

2008

# IT Architect Regional Conferences

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## **Enterprise Information Management**

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# Am I (or you) in the wrong conference?

- What does Information Management have to do with Software Architectures?
- Should Software Architects be concerned about Information Management?
- A quick survey
  - When the last time you sent a snail mail?
  - How much of your official/business communication is conducted by email? (How much of it is filed?)
  - Who uses IM/Skype/SMS for official/business communication? (Has it ever been recorded?)
  - How many software applications have you designed/encountered that incorporates non structured information (email, scanned documents, audio, video or faxes)?

# A Case Study - Canadian Govt

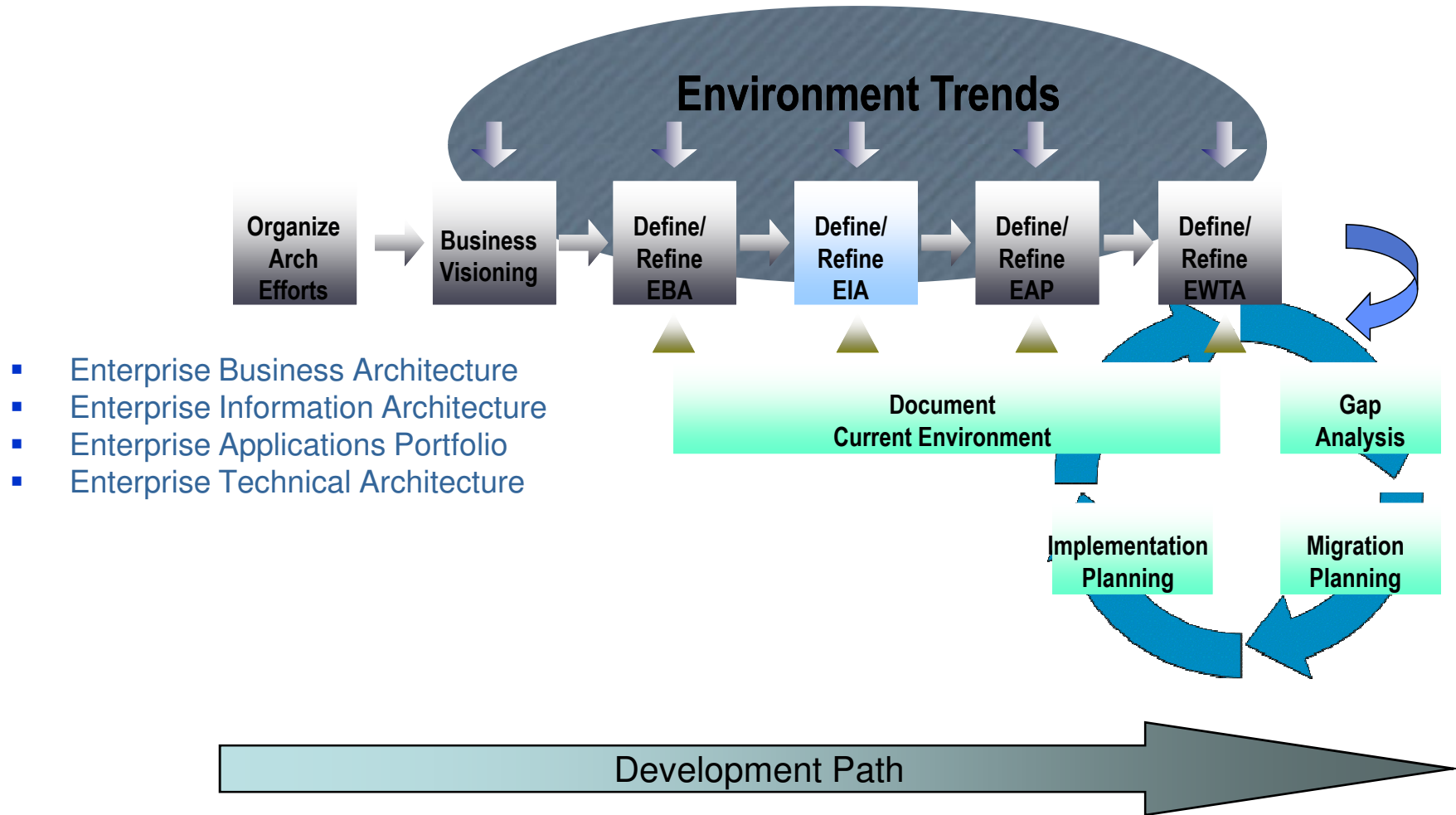
- Leading for 5 consecutive years in e-Gov (Accenture)
- Information Management an Enterprise Initiative
  - Departmental Responsibilities
    - Treasury Board overall responsibility for IM in Government
    - Public Works responsible for IM Program implementation
    - National Archives responsible for Enterprise policies/standards/practises
  - Justification for IT projects based on Information/Service delivery
  - High Visible Annual awards for IM

