The Municipal Reference Model as an Information Management Framework

Managing Information In the Public Sector
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Agenda

1. Peel Information Management Challenge
2. What is the Municipal Reference Model?
3. The MRM as an IM Framework
4. Peel Information Management Strategy Implementation
The Region of Peel

1,254 square kilometers.

4.4% population

38.4% population

57.2% population

1.2 M residents

24 member elected Regional Council, plus Chair appointed by Council

invest·inspire·instill
our Common Purpose ... are you in?
Award Winning

Region of Peel is …

- A leading edge service provider committed to continuous improvement
- The 1st government in Canada to receive National Quality Institute
  - Canada Award of Excellence
  - CAE Gold Award for Quality
  - CAE Healthy Workplace Award
Information Management at Peel
Where we are coming from
Estimated 16 Million files (documents) plus 10 million emails – WOW!!!

Only 2% (at most) of electronic information can be considered to be “managed”
Growth in Electronic Information

- Total storage quadrupled since 2006
- EIM only 4% of stored information – but up from 2% in 2008

Growth, by itself, is expensive – but (more importantly) it is also a symptom of information being an unmanaged “asset”.
Peel IM Challenges

1. “Tame the storage beast”
2. Manage our information assets
The Municipal Reference Model
What is a Reference Model?

**Definition**

An abstract representation of the entities and relationships involved in a problem space and forms the conceptual basis for the development of more concrete models of the space and, ultimately, implementations in a computing context.

It thereby serves as a... template for the development of more specific models ...and allows for comparison between complying models.

*Source: Wikipedia*

In short: A reference model is a set of rules for how you describe things.
Municipal Reference Model

Brief History…..

• **1990**: Established Joint Venture of 20+ Ontario municipalities to develop Municipal Reference Model and Engineering Database – initially as a data model

• **1992**: JV Awards RFP to develop and administer MRM program to Chartwell IRM (Chartwell acquired by KPMG in 2009)

• **1995-2000**: MRM evolves from a data to a business model and is successfully marketed by Chartwell to other Canadian, US and overseas municipalities

• **2000-2005**: MRM adopted and adapted by Province of Ontario (PSRM) and Government of Canada (GSRM); integrated into business transformation enablement process (BTEP)

• **2007**: MRMv2 Project undertaken by MISA/ASIM Canada to update and re-establish MRM at municipal level and align with PSRM/GSRM

• **2009**: MISA/ASIM Canada enters into relationship agreements with IBM and KPMG to implement MRMv2 using IBM (Rational) Business Modeling Software
The Municipal Reference Model: A Program and Service Based View

Program and Service Model

- Vision / Mission
- Program (Goal)
- Why?
- What?
- Internal Service
- Service
- How?
- Public Service
- Client Set
- For Whom?
- Process / Activity
- Resource

Organizational Model

- Roles
- Governance
- Accountability
- Responsibility
- Authority
- Council
- Committee of Council
- CAO / City Manager
- Dept. 1
- Dept. 2
- Dept. 3
- Division 1
- Division 2
- Division 3
- Section 1
- Section 2

Viewing Government from the perspective of our clients: from the outside in.
Municipal Reference Model Concepts:

Program: a mandate to achieve goals and outcomes that address the needs of a target group. Programs are delivered through a collection of services that contribute to program goals.

Program Key Concepts:
- Target Group
- Need
- Delivered through services
- Outcome (a positive change in the level of need of the target group)
- Public and Internal Programs
- Sub-program

Government Reference Models Provide:
A Common Language and Structure for Describing the business of Government.
Municipal Reference Model Concepts:

**Service**
- Provider Organizations
- Governance
- Outcomes & Impacts
- Client Organizations
- Program Organizations
- Accomplish
- Services
- Deliver
- Processes
- Resources
- Authority
- Responsibility
- Accountability
- Service: provision of specific final outputs that satisfy client needs and contribute to program outcomes

**Service Key Concepts:**
- Client (external to the organization providing the service)
- Service output
- Service value (links service to program outcome)
- Complete/stand-alone
- Sub-service

**Government Reference Models Provide:**
A Common Language and Structure for Describing the business of Government.
Municipal Reference Model Concepts: **Process**

**Process Key Concepts:**
- Interim outputs
- Resources
- Linked to deliver (ultimately) a service output

**Process:** a linked sequence of activities or tasks that use resources to produce outputs. Processes participate in a chain to produce service outputs.

