



SATURN 2007 Workshop:

“How the QAW Helped our Enterprise Architecture Effort”

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Outline

- **What is Enterprise Architecture**
- **The Zachman Framework**
- **The Open Group Architecture Framework**
- **QAW Experiences**
- **The focus of the QAW**
- **EA Elements to Harvest from a QAW**
- **Aligning EA Elements**
- **Conclusions**





What is Enterprise Architecture (EA)?

- It depends on who you ask...
 - *“The ability to understand and to reason the continual needs of integration, alignment, change, and responsiveness of the business to technology and to the marketplace through the development of models and diagrams” [1]*
 - *“The primary reason for developing an enterprise architecture is to support the business by providing the fundamental technology and process structure for an IT strategy. This in turn makes IT a responsive asset for a successful modern business strategy” [2]*

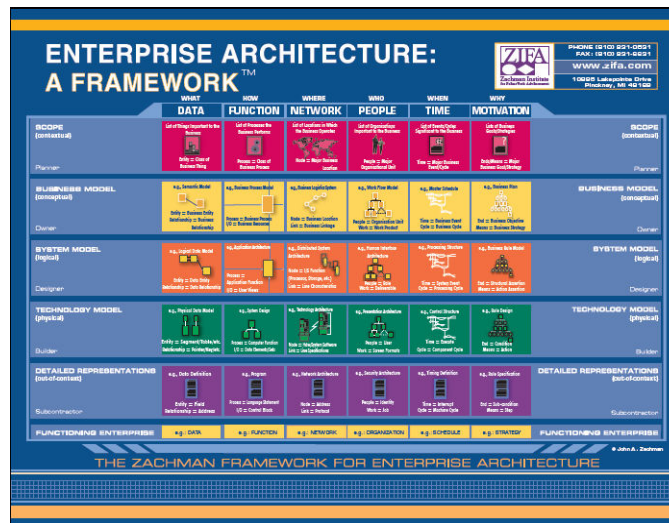


What is Enterprise Architecture (EA)? - 2

- It depends on who you ask...
 - *“The art and science of capturing, designing, and making explicit, an enterprise’s operating framework. The goal of EA is to ensure that decision-making within the enterprise is done based on explicit knowledge about the enterprise rather than ‘folklore.’” [3]*

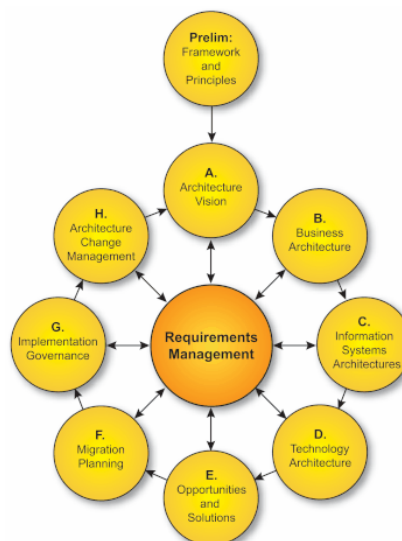


Zachman Framework for EA

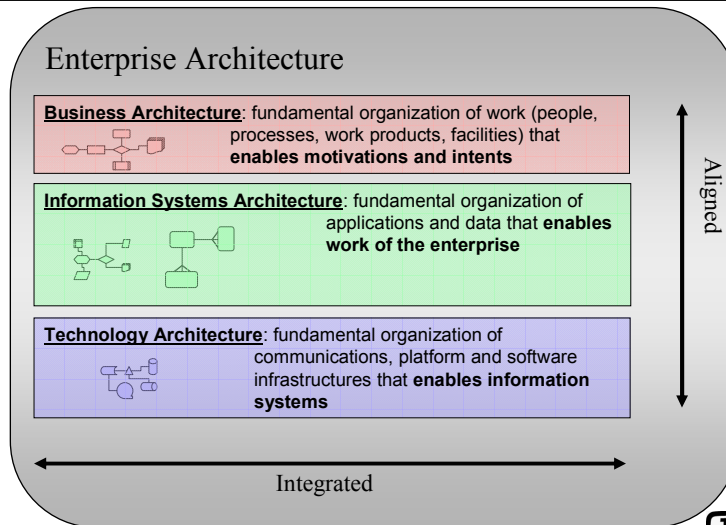


The Open Group Architecture Framework (TOGAF)

