

# Knowledge Management Strategy

GOVERNMENT OF THE  
NORTHWEST TERRITORIES

*Prepared by*

**Informatics  
Policy Committee**

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# Knowledge Management Strategy

Information technology (IT) is the tool of choice to make knowledge management easier. Before knowledge management can be implemented in a large, complex organization such as the GNWT, a means of managing IT well must be in place.

Within the GNWT, the Informatics Policy Committee (IPC) has been given by the Financial Management Board (FMB) responsibility for corporate information and information technology management. The IPC, which is composed of the Deputy Ministers from several major departments, recently reviewed the government's current way of managing information technology and found it was dated and failed to meet the overall needs of the GNWT.

In the GNWT, the management of information technology is highly decentralized and the technology infrastructure is composed of a wide variety of hardware, software and telecommunication products. As a result, IT management suffers from the following disadvantages:

- There is considerable duplication of effort
- Economies of scale are not being achieved
- The IT environment is inefficient and overly costly to support
- It is difficult and time consuming to obtain accurate, corporate-level information
- There are technological and organizational barriers to the exchange of information, within privacy constraints, across the GNWT
- The IT environment is not effectively structured to support future electronic service delivery (ESD) initiatives

Through the development of a Knowledge Management Strategy, the IPC concluded that the government's technology infrastructure must be standardized and IT initiatives must be undertaken with a broader vision to improve the use of information within the GNWT and the delivery of services to residents of the Northwest Territories.

The Knowledge Management Strategy is a three-year plan to put the building blocks in place for effective, government-wide, knowledge management.

















## Challenges

Implementing a technology framework that will organize and enable information to flow freely across the government will not be without its share of obstacles. Effectively managing the IT resources and IT-related initiatives in the GNWT will require overcoming a number of challenges, some of which include:

- 1. Gaining acceptance for the changes from a variety of stakeholders.** At present, departments have the latitude to make their IT investment decisions based solely on their individual requirements. While some departments have made significant progress, others feel they are just beginning. While introducing changes, it will be important to ensure progress continues for those departments that have already made advancements.
- 2. Dealing with residual perceptions that establishing any type of government-wide approach is really a move to reduce departmental control.** Today, many organizations are taking an enterprise-wide approach to the management of common resources such as information and technology. Critical to the success of this approach is that roles and responsibilities are clearly delineated, including ownership of the information and knowledge by the department or agency with the mandate for delivering the program and service.
- 3. Recognizing the realities of operating in the North.** Technology solutions, which have been successful in the South, are not always easily transportable to the North. For example, while it might make economic sense to have all servers located in Yellowknife, instead of in each individual community, the current network speed means that centralization of servers may in some cases decrease operational efficiency. Appropriate Northern solutions will be required.
- 4. Not everyone is ready for an electronic world.** In some communities, having a telephone in each household would be a practical limit to technological advancement. Some citizens still want to walk into an office or telephone a government employee to access services. There will be some residents who will never want self-service. Technology initiatives must recognize the need to support both self-and assisted-service.

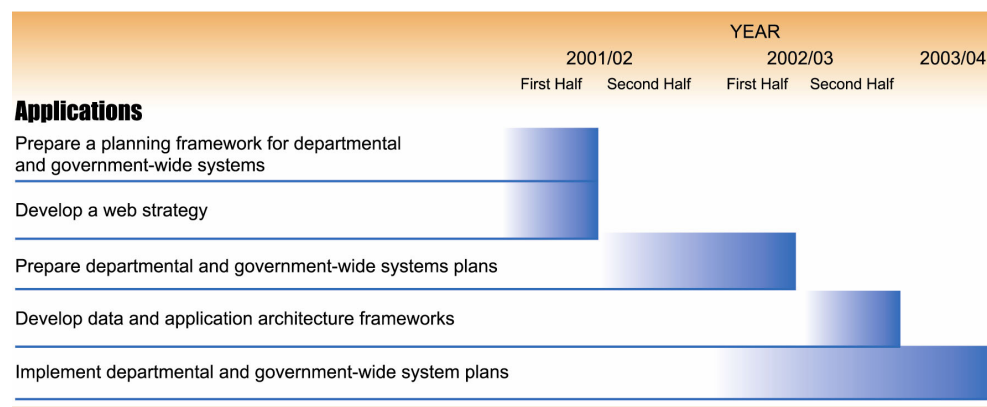




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## Project #2 – Applications

*Outcome:* Strong departmental and government-wide systems



The phases in project 2 are related to applications (or systems) and are the responsibility of owners of departmental and government-wide systems. The first phase is development of a web strategy because this is the "face" the GNWT presents to its public. To achieve the benefits of increased information sharing and a government-wide approach to knowledge management, a collaborative approach is necessary involving all system owners. The aim is to make the whole greater than the sum of its parts.

