TOGAF 9 Foundation Part 1 Exam Preparation: Course in a Book for Passing the TOGAF 9 Foundation Part 1 Exam: The How to Pass on Your First Try Certification Study Guide

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Chapter 5: The Open Group Architecture Framework

5.1 TOGAF Overview

The Open Group Architecture Framework (TOGAF) provides several opportunities for enterprise architects and IT organizations, including:

- an iterative process model supported by best practices
- A re-usable set of existing architecture assets
- Methods and tools for the acceptance, development, use, and maintenance of an enterprise architecture

5.1.1 Defining Architecture

The definition of 'architecture' from ISO/IEC 42010:2007 is:

“The fundamental organization of a system, embodied in its components, their relationships to each other and the environment, and the principles governing its design and evolution.”

TOGAF supports this definition by remaining consistent with the terminology of the ISO/IEC 42010:2007 but views the meaning of 'architecture' differently based on the context used. For TOGAF, architectures are:

- A formal description of a system, or detailed plan of a system at the component level for guiding implementation.
- The structure of components, their relationships to each other, and the principles and guidelines underlining there design and evolution over time.

An enterprise architecture is comprised of four commonly accepted domains:

- Business Architecture
- Data Architecture
- Applications Architecture
- Technology Architecture

5.1.2 Approaches to Architecture Development

On large scale, complex architecture development projects, the focus and scope of the project is a critical component to the project's success.

Two approaches are typically adopted:

- Vertical Approach – enterprise is divided into segments representing independent business sector.
- Horizontal Approach – enterprise is divided into architecture domains.

5.1.3 Architecture Capability

Creating architecture for an enterprise requires that the organization have the business capability to support the architecture through structures, roles, responsibilities, skills, and processes.

TOGAF architecture capability builds on the Architecture Repository and Enterprise Continuum by identifying the architecture components providing the capability and their relationships to each other.

The components include:

- Skilled Resource Pool
- Roles and Responsibilities
- Contracts
- Projects and Portfolios
- Governance of Projects and Portfolios
- Business Operations
- Governance Bodies

Enterprise Architectures look to establish capabilities in the areas of:

- Financial Management
- Performance Management
- Service Management
- Risk Management
- Communications and Stakeholder Management
- Quality Management
- Supplier Management
- Configuration Management
- Environment Management

5.1.4 Architecture Integration

Integrating individual architectures provide the foundation for interoperability, migration, and conformance between those architectures.

Referred to as a meta-architecture framework, its purpose is to:

- Provide a basis for understanding how components fit into the overall framework
- Enable architectural models to be created that focus on enterprise-level capabilities
- Define the conformance standards to enable maximum leverage and re-use of architecture components

5.1.5 Inter-operability

Interoperability is categorized often in the following classes:

- Operational or Business Interoperability – defines the sharing behaviors for business processes
- Information Interoperability – defines the sharing behaviors for information
- Technical Interoperability – defines the sharing behaviors for technical services

The Enterprise Application Integration (EAI) defines interoperability in terms of:

- Presentation Integration/Interoperability – provides a common look and feel approach
- Information Integration/Interoperability – corporate information is seamlessly shared between corporate applications to obtain a common set of client information
- Application Integration/Interoperability – corporate functionality is integrated and shared to prevent duplicate applications
- Technical Integration/Interoperability – common methods and shared services for the communication, storage, processing, and access to data in the application platform and communications infrastructure domain

5.2 Components of TOGAF

5.2.1 Architecture Development Method

The Architecture Development Method (ADM) is the core component of TOGAF, providing a tested and repeatable process for developing architectures.

The phases of the ADM include:

- Preliminary – Prepares the organization.
- Architecture Vision – sets the scope, constraints, and expectations.
- Business Architecture – develops baseline and target architectures for Business Architecture.
- Information Systems Architecture – develops baseline and target architectures for Information Systems Architecture.
- Technology Architecture – develops baseline and target architectures for Technology Architecture.
- Opportunities and Solutions – performs initial implementation planning.
- Migration Planning – analyses costs, benefits, and risks.

- Implementation Governance – provides architectural oversight to implementation.
- Architecture Change Management – provides continual monitoring and a change management process.
- Requirements Management – validates and enforces business requirements.

