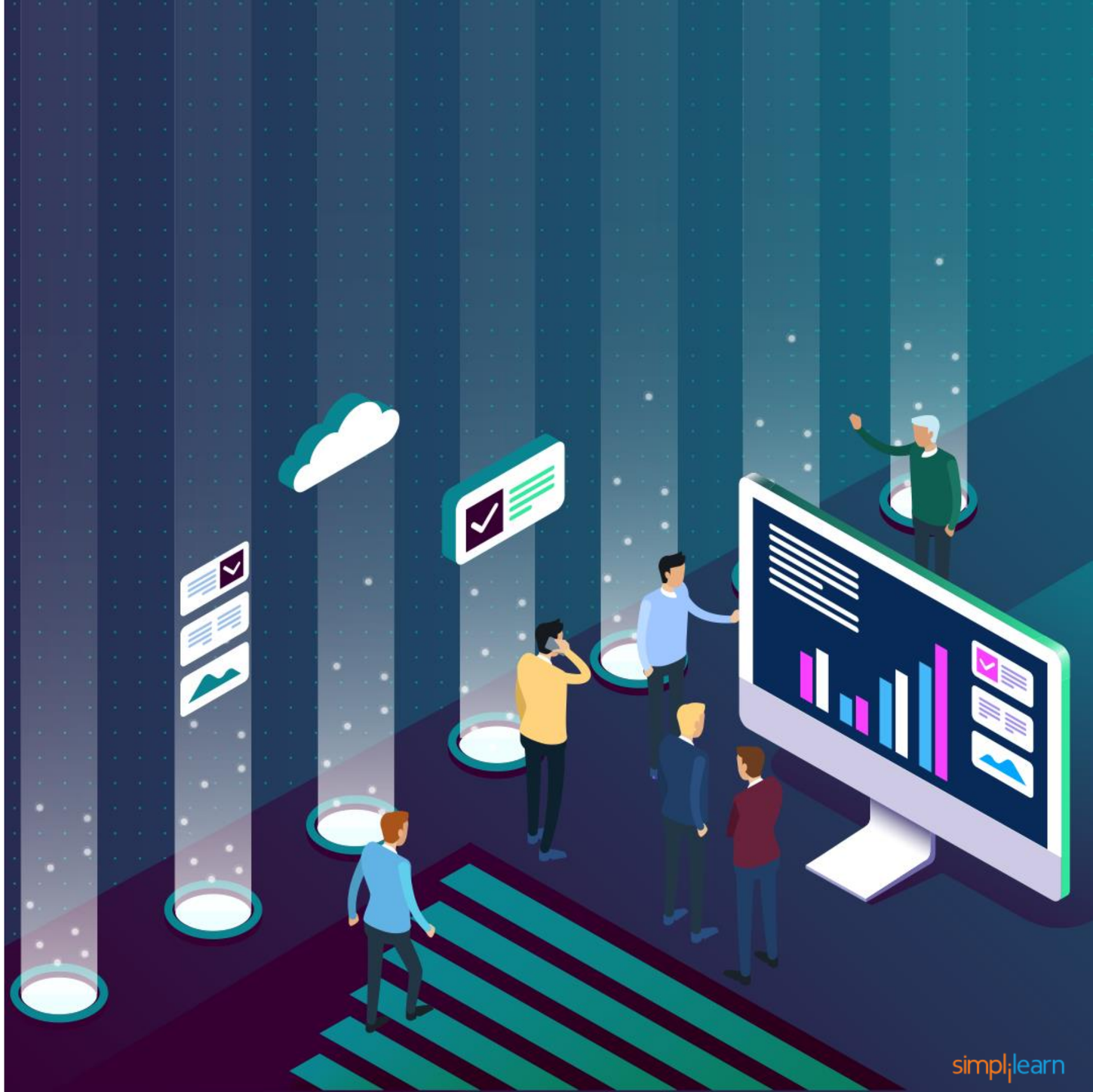
TOGAF® Enterprise Architecture Training Course (Foundation)