Planning for systems within the government is presently an independent process. There is no standard template for preparing plans and no means for system owners to communicate their plans. This project includes development of a planning framework for use by departments and government-wide system owners. Ideally this planning framework will be implemented for the 2002/03 budget planning cycle. The CIO Office will provide ongoing consulting support.

To enable computers to recognize like things, a great deal of effort is required to develop data and application architectures for use across the organization. The more consistent the data is, the greater the chances of being able to produce and share meaningful information. For example, if there is a standard way to record a person's name and address, to affix a date, or to identify a region, service delivery can be enhanced.

Some duplication can be eliminated and service can be faster because basic data does not have to be continually re-entered. When there is assurance that data and

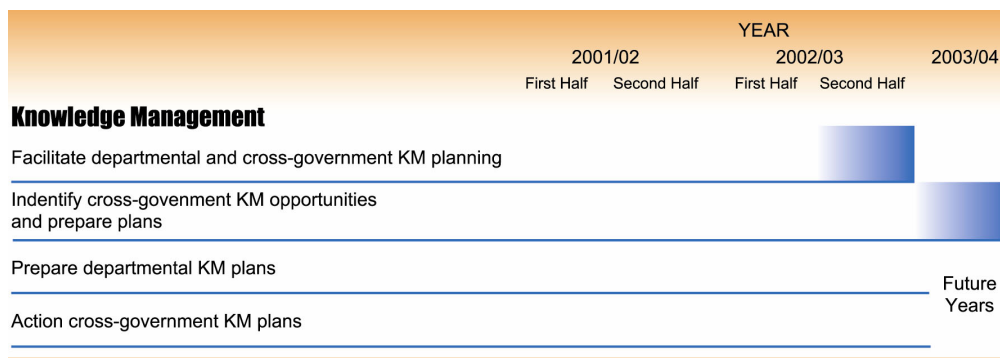
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information are accurate, risk is reduced particularly when that data is used to make decisions.

The phases related to the development of data and application architecture frameworks will involve the preparation of guidelines for departments to use in developing their architectures and systems plans.

### Project #3 - Knowledge Management

*Outcome:* Integrated, cross-government plans for knowledge management



Project 3 identifies cross-government information sharing opportunities. Content owners have the responsibility for identifying knowledge management initiatives within their own areas of responsibility as well as cross-government.

This project includes developing and distributing planning guidelines to departments and agencies. Facilitated, cross-government knowledge management planning sessions will take place to develop cross-government knowledge management plans. Departments can undertake similar activities in their own business areas as they implement knowledge management into their own operations. The Office of the CIO will be available in an advisory capacity. The desired outcomes are a workplace that encourages:

- Identifying mission-critical knowledge required in the GNWT in order to manage programs and resources
- Establishing the types of relationships required to build and sustain knowledge in the organization
- New approaches to the divestment of knowledge so that innovative practices can challenge the mindset of "we've always done it this way".



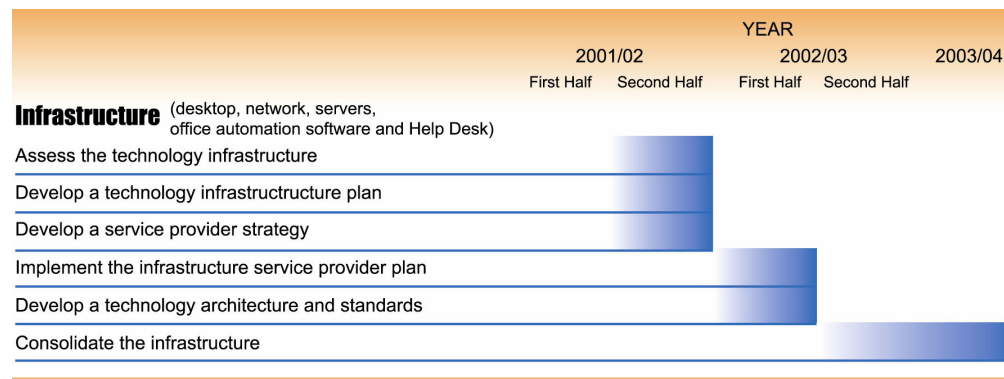
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- Ensuring employees have easy access to the information they need for their daily work, are able to use information in value-adding activities, and can contribute knowledge back into the organization for others to use when they provide service or tackle problems.

