

Enterprise Architecture's Identity Crisis: Caution Sign for the EA/IQ Relationship

ABSTRACT

The professions of Enterprise Architecture and Information Quality have a potentially rewarding, symbiotic relationship. But that relationship may be threatened by a trend the author has observed within, and on the periphery of, the Enterprise Architecture world.

That trend takes the form of a growing identity crisis: In the beginning it seemed that outsiders didn't know who we Enterprise Architects were; now it almost seems that we ourselves don't know who we are. Who is one and who is not one? Almost every job title now has the word "architect" added onto it. Does anybody care?

Yes! The author cares, for this reason, among others: When so many job titles are called "architect," there is confusion between Enterprise Architects and everyone else. Everyone who examines at least one aspect of an enterprise (e.g., the data, or the systems, or the business processes) is likely to be considered an Enterprise Architect. But the true Enterprise Architect looks at the whole, well... enterprise.

In the same way, Information Quality permeates many, if not all, aspects of an enterprise. In order to take advantage of all the synergies between Enterprise Architecture and Information Quality, Information Quality professionals need to seek out and interact with true Enterprise Architects, who have the full picture of an enterprise, in addition to working with the data architects and data modelers.

BIOGRAPHY

P. Kathie Sowell

President

Custom Enterprise Solutions, LLC

Ms. Sowell is a recognized leader in Enterprise Architecture, having been the principal author of the Department of Defense's original architecture framework, the C4ISR Architecture Framework (later renamed the DODAF), and a principal developer of other frameworks for Government and Industry. She has been named one of the five Pioneers of Enterprise Architecture by the Society for Information Management.



She retired from The MITRE Corporation, where she performed a leadership role in Enterprise Architecture for many Government clients. Her expertise has been tapped by NATO Headquarters, the Australian Ministry of Defence, Canadian corporations, the Danish Embassy,

the Swedish military, and State and local governments. She is a frequent speaker at EA conferences.

For five years she served as a curriculum developer, Technical Director, and Director of the DoD Division of the Federated Enterprise Architecture Certification Institute (FEAC).

For the past several years her SowellEAC program has been providing Enterprise Architect Certification through her company, Custom Enterprise Solutions, and National-Louis University.



Enterprise Architecture's Identity Crisis : Caution Sign for the EA/IQ Partnership

P. Kathie Sowell
Custom Enterprise Solutions, LLC
SowellEAC Enterprise Architect Certification Program
www.SowellEAC.com



Objectives of this presentation

- To warn against a trend in Enterprise Architecture that could have a limiting effect on the symbiosis between Enterprise Architecture and the Information Quality profession



Enterprise Architecture is having an identity crisis

(The profession is too young for a mid-life crisis)

- The Enterprise Architecture territory is being carved up into subspecialties – but they all call themselves “enterprise architects”
- Things that are not even architecture are being called “architecture.”

If everyone is an enterprise architect – is anyone an enterprise architect?

Is there any such thing as an “enterprise architect?”

3



John Zachman describes it this way*

“This is what is killing Enterprise Architecture... every computer programmer, systems designer, software architect, solutions architect, technology architect, computer operator, PC owner, data architect, database architect, network architect, business analyst, systems analyst, enterprise architect, service architect, object architect, project manager and CIO calls whatever they want to or maybe, whatever they are doing, “Architecture.” It is chaos. ...”

- “Yes, Enterprise Architecture is Relative, But It’s Not Arbitrary”
copyright 2009 John A. Zachman, Zachman International
www.zachmaninternational.com

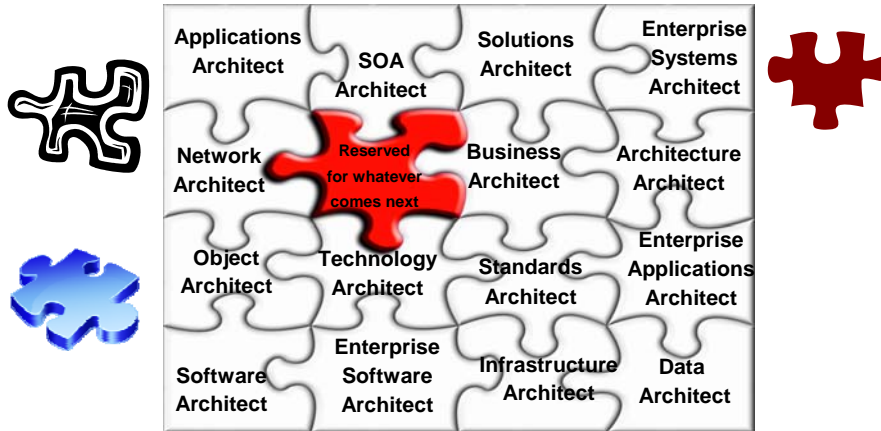
- A LinkedIn EA discussion group started a discussion on this quote
 - There are over 657 comments and counting
 - Sad fact: Many commenters, some apparently unwittingly, do as much to solidify the trend as to fend it off

* “Everybody wants to get into the act” – Jimmy Durante

4



Where is the “real” enterprise architect?