# Quick review of Enterprise ICT Architectures

Consists of 4 main sub architectures

- Enterprise Business Architecture
- Enterprise Information Architecture
- Enterprise Applications Portfolio
- Enterprise Technical Architecture

# Development and context of an EA



- Enterprise Business Architecture
- Enterprise Information Architecture
- Enterprise Applications Portfolio
- Enterprise Technical Architecture

# Zoom on to EIA

- Information – one of the most important assets to any enterprise (“fuel” that runs the car)
- Information Architecture – aligns business processes to the information systems that support those processes, promotes information sharing and facilitates information exchanges
  - provides the organization with a high-level model of its critical information



# EIA is really about IM

Popular IM definitions

- An enterprise's "information value chain" element of business strategy (Meta Group)
- "A discipline that directs and supports effective and efficient management of information in an organization, from planning and systems development to disposal and /or long-term preservation." (National Archive of Canada)
- "The means through which an organization maximizes the efficiency with which it plans, collects, organizes, controls, disseminates, uses and disposes of its information, and through which it ensures that the value and potential value of that information is identified and exploited to the fullest extent". (Information Resource Management – Program Development, NATO)

# Important concept

## Data - Integrity

- Representation of disparate raw facts, figures, and concepts recorded in a manner suitable for manipulation, communication, or processing.

## Information - Effectiveness

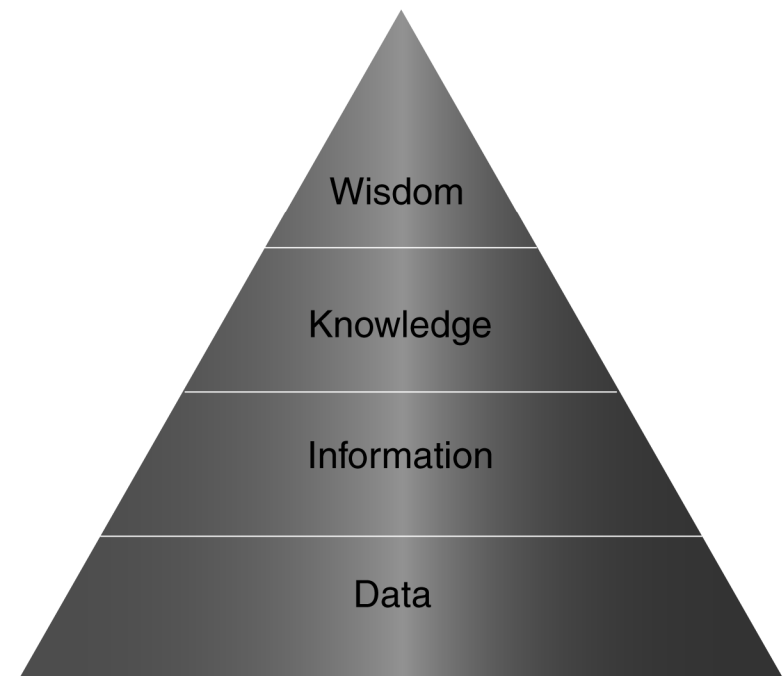
- The meaning given to data.
- All types of data or information in any form, held, handled, or communicated.

## Knowledge - Innovation

- The understanding given to information which results in insight
- Information analyzed and applied with guidance for action