Unit 4 – Introduction to ADM Techniques

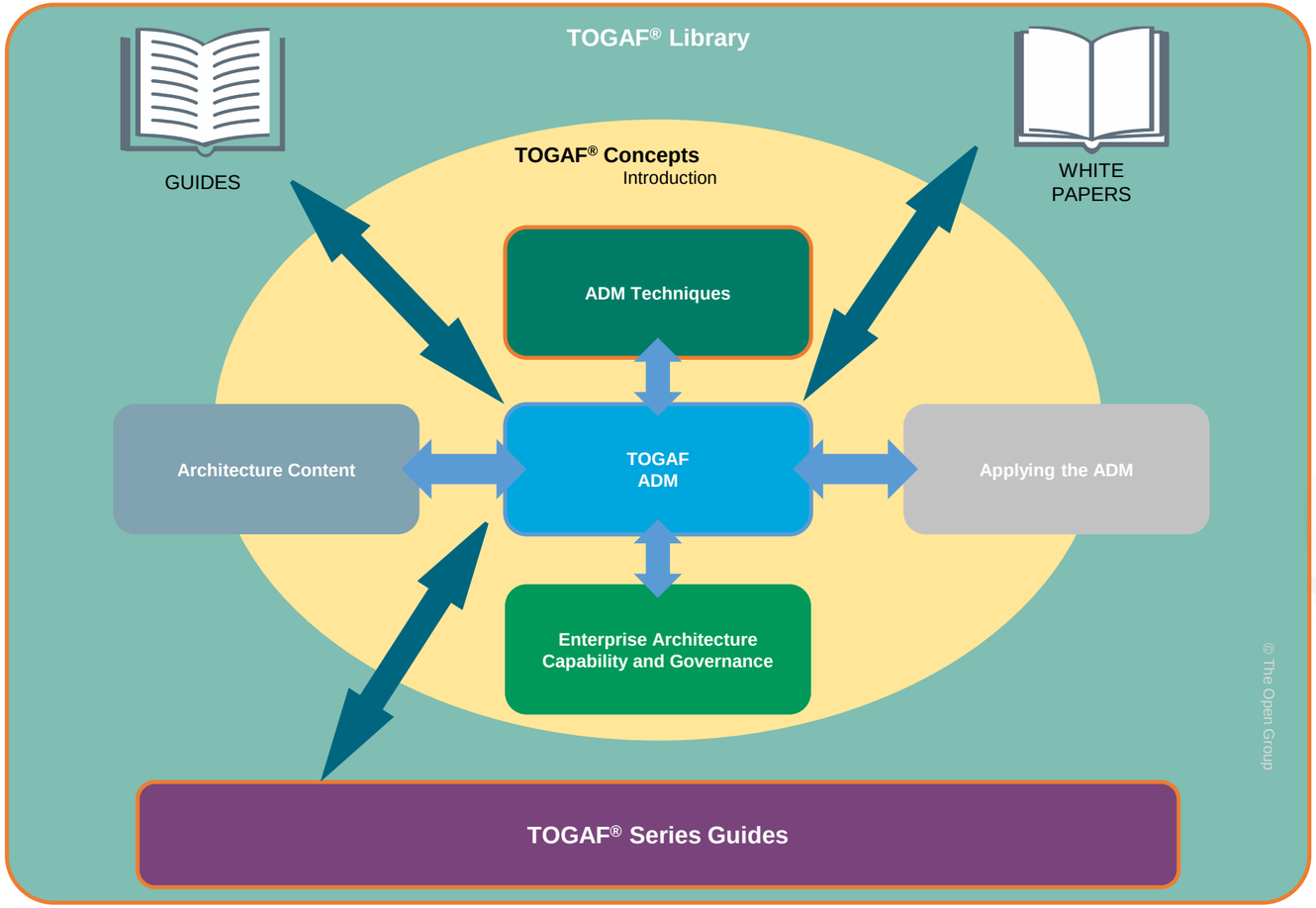
Unit Objectives

Introducing techniques available to support the application of the ADM. Topics include:

- How the ADM and Supporting Guidelines and Techniques relate to each other
- Architecture Principles
- Business Scenarios
- Gap Analysis
- Interoperability
- Business Transformation Readiness Assessment
- Architecture Risk Management

4.1 How the ADM and Supporting Guidelines and Techniques Relate to Each Other

Supporting Guidelines and Techniques



4.2 Purpose: Architecture Principles

The Purpose of Architecture Principles

Architecture Principles should address the following purposes:

- Enabling decision-making
- Aligning the enterprise
- Ensuring Governance
- Understanding Values and culture

The Purpose of Architecture Principles

- Enabling decision-making – it is important to set precedence during trade-off discussions and authority of “tie-breaking” if it must occur.
- Aligning the enterprise – principles take subjectivity and bias out of the equation and drive critical conversations that are objective and aligned to the enterprise’s values.
- Ensuring Governance – how will the enterprise ensure that the right decisions are surfaced at the right time and with the right decision-makers, and, moreover, how to monitor the decisions and approach taken to arrive at the decision?
- Understanding Values and culture – provide a better understanding about the enterprise’s culture and values; provide an approach and insight into how well the enterprise reacts to change.