5.2.2 Architecture Content Framework

The output of the ADM comes in many forms. To ensure consistency, the Architecture Content Framework defines the type of architectural work product found, such as:

- Deliverable – a formally agreed upon work product of the project output.
- Artifact – An architectural work product describing the architecture from a specific viewpoint.
- Building Block – A component of business, IT or architecture capability combined with other building blocks to create architectures and solutions. Building blocks typically include:
  - o Architecture Building Blocks (ABB)
  - o Solution Building Blocks (SBB)

5.2.3 Enterprise Continuum

Architecture and solution artifacts are collected into an Architecture Repository. The Enterprise Continuum is a comprehensive view of this repository and is comprised of two concepts:

- Architecture Continuum
- Solutions Continuum

The Architecture Repository stores architecture output at different levels of abstraction created by the ADM. In conjunction with the Enterprise Continuum, stakeholders and providers have the means to understand and cooperated within the architecture.

5.2.4 Architecture Repository

The primary components of the Architecture Repository include:

- Architecture Metamodel: the application of an architecture framework for a specific enterprise
- Architecture Capability – the parameters, structures, and processes supporting the governance of the Architecture
- Architecture Landscape – the architecture view of building blocks currently in use within the enterprise
- Standards Information Base (SIB) – the standards requiring compliance for architectures
- Reference Library – provides the guidelines, templates, patterns, and reference materials to leverage during the creation of the enterprise
- Governance Log – a record of governance activity across the enterprise

5.2.5 Architecture Capability Framework

The Architecture Capability Framework is based on the Capability Maturity Models (CMM), which provides an effective method for enabling an organization to gain control and improve its IT-related development processes in a gradual manner.

Several models are available for use:

- Capability Maturity Model Integration (CMMI)
- Software Acquisition Capability Maturity Model (SA-CMM)
- Systems Engineering Capability Maturity Model (SE-CMM)
- People Capability Maturity Model (P-CMM)
- IDEAL Life Cycle Model for Improvement
- IT Architecture Capabilities Maturity Model (ACMM)

The ACMM is comprised of three sections:

- The IT architecture maturity model
- IT architecture characteristics of processes at different maturity levels

- The ACMM scorecard.

Six levels of maturity are present for nine architecture characteristics:

- The Levels
  - 0 None
  - 1 Initial
  - 2 Under Development
  - 3 Defined
  - 4 Managed
  - 5 Measured
- The Characteristics
  - IT architecture process
  - IT architecture development
  - Business linkage
  - Senior management involvement
  - Operating unit participation
  - Architecture communication
  - IT security
  - Architecture governance
  - IT investment and acquisition strategy

5.3 The Enterprise Continuum

The Enterprise Continuum is used to communication and understands an individual enterprise, as well as the enterprises of a customer or vendor. Architecture is context-specific and therefore will differ from one enterprise to the next. The Enterprise Continuum provides the language to allow enterprises to work together.

5.3.1 Basics of the Enterprise Continuum

The Enterprise Continuum is a combination of two concepts:

- The Architecture Continuum - provides a method of defining and understanding the rules, representations, and relationships present in an information system.
- The Solutions Continuum – supports the Architecture Continuum by providing a method to describe and understand the implementation of rules, representations, and relationships found in the Architecture Continuum.

The content of the Enterprise Continuum are all architecture assets that exist within the enterprise and the IT industry, including:

- Models
- Patterns
- Architecture Descriptions

Assets are generally available for re-use and the Enterprise Continuum acts as a catalog for these assets.

The TOGAF Architecture Development Method is a process for moving from the TOGAF Foundation Architecture to an enterprise-specific architecture. The Enterprise Continuum is used to determine what assets already exist to transition easier.

TOGAF provides two reference models that could be included in an organization's Enterprise Continuum:

- The TOGAF Foundation Architecture – a set of generic services and functions that provide a foundation for more specific architectures to be developed.
- The Integrated Information Infrastructure Reference Model (III-RM) – based on the TOGAF Foundation Architecture to enable and support a Boundaryless Information Flow vision.

5.3.2 Components of the Enterprise Continuum

The Architecture Continuum is a composition of architectures, Architecture Building Blocks (ABBs) and architectural models used to create an enterprise-specific architecture.

