e-Governance and the Advancement of Science and Technology

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Agenda

- Introduction
- E-government - strategic thrusts
- E-government – a Knowledge Management Platform
- E-government - Advancing Science and Technology
- Example Applications
- Conclusions
Introduction

“All governments have caught on to the point-and-click phenomenon, as evidenced by the increasing amount of information available to the public at modem’s reach. Most government Web sites offer the public vast arrays of facts regarding government structure, laws, initiatives, geography, information requests and links to related sites.”

E-Government Strategic Thrusts

GOVERNMENT X

E-GOVERNMENT TRANSFORMATION

Strategic Focus Groupings
- Service Delivery
- Citizen Empowerment
- Market Enhancement & Development
- Exposure & Outreach

Key Areas of Development
- Service Automation and Information Provision
- Interaction Based Services
- CRM Constituent Relationship Management
- E-Participation and eDemocracy
- Collaboration and Partnership
- Globalization
- Marketing Electronic Government

Internal Efficiencies Platform
Integrated applications, Secure Channel, Common Infrastructure & Service Centers

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E-government – A Knowledge Management Platform

- Standards-based infrastructure enabling local and global connectivity and access
- Integrated applications supporting communities of practice and providing opportunities for knowledge sharing
- Globally accessible data and information repositories
- Highly competent human capital engaging in creating, classifying, cataloguing, storing, and disseminating information
Advancing Science and Technology

- Developing Knowledge Repositories & Networks
  - Information portals, access to datasets (scientific, statistical, etc.)
- Developing and Disseminating Technology Standards
- Managing Intellectual Property
- Building Research Networks and Funding Research Activities
- Fostering Local and International Collaboration
- Supporting Science and Technology Learning
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Knowledge Networks

- National Biological Information Infrastructure
  - is a broad, collaborative program to provide increased access to data and information on the US's biological resources.
Scientific Data Sets

- Geological Survey of Canada
- Access to a variety of geophysical databases
Scientific Data Sets

- **Space Environment Center - USA**
  - provides a wide variety of near-real-time and recent Space Weather data online through its Web and FTP sites.
National Statistics

- UK National Statistics Online
Technology Standards

- National Institute of Standards and Technology
  - a non-regulatory agency of the U.S. Department of Commerce's Technology Administration,
  - develops and promotes measurements, standards, and technology
Intellectual Property Management

- Canadian Patents Database
  - Allows access to 75 years of patent descriptions and images (more than 1.4 million patent documents)

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Research Partnerships and Funding

- **NSERC – Canada**
  - Co-ordinates funding for Canada’s natural sciences and engineering research and innovation agendas.

Program Guide

The Science of Innovation
NSERC and Canada’s Innovation Strategy

- Finalists for Canada’s Top Science Prize Announced
  - October 7, 2002

- GEPS Winter Symposium 2003
  - September 27, 2003

- New NSERC Industrial Research Chair Will Work on New, Human Eye-Infancy Test
  - September 20, 2002

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Research Partnerships and Funding

- National Science Foundation - USA
  - Coordinate US national scientific and engineering research agenda through a variety of funding and collaborative mechanisms
Local and International Collaboration

- **Safari 2000**
  - International regional science initiative that has been developed for Southern Africa
  - Research collaboration between US and Southern Africa Scientists and students
Local and International Collaboration

- Agricultural Research Council - RSA
  - promoting agricultural and related sectors through research, technology development and transfer
Learning

- NIST/Sematech Engineering Statistics Handbook
  - Provides online access to learning material and tools for statistical analysis
Learning

Statistics Canada
- Learning resources
  - Students
  - Teachers
  - Researchers
- Access to data sets
- Data Liberation Initiative
Conclusions

- E-government investments should also embrace efforts to advance science and technology
- Need to create systems and environment that promote knowledge sharing
- Require investment in developing capable human capital
Thank you.