## Wisdom – Principle/ Value

- The understanding of which knowledge to use for what purpose



**Information Theory**

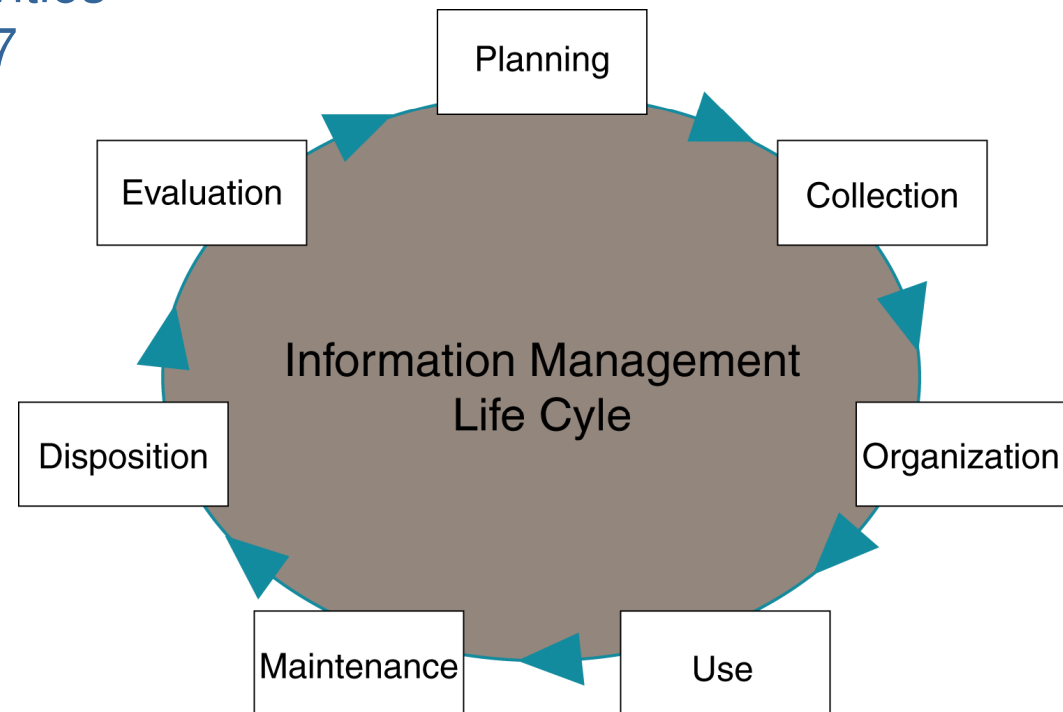


# Common terminologies

- Information
  - Any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audio-visual forms e.g. fax, email, multi-media, web page, document, voice, etc.
- Document
  - Information generated and kept by an organization or person. Mostly associated with the traditional definition of document.
- Traditional software design's main concern only about transactional digital information

# IM Life Cycle

- Information is best managed in a life cycle approach.
- The life cycle in the IM approach has 7 elements.
- Most normal business activities can be represented in the 7 elements.

