DOES CANADA NEED A STANDARD FOR PUBLIC SECTOR BUSINESS ARCHITECTURE?

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CloseReach
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Does Canada Need A Standard For Public Sector Business Architecture?

MY OBJECTIVE HERE:

>EXPLORE THE QUESTION
>OFFER ANSWERS
>TAKE AWAY YOUR RESPONSES
ABOUT ME AND MY BIASES

• Career (1984-2010): consulting firm co-founder and ‘chief methodologizer’ (methodologist and evangelizer)

• The firm’s evolution: IT strategic planning => enterprise architecture => business architecture

• Clients: ~400 public and civic sector organizations, ~100 financial organizations
  • All Canadian orders of government
  • Local, regional and national governments outside Canada

• Special recognition: developers and stewards of the “xRMs”: MRM, PSRM, GSRM

• Personal vision: coherent connected government dashboards
FORMULATING THE ARGUMENTS...

• Why would a business architecture be needed?
• What would it look like?
• Who would use it? Who would it be good for?
• Where and when would it be needed and used?
• How would it work and be sustained as a standard?
WHY?
WHY?

Federal Services

Municipal Services

Regional Services

Provincial Services
SO WHAT WOULD A BUSINESS ARCHITECTURE STANDARD LOOK LIKE? (1)

- Work backwards from the needs of a single organization;
- Put yourself in the place of someone setting out to:
  - create,
  - embed,
  - use,
  - maintain,
  - and manage

.....your organization’s business architecture.
YOU LOOK FOR EXTERNAL STANDARDS, KNOWING YOU WILL NEED:

- Something relevant to your industry, even some specialization;
- Case studies, results and arguments to justify your investment;
- Proven methods including samples to teach the outputs;
- Techniques, training, tools and templates to ‘hit the ground running’;
- Experienced guidance and skilled resources as needed because the work is project-structured;
- Certification to ensure quality and add staff career value.
JUST WHAT IS BEING STANDARDIZED ANYWAY?

- The Open Group Architectural Framework (TOGAF)—Although called a framework, is actually more accurately defined as a process

- The Zachman Framework for Enterprise Architectures—Although self-described as a framework, is actually more accurately defined as a taxonomy

- The Federal Enterprise Architecture—Can be viewed as either an implemented enterprise architecture or a prescriptive methodology for creating an enterprise architecture

- The Gartner Methodology—Can be best described as an enterprise architectural practice

Jeff Sessions 2007
YOU’RE ASKING A LOT, BUT **TOGAF** SEEMS TO FILL THE BILL...

The Open Group Architecture Framework (V9) – illustration of the constructs of a rich architecture standard.
TOGAF INTELLECTUAL PROPERTY (IP) COMPONENTS

• The ADM and ADM Guidelines: ‘Architecture Development Method’ tells you how to develop and manage the lifecycle of your architecture;
• Architecture Content Framework: organizes all the design elements of your organization’s architecture;
• Reference Models: describe proven patterns for assembling design elements;
• Enterprise Continuum: explains how to distinguish and organize your industry’s specialized design elements;
• Enterprise Capability Framework: identifies the particular design elements needed for your architecture capability;
• Metamodel: formal specification of all TOGAF components and relationships between components to govern design.
TOGAF ARCHITECTURE CONTENT FRAMEWORK

TOGAF embeds business architecture in enterprise architecture...
TOGAF Business Architecture Components Are a Subset

- The ADM and ADM Guidelines: includes how to develop and manage the lifecycle of your business architecture;

- Architecture Content Framework: organizes the business design elements of your organization’s architecture;

- Reference Models: describe patterns for assembling business design elements;

- Enterprise Continuum: organize your industry’s specialized business design elements;

- Enterprise Capability Framework: design elements needed for your business architecture capability;
### ZACHMAN FRAMEWORK

#### Business Architecture Content

**They ALL do it....**
Assumption: no new EA standard

Implication: either a stand-alone business architecture standard or merged with existing EA standard (which one(s)?)

Is a business architecture standard divorced from an enterprise architecture standard feasible? Useful?

DILEMMA # 1
A STANDARD REQUIRES SOME IP (EASY) BUT ALSO SOME KIND OF ECOSYSTEM (HARD)!