**Government Reference Models Provide:**
A Common Language and Structure for Describing the business of Government.
# Program and Service Example

<table>
<thead>
<tr>
<th>Program</th>
<th>Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Group</td>
<td>Municipal Residents and visitors</td>
</tr>
<tr>
<td>Need</td>
<td>Health</td>
</tr>
<tr>
<td>Outcome</td>
<td>Improved Health (How to measure? Can we define this more precisely?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>Food premise inspection</td>
</tr>
<tr>
<td>Service Output</td>
<td>Inspection Report (permission to continue operation)</td>
</tr>
<tr>
<td>Direct Client</td>
<td>Food premise owner / operator</td>
</tr>
<tr>
<td>Indirect Client</td>
<td>Food premise patron</td>
</tr>
<tr>
<td>Service Value</td>
<td>Reduced illness resulting from improper food preparation</td>
</tr>
<tr>
<td>Process</td>
<td>Schedule inspection, conduct inspection, produce report, schedule follow-up</td>
</tr>
</tbody>
</table>
Peel Public Programs

1. Community Health Program
2. Cultural Development Program
3. Environmental Program
4. Social Development Program
5. Public Safety Program
6. Transportation Program
### Municipal Programs: Selected Municipalities

<table>
<thead>
<tr>
<th>Peel</th>
<th>London</th>
<th>Windsor</th>
<th>Fredericton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Development</td>
<td>Social &amp; Health Services</td>
<td>Social Development</td>
<td>Community Development</td>
</tr>
<tr>
<td>Community Health</td>
<td></td>
<td>Health, Recreation and Cultural Development</td>
<td></td>
</tr>
<tr>
<td>Cultural Development</td>
<td>Culture</td>
<td>Parks, Recreation &amp; Neighbourhood</td>
<td>Leisure</td>
</tr>
<tr>
<td>Environmental</td>
<td>Environmental</td>
<td>Environmental Protection</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Transportation</td>
<td>Transportation</td>
</tr>
<tr>
<td>Public Safety</td>
<td>Protective</td>
<td>Public Safety</td>
<td>Public Safety</td>
</tr>
<tr>
<td>Planning &amp; Devel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Services*</td>
<td>Corporate, Operational &amp; Council Services</td>
<td>Internal Services</td>
<td>Corporate</td>
</tr>
</tbody>
</table>
Government of Canada - Internal Services (Draft)

Governance and Management Support
• Management and Oversight
• Communications
• Legal

Resource Management Services
• Human Resource Management
• Financial Management
• Information Management
• Information Technology
• Travel and Other Administrative Services

Asset Management Services
• Real Property
• Materiel
• Acquisition
Using the MRM as an IM Framework
Types of IM Frameworks – (Business Classification Schemes)

ISO 15489 requires one BCS across an entire organization

- Organizational
  - Familiar but high maintenance due to frequent changes
- Functional (function, activity, transaction)
  - Based on what the organization does (inside-out view)
  - Some off-the-shelf classifications available
  - Liked by Records Managers, not by users
- Subject
  - More easily understood by users, but hard to define for varied user community
- Service
  - Similar to functional but “outside-in view”
- Hybrid
  - Combination, usually of Functional (top levels) and Subject (below)

Province of Alberta

“Modified” Functional Classification

Business driven
- Business users (not RM staff) define what they do and terminology used
- Reduced training - more intuitive, based on familiar terminology
- Encourages business user ownership
- Increased accuracy and productivity