Existing Architecture Principles

If Architecture Principles exist from a prior EA Capability effort, they can be used to provide a context of the previous efforts to establish an Enterprise Architecture Capability

– they inform how the Enterprise Architecture Capability was viewed, viewed itself, and what purpose it was explicitly, or implicitly, supporting.

Developing Architecture Principles

- They are typically developed by Enterprise Architects
- In conjunction with key stakeholders:
  - The Enterprise CIO
  - Architecture Board
  - Business Stakeholders
- Approved by the Architecture Board

Developing Architecture Principles

- Architecture Principles will be informed by principles at the enterprise level, if they exist.
- Architecture Principles must be clearly traceable and clearly articulated to guide decision-making.

4.3 Template for Architecture Principles

Architecture Principles Template

Name	
Statement	
Rationale	
Implications	

Architecture Principles Template

Name

- Should represent the essence of the rule, and be memorable
- Should not mention specific technology platforms
- Should avoid ambiguous words

Statement

- Should succinctly and unambiguously communicate the fundamental rule

Architecture Principles Template

Rationale

- Should highlight the business benefits of adhering to the principle, using business terminology
- Should describe the relationship to other principles

Implications

- Should highlight the requirements for the business and for IT for carrying out the principle
- Should state the business impact and consequences of adopting the principle

Example: Primacy of Principles

Statement	Principles apply throughout the enterprise and override all other considerations when decisions are made.
Rationale	The only way we can provide a recognized, consistent, and measurable level of operations is if all parts of the enterprise abide by the principles when making decisions.
Implications	Without this principle, short-term consideration, supposedly convenient exceptions, and inconsistencies would rapidly undermine the management of information. Information management initiatives will not be permitted to begin until they are examined for compliance with the principles. A conflict with a principle will be resolved by changing the conflicting initiative, which could delay or prevent the initiative.

Example: Self-Serve

Statement	Customers should be able to serve themselves.
Rationale	Applying this principle will improve customer satisfaction, reduce administrative overhead, and potentially improve revenue.
Implications	There is an implication to improve ease-of-use and minimize training needs; for example, members should be able to update their contact details, etc. and be able to buy additional membership products online.

4.4 What Makes a Good Architecture Principle

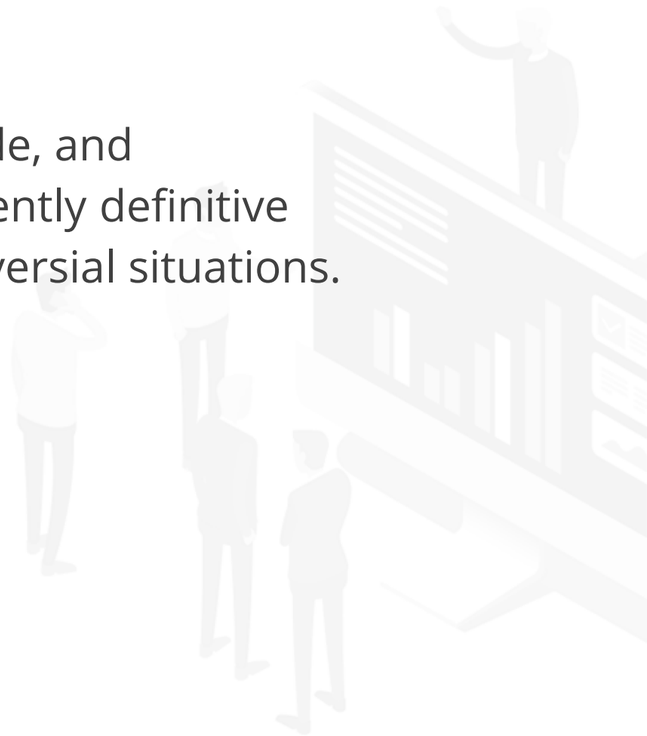
Qualities of Architecture Principles

1. Understandable
2. Robust
3. Complete
4. Consistent
5. Stable

Five Qualities of Architecture Principles

1. Understandable: the underlying tenets can be quickly grasped and understood by individuals throughout the organization. The intention of the principle is clear and unambiguous, so that violations, whether intentional or not, are minimized.

2. Robust: enable good quality decisions about architectures and plans to be made, and enforceable policies and standards to be created. Each principle should be sufficiently definitive and precise to support consistent decision-making in complex, potentially controversial situations.

