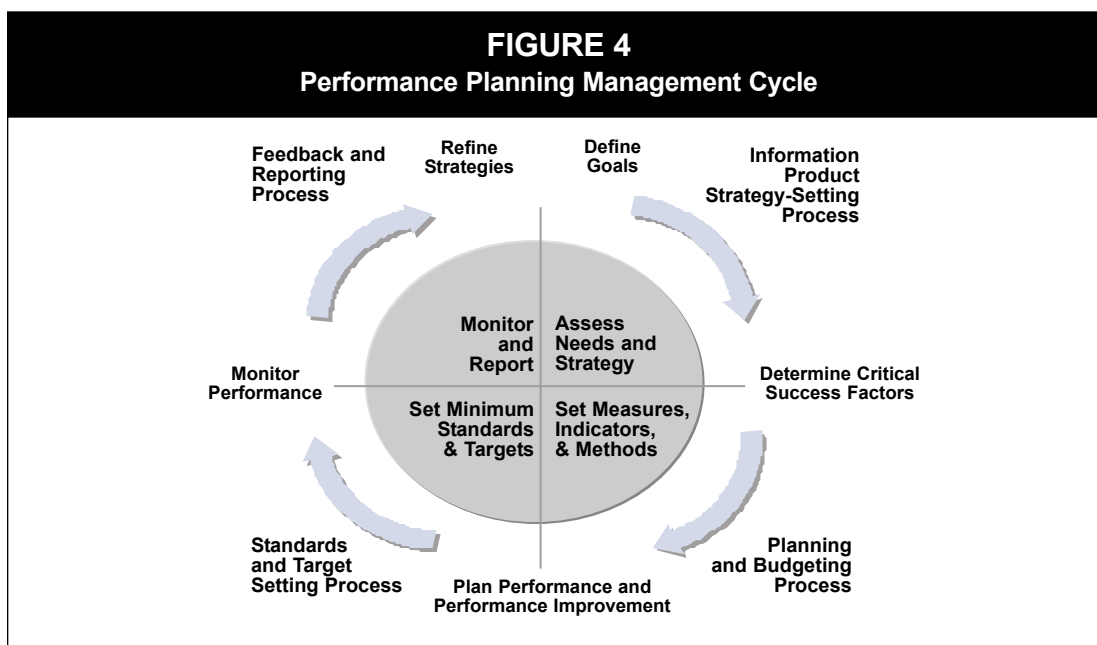
Information product management is the key area in which the framework plays an important function. A standardized accountability framework encourages consistent presence of key elements (i.e., articulated goals, success factors, measures/indicators, performance standards, targets, and alignments) and a standard for planning and reporting success.

The needs of clients are also represented as a key element in directing both product development and design as well as ongoing information product management. The planning cycle should be driven by both departmental priorities, as well as by ongoing client input and feedback. Channel issues are purely delivery decisions and should not mystify accountabilities. However, they do provide added manageable complexities in applying the accountability framework.

## **Performance Planning and Management Cycle for Information Products**

A key component of the accountability framework is the Performance Planning and Management Cycle for information products within the information product management area, as illustrated below.

The accountability planning cycle needs to be integrated into the ongoing information product planning cycle. During a new information product's start-up phase, the accountability planning cycle is most critical. It is then continuously applied as strategic priorities shift at the departmental level, and improvement targets are developed at the product or program level.



This accountability planning process is renewed through successive stages of the information product lifecycle (such as development, deployment, operation, and closure or migration and diffusion to partners). Due diligence is required when establishing new products to ensure that incremental client needs are addressed and that existing products could not already meet those needs effectively and efficiently.

The setting of performance measures should reflect, at a minimum, both client and financial requirements. Performance standards should be negotiated during the process of securing funding. These performance standards represent minimum performance levels for the utility of the information product. Targets represent higher anticipated objectives.

