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

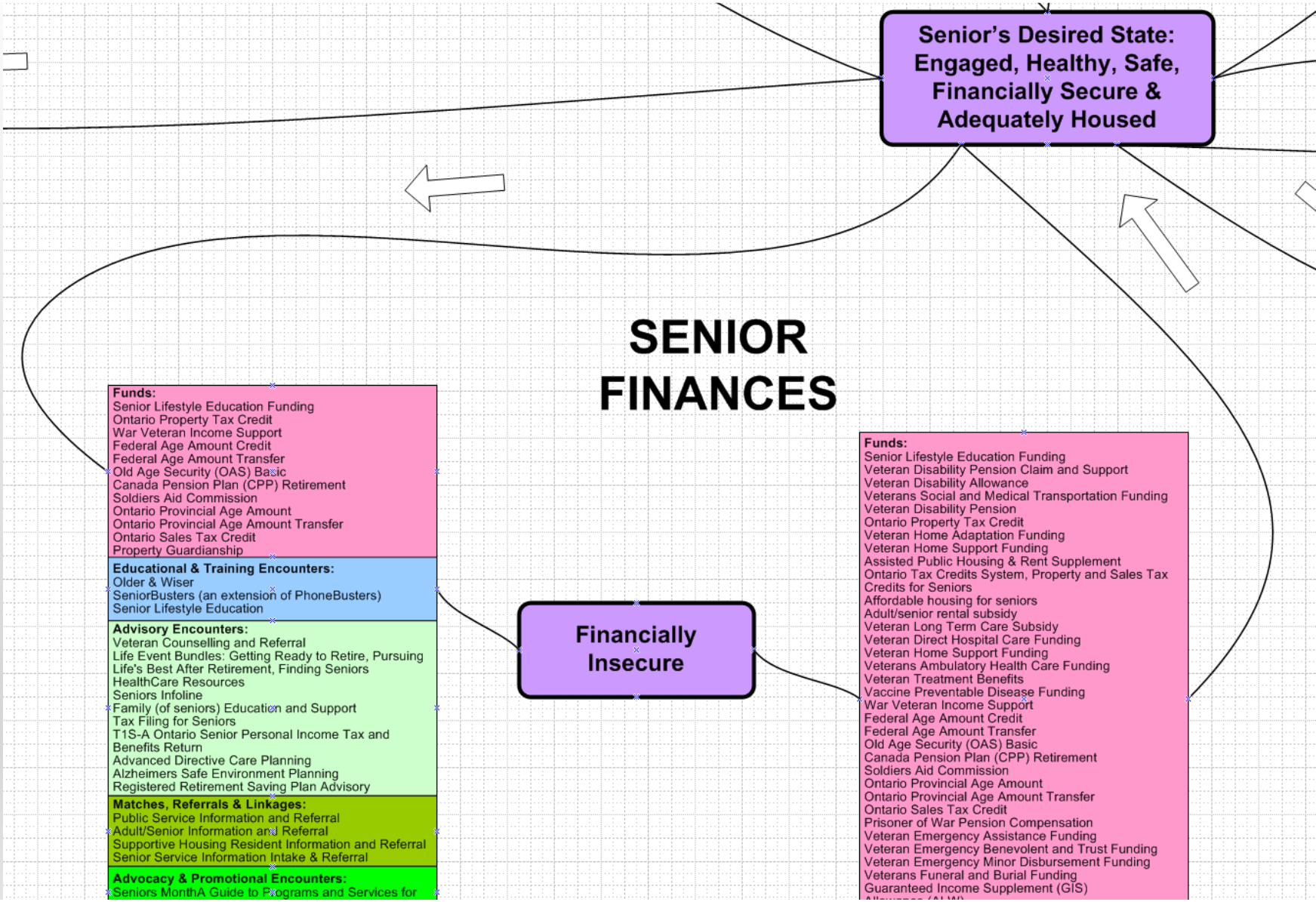
ABOUT ME AND MY BIASES

- 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

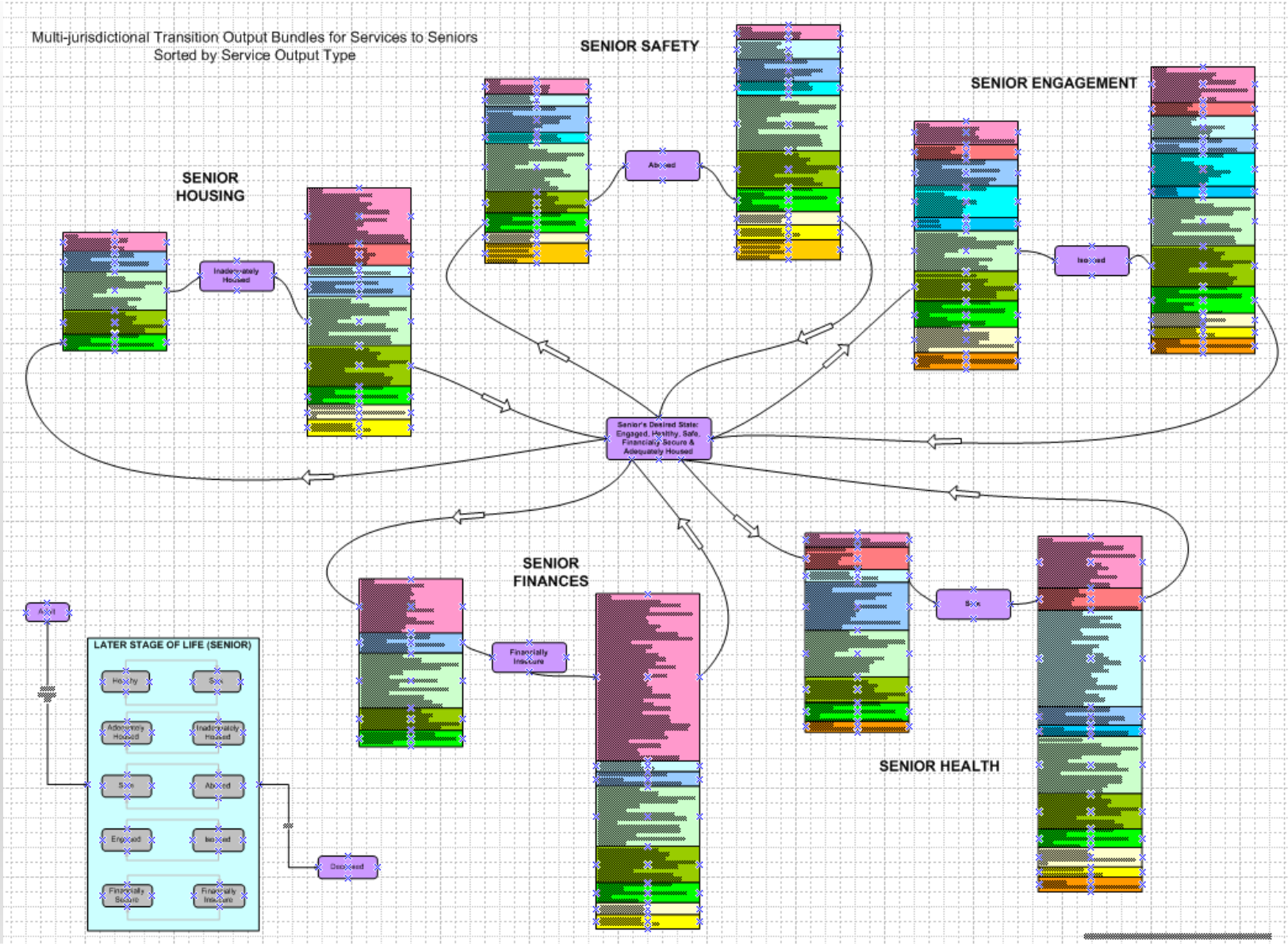
FORMULATING THE ARGUMENTS…

- 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?