Two guiding principles will govern the introduction of knowledge management. First there will always be a need to acquire knowledge through human interchange - people connecting with people. The second principle is that knowledge, which is an asset, will be deliberately managed using appropriate technologies to make knowledge management more efficient and effective.

## Project #4 – Infrastructure

*Outcome:* A well supported, standardized technology infrastructure



Project 4 involves assessment of the technical infrastructure, and development of a strategy to upgrade it and provide appropriate service and support. In a technology environment, the infrastructure includes desktop computers, printers, networks, servers, and office automation software. The phases related to infrastructure will begin with a detailed assessment of the current technology infrastructure in the GNWT in order to identify any gaps between what is in place and what is required. A technology infrastructure plan will be developed which addresses the needs of the GNWT over the next 4 – 5 years.

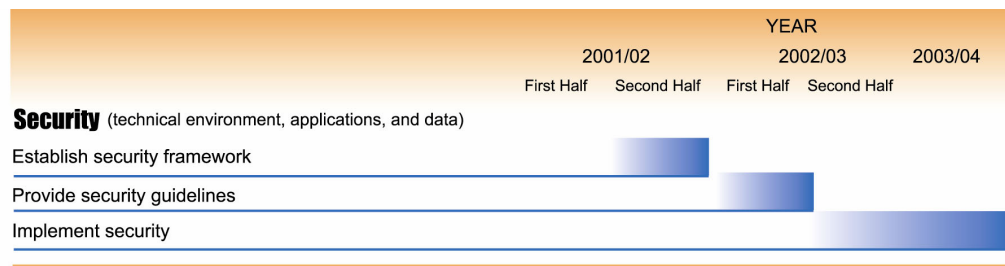
One of the main features of the technology infrastructure strategy is the establishment of a Technology Services Center (TSC) for the GNWT. This will involve a transition from the current, decentralized mode of operating and will lead to more integrated networks, improved access and capacity in the communities, and sound investments.

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The Technology Services Center may be established internally or externally. Either way, the types of services offered will be specified and service agreements will be drawn up between the TSC and each customer.

**Project #5 – Security**

*Outcome:* A security framework and guidelines to protect the technology and knowledge assets and support the protection of privacy



Project 5 is the development and implementation of a security framework. Security applies to the complete technology environment, including the applications and data, the office automation tools, and the technology infrastructure. Security is only as good as the practices people follow in their everyday work. When security systems are implemented, they generally follow the framework established for the organization, be it government-wide or at the individual program level. To maintain IT security, GNWT employees will need to follow the procedures that apply to them. Typically these include:

- Changing passwords regularly and never sharing passwords
- Canceling user access when people are no longer employed by the GNWT
- Making sure people know the differences between public, confidential, and restricted records and that they identify and treat records in accordance with the security categories
- Providing orientation and refresher programs to GNWT employees regarding security procedures they are expected to follow
- Regular monitoring of security practices







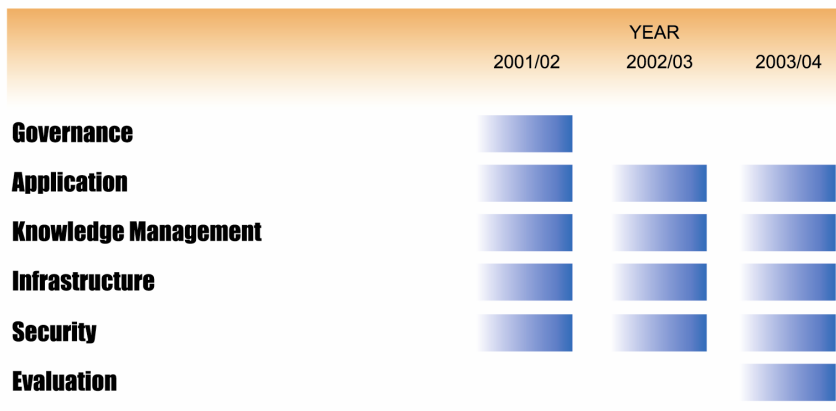


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## In Summary

A three-year plan has been developed for implementation of the GNWT Knowledge Management Strategy. This is an aggressive timeframe and will require the concerted efforts of all stakeholders to ensure the six projects are completed as scheduled. The following diagram summarizes the timelines.

### Project Action Plan



There are many challenges ahead. With the co-operation of departments and agencies and the willingness of government staff to participate, implementation of the Knowledge Management Strategy will result in better information, more efficient systems, and improved service to clients at a manageable cost.

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Informatics Policy Committee  
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