Enterprise Architecture Governance
Agenda

- Enterprise Architecture
- Gap Identification and Roadmap Definition
- Design of Implementation Roadmap
- Determination and Documentation of Governance Framework
- Implementation of Roadmap
What is Enterprise Architecture?

• Enterprise Architecture (EA) typically models Business, Information, Application and Infrastructure Architectures as different views that have clear linkages and ensures consistency across the views

• There should be a consensus of all the stakeholders about the EA

• An EA integrates Business and IT to ensure that Business Drivers drive the IT of an organization

• EA occupies a vast space and necessitates the coming together of specialists from various fields (from both Business and IT)
What do the different views represent?

- **Business Architecture** – Business Functions, Business Processes, Organizational Structure and Operational Details of an Enterprise

- **Information Architecture** – The Data Model for the Business, addresses issues like Ownership, Use and Management of Data across the Enterprise. Also, represents Strategic Views of Data useful for Senior Management through use of Tools like Data Warehousing and Business Intelligence. Further, User Experience Management could also be included.

- **Application Architecture** – The Applications (both COTS Products and ground-up developed ones) that address the Business Requirements

- **Infrastructure Architecture** – The Environment in which the Applications run. It deals with Servers, DBMS, Networks, Application Servers, Data Warehousing Tools, etc.
Who create these Views and how do they do it?

- Business Architecture – Business Consultants (Business Domain Experts) with the help of Business Users
- Information Architecture – Technology Architects (including Data Management Experts)
- Application Architecture – Technology Architects with the help of Business Domain Experts
- Infrastructure Architecture – Infrastructure Management Experts who understand IT Operations
- An Enterprise Architect (a Group or an Individual) owns and binds all these Views
EA Documentation

- EA Documentation covers all the Architectures
- It captures the AS-IS and TO-BE Scenarios
- It is ensured that all the Architectures are aligned to enable the TO-BE Business Scenarios
Enterprise Architecture Documentation

- How to use this document
- Introduction
- Business Architecture
  - AS-IS Architecture
  - TO-BE Architecture
- Information Architecture
  - AS-IS Architecture
  - TO-BE Architecture
- Application Architecture
  - AS-IS Architecture
  - TO-BE Architecture
- Infrastructure Architecture
  - AS-IS Architecture
  - TO-BE Architecture
- Security Architecture
  - AS-IS Architecture
  - TO-BE Architecture
- Integration Architecture
- Road Map to migrate from AS-IS to TO-BE
- Architecture Governance
  - Architecture Governance Structure
  - Roles and Responsibilities of concerned stake holders
  - Escalation Mechanism
- Appendix
Agenda

• Enterprise Architecture

• Gap Identification and Roadmap Definition

• Design of Implementation Roadmap

• Determination and Documentation of Governance Framework

• Implementation of Roadmap
Gap Identification and Roadmap Definition

- Gaps in TO-BE and AS-IS Scenarios Identified
- Roadmap to transition from the AS-IS to TO-BE Scenarios defined
What is a Roadmap?

• A Plan of Action for Transition

• Includes Required Processes

• Includes Required Deliverables
Agenda

- Enterprise Architecture
- Gap Identification and Roadmap Definition
- Design of Implementation Roadmap
- Determination and Documentation of Governance Framework
- Implementation of Roadmap
Design of Implementation
Roadmap

• Identification of Projects that
Agenda

• Enterprise Architecture

• Gap Identification and Roadmap Definition

• Design of Implementation Roadmap

• Determination and Documentation of Governance Framework

• Implementation of Roadmap
• Governance deals with the Plan for Defining, Maintaining, Accommodating and Modifying the AS-IS and TO-BE Scenarios

• Governance deals with the Roles and Responsibilities of various Stakeholders
Determination and Documentation of Governance Framework

- Governance deals with Defining, Maintaining, Accommodating and Modifying the Documentation and Change Management Processes

- Governance Framework, at a minimum, defines the Guiding Principles, Processes, Organization Structures and Assessment Mechanisms

- Governance ensures adherence to Standards and Guidelines
Governance also recommends

- Technology Standards
- Technology Platforms
- Integration Approaches
- Reusable Frameworks
- Procurement Strategy
- Templates
The first iteration of the journey ends with establishing the policies, standards, organisation, and management mechanisms for the ongoing maintenance and management of your IT architecture.
Principles – Policies and Guidelines are the operating principles for the Enterprise Architecture. These are used to make decisions, adopt IT standards and resolve issues and deadlocks that may arise. A typical example is a principle stating that the organisation will buy vs. build.
What are Principles?

