### TOGAF®

Version 9.1 Enterprise Edition

Module 23
Migration
Planning
Techniques

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#### **Preliminary** Architecture Vision Architecture Business Change Architecture Management C. G. Requirements Information Implementation Systems Management Governance **Architectures** F. Technology Migration Planning Architecture E. Opportunities and Solutions

# Migration Planning Techniques

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#### Roadmap

Part I - Introduction
Preface, Executive Overview, Core Concepts, Definitions
and Release Notes
Part II – Architecture Development Method
Introduction to ADM
ADM Phase Narratives
Part III – ADM Guidelines and Techniques
Guidelines for Adapting the ADM Process
Techniques for Architecture Development
Part IV – Architecture Content Framework
Content Metamodel
Architectural Artifacts
Architecture Deliverables
Building Blocks
Part V – Enterprise Continuum and Tools
Enterprise Continuum
Architecture Partitioning
Architecture Repository
Tools for Architecture Development
Part VI – Reference Models
Foundation Architecture: Technical Reference Model
Integrated Information Infrastructure Reference Model
Part VII - Architecture Capability Framework
Architecture Board
Architecture Compliance
Architecture Contracts
Architecture Governance
Architecture Maturity Models
Architecture Skills Framework

 Part III, ADM Guidelines and Techniques, Chapter 28





#### Module Objectives

#### The objectives are to:

- Understand the techniques used in Phases E and F for Migration Planning
- Key areas include:
  - Using the Implementation Factor Assessment and Deduction Matrix to document factors impacting the Architecture Implementation and Migration Plan.
  - The purpose of the Consolidated Gaps, Solutions and Dependencies Matrix
  - The purpose of an Architecture Definition Increments table
  - Using the Enterprise Architecture State Evolution Table with the TRM
  - Using the Business Value Assessment Technique



### The Implementation Factor Assessment and Deduction Matrix

- This matrix documents the factors impacting the Implementation and Migration Plan
- It is created in Step 1 of Phase E and updated throughout Phase E
- It is an input to Phase F
- It serves as a repository for architecture implementation and migration decisions
- The matrix should include
  - a list of the factors to be considered
  - their descriptions, and
  - the deductions that indicate the actions or constraints that have to be taken into consideration when formulating the plans





### Example – Implementation Factor Assessment and Deduction Matrix

Implementation Factor Assessment and Deduction Matrix			
Factor	Description	Deduction	
<name factor="" of=""></name>	<description factor="" of=""></description>	<impact migration="" on="" plan=""></impact>	
Change in Technology	Shut down the message centers, saving 700 personnel, and have them replaced by email.	<ul> <li>Need for personnel training, re-assignment</li> <li>Email has major personnel savings and should be given priority</li> </ul>	
Consolidation of Services			
Introduction of New Customer Service			





## The Consolidated Gaps, Solutions and Dependencies Matrix

- This matrix is used when consolidating the gap analysis results from Phases B to D
- It is used to group the gaps identified in the domain architecture gap analysis results and assess potential solutions and dependencies to one or more gaps
- It is first created in Step 3 of Phase E
- It is an input to Phase F
- This matrix can be used as a planning tool when creating work packages
- The identified dependencies will drive the creation of projects and migration planning in Phases E and F





## Example – Consolidated Gaps, Solutions and Dependencies Matrix

Consolidated Gaps, Solutions, and Dependencies Matrix				
No.	Architecture	Gap	Potential Solutions	Dependencies
1	Business	New Order Processing Process	Use COTS software tool process Implement custom solution	Drives applications (2)
2	Application	New Order Processing Application	COTS software tool X Develop in-house	
3	Information	Consolidated Customer Information Base	Use COTS customer base Develop customer data mart	





#### Architecture Definition Increments table

- This table allows the architect to plan a series of Transition Architectures outlining the status of the enterprise architecture at specified times
- It is created in Phase F
- It consists of listing the projects and then assigning their incremental deliverables across the Transition Architectures





#### Architecture Definition Increments table

#### Architecture Definition - Project Objectives by Increment (Example Only)

	April 2007/2008	April 2008/2009	April 2009/2010	
Project	Transition Architecture 1: Preparation	Transition Architecture 2: Initial Operational Capability	Transition Architecture 3: Benefits	Comments
Enterprise e-Services Capability	Training and Business Process	e-Licensing Capability	e-Employment Benefits	
T e-Forms	Design and Build			
IT e-Information Environment	Design and Build Information Environment	Client Common Data Web Content Design and Build	Enterprise Common Data Component Management Design and Build	
				***





### The Transition Architecture State Evolution Table

- This allows the architect to show the proposed state of the architectures at various levels using the TRM
- This is part of the Implementation and Migration Plan
  - showing proposed state of the architectures as they evolve
- It should be drawn up in Phase F, listing:
  - Services from the TRM used in the enterprise
  - Transition Architectures
  - Proposed transformations,
- All Solution Building Blocks (SBBs) should be described with respect to their delivery and impact on services



### The Transition Architecture State Evolution Table

Architectural State using the Technical Reference Model				
Sub-Domain	Service	Transition Architecture 1	Transition Architecture 2	Transition Architecture 3
Infrastructure Applications	Information Exchange Services	Solution System A (replace)	Solution System B-1 (transition)	Solution System B-2 (new)
	Data Management Services	Solution System D (retain)	Solution System D (retain)	Solution System D (retain)





## The Business Value Assessment Technique

- This technique to assess business value includes drawing up a matrix with value and risk index dimensions
- It is used in Phase F to develop an estimated value to the business for each project
- The value index should include criteria such as compliance to principles, financial contribution, strategic alignment, and competitive position
- The risk index should include criteria such as size and complexity, technology, organizational capacity, and impact of a failure. Each criterion should be assigned an individual weight



## The Business Value Assessment Technique

(Project size indicated by size of circle.) © The Open Group Project B Project D Project E Value Project F On target At risk In trouble

Risk



#### Summary

This module has explained the techniques used in Phase E and F for migration planning. In particular, it has discussed:

- 2 matrices (the *Implementation Factor Assessment and Deduction Matrix* and the *Consolidated Gaps, Solutions and Dependencies Matrix*).
- 2 tables (the Architecture Definition Increments table and the Enterprise Architecture State Evolution Table).
- 1 technique (the Business Value Assessment Technique)



## Exercise: The Business Value Assessment Technique

- Suppose that you are the Chief Architect of a large project in your enterprise. The project complies with your architecture principles. It will make a considerable financial contribution. It is strategically aligned with your business and it will strengthen your competitive advantage.
- However the project is complex and will use cutting-edge technology. Your organizational capacity is high, but the impact of failure is also high.
- Score each criterion on a scale of 0 to 10 and give each a weighting using this information and your experience and so produce a value index dimension and a risk index dimension for the project.



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