“Architecture”
A holistic concept

Building bridges between architectural disciplines and concerns makes Architecture a strategic asset and capability for Industries, Companies, Regulators and Consultants

Walter Stahlecker, Fellow of The Open Group

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Outline

• Intent, semantics and topics
• Model of “Enterprise”
• Model of “Enterprise Architecture”
• How to build an ecosystem of architectural disciplines
Intent for this Presentation

• Observations:
  – Architectural work is done throughout enterprises, although not always referring to “architecture”
  – Architects often focus inward on their discipline and neglect alignment with other disciplines

• Conclusion:
  – Making alignment part of architectural disciplines creates a holistic capability that will be valued, funded and used by executives
Some Meanings up front (1)

• “Enterprise” – a grouping of people and/or organizations with a purpose in an environment
  – An industry, or industry association
  – A company, NGO or other organization
  – Subsets of organizations (concerns or departments)
  – A person’s activity or project

• “Enterprise” emphasizes intent, activity

• Players in any enterprise may have different goals
Some Meanings up front (2)

Architecture:
“Those properties of a mission, its solution and their environment that are necessary and sufficient for the solution to be fit for purpose for its mission in that environment.” *

Multiple meanings of Architecture:
Concept – Profession – Documentation

* Definition by Len Fehskens (The Open Group)
Scopes of architectural work
(Registered disciplines and associations)

- **Buildings (1.3 M)**: Architectural services, regulations, urban design, studies, models, documentations, supervision, ...
- **Landscape (~35 k)**: Research & advice, planning, design, stewardship of environment, conservation, sustainability, ...
- **Naval (~12k)**: Research, production, maintenance, operation, technical research, modeling, probability of failure, ...
- **Planning (~100k)**: Development, preservation, environment, mobility, growth, economy, ... *
- **AOGEA (~ 13k)**: IT Architects with enterprise context **

* not called “architecture” but equivalent activity
** associated with The Open Group

Walter Stahlecker, February 2009
Other uses of Architecture

- **Industry Architecture**: Professor Jacobides (London Business School) – work on architecture of industry sectors, including distribution of value in an industry

- **Architect of war** (Financial Times article July 7, 2009): “McNamara, architect of the Vietnam war” – recognition of non-feasibility (based on facts and statistics), strategy for exit and execution, realization of value (end of losses)

- **Brand Architecture**: Stern School of Business (NY), University of Nijmegen

- **Architecture of Financial Regulation** (Henry Paulson, Financial Times article March 18, 2009): Proposes rework of regulatory architecture to recognize dynamism and able to adjust regulations to it

- **Strategic Architecture**: Kim Warren (London Business School) - Dynamics of Strategy, defines “strategic architecture” for enterprises (focus on value creation)
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Static Model of an Enterprise

Core Enterprise Concerns:

relevant context,
vision, mission and strategy,
and their execution
(i.e. pursuit of Vision/Mission/Strategy)
with effectiveness
(i.e. continued optimal operation)

Based on Mohamed El-Erian, Financial Times, p. 28., Nov. 4, 2008: About the mistake to break the “Recognition–design*–execution–effectiveness chain” (*design = vision/mission/strategy)
Dynamic Model of an Enterprise

Core Enterprise Concerns:
Recognition of change in relevant context,
vision, mission and strategy,
and their execution
(i.e. pursuit of Vision/Mission/Strategy)
with effectiveness
(i.e. continued optimal operation)
in a Transformation Continuum
Inside “Execution” & “Effectiveness”

Execution and Effectiveness
common scope, different tasks:
- Execution of Transformation
- Effectiveness of Operation

Defining **subset concerns**
manages complexity and provides for depth

Number and nature of **subset concerns** depend on type, scope and complexity of the enterprise
Differentiation of Concerns in an Enterprise

Shared Concerns: Strongly informing all other concerns

Specialized Concerns: Impact on other concerns varies

Such differentiation is deliberate and driven by balancing effort with effectiveness
Subset Concerns in an Enterprise

The Enterprise model can be used for Subset concerns. However there are differences:

- Nature of concern: Subset
- Scope of concern: Relevant Context \(\leq\) Enterprise Context
- This transformation continuum is concerned with the subset
- Stakeholders differ from those of the Enterprise

Note: “Enterprise” includes the union of all subset concerns
Alignment

Transformation: Alignment along the Transformation Continuum to adapt to changes

Operation: Alignment between shared concerns and specialized concerns to achieve efficiency

Relevant Context
- Vision
- Mission
- Strategy
- Execution & Efficiency

Context
- Business Architecture,
  Culture, regulation, ...

IT  People  IP  Manuf
Summary for Enterprise Model

• The Enterprise Model is intended to support discussion of transformation and alignment
• The Enterprise Model defines a set of key concerns in an Enterprise
• The model is intended for scopes ranging from industries to specialized concerns
• “Enterprise” includes the union of all subset concerns
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Enterprise Architecture (EA): Union of all architectures in an Enterprise

Nature and scope of EA are driven by the observation that architectural work is performed on all aspects of an enterprise.
Architecture of subset concern X

- Nature of concern: Subset concern X
- Scope of concern: Enterprise
Enterprise Architecture (essential properties to support purpose) reflects agreement among the enterprise’s stakeholders.

Architecture of subset concerns also addresses essential properties, but purpose and stakeholders differ (may the same people, but in different roles).

Issue:
X-architects and X-stakeholders often prefer discussing X and subsets of X over discussing alignment of X with the whole enterprise.
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TOGAF (IT-centric) and the Holistic Model of EA

The ADM in TOGAF addresses a subset concern of the enterprise ....

... that can be mapped into the holistic architectural model of the enterprise.
Wider environment of TOGAF

Architectural efforts thrive for multiple concerns

IT

Business

Vision/Mission/Strategy

Relevant Context
Vision
Mission
Strategy
Execution & Efficiency
Shared Concerns
Specialized Concerns

X.. Y..
Concerns have specific Frameworks and ADMs

Needed: Alignment among concerns via
“Boundaryless Architecture Information Flow”
Model of Holistic Enterprise Architecture

Relevant Context

Vision
Mission
Strategy

Execution & Efficiency

Relevance Filters
Shared Concern

Specialized Concerns

Icon for: Methods & Best Practices in a Concern
Attempt to reconcile the models of TOGAF and Holistic Enterprise (1)

TOGAF can be positioned as a specialized concern.

Relevant Context

Vision
Mission
Strategy

Execution & Efficiency

Relevance Filters Shared Concern

Specialized Concerns

Icon for: Methods & Best Practices in a Concern
Attempt to reconcile the models of TOGAF and Holistic Enterprise (2)
Attempt to reconcile the models of TOGAF and Holistic Enterprise (3)

Position “Business Architecture” as a shared concern:
“Chemistry” – how the intended value, defined by stakeholders, is created from the capabilities
(This is intended as description, not definition)

Range of chemistry types: Rigid to ad-hoc, explicit to tacit, simple to complex, etc.

BA: Much richer than an org-chart or business processes
BA: Expressed in executives’ language, not implementers’
Holistic EA – a goal

Enterprise stakeholders need Enterprise Architects, not X-Architects

Executives will understand architecture if X-Architects link their disciplines to enable Holistic EA

Architects: get out of your specialty’s depth, share best practices for aligning architecture disciplines and build true EA that is valued across the enterprise