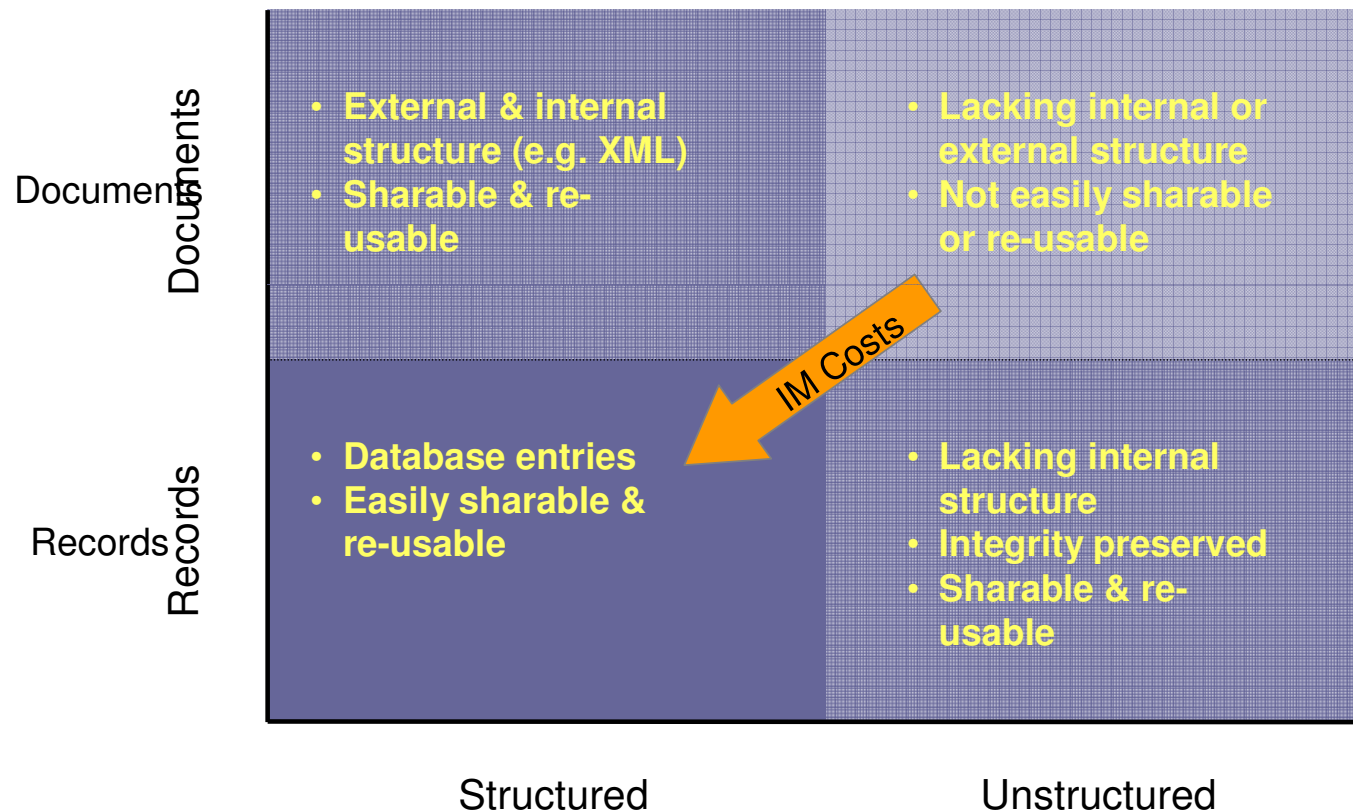


# Structured and unstructured information

- **Structured Information.** Structured information provides both the ability to see the “wrapper” of the information as well as the ability to search for and reuse the contents of the record/document.
- **Unstructured Information.** Unstructured Information provides only the ability to see the “wrapper” of the information. It lacks the ability to search for and reuse the contents of the record/document within a specific context.

# Cost: Structured Vs Unstructured

## Information - Type & Extent



## Link to importance of records management

- Record – A recorded information produced or received in the initiation, conduct or completion of an institutional or individual activity and that comprises content, context and structure sufficient to provide evidence of the activity (ICA – International Council of Archives)
- Records Management – The field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records (ISO 15489)