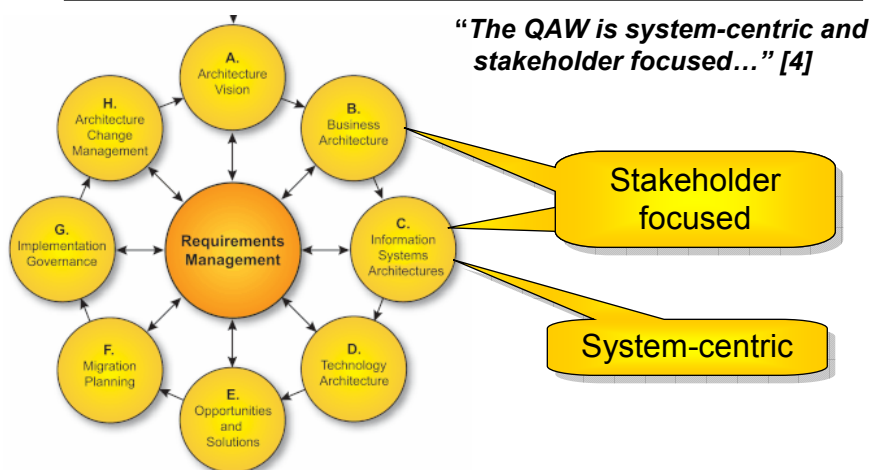
- **Architecture Development Method (ADM)** focuses on EA processes and activities
- **Clear separation between types of architectures**



The Focus of Enterprise Architecture



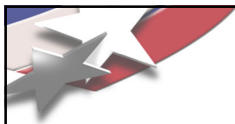
The Focus of the QAW





EA Experiences

- Participated in 3 Enterprise Architecture efforts
- Difficult to engage *Business Stakeholders*
- Easier to focus on Information Systems Architecture



QAW Experiences

- Led 6 QAWs last year
- Mostly Enterprise-wide Applications & Capabilities
 - Capabilities that will be used across the company
- Usually a lot of discussions related to the business architecture
 - Common understanding
 - Improved performance
 - Business Goals



EA Elements to Harvest from a QAW

QAW Business/Mission Presentation can Yield:

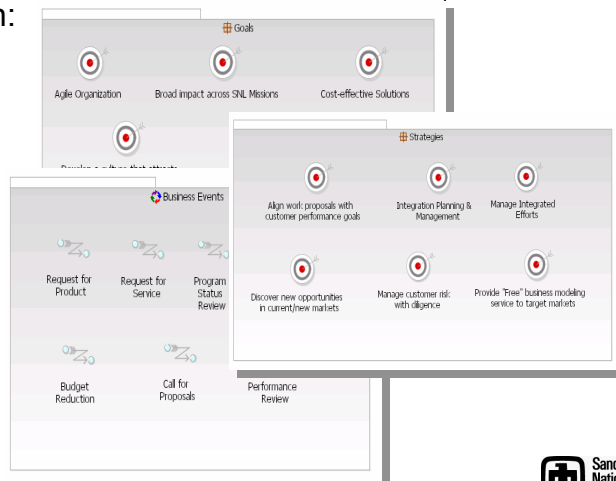
- Business Motives
 - Goals
 - Strategies
- Business Processes
 - How they do work
- ...



EA Elements to Harvest from a QAW

Example EA Elements from QAW Business/Mission Presentation:

- Goals & Objectives
- Strategies
- Business Events



EA Elements to Harvest from a QAW

- Example EA Elements from QAW Business/Mission Presentation:
- End-to-End Processes
 - Characterize Strategic Opportunities
 - Establish Strategic Commitments
 - Optimize the Business
 - Deliver Solutions
 - Provide Supporting Services
 - Respond to Inquiries



EA Elements to Harvest from a QAW

QAW Scenario Development can Yield:

- Refined Business Process Models
 - Business Events
- System Process Models
 - System Events
- ...



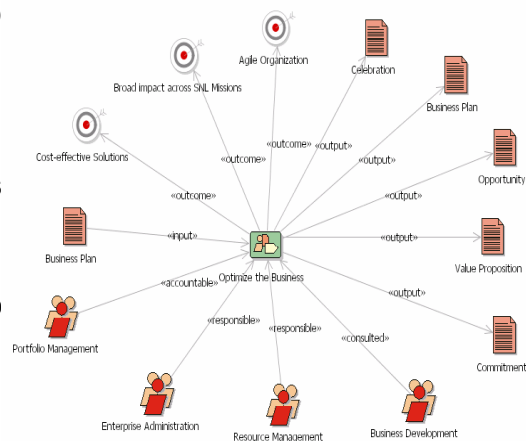
EA Elements to Harvest from a QAW

- Example EA Elements from QAW Scenario Development:
- Raw Business Scenarios:
 - *A customer is so pleased with the work products produced by our organization that he refers us to several other potential customers*
 - *We want to structure our organization so that we can respond quickly to any changes in strategic direction*



