Chapter 2

Definitions

This extract from TOGAF 9.1 contains the general definitions required for the Level 1 Syllabus, section 3.1.3, learning unit 3. It is primarily intended for TOGAF 9 Level 1 training.

2.1 Application

A deployed and operational IT system that supports business functions and services; for example, a payroll. Applications use data and are supported by multiple technology components but are distinct from the technology components that support the application.

2.2 Application Architecture

A description of the structure and interaction of the applications as groups of capabilities that provide key business functions and manage the data assets.

2.3 Architecture

- 1. A formal description of a system, or a detailed plan of the system at component level, to guide its implementation (source: ISO/IEC 42010: 2007).
- 2. The structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time.

2.4 Architecture Building Block (ABB)

A constituent of the architecture model that describes a single aspect of the overall model.

2.5 Architecture Development Method (ADM)

The core of TOGAF. A step-by-step approach to develop and use an enterprise architecture.

2.6 Architecture Domain

The architectural area being considered. There are four architecture domains within TOGAF: business, data, application, and technology.

2.7 Architecture Framework

A conceptual structure used to develop, implement, and sustain an architecture.

2.8 Architecture Principles

A qualitative statement of intent that should be met by the architecture. Has at least a supporting rationale and a measure of importance.

2.9 Architecture Vision

A succinct description of the Target Architecture that describes its business value and the changes to the enterprise that will result from its successful deployment. It serves as an aspirational vision and a boundary for detailed architecture development.

2.10 Baseline

A specification that has been formally reviewed and agreed upon, that thereafter serves as the basis for further development or change and that can be changed only through formal change control procedures or a type of procedure such as configuration management.

Definitions Building Block

2.11 Building Block

Represents a (potentially re-usable) component of business, IT, or architectural capability that can be combined with other building blocks to deliver architectures and solutions.

Building blocks can be defined at various levels of detail, depending on what stage of architecture development has been reached. For instance, at an early stage, a building block can simply consist of a name or an outline description. Later on, a building block may be decomposed into multiple supporting building blocks and may be accompanied by a full specification. Building blocks can relate to "architectures" or "solutions".

2.12 Business Architecture

A description of the structure and interaction between the business strategy, organization, functions, business processes, and information needs.

2.13 Business Governance

Concerned with ensuring that the business processes and policies (and their operation) deliver the business outcomes and adhere to relevant business regulation.

2.14 Capability

An ability that an organization, person, or system possesses. Capabilities are typically expressed in general and high-level terms and typically require a combination of organization, people, processes, and technology to achieve. For example, marketing, customer contact, or outbound telemarketing.

2.15 Concerns

The key interests that are crucially important to the stakeholders in a system, and determine the acceptability of the system. Concerns may pertain to any aspect of the system's functioning, development, or operation, including considerations such as performance, reliability, security, distribution, and evolvability.

2.16 Constraint

An external factor that prevents an organization from pursuing particular approaches to meet its goals. For example, customer data is not harmonized within the organization, regionally or nationally, constraining the organization's ability to offer effective customer service.

Data Architecture Definitions

2.17 Data Architecture

A description of the structure and interaction of the enterprise's major types and sources of data, logical data assets, physical data assets, and data management resources.

2.18 Deliverable

An architectural work product that is contractually specified and in turn formally reviewed, agreed, and signed off by the stakeholders. Deliverables represent the output of projects and those deliverables that are in documentation form will typically be archived at completion of a project, or transitioned into an Architecture Repository as a reference model, standard, or snapshot of the Architecture Landscape at a point in time.

2.19 Enterprise

The highest level (typically) of description of an organization and typically covers all missions and functions. An enterprise will often span multiple organizations.

2.20 Foundation Architecture

Generic building blocks, their inter-relationships with other building blocks, combined with the principles and guidelines that provide a foundation on which more specific architectures can be built.

2.21 Gap

A statement of difference between two states. Used in the context of gap analysis, where the difference between the Baseline and Target Architecture is identified.

2.22 Governance

The discipline of monitoring, managing, and steering a business (or IS/IT landscape) to deliver the business outcome required.

2.23 Information

Any communication or representation of facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audio-visual forms.

