Enterprise Architecture: Idea Generation for IT Transformation Projects

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Agenda

- Introduction
- Our Approach
- Idea Generation
- A Case Study
- Conclusion
Introduction

- We will review an approach for idea generation in an enterprise to identify transformational projects.

- The approach will highlight:
  - how business and IT need to be very closely involved in the ideation process, and
  - that this process functions best when enabled by well defined and agreed enterprise architecture guiding principles and effective technology roadmaps.

- A case study will also be briefly discussed.
Approach and Expected Benefits from Enterprise Architecture

Approach

2. **Drive effective change using an Enterprise Architecture approach**
   
   1. **Business-driven:** optimizes the Enterprise’s IT Environment (what is managed).
   2. **Rigorous:** standardizes IT Services Delivery (how it is managed)
   3. **Pragmatic:** follows a methodology - repeatable, affordable, explicable

Outcomes

4. **Method ensures best return per Rs/Dollar invested in IT**

5. **Steps and direction are regularly reviewed and updated as necessary to maintain business alignment**
Hea Generation vis-à-vis EA Methodologies

Figure 1: The Exchange Enterprise Architecture Framework:

- DATA
  - Objectives/Scope
  - Function
  - Network
  - People
  - Time
  - Motivation

- FUNCTION
  - List of Business Participants
  - List of Business Processes
  - List of Business Locations
  - List of Important Organizations
  - List of Significant Risks
  - List of Business Rules
  - Objectives/Scope

- NETWORK
  - Enterprise Model Concept
  - Enterprise Model Conceptual
  - Enterprise Model Logical
  - Enterprise Model Physical

- PEOPLE
  - Process
  - Staff
  - Sub-org.
  - Org.

- MOTIVATION
  - Objective/Scope
  - Function
  - Network
  - People
  - Time
  - Motivation

Legend:
- Data
- Function
- Network
- People
- Motivation

Legend:
- Exchange
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- Architecture
- Framework

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HP’s Architecture Governance Methodology

**Exploration**

- Work to understand requirements from a business perspective
- Identify “as is” and “to be” architectures
- Validate needs and discover opportunities

**Specification**

- Validate opportunities through financial-based analyses
- Establish domain transformation roadmap proposals

**Proposal**

- Propose projects to Executive review board for approval
- Transition approved projects onto appropriate Transformation Plan of Record

**Prioritization**

- Prioritize opportunities based on business strategies with consideration of dependencies
- Establish architecture roadmap
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- Introduction
- Our Approach

Idea Generation

- The Constituents
- The People Dimension
- The Fundamentals
- The Process
- The Tools
Key Constituents

Architecture consists of:

Principles – the set of guidelines governing design (e.g., buy vs. build)

Policies – the set of rules governing use and implementation (e.g., must adhere to customer security requirements)

Standards – the set of fully documented solution designs, that include process models, technology integration, and implementation blueprints

As-Is – the fully specified detailed description of the current state

To-Be – the fully specified detailed description of the future optimum state

Roadmaps – the fully specified set of steps leading from as-is to to-be
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Thoughts on IT Organisations

CEO

Applications

Business Interactions

Infrastructure

Enterprise Architecture
CTO / EAPatterns

There are 5 patterns of CTO behaviour:

- **Administrator**: extensive negotiations with outside vendors, helps the org determine accuracy of vendor claims (e.g. Govt)

- **Advocate**: Selects and combines technologies for the best user experience with the company (e.g. CTO of FedEx, Retail)

- **Executive**: Guides Strategic discussions and manages the innovation process (e.g. CTO HP, IBM etc)

- **Genius**: The CTO, whose genius clearly enhances the products and services of the organisation (e.g. Sergei Bin @ Google)

- **Director**: Creates an environment in which others can do technology work. (e.g. CTO Intel etc)

- **Void**: Intentionally decide not to have a CTO (e.g. Retail chains, CIOs take a part of the load)

Source: “5 Patterns of the Chief Technology Officer” by Roger Smith
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  - The Tools
Fundamentals that should be in place

- Set of guidelines
- Set of rules
- Set of fully documented solution designs
- Current state
- Future optimum state
- Set of steps

Standard Reference Architecture

Business objectives and strategy

AS-IS, TO-BE views

- Business process model

Standards

Principles and Policies

People

Process

Technology

Can be created during the Idea Generation Lifecycle
Domains - You need to get them right

TOGAF Domains
- Business Architecture
- Applications
- Data Architecture
- Infrastructure

Other Potential Domains
- Applications Development
- Applications Management
- International
- Business Intelligence
- Knowledge Management
- Network
- Central Compute (Servers)
- End User Compute
- Security

A simple starting Domain choice could be the TOGAF domains
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- The Tools
Global Architecture Governance Process

Global Architecture Governance Process

Transformation Activities
- Project Execution
- As needed architecture refinement
- Project tracking
  - Financial
  - Timing
  - Resources

Governance Review Board
- Chief Technology Officer
- Global Architect
- Customer Architecture Lead
- Domain Architecture Lead

Results
- New AS IS
- Additions to Standard Reference Architecture
- Knowledge Gained

Exploration
- Work to understand requirements from a business perspective
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- Establish architecture roadmaps
Key elements of HPGM for ITSA

The HP Global Method for IT Strategy and Architecture (ITSA) is:

- Based on stakeholder participation
- Organized as a set of four fundamental views
Stakeholders in the house building analogy

**Business view**
*Why do I want a new house?*

**Functional view**
*What features should the new house provide?*

**Technical view**
*How will the house be built?*

**Implementation view**
*With what will the house be built?*
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  - The Tools
The three EA tools categories are clearly established today, but the boundaries will blur in the next three years.

- **Top-down approach**
  - Casevise
  - Computas
  - IDS Scheer
  - MEGA
  - Popkin Software
  - Proforma
  - PTech
  - Visible

- **Bottom-up approach**
  - Adaptec
  - AM2 Systems
  - ASG software solution
  - (Rochade)
  - Flashline
  - Orbis
  - Softlab (ENABLER)
  - Troux

- **Change-management approach**
  - alphabet
  - Agilense
  - Enamics
  - Solu-QiQ

Source: Forrester Research, Inc.

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### EA Tools Required And Optional Features

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Source: Forrester Research, Inc.
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Conclusions ...

- Initiating an EA Program in an existing enterprise is a challenge
- The domain-focused entry is a proven way of productively initiating the program
- Key Challenges include
  - Identifying appropriate Domains
  - Ensuring the right skills and focus in the teams
Questions?