

# Enterprise Architecture

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## *The Practice of Architecture*



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# Abstract

IT Architecture practices are relatively new. Organizations have tried to implement architecture practices with varying degree of success.

Differing schools of thought and different points of view have resulted in practices that are unclear and unappealing to some business leaders. This presentation describes the opportunities and challenges related to defining and implementing the practice of architecture. It offers proven approaches for creating a useful and pragmatic practice that supports the business.

*With mastery in leadership and strategic change, Craig Van Spall is a skilled & competent leader who builds and coaches effective, high-performing teams to transform, deliver, inspire, & connect business, technology, & people.*

*With 18 years' in Public Service (Health), Finance, & Telecommunication, Craig has gained pragmatic experience in using the best of Information Technology practices – Architecture, IT Governance, Project Management, Application Portfolio Management, & ITIL – to implement & deliver on cross organizational initiatives & enterprise-wide strategies. Currently, Craig Van Spall is Director of Enterprise Architecture at eHealth Ontario.*

***Disclaimer:** All opinions expressed in this presentation is solely the opinion/experience of Craig Van Spall and may not reflect the opinion/experience of a specific organization.*

# Overview

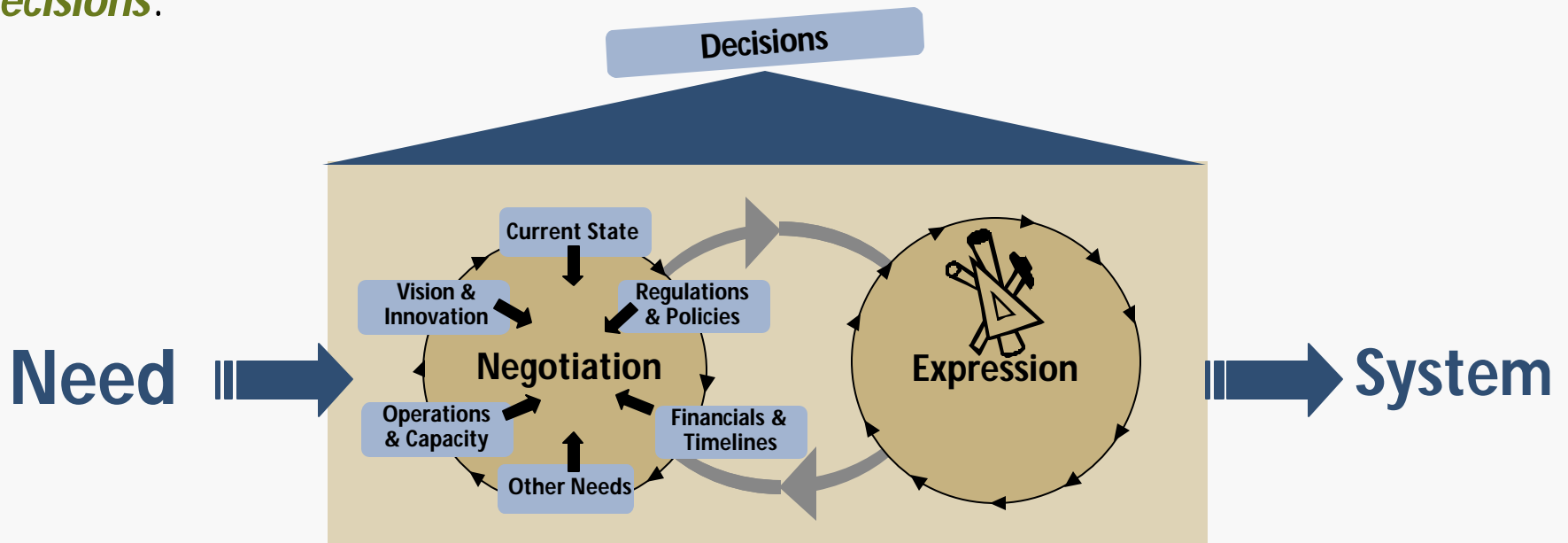
- What is Architecture?
  - What is Enterprise Architecture?
  - Challenges of Enterprise Architecture
  - Impact of No EA
  - EA as a safeguard
- Enterprise Architecture is the *practice of Architecture*
  - Areas of Emphasis
  - 3 elements of a successful architecture practice
    - Principles
    - People
    - Services

***What does the term  
“architecture” mean to you?***

***How would you  
define “architecture”?***

# What is Architecture?

- Architecture can be seen as the *negotiation and expression of a need*, resulting in a *system*. The practice of Architecture supports informed & deliberate *decisions*.



