Directions Teleconference & Webinar: 
When EA & SOA Worlds Collide!

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Today’s Agenda

• Why is SOA such a misunderstood topic
• The natural tension between Enterprise-level and project-level architecture
• An Enterprise Architect’s view of SOA
• A Service Oriented Architect’s view of SOA
• What should EA do for SOA projects?
• What should SOA projects do for EA?
• What should SOA and EA do together for the business?
• How do you bring these two together?
• Implications for Governance

• Q & A from the audience
YOU HAVE TO TRANSFORM
YOUR IT-PROCESSEES TO
LET THEM ADD MORE
VALUE TO YOUR BUSINESS-
PROCESSEES

SOUNDS
GREAT!
AND WHAT
DOES THAT
MEAN?

SOA?

THE CONSULTANTS HANDBOOK PART 1:
WHAT TO DO WHEN YOU REALLY HAVE NO CLUE
Current Issues

• Technological obstacles to reuse being overcome
• Cultural obstacles to reuse still an issue
• Project-oriented obstacle to reuse
• Many competing internal SOA projects, approaches, & technology choices
• Hype-driven confusion (e.g., “SOA 2.0”)
• Lack of leadership from EA on SOA
• Processes moving outside of the firewall
• Departments operating independent of oversight
• More enterprise applications are Web-delivered
• Technology as a business advantage and cost saving mechanism
Enterprise Architecture

- SOA
- SaaS
- Hype
- Web 2.0
- Cost Reduction
- Emerging Standards
• There seems to be two worlds out there, the world of enterprise architecture and the world of SOA.
  – “The funny thing is that those in each world thinks that they can do the other world's jobs.”
  – “The end result...there is not a lot of synergy there yet.”
More good news…

Some traditional enterprise architects have not done a stellar job in understanding the opportunities within SOA, generally speaking, and the SOA guys have not figured out how SOA meshes with existing enterprise architecture standards, notions, and practices, again generally speaking.
Natural Tension between E-level and project-level architecture

- The project is the primary “unit of change” in an enterprise
- Project have limited scope, budget, schedule and resources
- The “Big Picture” needs to exist and be maintained
- Linkages need to be established and impact analysis performed
- Downstream decision making/projects must be consistent with Upstream intentions

Tension can become Synergy!
Defining Enterprise Architecture: Process

- **Enterprise Architecture (EA)** is a strategic management discipline that creates a single, holistic view of the processes, systems, information and technology of the enterprise designed and optimized to achieve the business strategy and current objectives.

- **Primary Output**: a roadmap that evolves the ‘as-is’ business processes, systems, information and technology of the enterprise from the ‘current state’ to the desired ‘future state’.

- **Intent of EA process**: Identify the impact of enterprise strategies and influence lower-level tactical, operational, and project decisions and activities to be more aligned with enterprise strategies.

The primary design goal for enterprise architecture must be to enable efficient change in business capabilities through the services that enable them!
Key Concepts in Enterprise Architecture

• Holistic View
  – Lots of other views
  – From Portfolio Management to Budget to HR

• Optimized for the Enterprise
  – Not the Business Unit
  – Not the Process
  – Not the Application
  – Not the Database
  – Not the Server
  – *The problem of ‘point optimization’*

• Not simply ‘IT standards’
  – Examples:
    • This building
    • Designing an airplane

• EA is a ‘process’ not a ‘project’
An Enterprise Architect’s view of SOA

- Business Strategy
- Current Objectives

Processes:
- Data & Information
- Systems & Infrastructure

Enterprise Capabilities:
- Services Catalog
  - Business Services
  - Application Services
  - Information Services
  - Infrastructure Services

EA Roadmap:
- Current State
- Future State
- Analysis
- Project Portfolio
An Enterprise Architecture Model view of SOA

- **Enterprise Solutions Architecture**
- **Enterprise Technology Architecture**
- **Enterprise Information Architecture**
- **Enterprise Business Architecture**

**Value Network Analysis**

**Business Scenario Models**

**Information Value Chain Analysis**

**Function/Process Decomposition**

**Business Event Analysis**

**Context Diagrams**

**Business Scenario Models**

**Use Cases**

**Solutions Portfolio**

**IT Standards**

**Service Catalog**

**Value Network Analysis**

**Required Capabilities (CRV)**

**Swimlane Diagrams**

**Integration Models**

**Service Function Models**

**Enterprise Business Strategy**

**Enterprise Intelligence**
Continued …
A Service Oriented Architect’s view of SOA

- Data Abstraction
- Data Services/Messaging
- Process/Orchestration
- Monitoring/Event Management

- Security
- Governance

- Data
- Data
- Legacy
- Legacy
- New Services
- Internet-Based Services

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So, the EA “Mega Trends”

1. SOA, SOA, SOA!
2. SaaS
3. “Web 2.0”
4. “Enterprise 2.0”
   - Mashups
   - Inside-out
   - Outside-in
5. Incorporating existing Enterprise Architecture concepts and practices… how?
What should EA do for SOA projects?