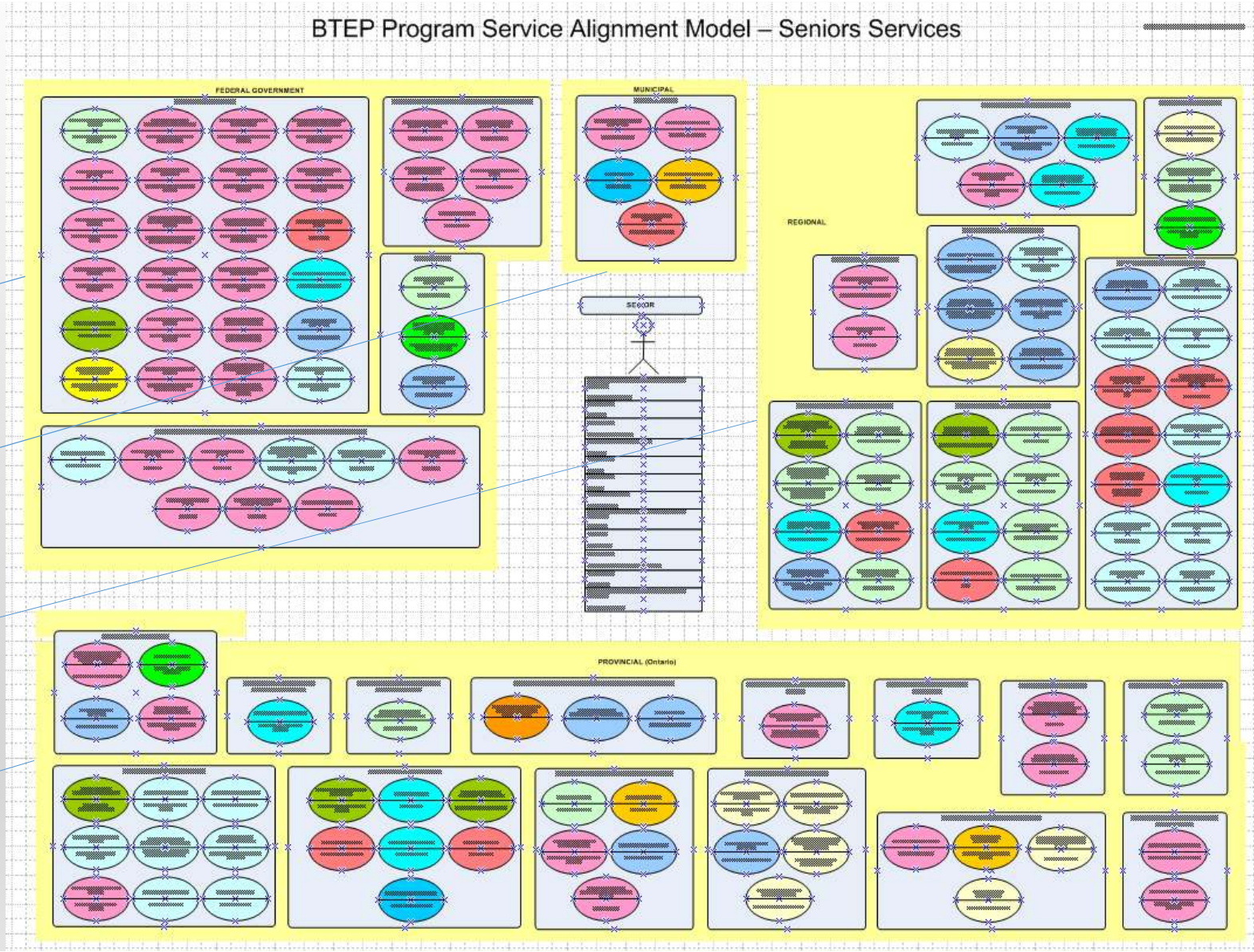

Senior's Desired State: Engaged, Healthy, Safe, Financially Secure & Adequately Housed
SENIOR FINANCES
Financially Insecure
Funds:
Senior Lifestyle Education Funding
Ontario Property Tax Credit
War Veteran Income Support
Federal Age Amount Credit
Federal Age Amount Transfer
Old Age Security (OAS) Basic
Canada Pension Plan (CPP) Retirement
Soldiers Aid Commission
Ontario Provincial Age Amount
Ontario Provincial Age Amount Transfer
Ontario Sales Tax Credit
Property Guardianship
Educational & Training Encounters:
Older & Wiser
SeniorBusters (an extension of PhoneBusters)
Senior Lifestyle Education
Advisory Encounters:
Veteran Counselling and Referral
Life Event Bundles: Getting Ready to Retire, Pursuing Life's Best After Retirement, Finding Seniors HealthCare Resources
Seniors Infoline
Family (of seniors) Education and Support
Tax Filing for Seniors
T1S-A Ontario Senior Personal Income Tax and Benefits Return
Advanced Directive Care Planning
Alzheimers Safe Environment Planning
Registered Retirement Saving Plan Advisory
Matches, Referrals & Linkages:
Public Service Information and Referral
Adult/Senior Information and Referral
Supportive Housing Resident Information and Referral
Senior Service Information Intake & Referral
Advocacy & Promotional Encounters:
Seniors MonthA Guide to Programs and Services for
Funds:
Senior Lifestyle Education Funding
Veteran Disability Pension Claim and Support
Veteran Disability Allowance
Veterans Social and Medical Transportation Funding
Veteran Disability Pension
Ontario Property Tax Credit
Veteran Home Adaptation Funding
Veteran Home Support Funding
Assisted Public Housing & Rent Supplement