The Architecture Continuum are developed through four architectures, not phases, which address enterprise needs and business requirements in varying degrees of detail. The different architectures are:

- Foundation Architectures – building blocks and standards that support all common systems architectures.
- Common Systems Architectures – provides guidance to the selection and integration of specific services used to create common solutions across multiple domains.
- Industry Architectures – integrates common systems components with industry-specific components to create solutions for target customer problems.
- Organization Architectures – represents the deployed solutions for a particular enterprise.

The Solutions Continuum consists of the architectures at each level of the Architecture Continuum and, in short, considered an inventory or library of solutions available to an organization, specifically:

- Products and Services - procurable hardware, software, or service components.
- Systems Solutions - a set of certified or branded products and services used to fulfill common requirements and capabilities.
- Industry Solutions – implementations of a specific Industry Architecture.
- Organization, or Enterprise, Solutions – combined implementations of industry solutions, system solutions, and products and services to fulfill specific requirements for an enterprise.

5.3.3 Technical Reference Model (TRM)

The Technical Reference Model (TRM) is a component of the TOGAF Foundation Architecture, which provides a model, and taxonomy of generic platform services. It is comprised of taxonomy and a graphic.

The taxonomy provides a list of terms and a coherent description of the components and conceptual structure of an information system. The TRM graphic is a visual representation of the taxonomy.

The TRM has two common architectural objectives: Application Portability and Interoperability

The major entities of the TRM are:

- Application Software
- Application Platforms
- Communication Infrastructure

The entities are connected using the Application Platform Interface and the Communication Infrastructure Interface.

Application software is categorized under:

- Business Applications - used to implement business processes for a specific enterprise or vertical industry
- Infrastructure Applications – provides general purpose business functionality

The Application Platform is a single, generic, entity of concept where a set of Application Software sits with the intentional objective of meeting an enterprise's business requirements.

The Application Platform Interface (API) is the connecting component between Application Software and the Application Platform. IT focuses on providing application portability, which requires the conformity of both applications and the platform to the interface.

High-level services for the Application Platform are defined as:

- Data Interchange Services
- Data Management Services
- Graphics and Imaging Services
- International Operation Services
- Location and Directory Services
- Network Services

- Operating System Services
- Software Engineering Services
- Transaction Processing Services
- User Interface Services
- Security Services
- System and Network Management Services

Services are provided in an object-oriented manner using an Object Request Broker (ORB) and Common Object services

The Application Platform seeks to fulfill several qualities beneficial to the enterprise, including:

- Availability
- Assurance
- Usability
- Adaptability

The Communications Infrastructure provides the basic services required to interconnect systems and allow the transfer or data. The infrastructure itself is a combination of hardware and software that provide the networking and physical links used by systems.

The Communications Infrastructure Interface connected the Communication Infrastructure with the Application Platform to provide interoperability within the enterprise and with the global community.

5.3.4 Standards Information Base (SIB)

The Standards Information Base (SIB) is a database of industry standards used for:

- Architecture Development
- Acquisition and Procurement
- General Information

The content of the SIB is a collection of works from various sources, including IEEE, ISO, ISACA, WWW Consortium, or the Object Management Group. The content includes guidelines, technical processes, product standards, and other documentation relevant to widely accepted best practices. The SIB is managed by The Open Group.

To be considered for including in the SIB, a specific standard has a few criteria to meet, including:

- Ability to be implemented non-discriminatory
- Available of dependent products or services to interested parties
- Implementation of the standard is commercially available
- Organizations are free to develop a practical solution that supports or utilizes the standard
- Future versions of the standard remain available
- Developers using the standard are immune from liability for using the standard
- A market need is present for the standard
- Interfaces do not require additional, proprietary, interfaces to function
- Patents covering the interfaces are non-discriminatory
- Specifications and test suites are available

5.3.5 Integrated Information Infrastructure Reference Model (III-RM)

The Integrated Information Infrastructure Reference Model (III-RM) is a component and extension of the TOGAF Technical Reference Model which addresses and the ability of an enterprise to enable Boundaryless Information Flow. Like other components of the TOGAF, the IIS-RM is comprised of taxonomy and an associated graphic representing the taxonomy.

The concept of Boundaryless Information Flow has its roots in the modern enterprise's growing need for speed, flexibility, and responsiveness in the organization's ability to work together. The solution is the creation of an infrastructure that integrates the information requirements of the organization and provides integrated access to that information by all members of the organization.