EA Elements to Harvest from a QAW

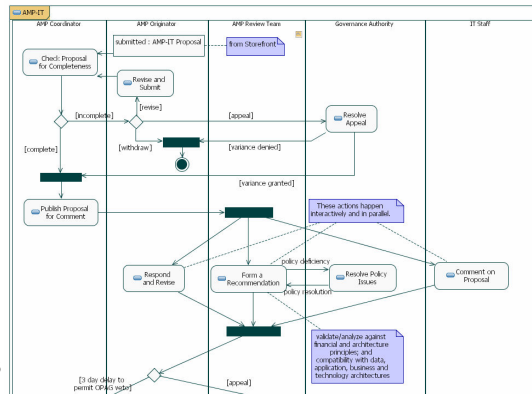
- Example EA Elements from QAW Business/Mission Presentation an
- Process-centric views
 - Inputs/Outputs
 - Supporting Roles
 - Goals Support
 - Triggers



EA Elements to Harvest from a QAW

- Example EA Elements from QAW Scenario Development:

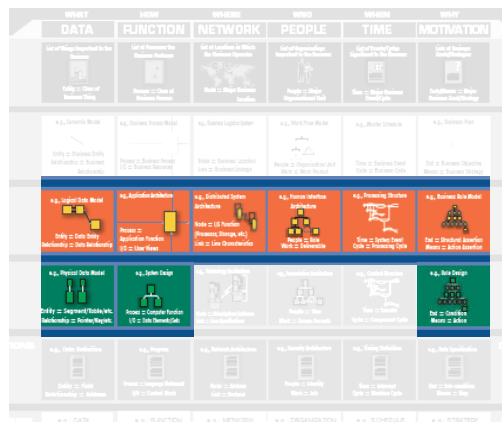
- Business Processes and Activities
 - Clear-box view
 - Activity Diagrams
 - Roles & Responsibilities



EA Elements to Harvest from a QAW

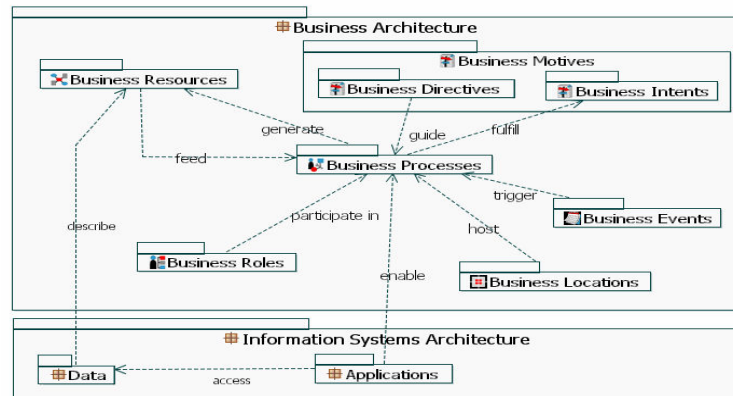
QAW Architectural Plan Presentation can Yield:

- Business Rules
- Logical Models
- Application Architecture
- Can include Technology Architecture
- ...



Alignment of EA Elements between Architectures

- Can begin to align EA elements that are harvested from the QAW



Conclusions

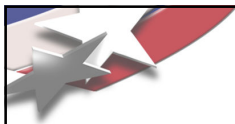
- **QAW is a useful mechanism for uncovering many valuable EA nuggets**
 - **Business Processes**
 - Activities and Workflows
 - Roles & Responsibilities
 - **Business Rules**
 - **Business Events**
 - Timelines and business cycles
 - **Organization Structure**





Conclusions

- The QAW provides a formal facilitation method to address both the Business Architecture and the Solution Architecture
- Can easily tailor the QAW to harvest EA elements



References

1. *Enterprise Architecture: Using the Zachman Framework*; by O'Rourke, Fishman, Selkow
2. *The Open Group Architecture Framework*;
www.opengroup.org/togaf
3. Presentation: *EA as an Enabler to Implement Strategy*; by Manuel P. Ontiveros, Sandia National Labs
4. Quality Attribute Workshops (QAWs) Third Edition; by Barbacci, et al.
<http://www.sei.cmu.edu/pub/documents/03.reports/pdf/03tr016.pdf>
5. Model contributions from David S. Cuyler, Sandia National Labs