Ontario Tax Credits System, Property and Sales Tax Credits for Seniors
Affordable housing for seniors
Adult/senior rental subsidy
Veteran Long Term Care Subsidy
Veteran Direct Hospital Care Funding
Veteran Home Support Funding
Veterans Ambulatory Health Care Funding
Veteran Treatment Benefits
Vaccine Preventable Disease Funding
War Veteran Income Support
Federal Age Amount Credit
Federal Age Amount Transfer
Old Age Security (OAS) Basic
Canada Pension Plan (CPP) Retirement
Soldiers Aid Commission
Ontario Provincial Age Amount
Ontario Provincial Age Amount Transfer
Ontario Sales Tax Credit
Prisoner of War Pension Compensation
Veteran Emergency Assistance Funding
Veteran Emergency Benevolent and Trust Funding
Veteran Emergency Minor Disbursement Funding
Veterans Funeral and Burial Funding
Guaranteed Income Supplement (GIS)

WHY?


Multi-jurisdictional Transition Output Bundles for Services to Seniors
Sorted by Service Output Type
SENIOR SAFETY
SENIOR ENGAGEMENT
SENIOR HOUSING
SENIOR FINANCES
SENIOR HEALTH
LATER STAGE OF LIFE (SENIOR)

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:

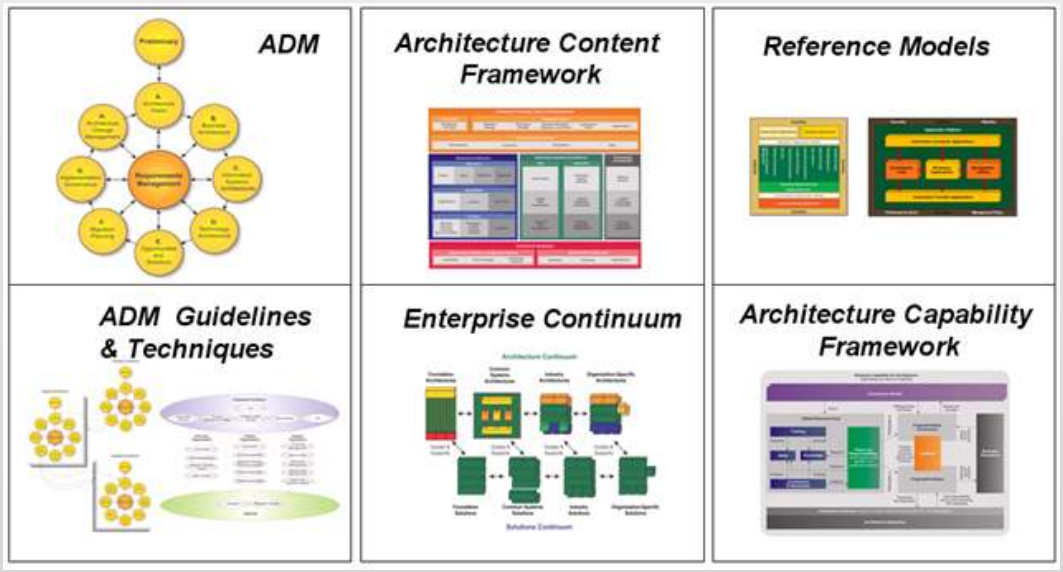
- Something relevant to your industry, even some specialization;
- Case studies, results and arguments to justify your investment;
- Proven methods including samples to teach the outputs;
- Techniques, training, tools and templates to 'hit the ground running';
- Experienced guidance and skilled resources 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 *proscriptive 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;

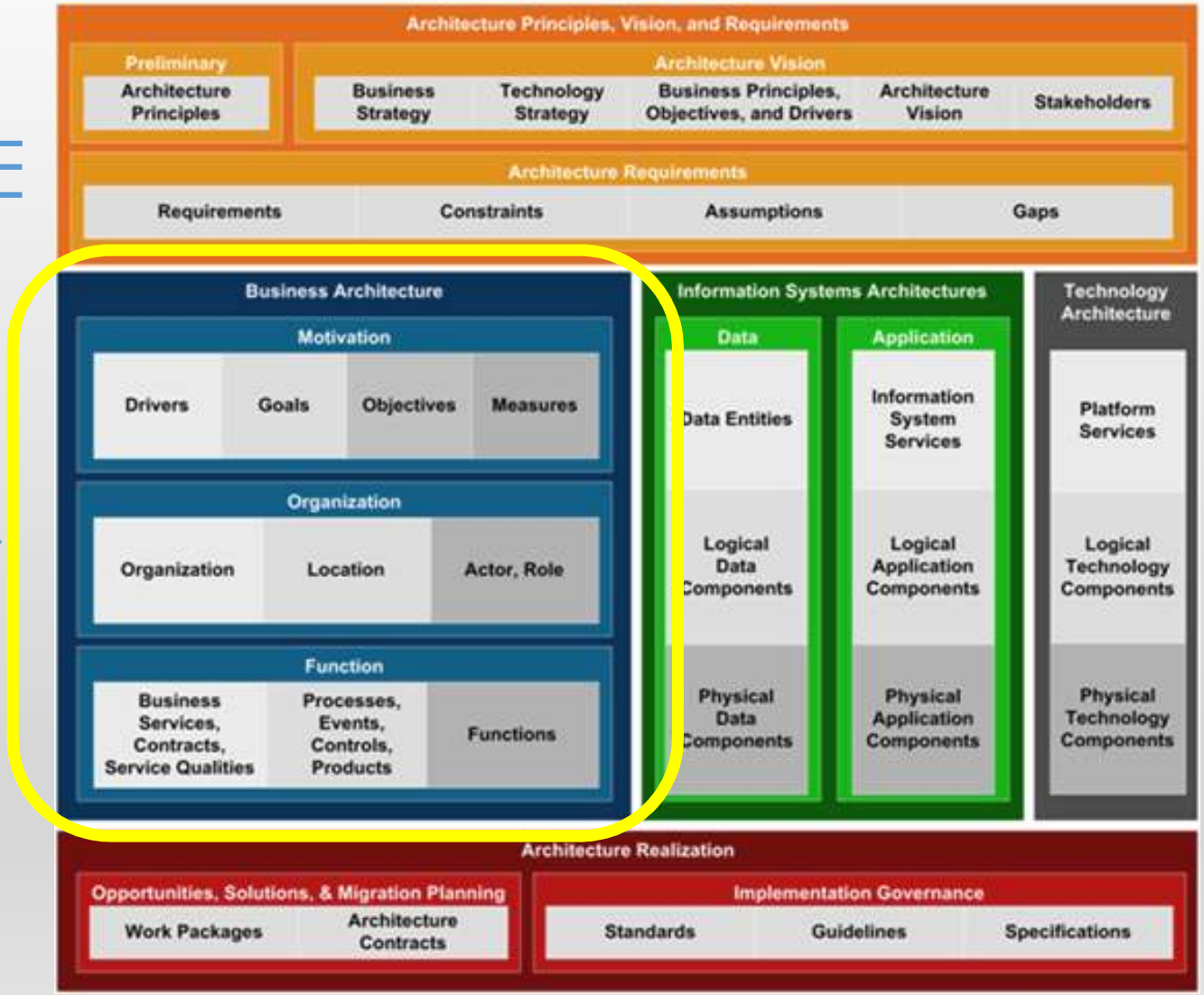
- Enterprise Continuum: explains how to distinguish and organize your industry's *specialized* design elements;

