



Australian Government

Department of Education, Employment and Workplace Relations

ICASAD606A Analyse stakeholder requirements

Release: 1

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Modification History

| Release | Comments |
|-----------|---|
| Release 1 | This Unit first released with <i>ICAI1 Information and Communications Technology Training Package version 1.0</i> |

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to analyse stated requirements, determine potential solutions, and define possible features available to meet stakeholder needs.

Application of the Unit

This unit applies to senior business analysts in medium to large organisations who define the IT requirements (both stakeholder and solution requirements) of one or more stakeholder groups in enough detail to allow solution components to be constructed.

Their job roles combine high-level management, business and technical skills necessary to manage complex analysis efforts within the information and communications technology (ICT) industry, often as part of business critical IT projects.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

| Element | Performance Criteria |
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| <i>Elements describe the essential outcomes of a unit of competency.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i> |

Elements and Performance Criteria

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| 1. Prioritise requirements | <p>1.1 Determine the <i>basis for prioritisation</i> of requirements</p> <p>1.2 Resolve <i>challenges</i> in facilitating the prioritisation</p> |
| 2. Organise requirements | <p>2.1 Articulate requirements at an <i>appropriate level</i> of abstraction</p> <p>2.2 Devise <i>appropriate models</i> to describe the solution scope based on informational needs of stakeholders</p> <p>2.3 Document dependencies and interrelationships among requirements</p> |
| 3. Specify and model requirements | <p>3.1 Develop textual requirements</p> <p>3.2 Generate matrices to convey or support identified requirements</p> <p>3.3 Create models to document and communicate requirements and improvement opportunities</p> |
| 4. Define assumptions and constraints | <p>4.1 Agree on assumptions to be defined and clarified as requirements are understood</p> <p>4.2 Document and examine <i>business constraints</i> to identify options no longer available</p> <p>4.3 Recognise and examine <i>technical constraints</i> that may restrict design or mandate standards to be followed</p> |
| 5. Verify requirements | <p>5.1 Establish <i>characteristics of requirements' quality</i></p> <p>5.2 Undertake verification activities iteratively throughout the requirements analysis process</p> |
| 6. Validate requirements | <p>6.1 Identify and define stakeholder requirement benefit assumptions so that associated risks can be managed</p> <p>6.2 Generate measurable evaluation criteria to assess success of requirements benefit post-implementation</p> <p>6.3 Assign business value of requirements to assist in identifying candidates for elimination</p> <p>6.4 Determine requirement dependencies for benefits realisation</p> <p>6.5 Evaluate alignment with business case and opportunity cost to assist validation and decision making</p> |

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- analytical skills to review organisational and technical business solutions
- communication skills to:
 - conduct focus groups and requirements workshops
 - conduct research and interviews
 - liaise with stakeholders
- analytical skills to prioritise requirements
- technical writing skills to develop requirements documents and specifications
- technical modelling skills to develop models of systems, processes and solutions.

Required knowledge

- business rules analysis
- data flow diagramming
- data modelling
- functional decomposition
- organisation modelling
- process modelling
- risk management strategies
- scenarios and use cases
- scope modelling
- user stories.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

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| Overview of assessment | |
| Critical aspects for assessment and evidence required to demonstrate competency in this unit | <p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • define, specify and prioritise stakeholder and solution requirements to a standard that would allow construction of a business solution • verify and validate the requirements to ensure necessary quality and support for stakeholder needs. |
| Context of and specific resources for assessment | <p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • documentation, including appropriate policies, current business analysis practices, tools and legislation • appropriate learning and assessment support when required • modified equipment for people with special needs. |
| Method of assessment | <p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • evaluation of a simulated or workplace project in a medium to large enterprise • direct observation of the candidate carrying out business analysis work • verbal or written questioning to assess required knowledge and skills • review of reports and plans prepared for the projects • evaluation of a portfolio of the project work undertaken. |
| Guidance information for assessment | <p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.</p> <p>Indigenous people and other people from a non-English speaking background may need additional support.</p> <p>In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.</p> |

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

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| <p><i>Basis for prioritisation</i> may include:</p> | <ul style="list-style-type: none"> • difficulty of implementation • relative value • likelihood of success • risk • regulatory or policy compliance • relationship to other requirements • stakeholder agreement • urgency. |
| <p><i>Challenges</i> may include:</p> | <ul style="list-style-type: none"> • non-negotiable demands, e.g. stakeholders wish to rank all requirements as high priority • unrealistic tradeoffs, e.g. difficulty or complexity of implementing certain requirements may be overstated. |
| <p><i>Appropriate level</i> is determined by:</p> | <ul style="list-style-type: none"> • particular methodology being used • whatever level of abstraction is appropriate for the audience. |
| <p><i>Appropriate models</i> may include:</p> | <ul style="list-style-type: none"> • data flow diagrams • data models • functional decomposition • organisation models • process models • scenarios and use cases • scope models • user stories. |
| <p><i>Business constraints</i> may include:</p> | <ul style="list-style-type: none"> • organisational restrictions • budgetary restrictions • limits on the number of resources available • restrictions based on skills of the project team and stakeholders • scope restrictions • time restrictions. |
| <p><i>Technical constraints</i> may include:</p> | <ul style="list-style-type: none"> • application software that must be used • architecture decisions that are made that may impact the design of the solution, such as: <ul style="list-style-type: none"> • development languages |

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| | <ul style="list-style-type: none"> • hardware and software platforms • application software that must be used • restrictions, such as resource use • message size and timing • software size • maximum number of and size of files records and data elements • enterprise architecture standards that must be followed. |
| <p><i>Characteristics of requirements' quality</i> may include:</p> | <ul style="list-style-type: none"> • cohesiveness • completeness • consistency • correctness • feasibility • modifiable • testable • unambiguous. |

Unit Sector(s)

Systems analysis and design