- **Standardization**
  - Infrastructure (hw, sw, network)
  - Messages (format, content, delivery, use case)
  - Data content/names/definitions/ownership
  - Business Rules & Events
- **Drive towards common semantics between EA and SOA**
- **Be proactive in identifying services that should be built and identifying the development efforts that are positioned to deliver needed services**
- **Broader than the project view**
  - Scope of analysis and design
  - Models for impact analysis and integration planning
- **Research and recommend SOA technology choices, approaches and designs**
- **Collaborate on technology choices, approaches and designs that can satisfy a broader part of the enterprise**
- **Extend the application of successful SOA implementations to other parts of the enterprise**
- **Governance integration**
- **CULTURE CHANGE!!!**
What should SOA projects do for EA?

- Create and populate EA repository with appropriate documentation
- Comply with existing EA standards, when possible
- Demonstrate need for new standards or extensions to EA
- Provide an opportunity for SOA Proof-of-Concept (POC)
- Contribute to the ongoing evolution of EA standards, patterns and models
- Seek service reuse opportunities
- Bind services with appropriate partners
- Create long term service development, deployment, and management plan
- Link back to proper EA methods
What should SOA and EA do together for the business?

• Deliver the needed Enterprise Capabilities
• Identify the potential investments required to build an SOA
• Develop a Service Catalog
• Foster a collaborative reuse-oriented culture as a model for the rest of IT
• Identify opportunities to externalize business services, as well as identify external services for consumption
• Continue to measure agility and reuse, and adjust as needed
• Monitor the integration with partners
• Continue to monitor the value to business
How do you bring these two together?

Executive Management

Annual, Tactical Goals, Objectives & Targets

Existing Operations

Tactical Project Requests

Models of the Current State Enterprise

New/Changed Capabilities Delivered

Models of the Future State Enterprise

EA Roadmap
• Project Requests
• Adds/Changes to Applications, Infrastructure, Information, & Business Processes Services
• Timeline/Interdependencies

Business Strategy

Project Portfolio

Influences

Populate

Build & Integrate

Project A

Project B

Project C

Tactical Project Requests

New/Changed Capabilities Delivered

Input

Standard Service Request

Standard Service Response

CLIENT (Service Requestor)

Service Provider

Work

Need for Service

Executive Management

Existing Operations

Project Portfolio

Enterprise Architecture

Tactical Project Requests

Models of the Current State Enterprise

New/Changed Capabilities Delivered

Input

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Tactical Project Requests

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Implications on Governance

**EA Governance**
- Ensuring that duplicate services are not created
- Compliance with standards / exemptions / extensions
- Ensuring service levels are defined and approved
  - Need appropriate metrics
- Change management more complex – unknown service consumers
- Manage the portfolio of services

**SOA Governance**
- SOA Governance becomes a sub-discipline to EA Governance
- Design Time SOA Governance
  - A registry and/or repository for the tracking of service design, management, policy, security, and testing artifacts.
  - Design tools, including service modeling, dependency tracking, policy creation and management, and other tools that assist in the design of services.
  - Deployment tools, including service deployment, typically through binding with external development environments.
  - Links to testing tools and services, providing the developer/designer the ability to create a test plan and testing scenarios, and then leverage service testing technology.
- Run-Time SOA Governance
  - Service discovery
  - Service delivery
  - Security
  - Setting and maintaining appropriate service levels
  - Managing errors and exceptions
  - Enabling online upgrades and versioning
  - Service validation
  - Auditing and logging
Final Thoughts

• **EA is an evolving discipline.** New notions and business events will drive EA activities going forward.

• **SOA is part of EA.** We have a tendency to forget that. The “A” in SOA is architecture.

• **Learn how to see beyond the SOA hype, and make sure to understand your own business issues.**

• **Accept the emerging Web as a resource that is to be leveraged for the good of the company.** There will be much change here.

• **The enterprise architect should drive change for the good of the company.** However, never “manage by magazine.”

• **The lines are blurring between enterprise applications and the emerging Web.** There is a fundamental shift in how we deploy and manage enterprise applications and services going forward.

• Project architects may lead, or EA may lead, but **they must work collaboratively** to advance SOA beyond marginal point successes.
To submit your questions, please click on the “Q&A” tab on the bottom right-hand corner of your screen.