Australian Government

Department of Education, Employment and Workplace Relations

MSACMG800A Analyse data for relevance to organisational learning

Revision Number: 1

MSACMG800A Analyse data for relevance to organisational learning

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the analysis of data generated from formal information monitoring and management systems such as SPC and six sigma or Systems Control and Data Acquisition (SCADA) software and determining its relevance for organisational learning.

Application of the Unit

Application of the unit	This unit is intended for managers, team leaders and people with a similar sphere of influence and scope of authority and responsibility. It covers the capturing of knowledge from data generated within organisation systems and takes a largely quantitative view of information. The unit applies to individuals who are familiar with the application and use of statistics in manufacturing. Where this is not the case the unit MCMT452A Apply statistics to processes in manufacturing may be completed to supply the necessary skills. For a more qualitative approach of capturing and analysing data and applying the knowledge deduced from that to organisational learning see MSACMG708A Capture learning from daily activities in a manufacturing organisation. This unit may also be applied to service organisations applying competitive manufacturing principles.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify learning from own organisation data.	1.1 Obtain data from appropriate data systems 1.2 Examine data for discontinuities, trends and other possible signs of assignable cause 1.3 Examine selected data events to determine root causes of data events 1.4 Communicate root causes of data event(s) to relevant stakeholders
2. Identify learning from value chain data.	2.1 Identify data which is or could be available from other value chain members 2.2 Identify data which might be useful but is not available and seek access to it 2.3 Obtain and examine available data for discontinuities, trends and other possible signs of assignable cause 2.4 Examine selected data events to determine root causes of data events in liaison with appropriate value chain personnel 2.5 Communicate root causes of data events to relevant stakeholders
3. Capture learning	3.1 Review root causes to determine implications for organisational learning 3.2 Ensure learning is captured by organisation's systems 3.3 Obtain involvement and required approvals from relevant process/system owners 3.4 Check that learning flows to all relevant stakeholders
4. Apply learning to team/organisation.	4.1 Review management systems for their impact on organisational learning 4.2 Brief relevant process/system owners on changes and obtain required approvals 4.3 Check learning is used in daily operations 4.4 Review use of learning in liaison with appropriate value chain personnel and update in knowledge system 4.5 Identify implications for training and procedures 4.6 Recommend improvements to value chain/organisation knowledge system.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

The required skills for the unit include:

- problem solving
- root cause analysis
- communication at all levels
- use of organisation knowledge system
- data manipulation

Required knowledge

The required knowledge for the unit include:

- competitive manufacturing principles
- organisational goals and processes
- continuous improvement
- communication methods
- root cause analysis
- maths and statistics
- expected range of performance for process
- types of knowledge capture and retrieval systems and their applicability

Evidence Guide

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	Assessment of this unit should demonstrate competence in an operating/processing/work environment. The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency. Assessment will encompass a range of situations which may be typical or atypical. Evidence may be acquired from activities actually undertaken in the workplace or from workplace based projects which have been designed to provide the required evidence and also provide some benefit to the employing organisation. This unit of competency includes a body of knowledge which will be assessed through questioning and/or other techniques which provide evidence of the required knowledge.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Competence must be demonstrated in the ability to recognise, extract and record learning from workplace generated data. In particular look for evidence of: • translation of data into useful information • ongoing additions to the learning system • use of the learning system
Context of and specific resources for assessment	Assessment will require access to a workplace over an extended period of time, or a suitable method of gathering evidence of competency over a range of situations. A bank of scenarios/case studies/what ifs will be required as will a bank of questions which will be used to probe the reasoning behind the observable actions.
Method of assessment	It may be appropriate to assess this unit concurrently with other relevant units.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

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.	
Data systems	Data systems to include HSE and maintenance systems along with process and quality systems
Codes of practice/ standards	Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.
Health, safety and environment (HSE)	All changes implemented are expected to be at least neutral, or preferably beneficial, in their impact on health, safety and environment.
Data	Data may come from any or all of a range of internal and value chain sources including: • Statistical Process Control (SPC) processes • 6 sigma processes • Quality processes • plant instrumentation and control data
Causes of data events	Data events need to be analysed to separate causes of changes in data from those which may coincidentally be chronologically correlated.
Performance not to expectation/norm	Performance outside the normal range (good or bad) may be expected to have an assignable cause which when identified can add to knowledge.
Other value stream members	Other value stream members includes internal and external suppliers and customers
Learning	Learning is something which can be passed on and is a recordable event or method etc. which leads to change in practice
Systems for the capture of knowledge	Systems for the capture of knowledge may be paper based electronic or other and may include: • clip boards on the line • problem solving templates

RANGE STATEMENT	
	• procedures templates • white boards/other notice boards • data bases and other electronic records • incident reports • maintenance requests They may have as part of them a method of knowledge retrieval and possibly of searching, filing and cataloguing
Record	Appropriate records include systems which ensure knowledge: • is not just retained by an individual • is available to others • survives beyond the departure of individual • has an allocated a level of importance.
Stakeholders	Stakeholders include work team members, value chain members as well as other stakeholders.

Unit Sector(s)

Unit sector	Vocational Graduate Certificate in Competitive Manufacturing Vocational Graduate Diploma of Competitive Manufacturing

Competency field

Competency field	

Co-requisite units

Co-requisite units		