Aligned with Government of Alberta Enterprise (Business) Architecture (GAEA)
- GAEA has its roots in MRM/PSRM/GSRM
- Defined as a “Functional” system (function, sub-function, activity)
- **Functions**: Support Services Functions, Governance Functions, Mandated Functions/Programs
  - i.e. internal and public **programs**
- **Sub-functions**: higher level business processes that …fulfill the purpose of the mandated function/program
  - i.e. **services**
- **Activities**: steps undertaken by an organization to complete a business process
  - i.e. **processes**

Snapshot of the Framework

- **Primary Programs**
- **Secondary Programs**
- **Tertiary Programs**

**Services, Subservices, Processes, Subjects**
Peel’s IM Strategy Implementation
## Defined Use for all Repositories

<table>
<thead>
<tr>
<th>Repository</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate records</td>
<td>Corporate records and some specific non-records</td>
</tr>
<tr>
<td></td>
<td>Project Workspace for projects (purge in Close-out Phase)</td>
</tr>
<tr>
<td></td>
<td>Medium/long term retention according to Retention By-law</td>
</tr>
<tr>
<td>Network Drive</td>
<td>Network Drive</td>
</tr>
<tr>
<td></td>
<td>• Shared files that are not corporate records</td>
</tr>
<tr>
<td></td>
<td>• Limited retention (after 2 years, files will be deleted)</td>
</tr>
<tr>
<td>My Documents</td>
<td>My Documents</td>
</tr>
<tr>
<td></td>
<td>• Working files/drafts or personal files</td>
</tr>
<tr>
<td></td>
<td>• Limited storage of 1GB, excludes PSTs (honour system)</td>
</tr>
</tbody>
</table>

*Automatic deletion will take effect only when the organization is ready*
## Defined Use for all Repositories

<table>
<thead>
<tr>
<th>Repository Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook/ Exchange</td>
<td>- Emails that are not corporate records</td>
</tr>
<tr>
<td></td>
<td>- Limited retention (after 2 years, emails will be deleted)*</td>
</tr>
<tr>
<td>Collaboration / Discussion Space</td>
<td>- Enhanced environment to promote collaboration</td>
</tr>
<tr>
<td></td>
<td>- Move discussions out of Exchange</td>
</tr>
<tr>
<td></td>
<td>- Investigating options</td>
</tr>
<tr>
<td>Pathways (Intranet)</td>
<td>- Current and frequently accessed information (highlights)</td>
</tr>
<tr>
<td></td>
<td>- Gateway to records in EIM (details)</td>
</tr>
</tbody>
</table>

*Automatic deletion will take effect only when the organization is ready*
What’s in it for our users?

- Manage documents within a defined structure
- Spend less time managing and re-creating information
- Find all the right information on a timely basis
- More accurate and reliable information (the “right” version)
What’s in it for Peel?

- Compliance to information or e-discovery requests
- Gained productivity
- Leverage information to make better decisions
- Information managed to protect value to Peel and Peel citizens
Pilot Results (Preliminary)

- Pilot Group My Documents storage reduced by 85%
- Rush to join the “Mb Club” (my documents < 1 Gb)
- Average Pilot Group user now has My Documents of:
  - 690 MB (including PSTs)
  - 200 MB (excluding PSTs)
  - 0 have over 1GB
  - 3 have over 1GB w PST
- Network drive stored reduced by 20%
  - Target is 50% but may reach 70%
Where do we want to be in 3 Years?

- **Information that is organized and managed**
  - All corporate records stored in EIM
  - 25% of stored information in EIM (What is the right target?)
  - Information stored once and is findable

- **“My Documents” storage reduced by 75%**
  - 1 Gb limit per employee

- **Network Drive storage reduced by 50%**
  - Automatic deletion after two years (some exceptions)
  - “Corporate Records” moved to EIM

- **Eliminate use of PST files for emails**
  - Much larger storage limits per user
  - Automatic deletion of emails after two years - unless filed as record (in EIM)
  - Consistent use of links, not attachments
  - No attachments stored with emails
  - Discussions moved out of email to collaboration environment

- **Integration of Pathways (Intranet) and EIM (Document Management)**
  - Pathways as gateway to EIM
  - Integrated search across both environments
  - Consistent organization

Information Management is working for us and we are taming the storage best
Questions

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