• General Rules and Guidelines
• Support the Transition Process
• Long Lasting
• Rarely Amended
What are Principles?

- Policies and Guidelines are the Operating Principles for Enterprise Architecture
The opengroup’s TOGAF describes the following quality criteria:
– Understandability
– Robustness
– Completeness
– Consistency
– Stability
Principles - Quality

• Based on the Beliefs and Values of the various Stakeholders
Guiding Principles - Sample

- The Organization will maintain a Single Enterprise Architecture (under version control for revisions)
- Will support Core Operations
- Will be Standards based
- Will support Reuse
- Accessibility
- Security
Organization Structure & Roles

• Architecture Review Board/ Technology Management Committee/EA Committee
  – CxOs, Directors of various Functions, Business Architects, Data Architects, Infrastructure Architects, Security Architects, …

• Project Management Office

• EA needs to take Power Politics into account while forming Teams
Escalation Process

Jurisdiction Account Executive -> Program Management Office

Program Management Office -> Technology Management Committee

Technology Management Committee -> EA Document Maintenance Committee

Jurisdiction Project Manager
Agenda

• Enterprise Architecture

• Gap Identification and Roadmap Definition

• Design of Implementation Roadmap

• Determination and Documentation of Governance Framework

• Implementation of Roadmap
Implementation of Roadmap

• Implementation of identified Projects
• Dealing with Organizational Politics
• Assessment and Correction
Agenda

• Enterprise Architecture
• Gap Identification and Roadmap Definition
• Design of Implementation Roadmap
• Determination and Documentation of Governance Framework
• Implementation of Roadmap
• SOA Governance
SOA Governance
Some Aspects of SOA Governance

• Mapping Technology Services to Business Services

• Ensuring that Services are Reusable

• Various life cycle issues like architecting, designing and implementing the Identified Services

• Documenting Standards and Guidelines on aspects like creation and maintenance of Registries, Production and Consumption of Services, Process Orchestration, maintenance of Services, SLAs for QoS, and Security Issues
# Sample Governance Mechanism for SOA

<table>
<thead>
<tr>
<th>Decision</th>
<th>Responsible</th>
<th>Accountable</th>
<th>Consulted</th>
<th>Informed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which services to do?</td>
<td>Enterprise architects, application developers</td>
<td>Enterprise architects</td>
<td>Process owners, application developers, security experts**, DB experts**</td>
<td>All ICC</td>
</tr>
<tr>
<td>Which services to do first?</td>
<td>Enterprise architects, application developers, ICC internal marketing, process owners, SOA project sponsor*</td>
<td>Enterprise architects, ICC internal marketing, process owners</td>
<td>Process owners, application developers, security experts**, DB experts**</td>
<td>All ICC, SOA project sponsor</td>
</tr>
<tr>
<td>Is this really a new, reusable service?</td>
<td>Enterprise architects, ICC administrators, application developers, process owners*</td>
<td>Enterprise architects, ICC administrators</td>
<td>Application developers, process owners*, integration technology vendors*, security experts**, DB experts**</td>
<td>If a new, reusable service is agreed, all ICC; if not, service owners of the services that are reused</td>
</tr>
<tr>
<td>Who’s going to pay for the development and maintenance of this service?</td>
<td>Enterprise architects, process owners, application developers, IT budget committee</td>
<td>SOA project sponsor, IT budget committee</td>
<td>Process owners, application developers, operations, security experts**, DB experts**</td>
<td>Application developers, service owners</td>
</tr>
<tr>
<td>Who owns this service?</td>
<td>Enterprise architects, application developers, process owners*</td>
<td>Enterprise architects, application developers, process owners*</td>
<td>Process owners, application developers, operations, security experts**, DB experts**</td>
<td>All ICC</td>
</tr>
</tbody>
</table>

* = for coarse granularity, highly reusable services  
** = depending on the nature of the service

Source: Gartner (April 2006)
Thank u ...