Incorporating ICT’s into the Regional Development Agenda: *Using E-Government Systems as the Driver*

Conference for Regional Policy Makers and Advisers

Caribbean Development Bank
Barbados

Registry Systems in Support of Revenue Generation
Canadian Experience - Practitioner’s Perspective

Elaine MacEeachern
*E-government Solutions Specialist*

September 30 & October 1, 2008
Topics

- ICT / Regional Development Agenda - Background
- Case Studies from Atlantic Canada
- Business and Technology Model
- Challenges
- Success Factors
- Regional Registry Services
- Lessons Learned
- Business Models
Practitioner Focus

- Information Communications & Technology (ICT) solutions / services to facilitate e-government transformation and reform involving:
  - Land registry systems
  - Personal/Movable Property registry systems
  - Business registry systems
  - Other similar registry systems

- Expertise and best practices founded on electronic services delivery (ESD) initiatives in Atlantic Canada

- Geographic focus – Atlantic Canada/Asia Pacific Region (since 2002), recently the Caribbean

- Subject expert - advising governments as they build and implement systems through all stages of:
  - Legislative and business process re-engineering
  - Operational modeling, assessment, deployment
  - IT solution design and implementation
  - Human resource training, communications.
ICT & the Regional Development Agenda

- ICT / e-Government is recognized as a key enabler in the transformation of emerging economies into sustainable, productive, and transparent open market economies.

- e-Government is part of a larger reform program for how government works, manages information, manages internal functions, serves citizens and businesses to further economic development and good governance.

- IFI’s, governments, policy makers, legal and financial experts all recognize the importance of such reform to:
  - to support the growth of economies
  - stimulate investment, and
  - achieve other social development objectives.

- To enable the legal and regulatory environment to function effectively, registry systems must be established, or modernized.

- Emerging economies are frequently challenged with governance issues, poor IT infrastructure, lack of e-Commerce and financial processing...
Key Business Drivers

- Using e-business tools / solutions to achieve strategic goals
  - Enhance access to and delivery of government services to benefit citizens
  - More effective governance
  - Increased transparency
  - Re-engineering business processes to streamline and integrate programs and information
  - Responding to new legislative requirements
Government Re-engineering Objectives

- A “quantum” leap in improved government service
- Cost containment
- Revenue generation
- Standardization & simplification of process, approvals & support
- Improved regulatory compliance
- End-to-end business function capability
- More access channels
- Security as it relates to the business function
- Efficient delivery of goods and services to citizens, businesses, government employees and agencies.
- Improved cross-agency coordination and collaboration
Types of Government eServices

**Government-to-Citizen (G2C)**
- License renewals
- Ordering of birth/death/marriage certificates
- Filing of income taxes
- Etc.

**Government-to-Business (G2B)**
- Business information
- Application forms
- Renewing licenses
- Registering businesses
- Obtaining permits
- Payment of taxes
- Payment of fees
- e-procurement

**Government-to-Employee (G2E)**
- Training
- Collaboration
- Dissemination of information
- Research
- HR tools

**Government-to-Government (G2G)**
- Transactions between levels of governments
- Between departments
- Agencies
Leaders in e-government customer service

Barbados leads the Caribbean region, ranking in the top 25 per cent overall (education and infrastructure indices being contributing factors). Trinidad and Tobago, and the Dominican Republic made positive gains. DR had the highest web measure, ranking in the top 1/3, but poor infrastructure overall. Jamaica declined and Haiti, which is now included in the group of countries online was ranked 165th out of 182 countries.


Note: The e-government readiness index is a composite index comprising the web measure Index, telecommunication infrastructure index and the human capital index.
Atlantic Canada On-Line

A Case Study in e-Government Electronic Services Delivery
ACOL Background

Atlantic Canada

Atlantic Canada Population 2007

<table>
<thead>
<tr>
<th>Persons (thousands)</th>
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<tbody>
<tr>
<td>Nova Scotia</td>
<td>934.1</td>
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<tr>
<td>New Brunswick</td>
<td>749.8</td>
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<tr>
<td>Newfoundland &amp; Labrador</td>
<td>506.3</td>
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<tr>
<td>Prince Edward Island</td>
<td>138.6</td>
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<tr>
<td>Atlantic Canada – Total</td>
<td>2,328.8</td>
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<tr>
<td>Canada - Total</td>
<td>32,976.0</td>
</tr>
<tr>
<td>Atlantic % of Canada</td>
<td>7.06%</td>
</tr>
</tbody>
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Source: Statistics Canada, CANSIM table.
ACOL Background

- Sponsored by Conference of Atlantic Premiers
- Feasibility assessment
  - Phase 1 – Review of Best Practices in other jurisdictions
  - Phase 2 – Organizational Readiness
  - Phase 3 – Selection of private sector partner
- Operating since November 1997
ACOL Business Model