- Need** can be a simple idea, vision, want, desire, concept, or request.
- System** is a set of interacting or interdependent entities that form an integrated whole. Systems have structure, behavior and interconnectivity. Eco-systems, urban systems, IT systems, business systems are examples of systems.

Definition of Architecture based on Craig's personal experience

# What is Enterprise Architecture?

- The practice of Architecture
  - Ensures that architecture is practiced well consistently – including at the enterprise level (cumulative) – and improves with time
  - Enables good IT decisions
- Provides Governance over Architecture
  - Aligned with the business needs (incl. enterprise level)
  - Provides value to the enterprise
  - Mitigates enterprise risk related to IT decisions
  - Ensures resources are qualified, competent, engaged, and empowered
  - Monitors and improves performance

# Challenges of Enterprise Architecture

- IT Architecture practices are relatively new.
- Differing schools of thought and different points of view have resulted in a practice that is unclear to some business leaders.
- Organizations have tried to implement architecture practices with *varying degree of success*. This is mainly the result of:
  - Disparate Definitions, Frameworks and Approaches (e.g. Federal Enterprise Architecture (FEAF), Department of Defense Architecture Framework (DoDAF), Zachman, TOGAF, Gartner)
  - Industry has no de facto standards that define Enterprise Architecture
  - Value of Enterprise Architecture programs (if implemented successfully) builds with time and resides primarily in the highest levels of the organization

➔ *The Result: IT decisions that could have higher risk.*

# Impact of Bad IT Decisions

- Reputational Impacts
  - Under-deliver on our commitment to clinical outcomes
- Financial Impacts
  - Questionable value – costs too high for benefit delivered
  - Limited resources – blow our budget in the wrong places
- Operational Impacts
  - Saddle the Organization with operational commitments that prevent it from realizing its mission
  - Slow or unable to respond to client needs
  - Unscheduled and unmanaged service outages

# EA as a Safeguard against Bad IT Decisions

- EA can be a safeguard against bad IT decisions.
- Practiced architecture ensures that architecture is *defined, managed, and measured*.
- Without an architecture practice, Organizations may make decisions without:
  - Review bodies to ensure business needs and strategic objectives are being met
  - Standards, principles, & policies to guide individual decisions
  - Consultation and collaboration
    - Individual architects may be unaware of existing IT investments that can be leveraged
    - Architects don't collaborate with other architects to utilize the broader knowledge base

***Enterprise Architecture mitigates bad IT decisions.***



**Enterprise Architecture is the  
*practice of Architecture.***

# Enterprise Architecture: Context

## Mission, Vision, Strategy, Blueprint

### Strategic Planning

2/3 of EA's effort

**Advances Architectural Standards**  
EA translates the business strategy into its target architectures & standards and integrates them into its Knowledge Repository. EA also launches training and awareness sessions to disperse the knowledge within the Organization

**1) Architecture Advancement:** This service ensures that target architectures and standards are developed and current. The suite of Target Architectures (in concert), express in architectural terms, the enablement of the Organization's Strategy

**2) Knowledge Management:** This service ensures that Architecture Knowledge is retained, relevant and current. KM includes the maintenance of a document library where artifacts are organized and classified into discrete re-usable chunks

### Project

1/3 of EA's effort

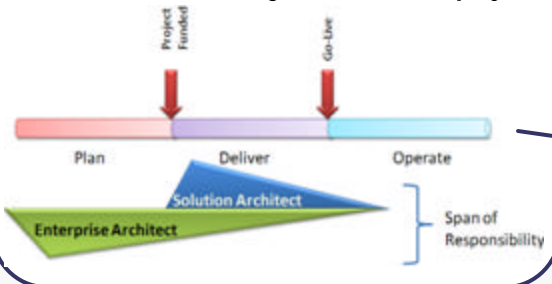
**Advises & Reviews Solutions**  
EA provides Architectural Advisory & Review to projects against solution needs