5



This identity crisis has two seemingly opposite negative effects

- It tends to separate the skill sets from each other
 - “Data architects” talk to other data architects, “technology architects” talk to other technology architects.
- Conversely, it tends to confuse the skill sets
 - People confuse each of these “architects” with an “enterprise architect.”



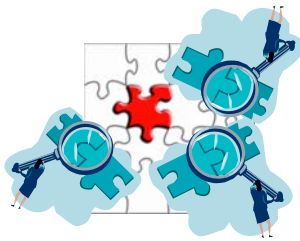
A network architect is not an enterprise architect.
A data architect is not an enterprise architect.
An infrastructure architect is not an enterprise architect.

6



Who is an enterprise architect, then?

- An enterprise architect is someone who
 - Holistically examines an organization or other functioning entity
 - Diagnoses current or potential problem areas
 - Recommends actions to alleviate or prevent problems or to improve performance.



+



=



7




An Enterprise Architect's area of concern is very broad


- An enterprise architect is concerned with all of these aspects of an enterprise
 - business goals
 - business processes
 - business organizations
 - data structure
 - data relationships
 - data standards
 - data flows
 - systems
 - interface standards
 - applications
 - services
 - current state/goal state/transition
 - performance measures



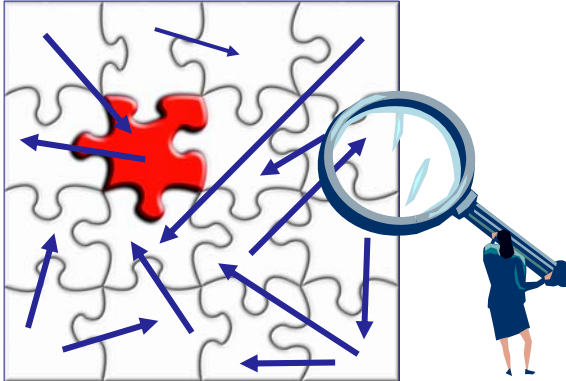
8



The MIT 2010 Information Quality Industry Symposium




And most importantly, an enterprise architect is concerned with the relationships among all the various aspects of an enterprise




This is the hard part, and the most valuable part!
And this is what makes an enterprise architect an enterprise architect!

9

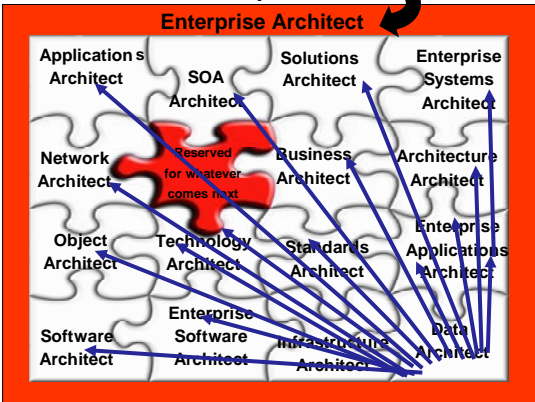


The MIT 2010 Information Quality Industry Symposium



So, what is wrong with this picture?

1) There should be an (actual) Enterprise Architect who is concerned with the whole scope



2) The Data Architect should be connected to every other specialty

10



The MIT 2010 Information Quality Industry Symposium



Excessive stovepiping of skill sets, and calling everything “architecture,” are bad for EA ...

- Obscures the true role of an Enterprise Architect as one who pulls together the analysis of the whole enterprise
- Makes “Architecture” look like the latest pied piper buzzword that everybody wants a piece of (and is therefore suspect)