- 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

Business Architecture Content



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;

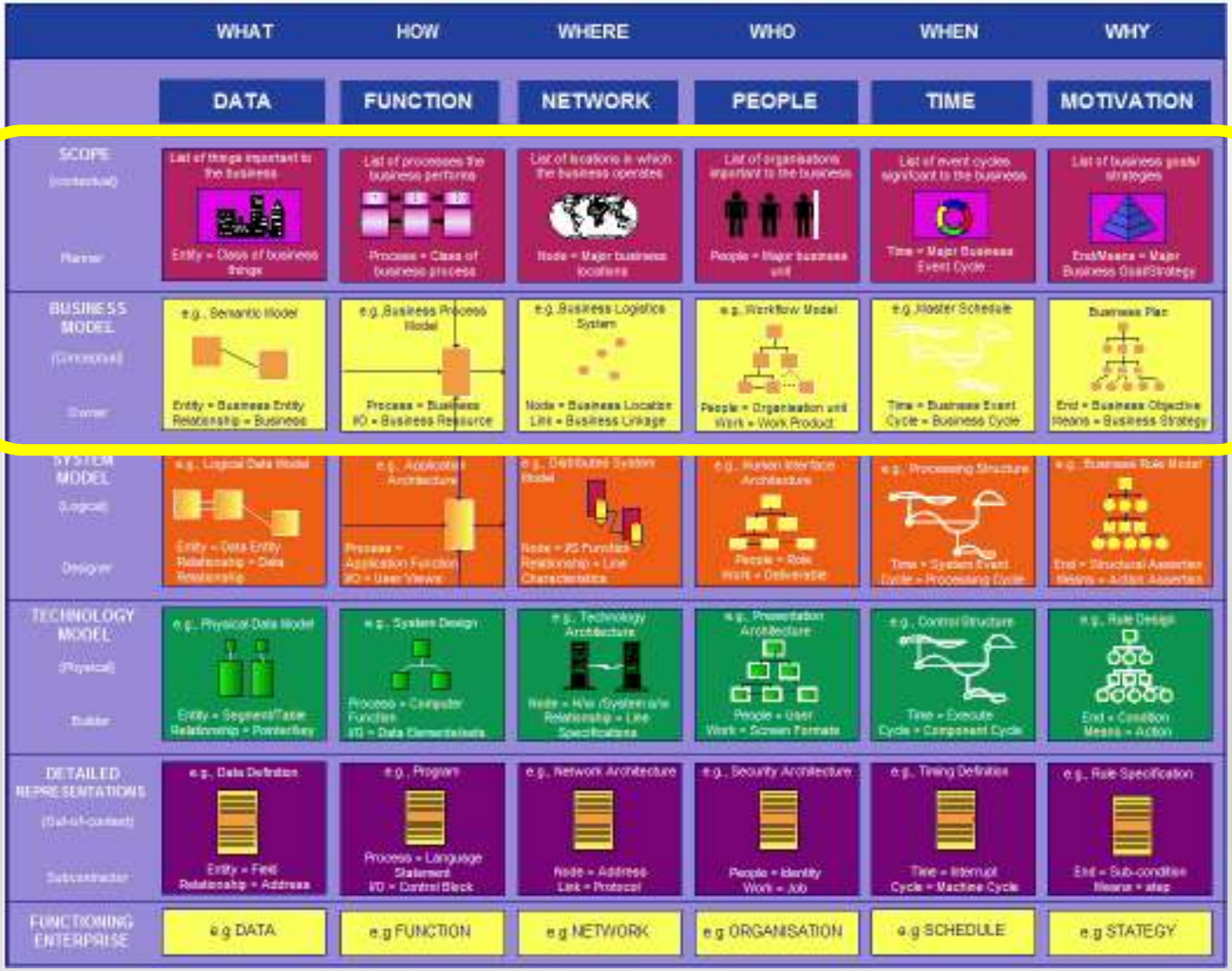
- Reference Models: describe patterns for assembling business design elements;

- 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….