- Vendor / Service Provider granted access to government information databases
- Government retains ownership of data
- Business case for each service offering developed in partnership with government
- Private sector partner and government share revenues from transaction fees
- Adheres to stringent security/confidentiality standards
- Seamless, regional system, regardless of government or information source
eGovernment Vision

- **Shared** Infrastructure – leverage economies of scale
- **Improved** information management
- **Improved** service delivery
  - 24X7 service availability to multiple applications
  - Flexibility - allowing clients to interact with government through multiple technologies, Web, WAP…
  - Automated processes, reduced data entry burden, real time services, increased accuracy
- **Reduced** service delivery and administrative costs
- **Level playing field** for businesses
- **Revenues** from new and existing services (via service fees)
- **Improved** compliance
- **Expandability** - ability to add new applications and services
- **Continual improvement** - integration and use of new technologies and services
Service Provider Role

- Hardware, Software and Network
- e-Business Functionality
- Business Office - Client and Financial Management
- Database Management
- Client Support Centre
- Help Desk
The ACOL Strategic Alliance

- **Master Agreement – Provincial Level**
  - Establishes overall framework: defines purpose, goals and scope; commitments of the parties; governance structure, term and related conditions

- **Access Agreement – Department Level**
  - Signed by implementing department in each province; details terms and conditions of Unisys’ access to the provinces’ database

- **Schedules – Division Level**
  - Specific to each database; negotiated as required.
ACOL Operational Concept

Provincial Data Centres: Public Record Databases

- Personal Property
- Companies
- Vital Statistics
- Land Information
- etc.

Nfld
- Amdahl
- U2200

PEI
- U2200

NS
- IBM 3090
- HP Unix

NB
- U2200
- HP3000 Unix

ACOL Services

Value-added Channels
- Business Offices
- Business Users

Business Offices
- Business Users

Kiosk
- Citizens

Internet
- Citizens
- Business Users

Phone/IVR
- Citizens
- Business Users

Service Counter
- Gov't or Franchise
Welcome to ACOL*  
...It's all about getting on-line, not in line.

Bienvenue à ACOL*  
Branchez-vous pour éviter les files.

*ACOL and Atlantic Canada On-Line are registered official marks of the provinces of New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island. Unisys Canada Inc. is a licensed user of ACOL and Atlantic Canada On-Line.

First Regional Application

Personal Property Registry System (STR)

- A central repository for the registration and searching of security interests in moveable collateral
- Approximately 3000 users
- Operational since November 1997
- Provides access to 6 separate provincial databases
- Total Revenue Generation – approx $12 million annually
- 6 Governments – 6 Registries
Personal Property Registry

- Introduction to PPRS
- Enter a Registration
- Change a Registration
- Search
- Submit a Batch File
- Request a Pre-PPSA Document Copy
- PPRS Administration

4040 Warning: Low Account Balance.
IT'S ALL ABOUT GETTING ON-LINE, NOT IN LINE
Value-added Services

- **Driver Insurance Abstract Service**
  - Provides registered users access to the RMV database for Driver Insurance Abstracts
  - Web enabled, secure access
  - Data Interchange interface
  - Authenticated by registered user ID’s and passwords
  - Search - Client Drivers License Master Number
  - Results - a single match results screen is displayed and can be printed
    - Driver & license information, convictions, suspension, accident history
  - Fee Collection - automatic collection from Client accounts for each valid search and payment to the Province
Lien Check Service

- Used to identify liens on personal property via the Internet
  - Such as, a motor vehicle, trailer, mobile home, airplane, boat
- This can help protect individual from purchasing personal property that may be subject to seizure
- Searches the Personal Property Registry (PPR) to identify registrations and their current details using a serial number
- Produces an official record of the contents of the PPR in the form of a Search Result Report
- The fee for a search varies based on the province or territory between $5.00 and $10.00.
Value-Added Services

- Service Nova Scotia and Municipal Relations Online Services
  - Motor Vehicles
    - Driver Instructor Verification
    - Driver Test Payment
    - Vehicle Permit Renewal
    - Fine Payment
    - Change of Address
    - Registry of Motor Vehicles

- Atlantic Blue Cross Care (for Nova Scotia Health Card)

- Halifax Regional Municipality (Taxation Department)
  - Vital Statistics Requests
  - Birth Certificate
  - Marriage Certificate
  - Death Certificate
  - Payment on Account
NSBR

Case Study

“…one-stop services, integrated registration, and compliance management.”
NSBR - Vision

An integrated, secure information system and access channel that acts a primary tool with which Nova Scotia businesses can conduct business with Government. Its functionality allows 24/7 access to government services spanning provincial, federal and municipal governments and agencies. Government can share information between departments and levels of government.

Source: NSBR, SNSMR
What is the NSBR?