The core components of an III-RM at a high-level are:

- Business Applications (BA)
- Infrastructure Applications (IA)
- Application Platform
- Interfaces
- Qualities

The applications are further broken down into:

- Brokering Applications – a business application designed to manage requests fro clients to Information Provider Applications
- Information Provider Applications – a business application, which provides responses to client requests and basic access to data.
- Information Consumer Applications – a business application designed to deliver content to users and request access to information on a specific system.
- Development Tools – an infrastructure application, which provides the necessary modeling, design, and construction capabilities to develop and deploy applications.
- Management Utilities – an infrastructure application providing the necessary utilities to understand operate, tune, and manage the run-time system to meet business demand.

5.4 Architecture Governance

Architecture Governance aligns the framework with current best practices and ensures an appropriate level of visibility, guidance and control to support the stakeholder's requirements and obligations.

A controlled environment should manage architectural artifacts, governance, and related processes. The major information areas related to architecture governance to be managed are:

- Reference Data – provides guidance and instruction during project implementation.
- Process Status – manages the governance processes and information acquired by the process.
- Audit Information – recorded process actions to support key decisions and responsible personnel, and provide a reference for future process develop0ments, guidance, and precedence.

5.4.1 Benefits of Architecture Governance

- Increases transparency of accountability
- Provides informed delegation of authority
- Provides controlled risk management
- Allows re-use of processes, concepts , and components
- Creates value through monitoring, measuring, evaluation, and feedback
- Increases visibility of decisions at all levels
- Increases shareholder value
- Integrates with existing solutions through control capabilities

5.4.2 Implementation of Architecture Governance

Architecture Governance is generally accepted as a distinct domain within a hierarchy of governance structures, including:

- Corporate governance
- Technology governance
- IT governance
- Architecture governance

Governance has specific characteristics that amplify their value and necessity in an enterprise:

- Discipline – commitment to adhere to procedures, processes, and authority structures
- Transparency – all activity and decision-making structures available to inspection
- Independence - processes, decision-making, and mechanisms are established to minimize and avoid potential conflicts of interest.
- Accountability – groups are authorized and accountable for their actions
- Responsibility – contracted parties required to act responsibly
- Fairness – activities and solutions do not create an unfair advantage to a particular party

5.4.3 Architecture Governance Framework

Conceptually, the Architecture Governance is a set of processes, a cultural orientation, set of owned responsibilities, and an approach for overseeing the integrity and effectiveness of the architecture.

The processes of Architecture Governance include:

- Policy Management – integrates architecture contracts with existing governance content to allow management and auditing.
- Compliance – performs assessments against SLAs, OLAs, standards, and regulatory requirements
- Dispensation – used when compliance is not meet by a subject area to provide the responsible party an opportunity to correct
- Monitoring and Reporting - basis of performance management
- Business Control - used to ensure compliance in business policies
- Environment Management – ensures an effective and efficient repository-based environment

The framework for Architecture Governance provides several levels of support within its organizational structure, including:

- Global governance board
- Local governance board
- Design authorities
- Working parties

5.4.4 Architecture Board

A successful architecture governance strategy incorporates an Architecture Board, which involves representation from across the organization. The Architecture Board can have global, regional, or business line scope with articulated and identifiable responsibilities, decision-making capabilities, and authority limits.

5.4.5 Architecture Compliance

An essential aspect of architecture governance is the compliance of individual projects to the enterprise architecture. Compliance is derived by a solution's ability to:

- Support the stated strategy and future directions
- Adhere to stated standards
- Provide the stated functionality
- Adhere to stated principle

Conformity is supported by the Architecture function's ability to prepare a series of Project Impact Assessments and the IT Governance function's ability to define a formal review process.

Project Impact Assessments provides an opportunity to describe how the enterprise architecture affects the projects currently in place in the organization.

Architecture Compliance Reviews are used to verify the compliance of a specific project against the established architecture criteria, spirit, and business objectives.

The steps of the Architecture Compliance Review are:

- Request an architecture review
- Identify responsible parties and project principles

- Identify Lead Architect
- Determine the scope of the review
- Tailor checklists
- Schedule the Architecture Compliance Review meeting
- Interview project principals
- Analyze completed checklists
- Prepare report on the review
- present findings in the report
- Obtain acceptance of findings
- Send the assessment report to the Architecture Review Coordinator.

