ICASAD504A Implement quality assurance processes for business solutions

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with *ICA11 Information and Communications Technology Training Package version 1.0*

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to define and implement quality assurance processes and procedures to ensure that business solutions achieve quality performance expectations.

Application of the Unit

This unit applies to senior information and communications technology (ICT) staff in a range of areas who are required to ensure quality in ICT systems.

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
Elements describe the essential outcomes of a unit of competency.	*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.*

Elements and Performance Criteria

1. Plan business quality assurance process	1.1 Determine business quality performance expectations and benchmark *standards*
	1.2 Develop business standards and guidelines for achieving each benchmark
	1.3 Allocate strategic quality responsibilities for meeting business standards and guidelines according to business procedures
	1.4 Communicate quality policy and procedures to appropriate *stakeholders*
	1.5 Document expectations, standards and benchmarks in a quality plan based on business *documentation standards*
	1.6 Identify appropriate quality management systems guides, including *quality management plan* for complex activities
2. Implement quality policies and plans	2.1 Write quality policy for business directive
	2.2 Create quality management plan for business process
	2.3 Distribute quality management plan to key people for feedback
	2.4 Analyse feedback to determine if corrective action needs to be taken
	2.5 Make changes to quality management plan, if required, to incorporate corrective action
	2.6 Allocate key quality tasks and functions to *appropriate person* as per the quality management plan
	2.7 Establish and document a quality reporting and monitoring program
	2.8 Check and document skills of staff to ensure that they are able to meet the *quality standards* required
3. Control quality assurance processes	3.1 Implement quality performance guidelines, procedures and processes as per the quality management plan
	3.2 Obtain stakeholder feedback, including client satisfaction to monitor implementation of quality processes
	3.3 Monitor quality process performance as per the quality management plan
	3.4 Report on monitoring of quality performance to key decision makers
	3.5 Identify and record breakdowns in the *system* and create corrective action requests
	3.6 Take immediate corrective action, where necessary

4. Improve quality	4.1 Collect, analyse and measure quality performance results against benchmarks to determine quality standards
	4.2 Determine the frequency of quality breakdowns through corrective action requests in order to identify whether defects are isolated incidents or require a wider analysis and corrective action
	4.3 Determine corrective actions to be taken and assign responsibility for taking the action where appropriate
	4.4 Identify who will be responsible for quality improvement
	4.5 Implement corrective action solutions and measure performance
	4.6 Review and adjust benchmark standards periodically in order to improve quality performance
	4.7 Document quality performance results and disseminate the information to stakeholders as appropriate
	4.8 Review business procedures at predetermined schedules as part of a management-review process and quality-reporting function

Required Skills and Knowledge

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

Required skills

- analytical skills to:
  - analyse current development environment with regard to implementing quality plan
  - analyse quality performance results
- communication skills to liaise with a variety of key stakeholders and customers
- literacy skills to:
  - compile a quality plan
  - interpret quality reports
- planning and organisational skills to schedule the implementation
- problem-solving skills to solve quality breakdown issues
- technical skills to:
  - audit website security
  - test evaluation data
  - test implementation data
  - test technical design development.

Required knowledge

- copyright and intellectual property relating to IT systems development
- features of business models
- International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) and Australian Standards (AS) standards
- quality concepts applied to IT
- quality improvement processes
- techniques of technical performance measurement
- website architecture, including operating system
- website privacy, accessibility and equity legislation.

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.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • plan and implement appropriate processes and procedures to ensure quality expectations are met • produce quality standards that are quantitative and applied universally • document quality assurance standards.
Context of and specific resources for assessment	Assessment must ensure access to: • related quality standards • data related to the business model • quality guidelines • appropriate learning and assessment support when required • modified equipment for people with special needs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • verbal or written questioning to assess candidate's knowledge of quality assurance and appropriate processes • review of candidate's documented implementation plan.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. 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. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.

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.

Standards may include:	• ISO, IEC and AS standards • organisational standards • project standards.
Stakeholders may include:	• community groups • corporate body • end user • government body • internal or external client.
Documentation standards may include:	• ISO, IEC and AS standards • organisational standards • policy relating to: • distribution • revision • sign-off and storage • project standards • tools for documenting: • word-processing packages • desktop-publishing packages.
Quality management plan may include:	• audit • authorisations and responsibilities for quality control • communications and responsibilities • continuous improvement • critical success factors • measurement criteria and inspection • processes • quality assurance • report • review procedures.
Appropriate person may include:	• authorised business representative • client • supervisor.
Quality standards may be specific to:	• internal or customer-supplied standards • international standards

	• national standards • organisational standards.
Client may include:	• employees • external organisations • individuals • internal departments.
System may include:	• applications • application service provider (ASP) • databases • gateways • internet service provider (ISP) • operating systems • servers.

Unit Sector(s)

Systems analysis and design