- Partnership
  - Canada Revenue Agency (CRA)
  - Workers’ Compensation Board of Nova Scotia (WCB)
  - Service Nova Scotia and Municipal Relations
- Single window for business
  - Access across Government for information and transactions
  - Electronic self-service
  - One registry for tombstone data
  - One identifier, the CCRA Business Number (BN)
- E-government Infrastructure
  - Software
  - Call Centre
  - Access Nova Scotia Centres
  - Information Management
  - Interfaces to CRA, SAP, Registry of Joint Stock Companies, Point of Sale
  - Registry for common data
- Integration /management of 27 programs and corresponding data using a common identifier
- Live since 1999
Business Online Services

Government at the Speed of Business

Ask Us a Question

Business Registry
WCB Clearance Letter, Renew Business Name, More...

Driver’s Insurance Abstract

Economic Indicators
Social Stats, Business Stats

Joint Stock Companies Search
Forms Download, How to Register

Motor Vehicles
Vehicle Permits, Change of Address, Driver Test Payments, More...

Online Gas Stations Listings

Personal Property Registry

Procurement
Tender Notices, Results/Awards..

Property Online

Registry of Lobbyists

Special Move Permits

Target Nova Scotia

Tourism
Apply: Accommodations Licensing Return
Forms: Campgrounds and Fixed Roof, Flag Lending Request
Functionality

- Intake of applications
- Electronic Registration and Renewal
- Manages workflow, assigns tasks electronically
- Custom and Ad Hoc Reporting
- Collections
- Encryption/Decryption interface’s
- Batch mail outs / renewals
- Integration of Licensing Processes
- Protected with security and encryption technology
- Web enabled
Benefits

- Administrative efficiencies
- Improved access to services
- Standardized processes
- Improved compliance with government regulations and policies
- Leverages financial institution service channels
- Improved audit capability
- Increased revenues
- Reduced costs for government
- Improved business climate
Implementation Challenges

- Re-engineering business processes to streamline and integrate programs and information
- Addressing / integrating legislative requirements
- Leveraging and preserving investments in existing legacy systems, databases, and other information technology assets
- Selecting and implementing the right technology to help with the re-alignment of service delivery across government
- Managing relationships and expectations
Implementation Challenges

- Government is structured around paper and departmentalized processes
- Limited funding available for electronic service initiatives and to make investments
- Many agencies have large investments in dated technology and networking infrastructures
- Government departments and agencies don’t have a lot of experience with inter-jurisdictional client solutions and joint process change initiatives

Source: Giga information group
Critical Success Factors

- Shared Vision / Consensus of expectations
- Organizational Commitment
  - Government and vendor organization
- Collaborative Partnership Relationships
- Rigorous Project Management and Accountability
- Communications
- Executive Sponsorship
- Solid Business Case
  - Government and vendor
Lessons Learned

- **Project Structure**
  - Steering Committee
  - Project Management
  - Methodology
  - Project Administration Office
  - Controls

- **Decision Process**
  - Clearly defined stages
  - Need for flexibility and ability to deal with uncertainty

- **Solution**
  - System Integration is important – been there done it skills
  - Flexibility and reuse is a big time and cost saver
  - Technology is not the most important thing - Embrace but don’t chase
Lessons Learned

- Timelines
  - Business transformation drives critical path in the early stages
  - Legislation may require change and will effect timelines
  - Resource availability can be an issue (technical and business)
  - Contractual Relationships

- Contracts – inter-jurisdictional agreements
  - Harmonized Legislation
  - Partnership Approach
  - Integrated Project Teams
  - Need for flexibility
  - Defined Roles and Responsibilities
  - All parties must understand investments, risks, rewards and benefits
Business Model Considerations

- Invest or pay as cost incurred
- Value versus cost
- Client pays/Government pays
- Fixed Price can be difficult
- Risk / Reward
- Fee for Service Perceptions
- Mix/Flexibility
- Big Picture not always “aspect by aspect”
- Cost Benefits vs. fee for service
Financially Sustainable Models

- Small, self-financing or outsourced projects
- A revenue-generation strategy and revenue/cost-reduction strategy investment designed at the outset
- Private sector can play a critical role
- Revenue generating services should be end-user or demand-driven
- Privacy, security, ID mgmt. need to be addressed
- Communications strategy
- Partnerships
- Customer service orientation
- Client satisfaction measurements
- Pilot Projects
Atlantic Canada E-government Legacy

- Proven Track Record
- Business Re-engineering Expertise
- Partnership Relationships
- Registry Design and Architecture
- Valuable Lessons Learned
- Transferable Knowledge/Technology
International Recognition

- ADB sites ACOL model
  - Vietnam, Pakistan, Bangladesh
- World Bank, IFC
  - Russian Federation
- OECD & IFC
  - ACOL, NSBR
Elaine MacEachern, C.I.T.P.  
*Principal*, STRconsulting Ltd.

**mail:**  P. O. Box 3685, Windsor, Nova Scotia, Canada, BOP 1L0  
**phone:**  +001 902 798 0565  
**email:**  elainemaceachern@strconsulting.ca  
**website:**  www.strconsulting.ca