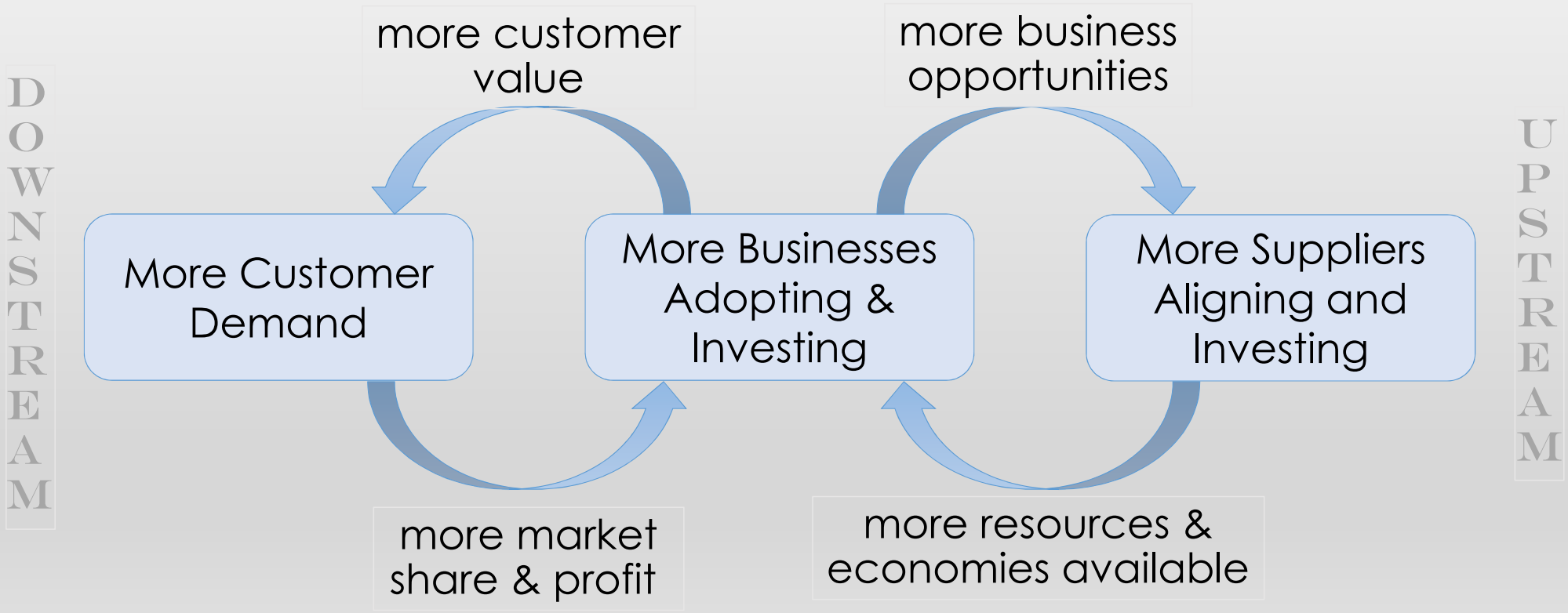
Assumption: no new EA standard

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

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

DILEMMA # 1

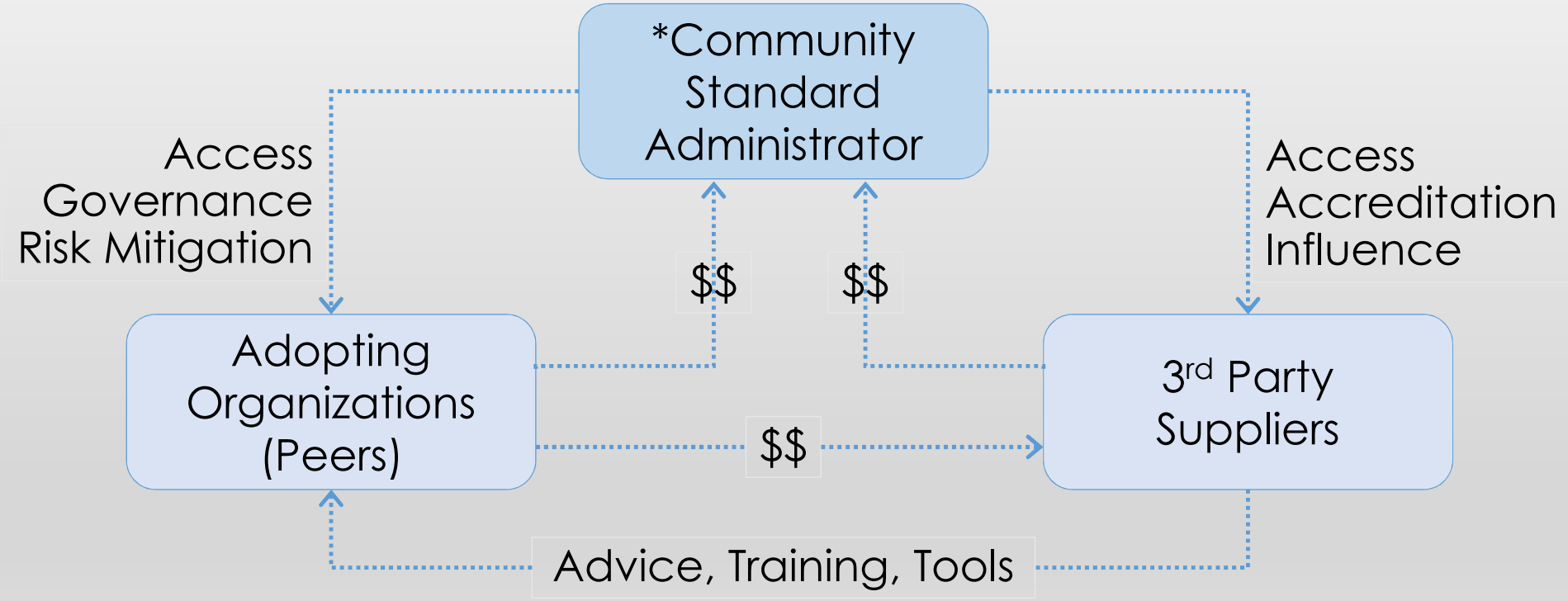
A STANDARD REQUIRES SOME **IP** (EASY) BUT ALSO SOME KIND OF **ECOSYSTEM** (HARD)!



