Introducing Enterprise Architecture into the Enterprise

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Approach

- Every situation is different
  - The organization
  - Its history and its current situation
  - The business
  - The people and their own objectives
- All these influence the approach to take
- Here, it is assumed that:
  - An IT system design/implementation facility exists
  - TOGAF is the framework to be used
- TOGAF tells you what to do
- Similar approaches for other frameworks
The recommended approach for Enterprise Architecture development consists of a preliminary phase followed by a cycle of nine phases. These phases are iterative, both within each phase and between the phases.

The information generated and consumed by each Phase is passed between the Phases as named sets of information. Sometimes these information sets are in the form of text documents that need to pass through some formal acceptance, or approval, procedure. However, this information will mainly be in the form of models generated by some form of IT Architecture tool. The models will be held in a repository and displayed as necessary by some form of viewing tool.

The information generated and consumed by each Phase is passed between the Phases as named sets of information.
Objectives of Preliminary Phase (1)

- To ensure everyone who will be involved in, or benefit from this approach, is committed to the success of the architectural process.
- To define the architecture principles that will inform the constraints on any architecture work.
- To define the "architecture footprint" for the organization - the people responsible for performing architecture work, where they are located, and their responsibilities.
- To define the scope and assumptions (particularly in a federated architecture environment)
Objectives of Preliminary Phase (2)

- To define the framework and detailed methodologies that are going to be used to develop enterprise architectures in the organization concerned.
- To set up and monitor a process (normally including a pilot project) to confirm the fitness for purpose of the defined framework.
- If necessary, to define a set of criteria for evaluating architecture tools (an example set of criteria is given in Part IV), repositories and repository management processes to be used to capture, publish, and maintain architecture artifacts.
Activities

- Get the buy-in
- Provide a foundation for the Architectural Framework
- Establish the Architectural Framework
- Integrate the Framework with existing procedures
- Choose the tools
- Creating a repository for the Enterprise Continuum
- Train the staff - architects and others
- Identify and capture existing Architecture assets
- Monitor a pilot project
The challenges of getting the buy-in

- The processes and techniques of IT Architecture are still evolving
- Comparative cases are not available
- There will never be a single preferred method of working
- It will never become an automatic process – the skills of an experienced Architect will always be required
  - It is not painting by numbers
  - But it is not rocket science
- A good Architect must understand the politics and commercial aspects of the background to Architecture
Getting the buy-in

- The Architectural approach needs to be sold at all levels
  - to the business management
  - to the technical management
  - to the system designers and developers
- Knowing the basis of resistance is half the battle of overcoming it
- Make a case tackling all the resistance points
- Ask “What is the alternative?”
- If the alternative is better – concede
- Avoid your own NIH
Getting the buy-in

- Carrot and stick approach using organization’s key drivers
- Find the carrots
  - All the good things we say about IT Architecture
  - If you have a spare day or two I will tell you
  - What are the Red Buttons
  - ...
- Find the sticks
  - Fear of failure
  - Fear of litigation
  - ...
- EDUCATE
Provide a foundation for the Framework

- Providing a foundation for the framework by establishing:
  - Architecture principles – to guide all future work on all future architectures
  - IT Governance
  - Architecture compliance procedures
Architecture Principles

- The principles for developing Architectures not for any particular architecture
- Define the underlying general rules and guidelines
- Architecture principles – to guide all future work on all future architectures
- Are applied for the use and deployment of all IT resources and assets
- Form the basis for making future IT decisions
- Clearly relate back to the business objectives and key architecture drivers
**Documented Architecture Principles**

- Involves
  - Obtaining a consensus
  - Demonstrating commitment
  - Documenting clearly
  - Publishing and promoting
  - Mandating
Developing Architectural Principles

- They should include a statement, the rational and the implications
- They are developed by the Chief Architect and key business stakeholders
- They must be appropriate policies and procedures
- They must ensure alignment of IT strategies with business principles strategies and visions
- A good set of principles will be understandable, robust, complete, consistent and stable
- Everything should be done to minimize violations whether deliberate or accidental
Example Architecture Principles

- From TOGAF documentation
  - Primacy of Principles
  - Business Continuity
  - Common Use Applications
  - Data is an Asset
  - Data is protected from unauthorized use and disclosure
  - Technology

- Boeing
  - "Thou shalt not idle the factory floor"

- Mark Forman – US Office of Management and Budget
  - Component of 5-part President’s Management Agenda
  - Market-based, Result-oriented, Citizen-centered
  - Simplify and Unite
IT governance