**3) Architecture Advisory:** This service provides recommendations, peer reviews and assessments for a particular initiative. The focus of this service is to help in ensuring success upfront by making sure all big things are thought through and sufficiently documented

#### Advisory & Reviews

Strategic Intent  
Business  
Logical  
Physical

#### EA's involvement during the course of a project



Projects

### Operations

# What does a Successful Practice look like?

## Three Elements of a Successful Practice

- I. Principles
- II. People
- III. Services

# I. Principles

- |               |
|---------------|
| I. Principles |
| II. People    |
| III. Services |

## ■ Program

- Organization-wide
- Relevant and practical
- Non-prescriptive

## ■ Team

- Interdependent
- Balance time and effort
- Iterative, collaborative, transparent

# Principles: Foundation for Success

I. Principles
II. People
III. Services

## ✓ **Supporting structure.**

A successful architecture practice is structured to enable the Business objectives.

## ✓ **Senior Management.**

Senior Management involvement is critical. Because of its nature, an EA program takes time to pay off (due to the amount of initial work required); therefore, senior managers must be willing to commit and see it through.

## ✓ **Empowered and positioned.**

Enterprise Architecture must be empowered and positioned at the right level to be able to assist in interpreting and executing the strategy.

Business will find it very hard to realize value from an EA program with no linkage to the business strategy or access to business stakeholders.

## ✓ **Effective management.**

Effective management is essential. Otherwise, Enterprise Architecture may be seen as an obstacle to project delivery.

## II. People

- I. Principles
- II. People
- III. Services

- Supporting structure
- Qualified, competent, & engaged individuals

## People: Case Study of Architecture Team Structure at the Banks

- I. Principles
- II. People
- III. Services

All banks have a tiered approach to architecture. Although terms vary from bank to bank, roles and functions are fairly universal:

- **Strategic Architecture.** Enterprise architects work with the lines of business to develop strategic roadmaps. They define and manage the practice of architecture (planning, standards, reviews, blueprints).
- **Applied Architecture.** Solution architects develop solutions for (sometimes multiple) lines of business. They work with, and provide guidance to, specialists within each line of business.
- **Specialists.** Subject matter experts, each employed by a specific line of business. Specialists are the experts on specific technologies, and work within the context of their line of business.

