
Overview

This sub discipline covers the competencies required to integrate a range of system elements together operationally in order to form a coherent set of capabilities that meets the business needs. These elements or components will already have been subject to systems development activity to ensure that they can interface with each other in order to produce an holistic 'end to end' IT/technology system. It also covers the competencies required to integrate larger IT/technology systems, system components and subsystems, each providing unique and discrete services, in order to support processes which typically span either across business units and functions within an organisation and/or across organisational boundaries.

Cross organisational integration activities are most commonly required as a result of business and organisational change such as merger, acquisition partnering and joint venture activity between organisations, during which the need to integrate and process information, particularly that relating to customers and revenue, must be maintained, protected and operated with a minimum of disruption. Failure to integrate systems rapidly and seamlessly is frequently cited as one of the main causes of the failure to realise the value from such wide ranging business change

Systems integration activities require a broad range of competencies due to the diverse characteristics of individual system components that need to be integrated together. These components may include hardware, software and network system capabilities that have been developed, acquired or commissioned. Some may be new and others may already be implemented and used within the infrastructure and are available for reuse

**Performance
criteria**

Perform systems integration activities as directed

You must be able to:

- P1 Correctly use specified systems integration procedures, tools and techniques
- P2 Follow organisational plans and standards for the systems development lifecycle, as appropriate to systems integration activities
- P3 Comply with any relevant legislation, regulations and external standards relating to systems integration activities
- P4 Assist with the provision of information to update systems architectures and systems designs as a result of systems integration activities
- P5 Contribute to the accurate and clear documentation of systems integration deliverables so that they can be used by implementation and support personnel

Knowledge and understanding

You need to know and understand:

Perform systems integration activities as directed

- K1 what is meant by systems integration and the stages of activity that constitute it
- K2 The procedures, tools and techniques that can be used to conduct and document systems integration activities
- K3 the systems development lifecycle as it relates to systems integration and the relationship between systems integration and systems installation, implementation and handover
- K4 systems integration occurring as a result of business activities such as merger and acquisition or the need to create business processes or 'value chains' that span multiple organizations
- K5 the impact of effective integration of systems components and subsystems on the successful operation of an organisation and/or organizations
- K6 systems integration as a complex activity, involving a wide range of diverse components, subsystems, infrastructure, business processes, roles and responsibilities across one or more organizations
- K7 professional and ethical standards relating to systems integration activities within an organisation and across organizations
- K8 the importance of systems integration deliverables supporting the business needs
- K9 the importance and relevance of systems integration activities on the full life cycle of information within an organisation and/or organizations
- K10 The importance of documenting the deliverables from systems integration work in a clear and understandable manner
- K11 apply the systems development lifecycle as appropriate to systems integration activities
- K12 gather information for business analysis and other design, development and testing activities to inform systems integration activities
- K13 use systems integration and documentation procedures, tools and techniques
- K14 document:
 - K14.1 systems integration deliverables so that they can be used by implementation and support personnel
 - K14.2 information gathered to conduct systems integration activities
- K15 operate with reference to:
 - K15.1 standards from all relevant organisations that are involved in systems integration activities
 - K15.2 professional and ethical standards relating to systems integration activities
 - K15.3 integrity and confidentiality during systems integration activities
- K16 comply with all relevant and applicable legislation, regulations and external standards relating to systems integration activities
- K17 provide updated information for systems architectures and systems designs as a result of systems integration activities

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