- Established to ensure senior management retain control of IT operation
- Established to ensure senior management is seen to assume responsibility for IT operation
- Two important elements
  - A cross-organization “Architecture Board”
  - An IT architecture compliance strategy
- IT Governance Institute
  - Control OBjectives for Information and related Technology (CobiT)
  - [http://www.itgi.org/](http://www.itgi.org/)
One approach

- Architecture Board
  - Representative of all the key stakeholders
  - Responsible for review and maintenance
  - Hopefully should contain Board level members
  - Hopefully should contain members from major IT partners
  - Becomes the sponsoring body for most architecture activities
  - Show that it pays for itself
Establish the Architectural Framework

- TOGAF and its ADM are generic
  - Where necessary it should be customized to meet the specific needs of an organization
    - Some phases may be unnecessary
    - Some procedures may need modification
    - Some new procedures may need adding
    - The whole may need to be adapted to interact with existing procedures and methodologies
  - Changes should be undertaken on a positive omission basis
- The same for the Foundation Architecture
Customizing TOGAF

- Customize, configure and select options suitable for the organization
- To modify the ADM to produce an 'enterprise-specific' ADM
  - review its components for applicability,
  - tailor them to the circumstances of the individual enterprise.
- Reasons for adapting the ADM include:
  - A different order may be preferred by the organization
  - Integrating TOGAF with another enterprise framework
  - Integration with the corporate governance
Integrate the Framework

- Every organization has existing procedures for:
  - Project planning and management
  - Risk analysis
  - Authorization of expenditure
  - Measurement of business performance
  - Procurement
  - ...
  - ...
Integrate activities

- Compliance with corporate standards
- Are there existing documents that can be used?
  - Request for architecture work = Project authorization
  - Architecture contract = Project specification
- Merge or enhance
- Are there additional documents to be generated
  - Risk analysis reports
  - Financial justifications
  - Templates to promote standardization
- Tools to ease production
Choosing the tools

- Selection of COTS tools sets depending on:
  - Current familiarity
  - Suitability for Architecture?
  - Information exchange between tools
  - Compatibility with vendors and subcontractors
  - Generation of output suitable for the consumer
  - Text is good – models are better (graphics?)
  - TOGAF Certification

- Home-grown tools
  - Corporate not personal – documented for continuity
  - Output to repository
  - Compatibility with vendors and subcontractors
Creating a repository

- A Building Blocks repository is necessary, a BBIB is better
- Goal:
  - Re-use of investments in defining Architecture BBs
  - Ease the search for Solution Building Blocks
- Capture “useful” Building Block Definitions from
  - Enterprise Continuum
  - Industry architectures
  - Public architectures
  - Vendors product solutions
- An ADL based BBIB would be ideal (in the future)
- A simple usable mandated repository is a must NOW
Train the staff

- Architecture practitioners
- Business Management
  - To understand the impact of Enterprise Architecture on their business
  - To understand what is expected of them
- Technical management
  - To understand the impact of Enterprise Architecture on their activities
  - To understand what is expected of them
- Technical implementers
  - To understand the impact of Enterprise Architecture on their activities
  - To understand what is expected of them
Training options

- Options to achieve training within resource constraints
- Instructor-led
  - Dedicated or public
- Webinars
  - Dedicated or public
  - Workbook reinforcement for certification
- CD-ROM
  - Training at own rate
  - Mentor support
  - Workbook reinforcement for certification
- Web-based (future)
Certification

- TOGAF 7 is the vendor-neutral, global basis of Certification to impose standards within our profession
  
  - TOGAF 7 Tool Support
  - TOGAF 7 Training
  - TOGAF 7 Certified
  - TOGAF 7 Professional Services

  Architecture tools which support TOGAF 7
  Training courses which instruct in TOGAF 7
  Architects trained in the use of TOGAF 7
  Professional services offered to support TOGAF 7
Capture existing Architecture assets

- Architecture Building Blocks for reuse
- Solution Building Blocks for reuse
- Existing Architectures
- Industry Architectures
- Common System Architectures
- Architecture patterns
- Business requirement statements
- Business driver statements
- Business strategy statements
Monitored pilot project

- Choose a suitable candidate
- Establishing the evaluation criteria
  - Comparisons not viable
- Provide the mentoring
  - To smooth the way
- Provide the monitoring
  - Consider it to be a separate project
- Evaluate
- Revise as necessary
- Continue or reject
Summary of activities

- Get the buy-in
- * Provide a foundation for the Architectural Framework
- * Establish the Architectural Framework
- * Integrate the Framework with existing procedures
- * Choose the tools
- * Creating a repository for the Enterprise Continuum
- Train the staff, architects, and others
- * Identify and capture existing Architecture assets
- Monitor a pilot project