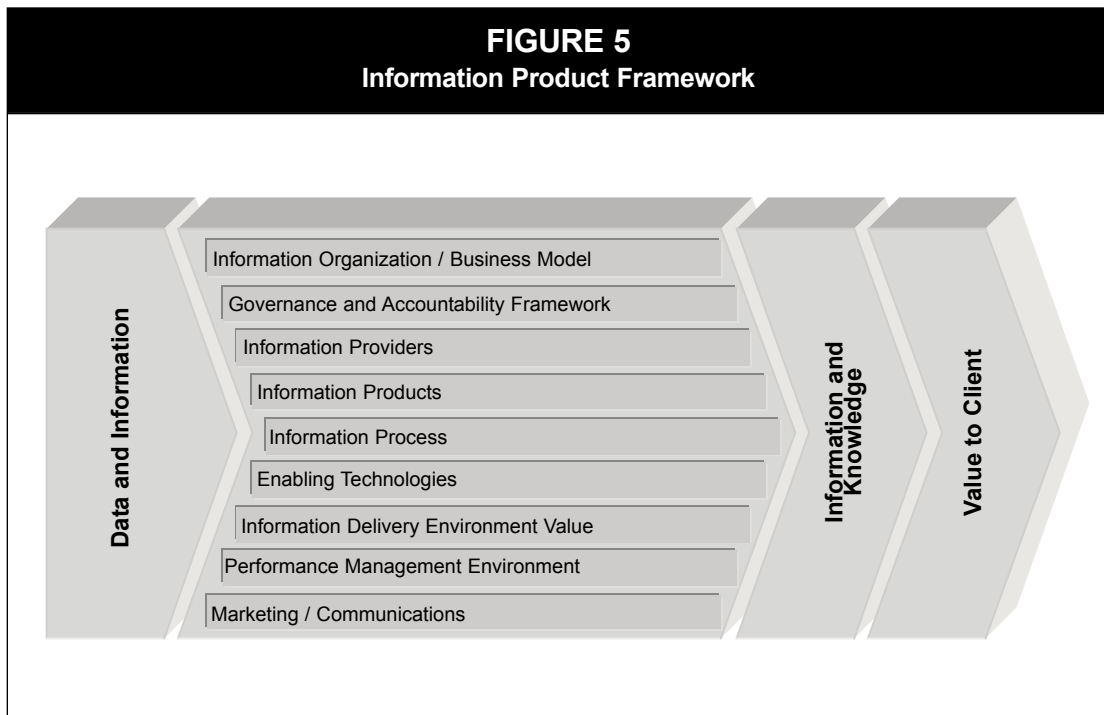
## 5.3 Information Product Evaluation Framework

### Objective

The objective is to develop a framework that can be used to assess the success of specific departmental information management projects, the impact of information products, or the effectiveness of Knowledge and Information Management initiatives.

### Information Product Framework

An Information Product Evaluation Framework comprising nine (9) dimensions was developed. Observations reported in Section 6 of this report are grouped and summarized against these dimensions. The framework, which is illustrated in the value chain diagram below, provides a structured approach to evaluating the overall success of an information product throughout the product's lifecycle.



Each dimension of the Information Product Evaluation Framework is described below:

- *Information Organization/Business Model*: Examine the organizational approaches adopted by business units to deliver information products and services (i.e., their operating models). Include an examination of key strategic partnerships that may be leveraged for information product development and service delivery. Understand the management infrastructure supporting information delivery.
- *Governance and Accountability Framework*: Examine the management and accountability frameworks supporting information delivery processes (i.e., governance models).

- *Information Providers:* Examine the organizations and individuals involved in the creation, deployment, support, maintenance and possibly enhancement/modification of information products. Understand the required competencies of information providers.
- *Information Products:* Develop an inventory/profile of information products in use. Assess the effectiveness, consumption characteristics, and usage of information products.
- *Information Process:* Examine the processes to effectively create and deploy information, as well as the processes that support the information delivery environment.
- *Enabling Technologies:* Assess technologies that enable and facilitate an effective information delivery environment.
- *Information Delivery Environment Value:* Assess the value of the information delivery environment. The assessment incorporates a cost-benefit analysis of the environment. Evaluate the effectiveness of resource deployment. Understand the culture of the information/knowledge creating organization.
- *Performance Management Environment:* Establish processes, metrics and policies to ensure the continuous improvement of processes within the information delivery environment that improve the effectiveness and quality of information products.
- *Marketing/Communications:* Evaluate the approaches and techniques used to stimulate or heighten awareness and demand for information products.

## ***6. Summary of Observations***

Section 5.3 introduces an evaluation framework for information products. This section summarizes observations of the review against the framework. The comments below are listed according to the dimensions of the framework. They are as follows:

- Information Organization/Business Model;
- Governance and Accountability Framework;
- Information Providers;
- Information Products;
- Information Process;
- Enabling Technologies;
- Information Delivery Environment Value;
- Performance Management Environment;
- Market/Communications.

### ***Information Organization/Business Model***

HRDC's approach to information and knowledge management is largely focused on the programs and their execution versus a focus on the management of information and knowledge products in the whole department. Each of the program groups has developed their own approach and organizational structure to meet the client demands for information.

