The Business Architecture Spectrum: The Art and Science of Architecture

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The Business Architecture Spectrum

"The Art and Science of Architecture"

About Mindy...

- Fourteen years in IT; Public and Private sectors
 - Financial, Insurance, Medical, Retail, Non-Profits, Government
 - As UI Designer, Lead Programmer Analyst, Project Architect, BA, BSA, PM
- BABottomline.com Blogger
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Agenda

- Defining the architect's role and what it means to the organization
- Understand how the range of organizational needs, projects, processes and structures affect architecture
- Learn how the art and science can effect the bottom-line
- Discover how the architecture spectrum can strengthen and provide resilience in the ever changing world of technology...and promote growth

First, a bit of history...

The history of Enterprise Architecture goes back 20 years and the field continues to evolve

- System complexity Organizations spend more \$\$\$ on building and implementing IT systems
- Poor business alignment Organizations continue to experience difficulty and increased costs when trying to align the IT systems with the business needs

<u>J&J&J&J&</u>

- Bottom line 20 years ago: more cost, less value
- Bottom line today: even more cost, even less value

1. Defining the architect's role and what it means to the organization

- Enterprise Architecture (EA) is "a well-defined practice for conducting enterprise analysis, design, planning, and implementation, using a holistic approach at all times, for the successful development and execution of strategy
 - CAO Chief Architect (CAO)
 - Business Architecture
 - Solution Architecture
 - Data Architecture
 - Application Architecture
 - Software Architecture
 - Information Architecture
 - Security Architecture
 - Project Architecture



Top Four Enterprise Architecture Methodologies are:

- The Zachman Framework for Enterprise Architecture
 - Taxonomy roadmap
- The Open Group Architecture Framework (TOGAF)
 - Process with directions and milestones
 - MODAF/DODAF SOA
- Federal Enterprise Architecture (FEA)
 - Complete methodology with reference models
- Gartner
 - Practice focused on Strategy

That is one big bunch of solution resources!

The Business Architecture Spectrum

Chief Architecture Officer (CAO or CTO)

Enterprise Architect

Portfolio Architect

Solutions Architect

Information Architect

Data Architect

Security Architect

Project or Applications Architect

Crown Glory- Success Vision/Mission - Strategy

Voice Throat - Sustainability

Heart/High Heart - Significant

Solar Plexus - Solidarity

Sacred – Stability (Products & Services)

Root – Safety/Security

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Strategic planning as part of enterprise architecture

Across Domains

Chief Architecture Officer (CAO or CTO)

Enterprise Architect

Portfolio Architect

Solutions Architect

Information Architect

Data Architect

Security Architect

Project or Applications Architect

Technology Architecture

Applications Architecture

Data Architecture

Business Architecture

2. Understand how the range of organizational needs, projects, processes and structures affect architecture

Business Architecture



Role Type Comparison 1 of 2

Торіс	Project or Applications Architect	Solution Architecture	Enterprise Architecture
Scope	Single solution or integrations	Single solution or set of related solutions	All current and future solutions and COTS
Primary Goals	Ensure that the solution suits the organizational architecture and user needs	Ensure that the solution fits within the enterprise context	Define the enterprise context including business, information, application, and technology
Responsibility	Translates functional and nonfunctional requirements into design, within enterprise oversight	Translates nonfunctional and functional requirements into design, within enterprise context	Translates strategies into target architectures and roadmaps
Tradeoffs	Enterprise standards, policies and frameworks adhered to for proper delivery	Enterprise strategy and goals vs. solution tactical and delivery requirements	Prioritization and rationalization of conflicting business, information, and technology requirements

Role Type Comparison 2 of 2

Торіс	Project or Applications Architect	Solution Architecture	Enterprise Architecture
Primary Artifacts	Existing Architecture	Solutions architectures and designs	Enterprise reference architectures, patterns and standards
Primary Stakeholders	System Sponsor and SMEs, development team, users	Solutions owners, EA, development team, technology	Executive leadership, business leaders, CIO, solutions
Characteristics	Responsible to solution and enterprise	Credibility with solutions teams and owners	Broad knowledge and experience, vision
Skills	Conceptualization, modeling , design, communications	Conceptualization, patterns, modeling, design, communications	Contextualization, conceptualization, abstraction, modeling, communications
Reporting Structure	Assigned to PMO and LOB, solution/business /application team, or EA	Assigned to solution team; report to solution owner (LOB), or EA	Reports to EA team, typically part of CIO organization

FACT: One of the top three Top Pop hits of all time is...

"I Can't Get No Satisfaction"

by The Rolling Stones



3. Learn how the art and science can effect the bottom-line

- Hard skills require smarts/Knowledge IQ
 - Can be learned or acquired
- Soft skills are behavioral/Emotional IQ
 - Such as patience, time management, empathy

ART

- Leadership
- Communication
- Motivating
- Enabling

SCIENCE

- Planning
- Monitoring
- Control
- Tracking

Competencies & Capabilities



Those dreaded statistics...

How many times have we heard the statistics?

"Roughly 70% of software projects fail because of poorly managed requirements"

CIO Magazine

Really? the requirements effort is the ultimate reason why we can't get no project satisfaction!

This fact is often taken out of context... look at the statement again.

The reality is that the requirements effort is <u>poorly managed</u>!

Organizational structures are key

• What does your organization look like?



Let's look at the methodologies again!





17

Competencies & Capabilities

• Everything has to be managed...

 ART Leadership Communication Motivating Enabling 	SCIENCE - Planning - Monitoring - Control - Tracking			
Architecture Vision				
Business Architecture				
Information & Data Architecture				
Technology Architecture				
Opportunity and Solutions Architecture				
Migration Planning/Implementation/Governance				
Architecture Change Management & Requirements Management				

4. Discover how the architecture spectrum can strengthen and provide resilience in the ever changing world of technology...and promote growth

- Strengthen organizations by reinforcing their established methods to provide and derive the "value" from business architecture
 - Domain driven design
 - Service Oriented Architecture
 - Alignment of business capabilities and competencies with technology
- As business architecture efforts become more mature, management would be able to focus on the strategy for the evolution, utilization, and governance of the overall organization's transformation in order to become better aligned with the business

SATISFIED!!!

 Managing the requirements effort will ensure project success, just focus on getting the ultimate satisfaction – for all aspects of the system changes and requirements management activities



References

1. "The Role of Solution Architect" by Mike Rosen, Cutter Consortium – July 2012

2. "A Comparison of the Top Four Enterprise Architecture Methodologies" by Roger Sessions, ObjectWatch, Inc., May 2007