More Customer Demand

More Businesses Adopting & Investing

More Suppliers Aligning and Investing

more customer value

more business opportunities

more market share & profit

more resources & economies available

Upstream

Downstream
ECOSYSTEM MODELS FOR STANDARDS ARE LARGELY PATH-DEPENDENT

- Community standards
  - Created, governed and administered by the peer members of the ecosystem
  - Example: TOGAF

- Proprietary standards
  - Established, governed and administered by the intellectual property owner
  - Example: Apple’s IOS interface standards

- Regulatory standards
  - Sanctioned, governed and enforced by authorities with regulatory power of some kind
  - Example: Health Canada’s safety standards for toys

- Standards bodies
  - Provide a platform for developing, harmonizing, governing and administering multiple standards
  - Examples:
    - OMG, SCC (community standards)
    - ISO, ITU (community and proprietary standards)
    - CEN (regulatory)
BASIC BUSINESS MODEL FOR A COMMUNITY STANDARDS ECOSYSTEM

*Community Standard Administrator*

Access, Governance, Risk Mitigation

Adopting Organizations (Peers)

Advice, Training, Tools

3rd Party Suppliers

Access, Accreditation, Influence

* Typically not-for-profit, holds IP ownership and manages it on behalf of community members
COMMUNITY STANDARD SUCCESS = \( f(\ IP + \ ECOSYSTEM + \ BUSINESS\ MODEL ) \)

- TOGAF (500 corporate/peer members worldwide)
- ITIL: Information Technology Infrastructure Library
  - Information technology service management standards from the UK government (200,000 take the exam annually worldwide => USD$50M in fees)
- PPDM: Professional Petroleum Data Management Association
  - Standards body for upstream petroleum industry data model and data exchange (100 corporate members worldwide)
- SCOR: Supply Chain Operations Reference Model
  - Cross-industry standard streamlines supply chain activities and information (7500 individual members in Canada alone)
- FEAF: Federal Enterprise Architecture Framework
  - US federal government standard for enterprise architecture governed by agency CIOs and sanctioned by the US OMB (approximately 1000 firms are accredited to provide compliant services)
- Zachman Enterprise Architecture Framework
  - Long-standing architecture content/description standard equivalent to TOGAF Architecture Content Framework
CRITICAL SUCCESS FACTORS FOR STANDARD’S SUSTAINMENT/GROWTH

- Network Effects: enables multi-party alignment and/or interoperation => PPDM, SCOR, FEAF
- Business Model is attractive to 3rd party suppliers => ITIL, TOGAF, SCOR, FEAF
- Accreditation: provides a personal career path credential => ITIL, TOGAF
- Not Competitive: prime mover/winner-take-all effects => SCOR
- Regulatory/economic pressure => FEAF, PPDM, ITIL (in the UK)
WHAT’S SO SPECIAL ABOUT PUBLIC SECTOR BUSINESS ARCHITECTURE?

• Not much in the ‘back office’; it’s all in the ‘front office’, i.e. “public services” stemming from ”public policy”.

• Scale…
  • Local (municipal and regional) governments 100 – 350 services
  • Provincial and state governments: 1500 – 2000 services
  • National governments: 5000+ services

• Scope…
  • Dozens to hundreds of policy portfolios, programs and distinct departments, ministries, agencies.

• Unique design imperatives generate unique complexity:
  • equity, accessibility and accountability/knowability

• Culture:
  • see Jane Jacobs “Systems of Survival” - guardian vs. trader mentalities
  • “If one government ‘customer’ is delighted, another will be ‘p….ed-off’
PUBLIC POLICY CREATES ARCHITECTURAL CONTENT UNIQUE TO THE PUBLIC SECTOR!!
THE ONLY MEANINGFUL ALIGNMENT OF PUBLIC SERVICES WITHIN AND BETWEEN JURISDICTIONS IS BY TARGET GROUP NEED ADDRESSED!
So Public Sector Business Architecture is really ‘Conventional’ Business Architecture extended by Public Policy Architecture.
• Formal definitions of public policy concepts, e.g.:
  • Program, Service, Output, Outcome, Target Group/Population, Need, etc.

• Modeling rules for translating policies into conventional ‘business’ models, e.g.:
  • Program Logic Model (PLM), Service Accountability Model (SIAM), Program Service Alignment (PSAM), Target Group Transitions (TGMT), etc.