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



* Typically not-for-profit, holds IP ownership and manages it on behalf of community members

COMMUNITY STANDARD SUCCESS = ƒ(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

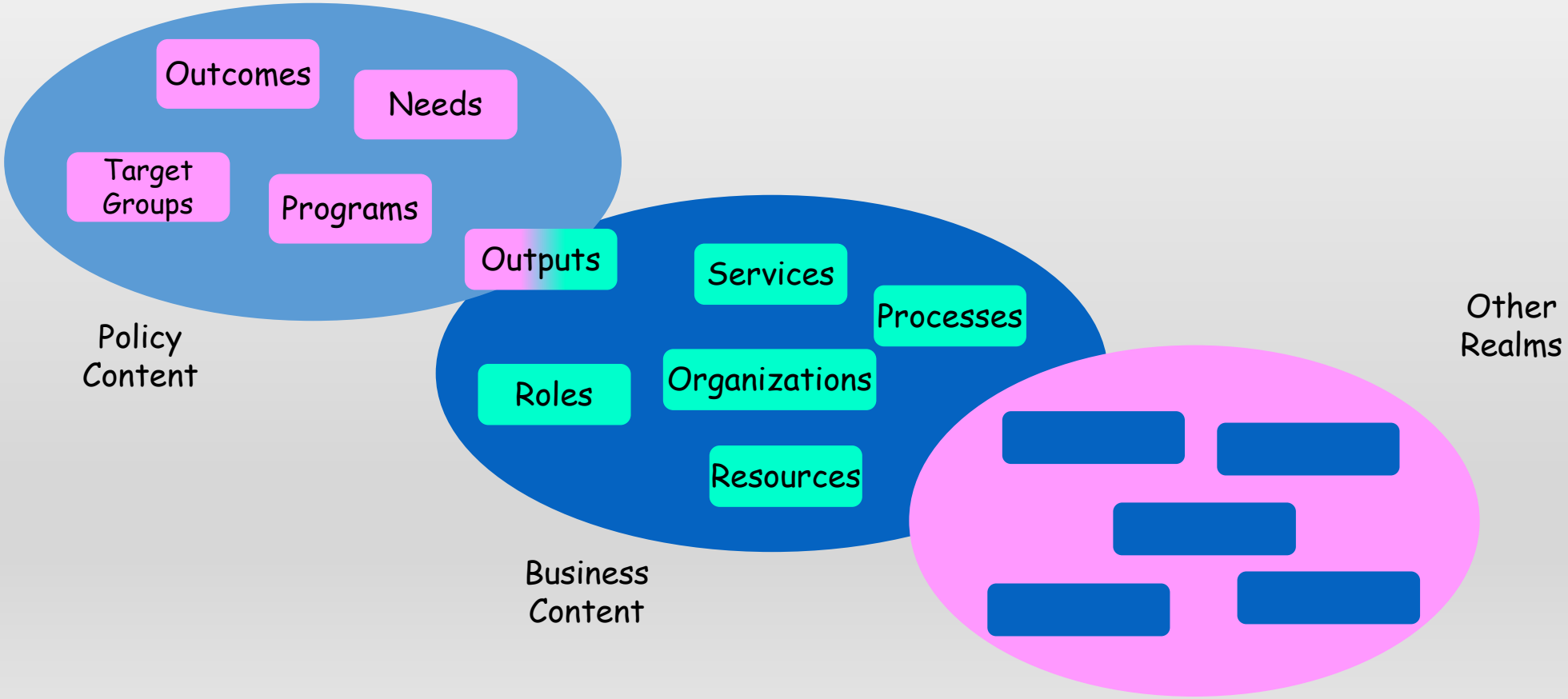
CRITICAL SUCCESS FACTORS FOR STANDARD'S SUSTAINMENT/GROWTH

- 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)

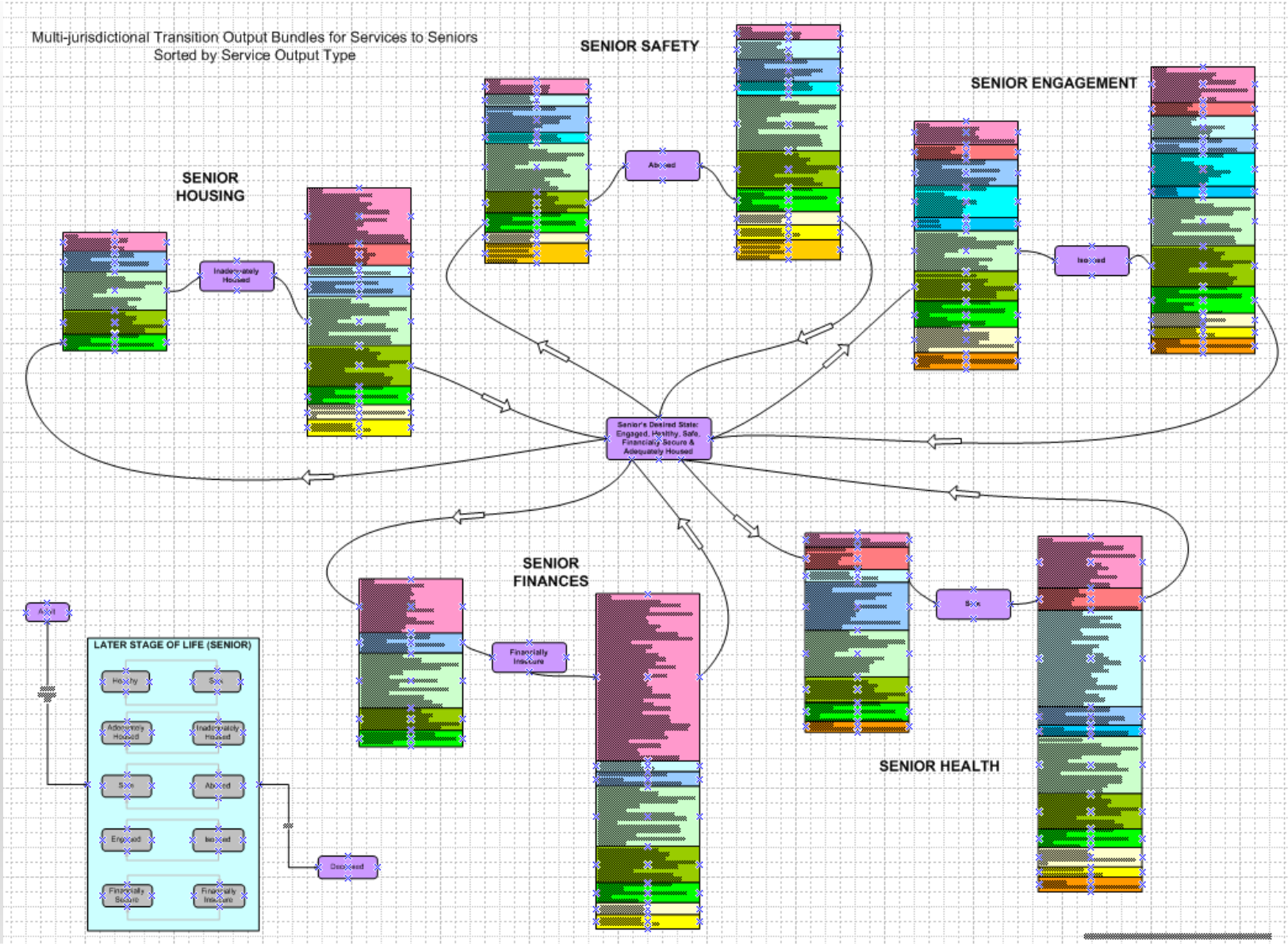
WHAT'S SO SPECIAL ABOUT PUBLIC SECTOR BUSINESS ARCHITECTURE?