11



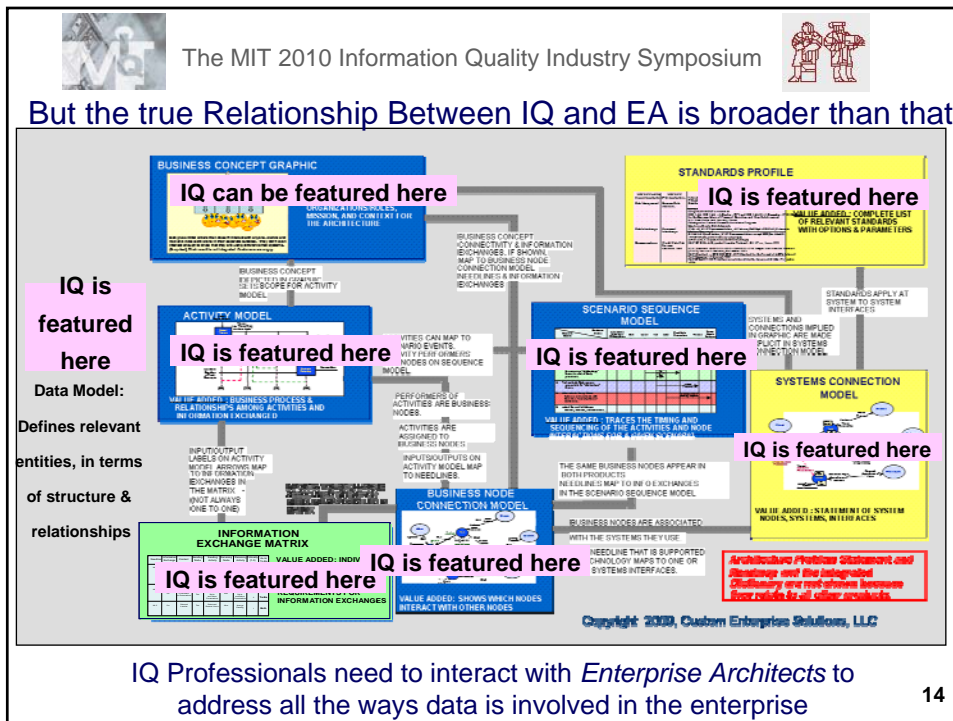
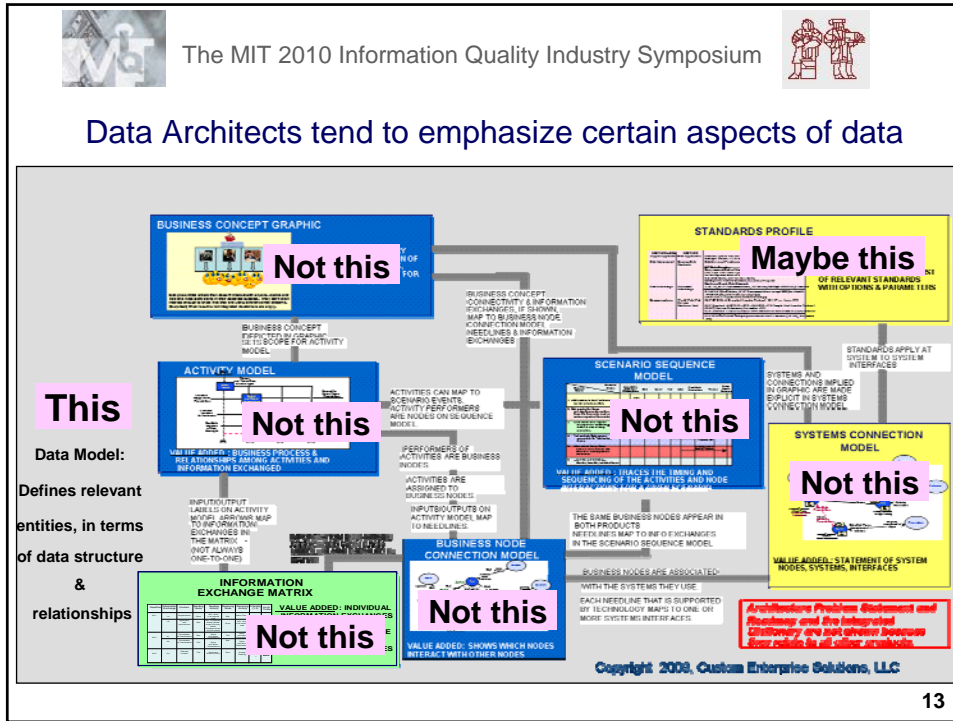
The MIT 2010 Information Quality Industry Symposium



It is also bad for the synergy between IQ and EA

- By separating “Data Architects” from “Enterprise Architects,” (or by falsely equating the two disciplines) we risk focusing on a too-narrow definition of data/information
- We then risk overlooking the broad nature of the relationship between IQ and EA

12





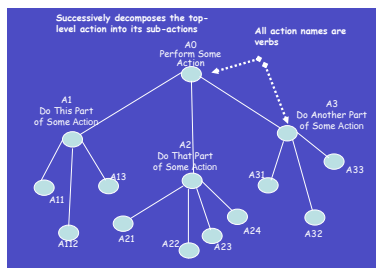
A closer look at where IQ intersects with EA