# People: Case Study of Architecture Team Structure at the Banks

I. Principles  
II. People  
III. Services

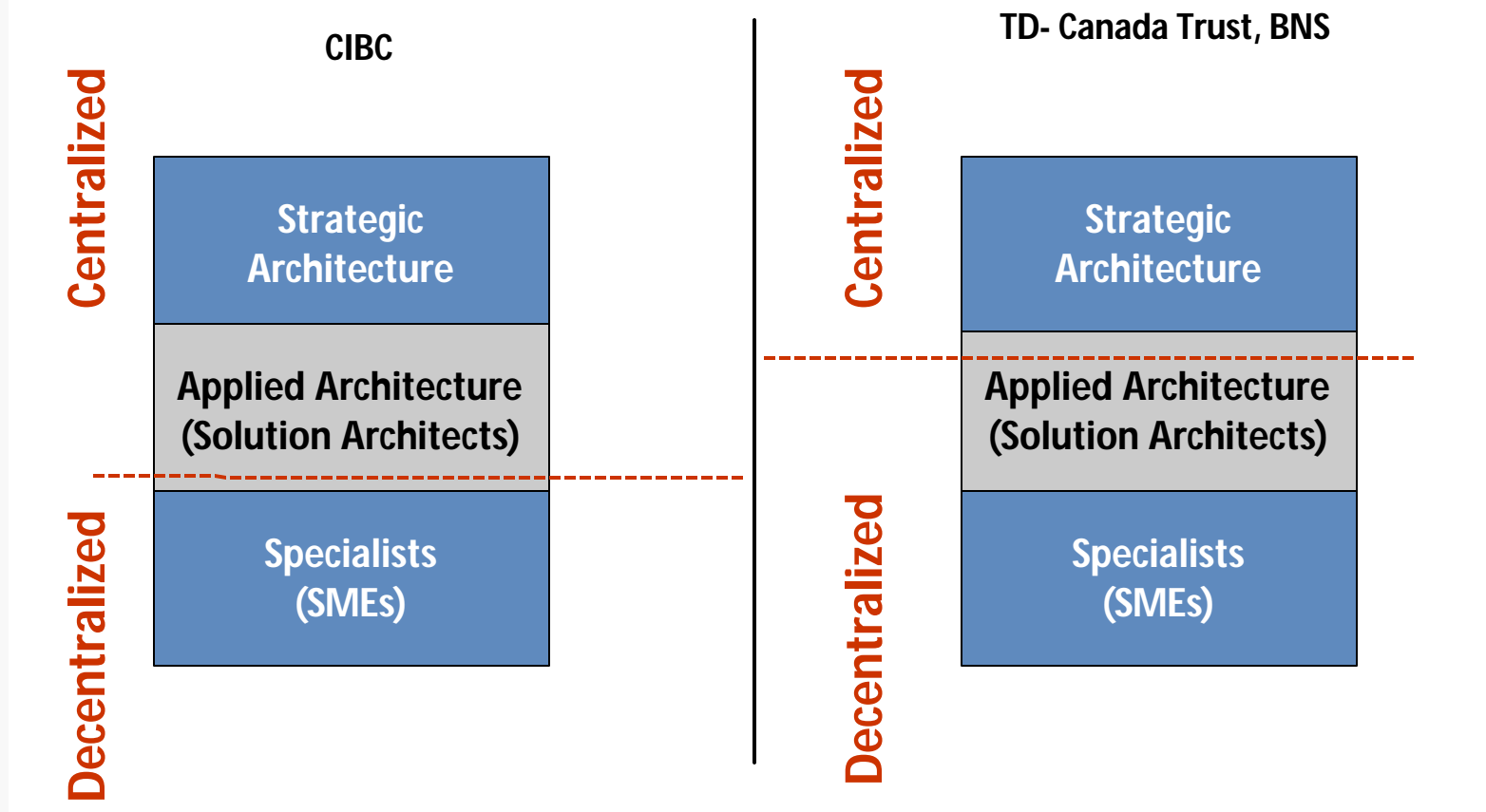
- Of the banks analyzed\*:
  - All banks have a centralized Strategic Architecture function.
  - All banks have Specialists embedded within lines of business (sometimes with the title of “Architect”).
  - Banks vary by their distribution of Solution Architects (SAs), from highly centralized SAs to most SAs embedded in the lines of business.
  - Gartner (and other) research supports the observation that the distribution of SAs varies among organizations, and some organizations oscillate between these two models.

\*CIBC, TD-Canada Trust, Scotia annual reports

# People: Case Study of Architecture Team Structure at the Banks

- I. Principles
- II. People
- III. Services

## Central vs. Decentralized Function at the Banks



# People: Qualified, competent, & engaged individuals

I. Principles  
II. People  
III. Services

## Characteristics of a great Enterprise Architect

- **Strategy**
  - Visionary, Entrepreneurial
  - Influence business strategy
  - Translate business strategy into technical vision and strategy
- **Consulting**
  - Committed to others' success
  - Empathetic, approachable
  - An effective change agent, process savvy
  - A good mentor, teacher
- **Organizational politics**
  - Listen, network, influence
  - Confident , Articulate, Patient
  - Sensitive to where the power is and how it flows in the organization)
  - Sell the vision (and keep it alive)
  - Limited personal agenda (focused on what is truly best for the organization)

Reference: "Architect Competency Framework", Dana Bredemeyer and Ruth Malan (Bredemeyer Consulting)

