
Overview

This sub-discipline is concerned with the competencies required to create, maintain and manage IT architecture models representing the operating model for an organisation and their lower level components. It also includes those competencies required to interpret, use and apply information contained within an IT architecture to inform a range of business improvement activities, particularly those involved in the design, development, enhancement and maintenance of information technology systems supporting an organisation.

The Enterprise Architecture is typically underpinned by other diagrammatic representations of the organisation which map it at increasingly lower levels of granularity – for some large organisations, more detailed representation of the Enterprise will be represented at individual business unit level within a *Segment Architecture*. Some of the models represent the organisation with specific emphasis on one aspect of its operation e.g. a *Data Architecture* represents the organisation's information assets, their relationship with each other, and the definition of information types used and a *Process Architecture* concentrates on the process flows and how information may be processed within the organisation.

A *Systems* or *Solutions Architecture* provides a detailed representation of elements of the organisation that need to be supported by current or new/enhanced information technology systems. It articulates, at a low level of detail, how individual technology components need to support the process, processing and information flows required in one or several areas of the organisation. Frequently, a logical Systems or Solutions Architecture is created and used as the blueprint upon which physical design work of individual system components, or assessment of purchased components against requirements is based. The resulting physical Solutions or Systems Architecture is primarily concerned with the definition of internal interfaces among the system's components or subsystems, and the interface between the system and its external environment, especially the user.

For the purposes of these standards, all variations and types of IT architecture work are covered within this sub-discipline.

Systems Architecture Level 3 Role

Performance criteria

Contribute to IT architecture work

You must be able to:

- P1 Correctly follow the processes, tools and techniques to conduct IT/technology architecture activities
- P2 Fully comply with all organisational standards relating to IT/technology architecture activities
- P3 Correctly identify what information is contained within current IT/technology architecture models and roadmaps, under the direction of superiors

Gather, use and maintain information relating to IT architecture models

You must be able to:

- P4 Accurately gather specified information about the processes, operations and functions that currently exist within the organisation, and document the relationships between them, in order to inform IT/technology architecture activities
- P5 Accurately gather specified information relating to the information that is held within, processed and used by the organisation
- P6 Gather all relevant information required to populate IT/technology architecture models and roadmaps
- P7 Correctly use and interpret all information contained within current IT/technology architecture models and roadmaps, under direction
- P8 Correctly maintain existing IT/technology architecture models and roadmaps, correctly using and documenting all relevant information required

Assist others with IT/technology architecture work

You must be able to:

- P9 Accurately collate information from current IT/technology architecture models and provide this information to others as directed
- P10 Assist others in sourcing and documenting information relating to the business strategy, business rules and operating model, so that it may be used to inform IT/technology architecture work
- P11 Assist others with the implementation of architecture models and/or roadmaps
- P12 Assist others in identifying the relationships between processes, functions, organisational entities and current IT/technology systems, services and assets

Knowledge and

Contribute to IT architecture work

Systems Architecture Level 3 Role

understanding

You need to know and understand:

- K1 Identify what information is contained within current IT/technology architecture models and roadmaps
- K2 Operate with reference to
 - K2.1 organisational strategy, policies and standards relating to IT/technology architecture activities
 - K2.2 professional and ethical standards relating to IT/technology architecture activities
 - K2.3 integrity and confidentiality during IT/technology architecture activities
- K3 Comply with all relevant
 - K3.1 and applicable legislation, regulations and external standards relating to IT/technology architecture activities
 - K3.2 internal standards relevant to IT/technology architecture activities
- K4 What is meant by
 - K4.1 IT/technology architecture
 - K4.2 an IT/technology roadmap
- K5 The fact that
 - K5.1 IT/technology architecture work and its deliverables are important to and valued by organisations
 - K5.2 IT/technology architecture models and roadmaps may exist in a variety of formats, including
 - K5.3 those representing the business structure and functions, IT/technology, processes, data and services
 - K5.4 IT/technology architecture models and roadmaps may represent just an organisation or span across organisational boundaries and cover one or more organisations
- K6 The processes, tools and techniques that can be used to conduct IT/technology architecture activities

Gather, use and maintain information relating to IT architecture models

You need to know and understand:

- K7 Gather information
 - K7.1 required to populate IT/technology architecture models and roadmaps
 - K7.2 already contained within IT/technology architecture models and roadmaps
 - K7.3 relating to the information that is held within, processed and used by the organisation
 - K7.4 relating to the processes, operations and functions that currently exist within the organisation
- K8 Use
 - K8.1 existing IT/technology architecture models and roadmaps
 - K8.2 all relevant information required within a particular IT/technology architecture model and/or roadmap

Systems Architecture Level 3 Role

- K9 Apply
 - K9.1 the processes, tools and techniques for undertaking IT/technology architecture work
- K10 Document
 - K10.1 what information is held within, processed and used by the organisation
 - K10.2 what processes, operations functions and organisational entities currently exist within the organisation
 - K10.3 information required to populate IT/technology architecture models and roadmaps
 - K10.4 the relationship between information held within or processed by the organisation and current IT/technology systems, services and assets
 - K10.5 the relationship between processes, functions and organisational entities within the organisation and current IT/technology systems, services and assets
 - K10.6 all relevant information within a particular IT/technology architecture model and/or roadmap
 - K10.7 the potential implications to an organisation of IT/technology architecture deliverables being incorrect, incomplete and/or inadequate
 - K10.8 the potential implications of failings of integrity, confidentiality and information security during IT/technology architecture activities
- K11 Maintain existing IT/technology architecture models and roadmaps
- K12 Interpret all information contained within current IT/technology architecture models and roadmaps
- K13 The importance of
 - K13.1 IT/technology architecture and roadmap activities being guided by and supporting the business needs
 - K13.2 using naming conventions and standards in IT/technology architecture work and its deliverables activities, in line with organisational strategy, policy and standards
 - K13.3 documenting the deliverables from IT/technology architecture activities in a clear and understandable manner
 - K13.4 verifying the accuracy, currency, completeness and relevance of information created, collected, used and documented during IT/technology architecture work

Assist others with IT/technology architecture work

You need to know and understand:

- K1 Provide information from current IT/technology architecture models to other internal individuals and groups
- K2 Who needs to use IT/technology architecture models and roadmaps
- K3 The fact that external providers of IT/technology architecture services

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Systems Architecture Level 3 Role

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