- Following slides illustrate some of the EA models referenced earlier and show in more detail how IQ needs to be addressed in each*
 - Activity Model
 - Business Node Connection Model
 - Information Exchange Matrix
 - Scenario Sequence Model

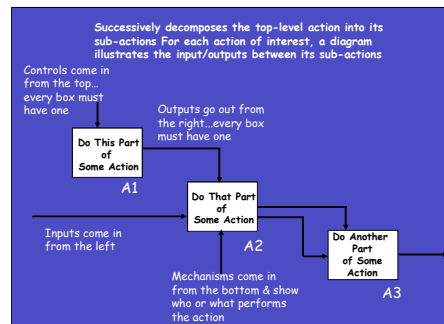
* Data Model is not shown, because that is well known!



The Activity Model shows the relevant activities that take place in your enterprise



Activity Hierarchy Tree



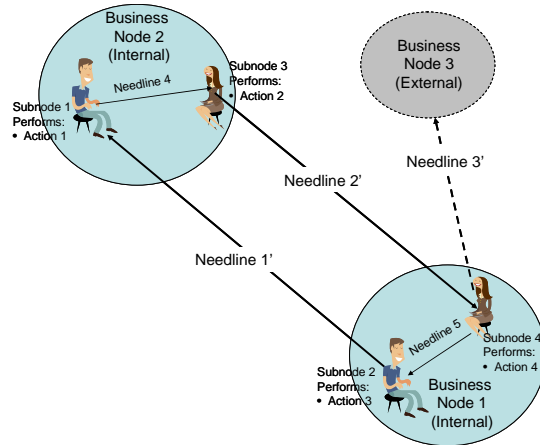
Activity Flow Model

Information flows from activity to activity:

IQ: Is it the right data, produced by the right activity?



The Business Node Connection Model shows which enterprise participants need to interact with each other



Information flows from place to place/person to person:
 IQ: Is it coming from the right place, going to the right place?



The Information Exchange Matrix captures the relevant quality (and other) characteristics of information as it is used in a given scenario

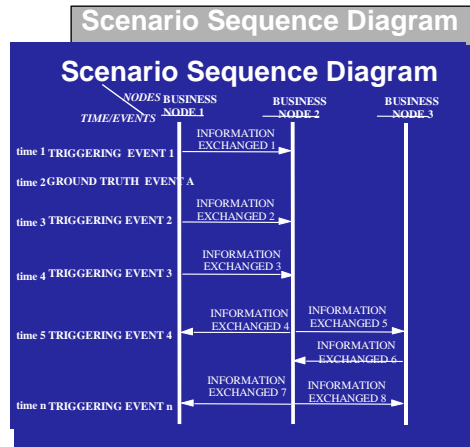
Identifier/ Name of Needline Supported	Identifier/ Name of Information Exchange	Nature of Transaction							Information Source			Information Destination			
		Medium Support	Language (for Natural Operations)	Content	Format Units	Media Type (e.g., Image, Physical)	Volume rate or One- way?	Inter- face Level Required	Purpose/ Triggering Event	ID of Producing Node	Own- ing Organization of Node	Name of Producing Action	ID of Receiving Node	Own- ing Organization of Node	Name of Receiving Action
1	e.g., 1-a														
2	e.g., 2-a														
:															
n															

Identifier/ Name of Needline Supported	Identifier/ Name of Information Exchange	Performance Requirements			Information Assurance Attributes					Threats		
		Frequency (per Unit of Time)	Time Lag	Other	Classifications/ Restrictions	Criticality/ Priority	Integrity Checks Required	Access Authorizations to Support Required	Other	Physical	Electronic (e.g., Hacking, e.t.c.)	Political/ Economic
1	e.g., 1-a				Time- sensi- tivity						Adversarial	Environmental
2	e.g., 2-a											
:												
n												

Who needs what information, and the required information quality, may differ by scenario.
 IQ: Is the required information quality being met?



A Scenario Sequence Diagram shows a series of events, and the information exchanges that occur in response to the events of a given scenario



Circumstances change in different scenarios.

IQ: How do the different scenarios affect the quality of the information?



Bottom Line

- Information Quality touches on all aspects of an enterprise, not just the parts that people think of as "Data Architecture."
- This is a potentially rich symbiotic relationship between IQ and EA
- To fully realize this potential, Information Quality experts should team with Enterprise Architects, not just with "Data Architects."

Let's exploit the full relationship between IQ and EA!