• Design patterns, e.g. licensing service

• Catalogs of well-formed/best practice designs and design elements, e.g. target group hierarchies, needs hierarchies, program and service profiles, etc.
WITH OF COURSE A METAMODEL TO LINK THE POLICY ELEMENTS TO THE BUSINESS ELEMENTS
A FRIENDLIER VERSION OF THE METAMODEL

Provider Organizations

Roles

Jurisdictions

Governance

Outcomes & Impacts

Programs

Accomplish

Deliver

Individual Clients

Services

Outputs

Resources

Authority

Used in

Responsibility

Processes
WHO’S THIS ALL FOR?

• Who would use the standard?
  • The usual suspects, but led by…
  • Public policy analysts

• Who would the standard be good for?
  • Ultimately Canadians we hope, but also…
  • Policy makers for inter- and intra-jurisdictional policy alignment;
  • CAOs and planners for better resource allocation and priority-setting within and between jurisdictions;
  • CFOs for better program and service costing;
  • Chief auditors for improved program and service reviews;
  • CIOs for the usual.
PROVEN USE CASES

1. Customer Satisfaction Survey
2. Policy and Needs Analysis
3. Program Design
4. Program Review
5. Service Design
6. Service Planning
7. Service Review
8. Service Integration
9. Multichannel Service Delivery
10. Multi-Jurisdictional Service Delivery
11. Service Level Review
12. Strategic Plan Development (Community / Corporate)
13. Transformation Portfolio Management
15. Service Level Agreement Development
16. Process Mapping, Reengineering / Optimization
17. Quality Control Certification (ISO, NQI, etc.)
18. Organizational Design & Restructuring
19. Council / Committee Governance Review/Design
20. Revenue Review (Fees / Charges / Rates)
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WHY CANADA NEEDS A PUBLIC SECTOR BUSINESS ARCHITECTURE STANDARD…

• 1 + 13 + 3400 jurisdictions can speak a common language
• Harmonizing multi-level, multi-jurisdictional policies and initiatives more effectively and efficiently
• Implementing intra-jurisdictional policies more effectively and efficiently
• Best practices can be better communicated and implemented
• And for all the conventional reasons why any organization needs a business architecture!
HOW’S IT ALL GOING TO WORK?

• The intellectual property collectively known as the “xRMs” consists of:
  • The Municipal Reference Model (MRM) owned by the Municipal Information Systems Association (MISA)
  • The Public Services Reference Model (PSRM) is the property of the Ontario Public Service
  • The Governments of Canada Strategic Reference Model (GSRM) is now called the Canadian Government Reference Model (CGRM) and is the property of the federal government.

• The xRMs began development c. 2002 and were used in approximately 200 programs across Canada and elsewhere.

• There are several dozen reference sites, e.g. BizPal, Service XYZs, cities of Winnipeg, Fredericton, Windsor, Guelph, Province of Ontario

• There are 13 days of certificated curriculum taught by Global Knolwedge (with McMaster U.) and 1 day by Intervista
BUT xRM SUPPORT HAS BECOME MORIBUND...!

• Materials are now dated; tool development has ceased;
• Efforts to merge the various versions have gone nowhere;
• Efforts to re-create support infrastructure in the traditional government manner have gone nowhere;
• International standards bodies have shown interest but there has been no follow-through;
• The Joint Councils (Public Sector Service Delivery and Public Sector CIOs) have opened the door to a proposal. They have asked the following questions.....
Why GSRM/CGRM has not become a standard on its own merit within federal departments, sponsored by TBS?

Why the MRM has not been sponsored by one or more of the many possible municipal associations that stand to gain, starting with CAMA and FCM?

How and why has the Ontario version (PSRM) been successful - a standard followed by all ministries in the OPS? Why haven't other provinces followed suit?

What would the concept of operations of a pan-Canadian standards body for the xRMs be, including products and services, and options for ongoing standards development, governance and potential costs for establishing it and funding its run rate?

What are the issues arising from multiple versions of the standard and recommendations on addressing them?

What would the business case look like for a participating government?

What role would the ICCS and the Councils play?
Does Canada need a standard for public sector business architecture?

YOUR THOUGHTS?