



Australian Government

Department of Education, Employment and Workplace Relations

ICAA5245A Evaluate RFID systems

Release: 1

ICAA5245A Evaluate RFID systems

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	<p>This unit defines the competency required for evaluating RFID systems against a client's business requirements.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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Application of the Unit

Application of the unit	
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		
	ICAA4041C	Determine and confirm client business expectations and needs
	ICAD4217B	Create technical documentation

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish business requirements	1.1. Identify and prioritise <i>business requirements</i> 1.2. Identify conflicting or overlapping <i>business requirements</i> 1.3. Specify budget and available resources 1.4. Validate <i>business requirements</i> , budget and resource needs with client
2. Research RFID technology	2.1. Describe <i>RFID technologies</i> and its functionality 2.2. Identify market drivers for RFID 2.3. Describe typical RFID implementations
3. Evaluate the impact of RFID technology on the business	3.1. Investigate the benefits of RFID to the organisation and customers, including new business opportunities 3.2. Investigate the impact of RFID on business processes 3.3. Identify business functions that benefit from implementing RFID
4. Determine RFID industry compliance requirements	4.1. Research the roles of <i>key stakeholders</i> in developing <i>industry standards</i> 4.2. Describe the different implementations of RFID
5. Prepare evaluation report	5.1. Recommend preferred product, including the reasoning behind recommendations 5.2. Prepare a report containing <i>solution</i> details 5.3. Submit report to client for approval

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- Identification of key sources of information
- Understanding specification sheets
- Accurately summarising and documenting information
- Understanding conflicts and integration capabilities between diverse equipment
- Understanding importance and relevance of product information
- Communicating with vendors effectively

REQUIRED SKILLS AND KNOWLEDGE

- Problem solving skills for a defined range of unpredictable problems involving participation in the development of strategic initiatives
- Plain English literacy and communication skills in relation to analysis, evaluation and presentation of information
- Teamwork skills involving the contribution to solutions and goals of a non-routine or contingency nature
- Negotiation skills in relation to other team members and applied to a defined range of predictable problems
- Report writing skills requiring depth in some areas
- Change management skills in relation to maintaining the continuity of IT operations and business functions
- Customer service skills in relation to reviewing change procedures
- Skills in handling difficult clients in relation to reviewing change procedures
- Conflict resolution skills in relation to reviewing change procedures
- Risk analysis skills in relation to reviewing change procedures

Required knowledge

- Knowledge of RFID hardware and software
- Network protocols and operating systems
- Security protocols, standards and data encryption
- Knowledge about the radio spectrum and RFID frequencies
- Vendor product knowledge
- Knowledge about RF interference
- Wireless topologies
- Use of protocol and frequency analysers
- Relevant knowledge of current and future technical systems
- Features and function of relevant hardware components
- Features and function of relevant software products
- Interaction between relevant hardware and software products
- Broad knowledge of the client business domain (e.g. when confirming system components to acquire and agreeing on methods for acquiring components)
- Current industry-accepted hardware and software products with knowledge of general features and capabilities and detailed knowledge in some areas
- Broad knowledge of vendor product directions
- Broad knowledge of help desk and maintenance practices
- Current industry-accepted hardware and software products, with broad knowledge of general features and capabilities and detailed knowledge in some areas
- Broad understanding of the role and level of stakeholder involvement
- Broad general knowledge of the client business domain
- Detailed knowledge of the system's current functionality
- Broad knowledge of quality assurance practices

REQUIRED SKILLS AND KNOWLEDGE

- One or more change management tools
- Broad knowledge of system testing
- Broad knowledge of change control procedures
- Detailed knowledge of the system under evaluation
- Broad knowledge of capacity planning.

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • Assessment must confirm the ability to conduct research and discuss various RFID standards and their applications to various business processes. • Assessment must confirm the ability to examine and discuss examples of different implementation strategies using case studies.
Context of and specific resources for assessment	<p>Evaluation of vendor products is critical for reducing costs, improving quality and ensuring better internal processes.</p> <p>Planning and evaluation of vendor products uses skills and knowledge applications across a broad range of technical and management requirements, evaluation and coordination.</p> <p>Vendor product evaluation may include participation in teams, including those concerned with planning and evaluation functions.</p> <p>The breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and coordination would be characteristic.</p> <p>Assessment must ensure:</p> <ul style="list-style-type: none"> • self-directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others. • Applications involve participation in development of

EVIDENCE GUIDE	
	<p>strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team coordination may also be involved.</p> <p>To demonstrate competency in this unit the person will require access to:</p> <ul style="list-style-type: none"> • Client functional requirements • RFID equipment specifications • Conversion tools • Database software • Organisational guidelines • Networked computers •
Method of assessment	<p>The purpose of this unit is to define the standard of performance to be achieved in the workplace.</p> <p>In undertaking training and assessment activities related to this unit, consideration should be given to the implementation of appropriate diversity and accessibility practices in order to accommodate people who may have special needs. Additional guidance on these and related matters is provided in ICA05 Section 1.</p> <p>The following assessment method is appropriate for this unit:</p> <ul style="list-style-type: none"> • Competency in this unit should be assessed using summative assessment to ensure consistency of performance in a range of contexts. This unit can be assessed either in the workplace or in a simulated environment. However, simulated activities must closely reflect the workplace to enable full demonstration of competency. • The assessment of this unit of competency will usually include observation and research of existing RFID technologies and their impact on various business scenarios.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>

EVIDENCE GUIDE

	<p>An individual demonstrating this competency would be able to:</p> <ul style="list-style-type: none"> • Demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas • Analyse and plan approaches to technical problems or management requirements • Transfer and apply theoretical concepts and/or technical or creative skills to a range of situations • Evaluate information, using it to forecast for planning or research purposes • Take responsibility for own outputs in relation to broad quantity and quality parameters • Take some responsibility for the achievement of group outcomes • Maintain knowledge of industry products and services
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Range Statement**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.

Business requirements may include:

- the business
- system
- application
- network
- people in the organisation

RFID technologies may include:

- RFID and networking tools and equipment
- RFID interrogators/readers and tags
- Servers and workstations

RANGE STATEMENT	
Key stakeholders may include:	<ul style="list-style-type: none"> • EPCGlobal • Auto-ID Center for industry standards • ISO
Industry standards may include:	<ul style="list-style-type: none"> • technical • vertical • regional
Solutions may include:	<ul style="list-style-type: none"> • new hardware • hardware upgrades • new software • software upgrades • user training • implementing a new system

Unit Sector(s)

Unit sector	Analysis and Design
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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