# Recent events



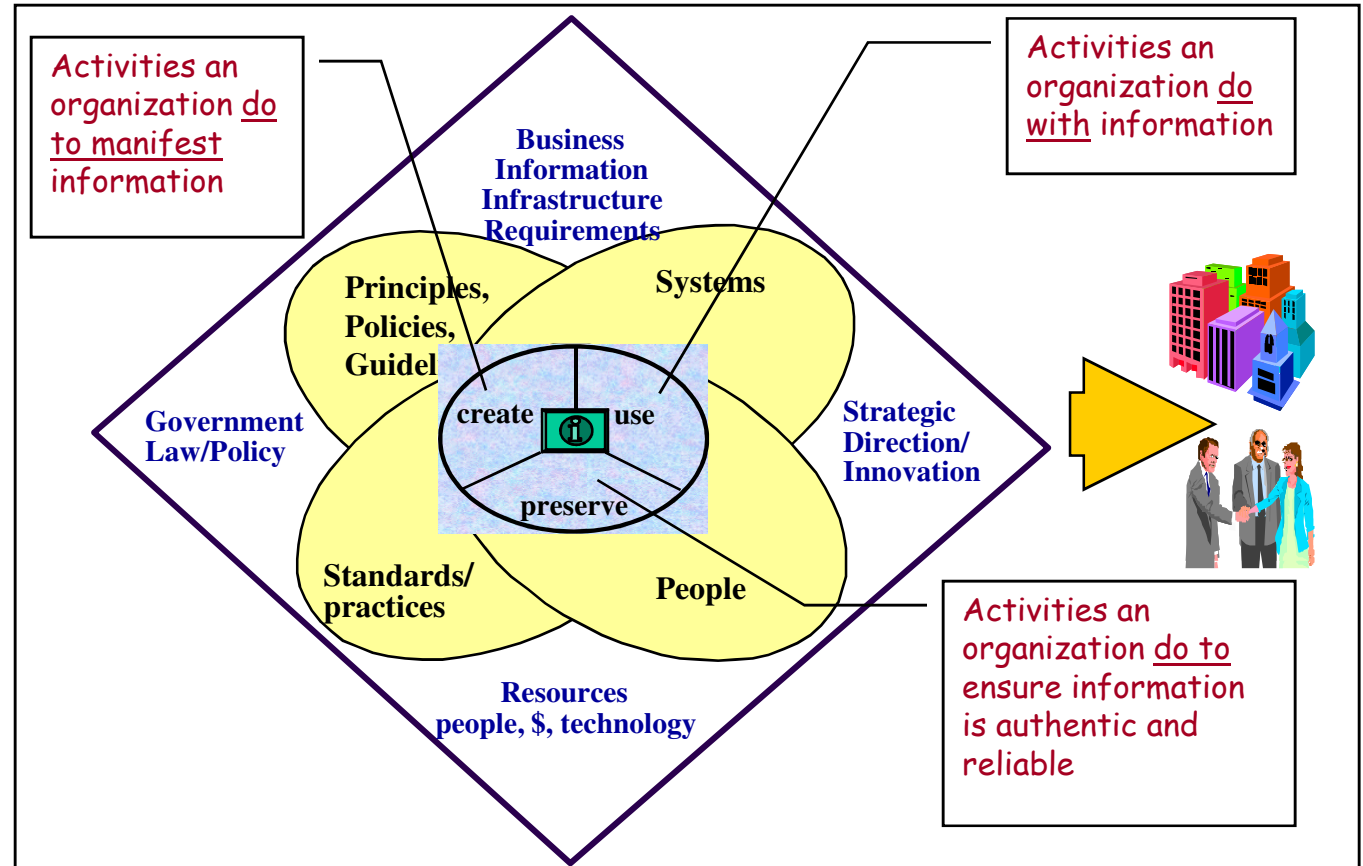
# Legislation & Acts

- Sarbanes-Oxley (SOX) – accounting and reporting practices



# Framework for development of IM

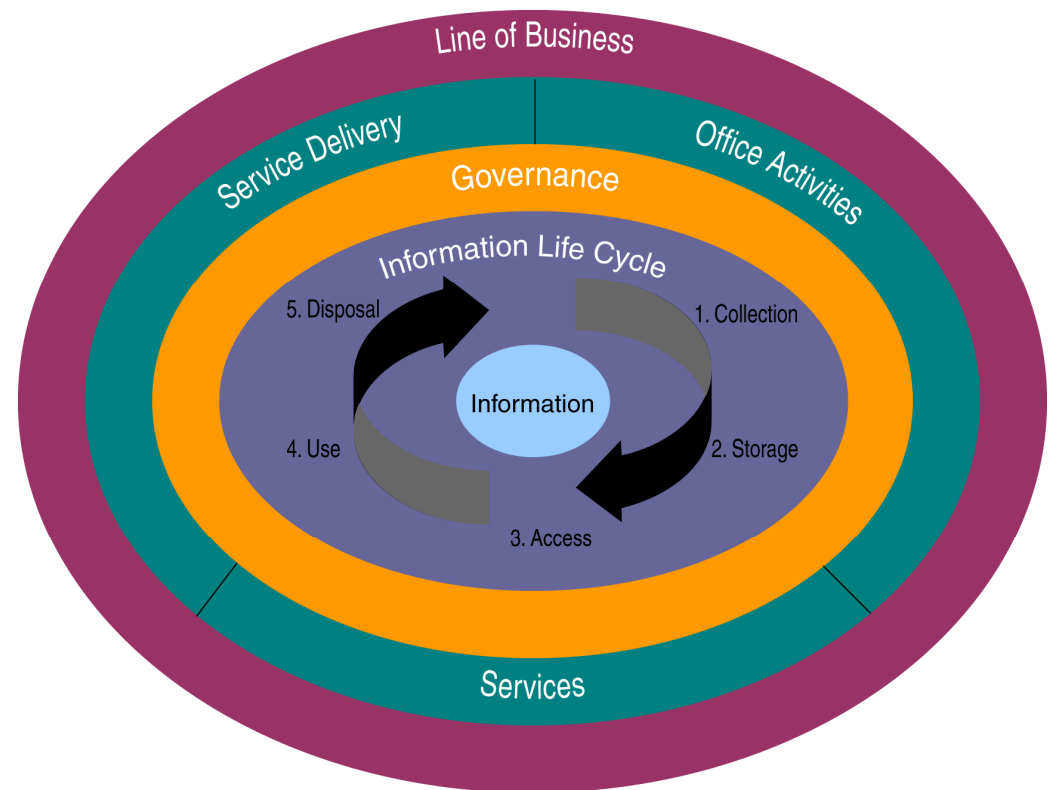
An enterprise framework is best when customized to address its information needs.