2.24 Information Technology (IT)

- 1. The lifecycle management of information and related technology used by an organization.
- 2. An umbrella term that includes all or some of the subject areas relating to the computer industry, such as Business Continuity, Business IT Interface, Business Process Modeling and Management, Communication, Compliance and Legislation, Computers, Content Management, Hardware, Information Management, Internet, Offshoring, Networking, Programming and Software, Professional Issues, Project Management, Security, Standards, Storage, Voice and Data Communications. Various countries and industries employ other umbrella terms to describe this same collection.
- 3. A term commonly assigned to a department within an organization tasked with provisioning some or all of the domains described in (2) above.
- 4. Alternate names commonly adopted include Information Services, Information Management, et al.

2.25 Logical

An implementation-independent definition of the architecture, often grouping related physical entities according to their purpose and structure. For example, the products from multiple infrastructure software vendors can all be logically grouped as Java application server platforms.

2.26 Metadata

Data about data, of any sort in any media, that describes the characteristics of an entity.

2.27 Metamodel

A model that describes how and with what the architecture will be described in a structured way.

2.28 Method

A defined, repeatable approach to address a particular type of problem.

See also Section 2.29.

Methodology Definitions

2.29 Methodology

A defined, repeatable series of steps to address a particular type of problem, which typically centers on a defined process, but may also include definition of content.

2.30 Model

A representation of a subject of interest. A model provides a smaller scale, simplified, and/or abstract representation of the subject matter. A model is constructed as a "means to an end". In the context of enterprise architecture, the subject matter is a whole or part of the enterprise and the end is the ability to construct "views" that address the concerns of particular stakeholders; i.e., their "viewpoints" in relation to the subject matter.

2.31 Modeling

A technique through construction of models which enables a subject to be represented in a form that enables reasoning, insight, and clarity concerning the essence of the subject matter.

2.32 Objective

A time-bounded milestone for an organization used to demonstrate progress towards a goal; for example, "Increase Capacity Utilization by 30% by the end of 2009 to support the planned increase in market share".

2.33 Physical

A description of a real-world entity. Physical elements in an enterprise architecture may still be considerably abstracted from Solution Architecture, design, or implementation views.

2.34 Reference Model (RM)

A reference model is an abstract framework for understanding significant relationships among the entities of [an] environment, and for the development of consistent standards or specifications supporting that environment. A reference model is based on a small number of unifying concepts and may be used as a basis for education and explaining standards to a non-specialist. A reference model is not directly tied to any standards, technologies, or other concrete implementation details, but it does seek to provide common semantics that can be used unambiguously across and between different implementations.

Definitions Repository

2.35 Repository

A system that manages all of the data of an enterprise, including data and process models and other enterprise information. Hence, the data in a repository is much more extensive than that in a data dictionary, which generally defines only the data making up a database.

2.36 Requirement

A statement of need that must be met by a particular architecture or work package.

2.37 Solution Architecture

A description of a discrete and focused business operation or activity and how IS/IT supports that operation. A Solution Architecture typically applies to a single project or project release, assisting in the translation of requirements into a solution vision, high-level business and/or IT system specifications, and a portfolio of implementation tasks.

2.38 Solution Building Block (SBB)

A candidate solution which conforms to the specification of an Architecture Building Block (ABB).

2.39 Stakeholder

An individual, team, or organization (or classes thereof) with interests in, or concerns relative to, the outcome of the architecture. Different stakeholders with different roles will have different concerns.

2.40 Strategic Architecture

A summary formal description of the enterprise, providing an organizing framework for operational and change activity, and an executive-level, long-term view for direction setting.

2.41 Target Architecture

The description of a future state of the architecture being developed for an organization. There may be several future states developed as a roadmap to show the evolution of the architecture to a target state.

2.42 Technology Architecture

A description of the structure and interaction of the platform services, and logical and physical technology components.

2.43 Transition Architecture

A formal description of one state of the architecture at an architecturally significant point in time. One or more Transition Architectures may be used to describe the progression in time from the Baseline to the Target Architecture.

2.44 View

The representation of a related set of concerns. A view is what is seen from a viewpoint. An architecture view may be represented by a model to demonstrate to stakeholders their areas of interest in the architecture. A view does not have to be visual or graphical in nature.

2.45 Viewpoint

A definition of the perspective from which a view is taken. It is a specification of the conventions for constructing and using a view (often by means of an appropriate schema or template). A view is what you see; a viewpoint is where you are looking from — the vantage point or perspective that determines what you see.