Australian Government

Department of Education, Employment and Workplace Relations

MSS408008A Analyse data for relevance to organisational learning

Release: 1

INDUSTRY SKILLS COUNCILS

Creating Australia's Future

MSS408008A Analyse data for relevance to organisational learning

Modification History

New unit, superseding MSACMG800A Analyse data for relevance to organisational learning - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to analyse data generated from formal information monitoring and management systems, such as statistical process control (SPC) and six sigma, or Systems Control and Data Acquisition (SCADA) software and determining its relevance for organisational learning.

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 operations. Where this is not the case the unit *MSS404052A Apply statistics to operational processes* 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 *MSS407008A Capture learning from daily activities in an organisation.*
This unit may also be applied to service organisations applying competitive systems and practices principles.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

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

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 events to relevant stakeholders
2	Identify learning from value stream data	2.1	Identify data which is or could be available from other value stream 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 stream 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 stream personnel and update in knowledge system
		4.5	Identify implications for training and procedures
		4.6	Recommend improvements to value stream/organisation knowledge system

Required Skills and Knowledge

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

Required skills

Required skills include:

- undertaking self-directed problem solving and decision-making
- communicating across all levels in an organisation
- preparing reports and recommendations
- researching and collating data from a variety of organisation systems and sources, including:
  - data presented at tool box and other regular team, section and area meetings
  - data available through ad hoc discussions/meetings with team members, sales and marketing employees, other employees, value stream members, regulators and visitors
  - data available from interviews with employees and external organisation representatives
  - operations records which may include data from:
    - clip boards on the line
    - problem solving templates
    - procedures templates
    - whiteboards or other noticeboards
    - computers or terminals that allow access to data bases and other electronic records
    - maintenance records
  - quality records
  - warranty and other returns
  - data from continuous improvement and breakthrough improvement activities (kaizen and kaizen blitz)
  - complaints from customers, employees and members of the community
  - equipment down time/maintenance records
  - non-obvious sources
- determining significant data correlations and changes from those which may coincidentally be chronologically correlated
- analysing data-related problems and events to root cause
- determining value of data for organisational learning, including establishing procedures for monitoring effectiveness of improvement actions based on data
- capturing learning through paper-based, electronic or other means (e.g. film and video)

Required knowledge

Required knowledge includes:

- competitive systems and practices tools, including:
  - value stream mapping
  - 5S
  - Just in Time (JIT)
  - mistake proofing
  - process mapping
  - establishing customer pull
  - kaizen and kaizen blitz
  - setting of key performance indicators (KPIs)/metrics
  - identification and elimination of waste (muda)
- organisational goals, strategies, operations and processes
- continuous improvement strategies and processes
- communication methods using arrange of media
- root cause analysis (RCA)
- mathematics and statistics
- expected range of performance for operations and processes, including any KPIs
- types of knowledge capture and retrieval systems used in the organisation and their applicability, including where used:
  - SPC processes
  - six sigma processes
  - quality processes
  - plant instrumentation and control data (e.g. SCADA) systems

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	Competence must be demonstrated in the ability to recognise, extract and record learning from workplace generated data.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • sort relevant from irrelevant data, including establishing correlations • find and collate data from less obvious sources • translate data into information relevant to operational

	and improvement activities • make ongoing additions to the learning system • use the learning system to validate data-based improvement activities.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being

	performed.

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.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as SCADA software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • JIT, kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise

	• the work organisation, culture, regulatory environment and the industry sector
Data systems	Data systems are to include: • health, safety and environment (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
HSE	All changes implemented are expected to be at least neutral, or preferably beneficial, in their impact on HSE
Data	Data may come from any or all of a range of internal and value stream sources, including: • SPC processes • six 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 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 • procedures templates • whiteboards/other noticeboards • databases 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 may include: • work team members • value stream members

Unit Sector(s)

Unit sector Competitive systems and practices

Custom Content Section

Not applicable.