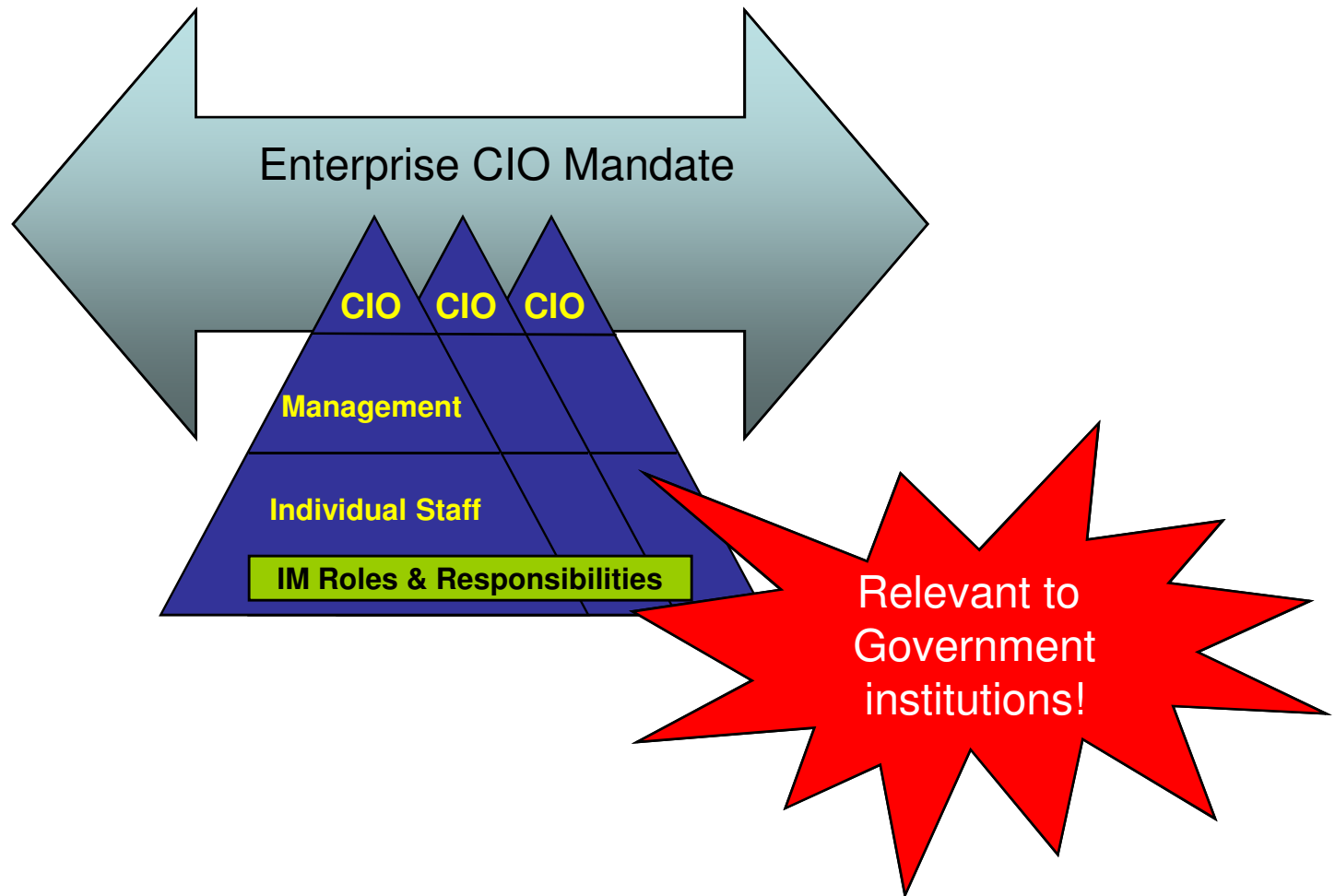
# Framework for development of IM

One enterprise's IM framework may not be the most suitable framework to maximize another enterprise's management of information.



# IM Governance Framework

## IM Governance



## Bottom Line

- Information Planning should be a key and first priority concern in the architecting of any systems
- There is a need to view software applications as delivering information (and service) instead of as automation of functions



**Terima Kasih**