Similarly, the programs have developed their own partners for the collection and dissemination of information and information products to their clients. Partnerships are developed at the office of immediate need. Experiences with these partners are not always shared to allow other organizations to benefit from the good working relationships. This results in the loss of opportunity to benefit from collective negotiation with partners.

The technical infrastructure is in place to support the needs of information exchange. However, the application of information management practices through the access, storage and sharing of information is not generally supported in the program focused environment. Internet and Intranet access has been implemented across the department, but program employees have varied capabilities to take advantage of the technical environment that supports the sharing of information.

### ***Governance and Accountability Framework***

The department, as a whole, does not have an effective governance structure that is recognizable to all business units and employees. The governance and accountability aspects of Information Products are ad hoc with governance structures only operational at the program level. Given the overall clientele of the department, it is not effective to have a program level focus when the clients see the department as a whole. It was observed that the leadership and senior champion(s) of information were distributed throughout the department with no single point of accountability. In the interviews with the Senior

Managers, they recognized the need for a more centralized approach to governance of information products. However there was a fear that the level of autonomy experienced by the programs would erode with such a governance structure.

Key information product developers do not have a forum for sharing experiences and best practices, cooperating with their peers, developing tools and resources to assist in information product development, and looking at information as a strategic tool for the department. Working groups and cooperative efforts are focused on single product creation, rather than on a broader view of the value of the product or information. Approvals of external products were obtained by program managers without the benefit of information about similar or like products in the department.

The ISWG, as a forum for information sharing, has afforded the opportunity for employees from across the department to share ideas and to work cooperatively on the standardization and recognition of information products and their supporting processes. However, the ISWG does not have the backing of management at all levels.

In the area of accountability, there is a need to implement an accountability framework and have this framework become an integral part of the business planning activities of program and business units. This would enable program and business units to report on their performance with regard to information products and their use.

### ***Information Providers***

In HRDC, it appears that any program manager with a need for an information product becomes the expert for that product for the department. This limits the ability of building any strength in this area due to the distributed knowledge base of information about information and products. The information product development employees make the best of what they have, and develop products to meet their needs. These employees may well have the research skills required to obtain the best information available for the program but may lack the creative and marketing skills required to develop and market that same product. All employees are providers of information in one form or another, but none have easy access to an information base that will assist them in the development of their specific product.

It was noted in the research review that knowledge managers need KM-specific skills. These include classification and organization skills, the discipline to create and manage new content, to facilitate, and to mentor. These skills are resident in a small number of employees in the department. The employee survey identified that a small number of people are responsible for the creation and development of critical information products compared to the broad usage reported across the department.

Training in the use of available products, both technically and in terms of how to use and interpret the information, as well as a general understanding of what products are available, are all significantly lacking according to most employees.



Lack of sharing was identified as a barrier in the department. The scarcity of communication or knowledge of available products and conflicting roles in the department are contributing factors to this lack of sharing.

### ***Information Products***

HRDC is known to have upwards of 500 information products. In this review a small number (10) were evaluated in detail, and another 44 products were inventoried as active products in the respective business units examined. These products were of consistent high quality, the result of dedicated work with attention to the details of development and production. The area most cited as a potential for improvement was in the area of marketing or sharing of background of the product with those who are expected to use the product with the department's clients. Well-designed products miss their mark in the field because of the lack of shared information about the goals and objectives associated with information and products. This is not only a source of frustration for the employees, but a significant drawback in the effectiveness of the product and the development effort put into the product.

The lack of any inventory of information products posed problems for those seeking information on like or similar products. As a result, there has been a tendency to build, rather than adopt other products, as this more readily meets the requirements in terms of accessibility, availability, and relevance. This has resulted in redundant development efforts across the department. The lack of a complete and accessible inventory also resulted in the distribution of obsolete products, or ones that were not the most recent versions.

The survey identified other shortcomings: a lack of training in products, difficulty accessing information through systems and a lack of sharing of information across the department. Study findings reflect the extreme importance of the overall function of information products at HRDC, based on the heavy reliance that most employees have on these products to achieve a large portion of their work objectives. Products are typically complex and varied, as are the methods for accessing them. The need for training to make maximum use of the products was also highly evident.

Given the strong linkages between product training and positive outlook, the department should ensure that employees are knowledgeable about what tools are at their disposal. This would include developing more courses in this area, and actively encouraging and providing employees with the time to take them.