# People: Characteristics of a great Enterprise Architect (continued)

I. Principles  
II. People  
III. Services

- Leadership
  - Vision
  - Make decisions stick
  - committed, dedicated, passionate
  - Build teams
  - Motivate
- Technology
  - Technology-agnostic
  - Good at working at an abstract level
  - Practical/pragmatic
  - Insightful
  - Tolerant of ambiguity, willing to backtrack,
  - seek multiple solution

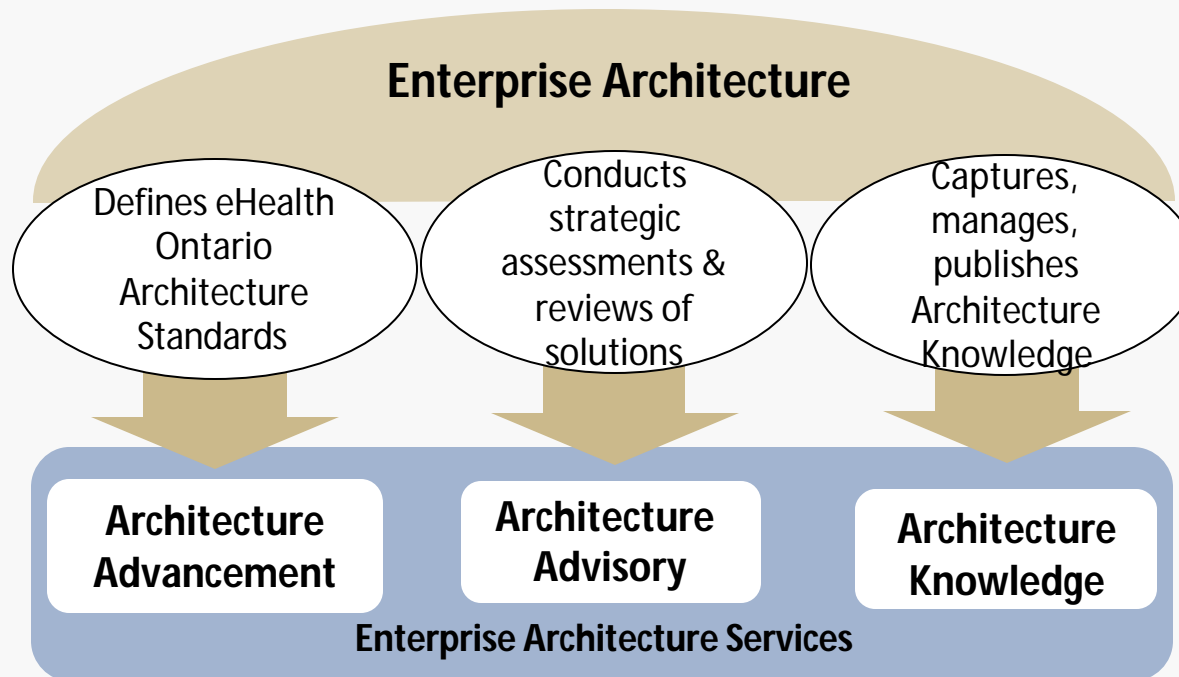
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## III. Services