Several checklists might be used to guide any effort to determine conformance, including:

- Hardware and Operating System Checklists
- Software Services and Middleware Checklists
- Applications Checklists
- Information Management Checklists
- Security Checklists
- System Management Checklists
- System Engineering/Overall Architecture Checklists
- System engineering/Methods and Tools Checklists

5.4.6 Architecture Contracts

Architecture contracts are agreements between development providers and sponsor. The agreements describe the deliverables, quality, and the fitness-for-purpose requirements for the desired development effort.

Managing contracts is a function of architecture governance as it ensures that responsibility for development is adequately delegated and accepted throughout the organization. Architecture Contracts are often used to drive architecture change. Different architecture contracts are required during different phases of the Architecture Development Method and include:

- Statement of Architecture Work
- Contract between Architecture Design and Development Partners
- Contract between Architecting Functions and Business Users

5.4.7 Architecture Content Framework

The Architecture Content Framework allows the TOGAF to be a stand-alone framework for architecture in an enterprise. It uses three categories to describe the type of architectural work product:

The core content metamodel concepts include:

- Core and extension content
- Formal and information modeling
- Core metamodel entities
- Catalog, matrix, and diagram concepts

The core and extension content is an introduction to how TOGAF employs a basic core metamodel and applies a number of extension modules to address specific issues in the architecture. It provides a minimum set of architectural content to support traceability across artifacts.

Core metamodel entities have some key relationship concepts:

- Processes should normally be used to describe flow

- Functions describe units of business capability
- Business services support organizational objectives and are defined at a level of granularity consistent with the level of governance needed
- Business services are deployed onto application components
- Application components are deployed onto technology components

Architectural information can be structured in an orderly way by the content metamodel. This allows the information to be processed to meet stakeholder needs effectively.

To present the metamodel clearly to the stakeholders, catalogs, matrices, and diagrams are used.

- Catalogs are lists of building blocks of a specific or related type for use as a reference or for governance. The metamodel can perform queries and analysis on the information.
- Matrices show relationships between two or more model entities. They are displayed in grid format.
- Diagrams render architectural content graphically to allow stakeholders to retrieve required information.

Each phase of the ADM contributes one or more artifacts to the core content metamodel:

- Preliminary
  - Principles Catalog
- Architecture Vision
  - Stakeholder Map Matrix
  - Value Chain Diagram
  - Solution Concept Diagram
- Business Architecture
  - Organization/Actor Catalog
  - Role Catalog
  - Business Service/Function Catalog
  - Business Interaction Matrix
  - Actor/Role Matrix
  - Business Footprint Diagram
  - Business Service/Information Diagram
  - Functional Decomposition Diagram
  - Product Lifecycle Diagram
- Information Systems (Data Architecture)
  - Data Entity/Data Component Catalog
  - Data Entity/Business Function Matrix
  - System/Data Matrix
  - Class Diagram
  - Data Dissemination Diagram
- Information Systems (Application Architecture)
  - Application Portfolio Catalog
  - Interface Catalog
  - System/Organization Matrix
  - Role/System Matrix

    - System/Function Matrix
    - Application Interaction Matrix
    - Application Communication Diagram
    - Application and User Location Diagram
    - System Use-case Diagram
- Technology Architecture
    - Technology Standards Catalog
    - Technology Portfolio Catalog
    - System/Technology Matrix
    - Environments and Locations Diagram
    - Platform Decomposition Diagram
- Opportunities and Solutions
    - Project Context Diagram
    - Benefits Diagram
- Requirements Management
    - Requirements Catalog

Extension modules are optional and selected during the Preliminary phase to meet the needs of the organization. The extension modules found in the TOGAF Content Metamodel are:

- Governance Extensions
- Services Extensions
- Process Modeling Extensions
- Data Extensions
- Infrastructure Consolidation Extensions
- Motivation Extensions

5.4.8 Stakeholder Management

Stakeholder management provides a discipline for gaining support between architecture practitioners and benefits the enterprise by:

- Identifying powerful stakeholders early for their input to shape the architecture.
- Obtaining support from powerful stakeholders to enable more resources to be available during engagement of architectures.
- Early and frequent communications with stakeholders allow better understanding of the architecture process.
- Reaction to architecture models and reports can be more effectively anticipated.