### ***Information Process***

The employee survey revealed that there is a heavy reliance on information products for employees of the department who meet with clients and partners. To meet the demands, it is essential that programs can identify and develop information products that support business needs. In order for business units to readily meet client demands effectively and efficiently, information on available resources, a structured development process, a performance management framework and support by knowledgeable personnel must be available to employees of the department. This is not the case at HRDC.

The ad hoc nature of the development processes used for developing information processes causes duplication of efforts throughout the department. The lack of any focus on information products in the department does not readily permit any sharing of information and resources in the development cycle. Additionally, this same shortcoming does not permit any coordinated approach to the improvement of tools and access to the systems, that provide the information employees need to complete their assigned work.

Information product design and development is made more complex with the participation of partners in these initiatives. This requires a fixed approach or methodology be followed to ensure that all partners and the department can agree on both the products, and the methods for development and dissemination of these products. Currently, a standard process is not being followed.

### ***Enabling Technologies***

The infrastructure in the department is sophisticated enough to allow for complete access to all aspects of information storage and retrieval. Very little attention has been spent on the training of employees and partners who need the information. The result is that employees are frustrated by the technology they are not trained on and they do not get the full benefits of this infrastructure. In addition, there is a definite variance in the level of competency in the use of the tools that are made available across the department. This is likely due to familiarity, training and ease of use of the tools.

All employees have access to the Internet and the Intranet. There is a proliferation of Internet sites in the department, yet little strategy associated with creation and development.

Some information products are on mainframe systems and dedicated terminals which tend to be slow and inaccessible. In addition, these programs have not adapted complicated operational systems to a more user-friendly environment. As a result, employees find work-around methods to meet the needs of their clients. Interviewees felt that appropriate training and use of convenient access routes would ease their jobs as well as better represent the department to their clients. Almost one in three employees felt that they did not have the tools to do their jobs, they cannot conduct their work effectively, or that HRDC does not provide good information for employees to do their jobs. On the bright side, about two-thirds are satisfied that they have the tools to do their jobs.

### ***Information Delivery Environment Value***

In the employee survey, it was observed that the employees of the department prefer to see the program structure as a barrier to sharing. In an Information and Knowledge Management environment, sharing is imperative to success. HRDC has demonstrated a variance in processes and application of development and dissemination of Information Products, and therefore has variations in the capability and service delivery profiles across the department.

Information sharing within the department suffers from a lack of employee knowledge of what is available, and the lack of communications across the groups. As a result, there is a tendency for groups to create their own information products. Barriers to sharing information in the department are wide spread. This may, in part, be a result of the lack of general training or communication to make employees aware of the types of products available to them. According to most employees, improved employee knowledge in this area will mitigate the major reason for not sharing information effectively.

Overall, however, the current state of affairs is positive. Employee perception of the quality of the critical products is very high, accompanied by high levels of satisfaction and an observation of minimal overlap. The perceived quality of training available is also very high although one in five employees has not received necessary training. These positive perceptions of the quality of products and training also have a direct influence not only on satisfaction, but also on employees' outlook with regard to their preparedness to meet the work challenges. The more employees believe these products and training to be good, the more likely they are to believe themselves well equipped to deal with the work and generally supported by a department that invests in good tools for its employees. This, in turn, makes for a more positive attitude about the department overall and employees' work environment.

### ***Performance Management Environment***

In the interviews on the subject of accountability with senior managers and with departmental personnel in the field, there was recognition of the absence of a rigour associated with performance management. The products that have been developed have been driven by program needs and they have met those needs without any performance framework for evaluation. The measurement of success is very difficult without a baseline or a framework for evaluation. Indicators of performance must be embedded into the product lifecycle very early in the process to have real meaning, and to provide a good understanding of why a product is being developed.

In addition, there is a need to incorporate information product accountability into the business planning cycle for the various business units and the programs. As it is very difficult to measure the ROI on IM/KM initiatives, a framework should be established identifying the measurable outcomes of the product early in the process. The department will then be able to collect enough information to measure the effectiveness of the independent products.

With the move to use electronic delivery channels more intensively, the department has the capability of monitoring product performance based on access and use of the information.

## ***Marketing/Communications***

HRDC has a challenge in generating awareness of, and dependency on information as a business tool. This is a requirement for the success of information initiatives. It is not enough to create information products and then just let them sit on shelves. Communications about the products and services is a necessary part of the process of becoming an information provider.

Additionally, HRDC is challenged to ensure that they are recognized for products that are developed in conjunction with or by product development partners. In particular, care should be taken to ensure that the department does not lose visibility in the community as it works closely with its partners.