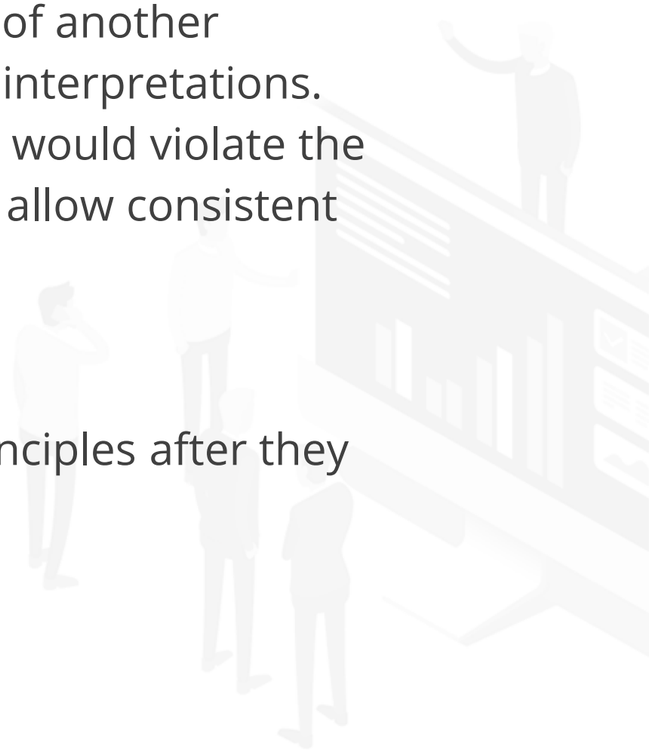


Five Qualities of Architecture Principles

3. Complete: every potentially important principle governing the management of information and technology for the organization is defined — the principles cover every situation perceived.

4. Consistent: strict adherence to one principle may require a loose interpretation of another principle. The set of principles must be expressed in a way that allows a balance of interpretations. Principles should not be contradictory to the point where adhering to one principle would violate the spirit of another. Every word in a principle statement should be carefully chosen to allow consistent yet flexible interpretation.

5. Stable: principles should be enduring, yet able to accommodate changes.
An amendment process should be established for adding, removing, or altering principles after they are ratified initially.

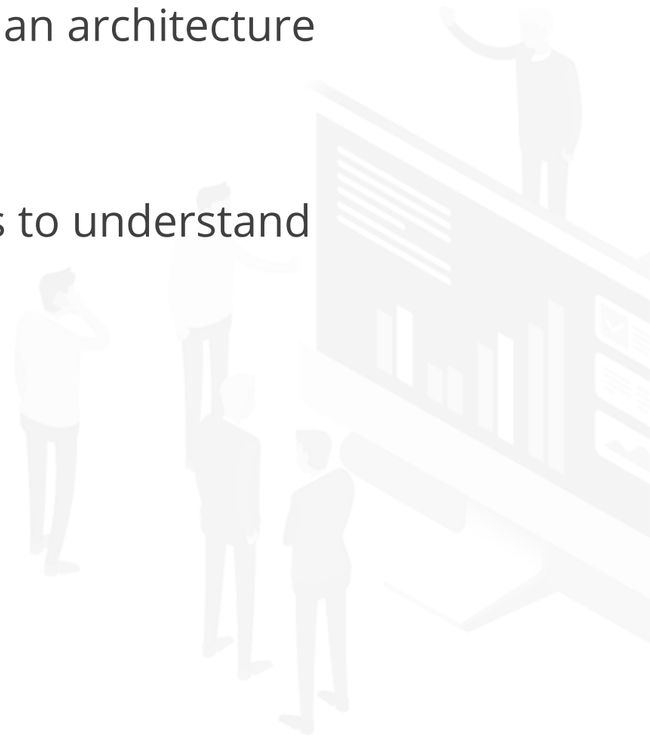


4.5 Business Scenarios

What is a Business Scenario?

- A method used to help identify and understand the business requirements that an architecture must address.

- A representation of a significant business need or problem and enables vendors to understand the value of a solution to the customer.



What does a Business Scenario describe?