- 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'

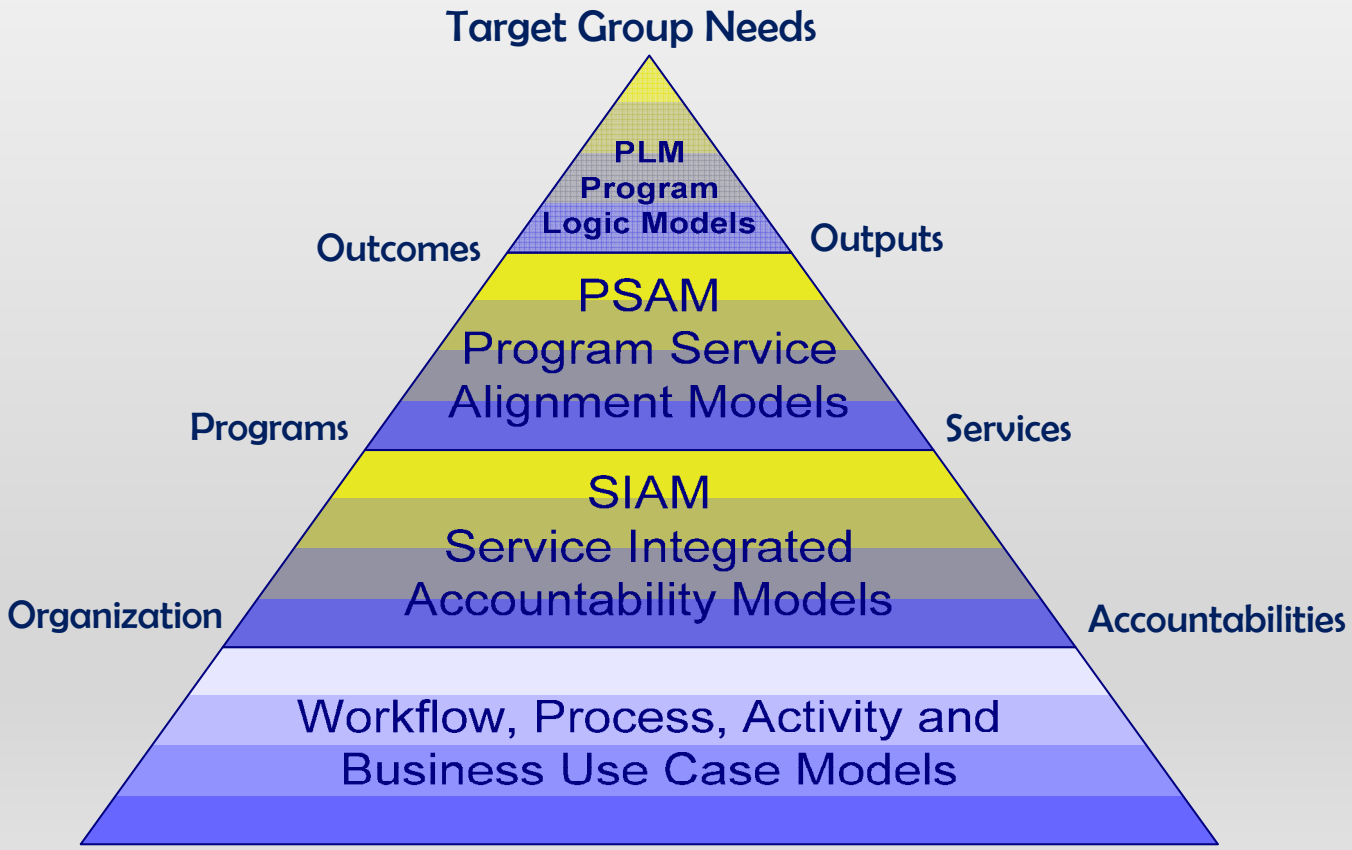
PUBLIC POLICY CREATES ARCHITECTURAL CONTENT UNIQUE TO THE PUBLIC SECTOR!!



THE ONLY MEANINGFUL ALIGNMENT OF PUBLIC SERVICES WITHIN AND BETWEEN JURISDICTIONS IS BY **TARGET GROUP NEED** ADDRESSED!