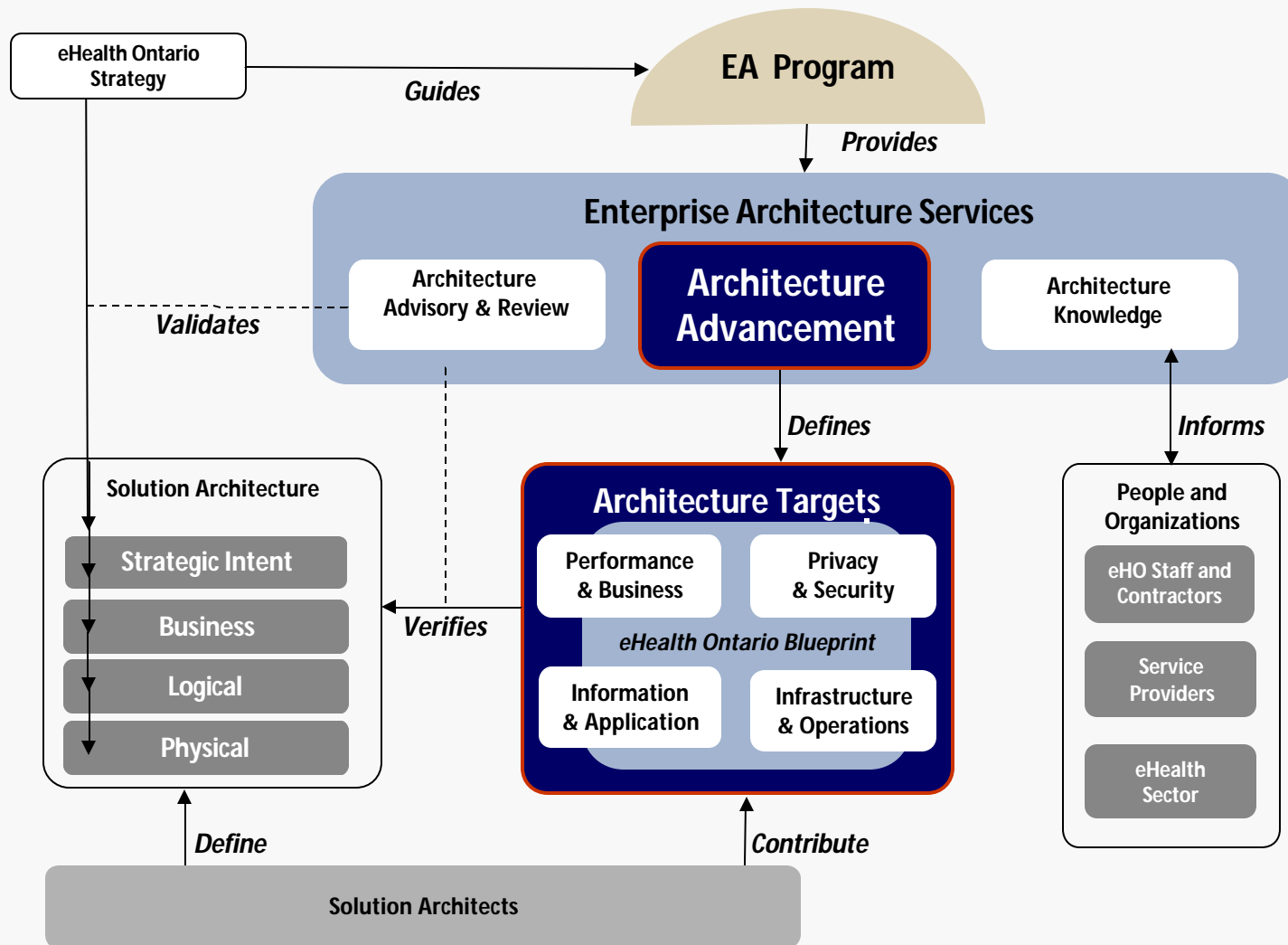
- I. Principles
- II. People
- III. Services

### Case study: Enterprise Architecture services at eHealth Ontario

- Enterprise Architecture supports and enables the eHealth Ontario business strategy through **three distinct services**.



# Case Study: EA Operating Model at eHealth Ontario



# Summary

- IT Architecture practices are relatively new. Organizations have tried to implement architecture practices with varying degree of success.
- Architecture is the *negotiation* and *expression* of a need, resulting in a system. The practice of Architecture supports *informed* and *deliberate* decision making.
- Enterprise Architecture is the practice of architecture.
- Principles guide Enterprise Architecture.
- People fuel Enterprise Architecture services
  - Attract, coach, and empower individuals who are qualified, competent, and engaged – and who *choose* to work *synergistically* and *respectfully* together.
- Enterprise Architecture is best delivered through a set of services
  - Advancement: Defines Architecture standards
  - Advisory: Conducts strategic assessments & reviews of solutions
  - Knowledge Management: Captures, manages, & publishes Architecture expression

# Questions & Contact Info

For guidance, information or discussions:

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Thank you for this opportunity!