Stakeholder analysis is used in the Architecture Vision phase to identify the key players in the engagement and updated with each subsequent phase of the ADM. The complexity of architecture can be difficult to manage and obtain agreement from large numbers of stakeholders. TOGAF addresses these issues throughout the ADM using the concepts of:

- Stakeholders
- Concerns
- Views
- Viewpoints

5.5 Architecture Views and Viewpoints

Architecture Views formal representations of the overall architecture that hold some significance or meaning to one of more stakeholders. This allows a particular architecture to be communications about and understood by all stakeholders in order to facilitate that the system is addressing their concerns. The views chosen are usually at the discretion of the architect.

ANSI/IEEEE Standard 1471-2000, Recommended Practice for Architecture Description of Software-Intensive Systems is an effort to promote a consistent method of creating views

5.5.1 Terms Related to Views

There are several terms to concepts related to views:

- System – a collection of components intended to provide a specific function or set of functions.
- Architecture – the system's fundamental organization of components, their relationships to each other, and the principles guiding design and growth.
- Architecture description – a collection of artifacts that document architecture.
- Stakeholders – people or groups you have key roles and concerns in the system.
- Concerns – the key interests of the stakeholders, which determine the acceptability of the system in the environment.
- View – a representation of the whole system form the perspective of a set of concerns.
- Viewpoint – the perspective from which a view constructed and used.

5.5.2 Core Taxonomy of Views:

The minimum set of stakeholders for a system in which views should be developed for are:

- Users
- System and Software Engineers
- Operators, Administrators, and Managers
- Customers

Each stakeholder group may have architecture views that fall into the following categories:

- Business
- Data
- Application
- Technology

5.5.3 Common Views and Viewpoints

Some of the most common views to be developed within architecture are:

- Business Architecture View – addresses the concerns of the users
- Enterprise Security View – addresses the security aspects of a system
- Software Engineering View – addresses the development of new software systems
- System Engineering View – addresses the assembling of hardware and software components for a working system
- Communication Engineering View – address the structuring of network and communication elements in order to simplify network design and planning
- Data Flow View – addresses the data requirements of processing, storage, retrieval, archiving and security.
- Enterprise Manageability View – addresses the operations, administration, and management of a system
- Acquirer View – addresses the procurement of Commercial Off-the-Shelf (COTS) software and hardware

5.6 Building Blocks and the ADM

The following descriptions characterize building blocks:

- They are packages of functionality defined to meet a business need.
- They are published interfaces to access functionality.
- They interoperate with each other.

- They are considerate of implementation and usage requirements and evolve to exploit technology and standards
- They can be assembled with other building blocks are may be a subassembly for other building blocks.
- They are re-usable and replaceable.
- They may have multiple implementations with different inter-dependent building blocks.

5.6.1 Architecture Building Blocks

Architecture Building Blocks (ABB) are related to the Architecture Continuum and define what functionality will be implemented through the capture of business and technical requirements. An ABB is technology aware and are used to direct and guide the development of Solution Building Blocks (SBB).

The fundamental functionality and attributes of an ABB are semantic and unambiguous. Their interfaces are either chosen or supplied.

5.6.2 Solution Building Blocks

Solution Building Blocks (SBB) relate to the Solutions Continuum and are either procured or developed. An SBB define what products and components are used to implement a specific functionality. They define the implementation with the intent to fulfill business requirements. The are product or vendor-aware.

The specifications of a SBB include at minimum:

- Specific functionality and attributes
- An implemented set of interfaces
- Requires SBBs identified
- Mapping of SBBs to the IT topology and operational policies
- Shared attributes, such as security, manageability, localization, scalability
- Performance and configurability defined
- Design drivers and constraints identified
- Relationships between SBBs and ABBs exploited

5.6.3 Building Blocks

Any given architecture is a set of building blocks shown through the architectural model. How the building blocks connect to each other to meet specific requirements make up the specifications of the architecture.

The building blocks of architecture represent the specific services required in the enterprise system. The process of creating building block definitions is a function of the Phases A, B, C, and D of the Architecture Development Method.

Building blocks are typically depicted in the form of models. The structure of a model consists of:

- Background to the Model
- The Business Process Level
- The Technical Functionality and Constraints Level
- The Architecture Model Level
- The Opportunity Identification Level
- The Building Block Re-use Level.