A business scenario describes:

- Real business problems
- The business and technology environment in which those problems occur
- Value streams enabled by capabilities
- The desired outcome(s) of proper execution
- The human and computing components (the “actors”) who provide the capabilities

4.6 The Purpose of Gap Analysis

Gap Analysis

- The purpose of gap analysis is to document the difference between the baseline and the target architectures

- It identifies components (building blocks) of the architecture that are added, deleted, and/or changed

4.7 Interoperability

Interoperability

■ **Usage** See note at *definitive*.

definite article *n.* the word (*the* i
English) preceding a noun and implyi
a specific instance.

definition /ˌdefɪˈnɪʃ(ə)n/ *n.* **1 a** defini
b statement of the meaning of a w
etc. **2** distinctness in outline, esp.
photographic image. [Latin: relate
DEFINE]

definitive /dɪˈfɪnɪtɪv/ *adj.* **1** (of
answer, verdict, etc.) decisive, u
ditional, final. **2** (of a book etc.)

Definition: “the ability to share information and services”.

Interoperability Categories

- **Operational or Business Interoperability** defines how business processes are to be shared
- **Information Interoperability** defines how information is to be shared
- **Technical Interoperability** defines how technical services are to be shared or at least connect to one another

How Interoperability is Used in ADM Phases A and B

- **Architecture Vision:** the nature and security considerations of the information and service exchanges are found using business scenarios.

- **Business Architecture:** the information and service exchanges are further defined in business terms.

How Interoperability is Used in ADM Phases A and B

- **Data Architecture:** the content of the information exchanges is detailed using the corporate data and/or information exchange model.

- **Application Architecture:** the way that the various applications are to share the information and services is specified.

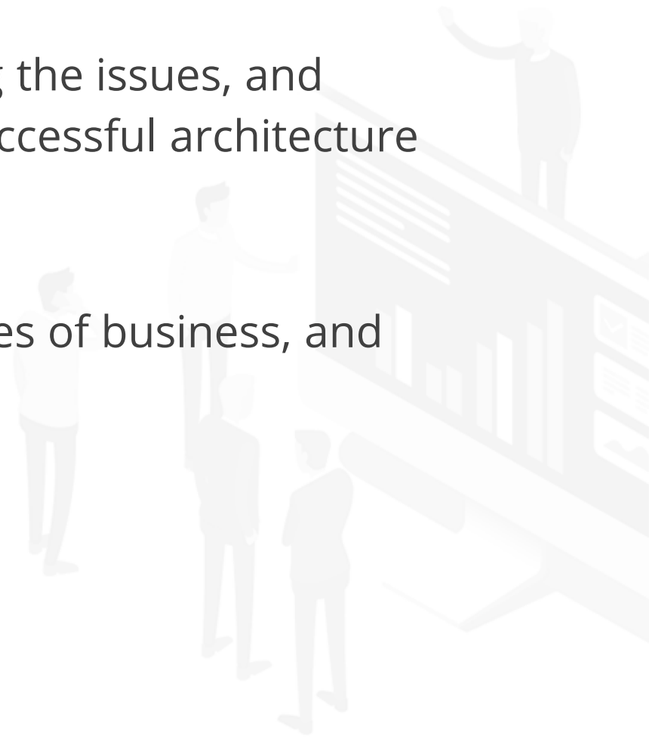
How Interoperability is Used in ADM Phases A and B

- **Technology Architecture:** the appropriate technical mechanisms to permit the information and service exchanges are specified.
- **Opportunities & Solutions**: actual solutions are selected; e.g., Commercial Off-The-Shelf (COTS) packages.
- **Migration Planning:** interoperability is logically implemented.

4.8 Business Transformation Readiness Assessment

Business Transformation Readiness Assessment

- Enterprise Architecture often involves considerable change.
- There are many dimensions to change, but by far the most important is the human element.
- Understanding the readiness of the organization to accept change, identifying the issues, and then dealing with them in the Implementation and Migration Plan is key to successful architecture transformation in Phases E and F.
- This is a joint effort between corporate (especially human resources) staff, lines of business, and IT planners.



Recommended Activities

- Determine the readiness factors that will impact the organization
- Present the readiness factors using maturity models
- Assess the readiness factors, including determination of readiness factor ratings
- Assess the risks for each readiness factor and identify improvement actions to mitigate the risk
- Work these actions into Phase E and F Implementation and Migration Plan

4.9 Risk Management and the TOGAF® ADM

Risk Management

- The ISO 31000 definition of risk management is "*coordinated activities to direct and control an organization with regard to risk*"

- ADM Techniques, Risk Management describes it as a technique to mitigate risk when implementing an architecture project

Risk Management in the ADM

- Risks are identified in Phase A as part of the initial Business Transformation Readiness Assessment.

- The risk identification and mitigation assessment worksheets are maintained as governance artifacts and are kept up-to-date in Phase G (Implementation Governance) where risk monitoring is conducted.

- Implementation governance can identify critical risks that are not being mitigated and might require another full or partial ADM cycle.