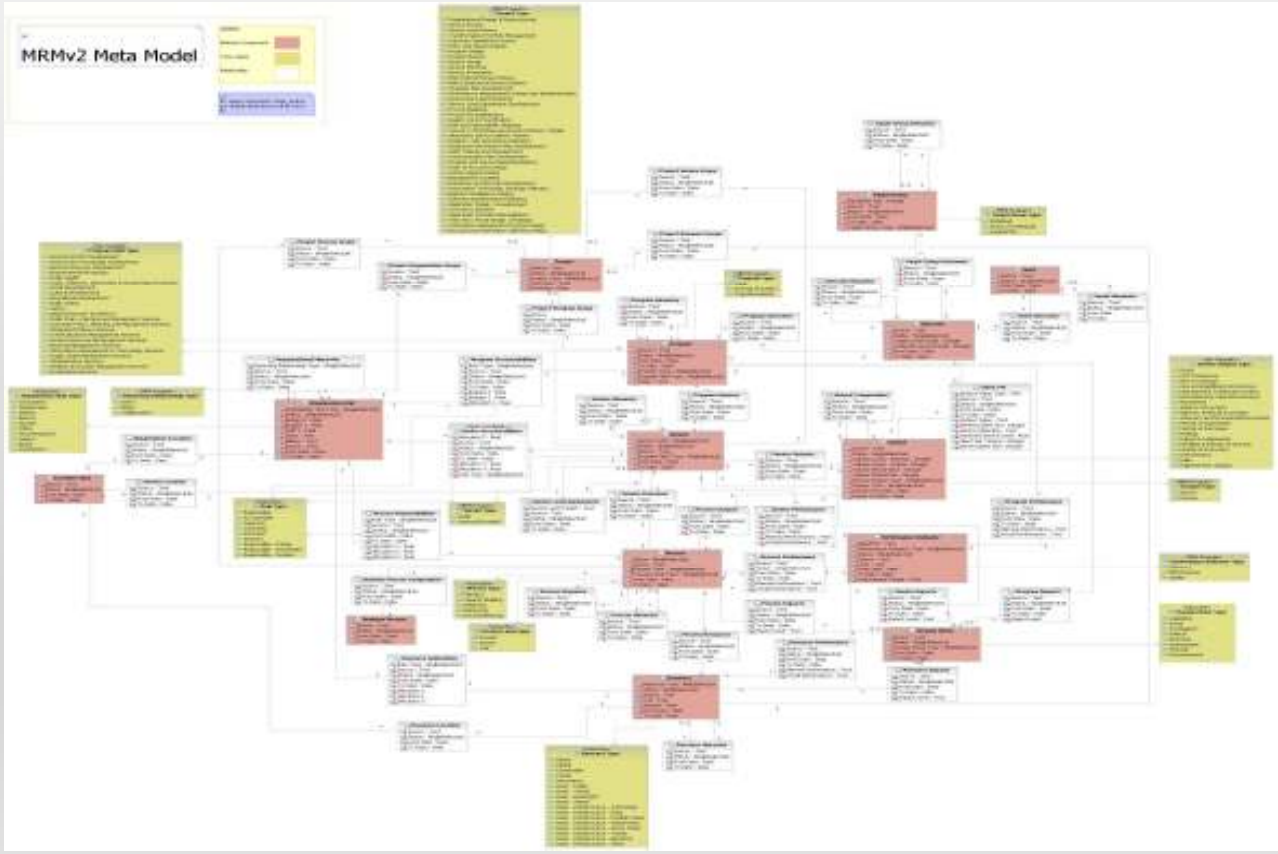
SO PUBLIC SECTOR BUSINESS ARCHITECTURE IS REALLY 'CONVENTIONAL' BUSINESS ARCHITECTURE EXTENDED BY **PUBLIC POLICY** ARCHITECTURE



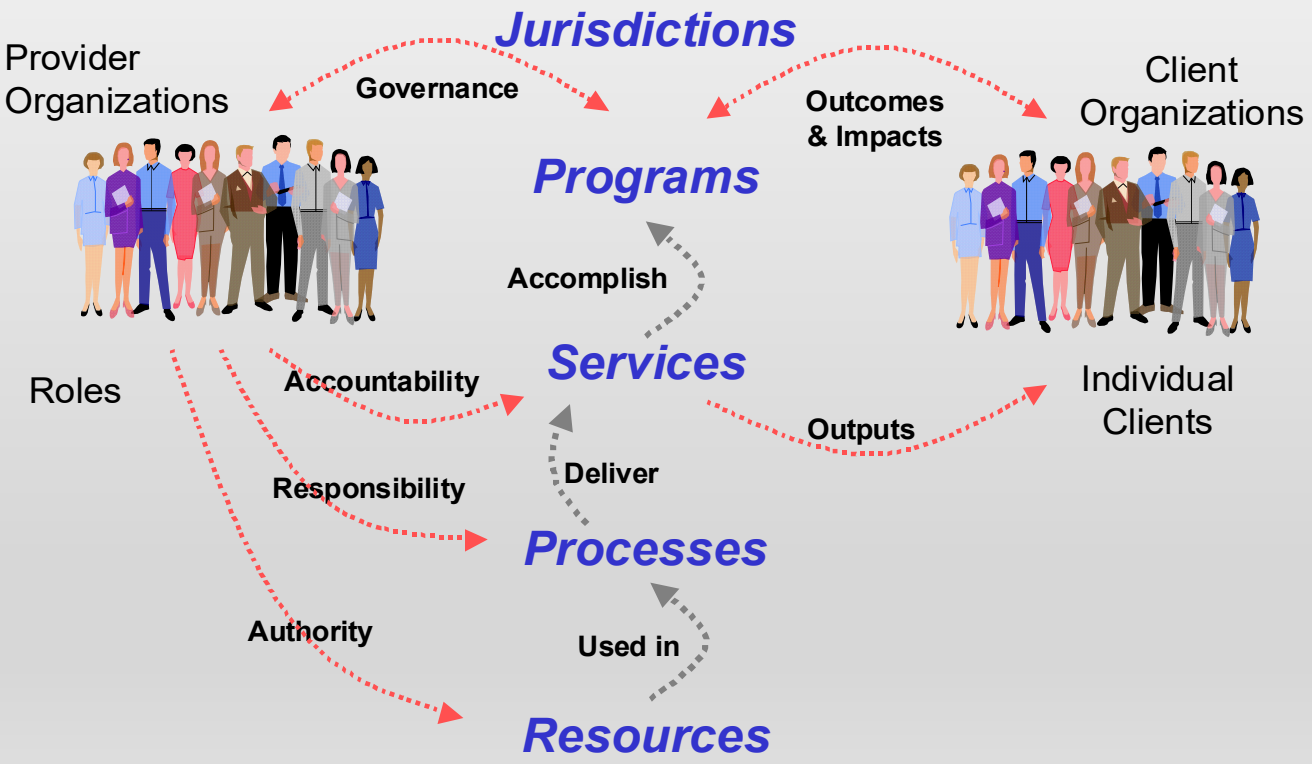
AND A PANCANADIAN STANDARD WOULD INCLUDE:

- 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 (TGTM), 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



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
14. Performance Measurement Design, Implementation and Benchmarking
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)

PROVEN USE CASES (CON'T)

21. Alternate Service Delivery Review
22. Position / Job Description Definition
23. Employee Performance Plan Development
24. Communication Plan Development
25. Program and Service Based Budgeting
26. Activity Based Costing
27. Management Audit
28. Enterprise Architecture Development
29. Information Technology Strategic Planning
30. Business Intelligence Design
31. Software Requirements Definition
32. Application Design / Development / Implementation
33. COTS Procurement
34. Application Portfolio Rationalization
35. Web Site / Portal Design / Redesign (Channel Access to Services)
36. Information Management Program Design
37. Records & Information Collection Design

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?