



Australian Government

MSS408006 Develop and refine systems for improvement in operations

Release: 1

MSS408006 Develop and refine systems for improvement in operations

Modification History

Release 1. Supersedes and is equivalent to MSS408006A Develop and refine systems for continuous improvement in operations

Application

This unit of competency covers the skills, knowledge and processes required to ensure that continuous improvement systems do not stultify and continue to improve along with other operational systems in an organisation. This unit is about improving the process yield/unit of effort or cost, reducing process variation and increasing process reliability, upgrading, enhancing or refining process outputs, and includes developing a culture of reviewing and sustaining change ensuring improvements are maintained and built on.

This unit applies to managers and people with a similar sphere of influence and scope of authority and responsibility and who are familiar with competitive systems and practices, continuous improvement and locking in improvements.

This unit may also be applied to service organisations applying competitive systems and practices principles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|----------------------------------|-----|--|
| 1 Establish parameters of | 1.1 | Describe organisation systems that impact on continuous improvement. |
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current internal improvement systems	1.2	Identify current relevant metrics and their values.
	1.3	Check that metrics are collected for all improvements.
	1.4	Determine yield of current improvement processes.
	1.5	Review results of improvements.
2	Distinguish kaizen blitz processes	
	2.1	Identify all improvements which have occurred over an agreed period of time.
	2.2	Distinguish between kaizen blitz (breakthrough improvements) and kaizen (continuous improvements).
	2.3	Determine the timing of kaizen blitz breakthrough improvement processes.
	2.4	Analyse factors controlling the timing and selection of kaizen blitz.
	2.5	Analyse kaizen to identify cases where kaizen blitz were required.
	2.6	Validate findings with process/system owners and obtain required approvals.
	2.7	Improve timing/selection of kaizen blitz.
	2.8	Improve other factors limiting the gains from kaizen blitz.
3	Develop kaizen practice	
	3.1	Check that levels of delegated authority and responsibility are appropriate for kaizen from the shop floor.
	3.2	Ensure all personnel have appropriate capabilities for kaizen processes.
	3.3	Ensure personnel and systems recognise potential kaizen blitz projects.
	3.4	Ensure sufficient resources are available for the operation of kaizen and kaizen blitz processes.
	3.5	Check that relevant information flows from improvement changes to all required areas and

- stakeholders.
- 3.6 Check data collection and metrics analysis capture changes which result from improvement actions.
 - 3.7 Check that improvement changes are standardised and sustained.
 - 3.8 Check review processes for routine kaizen.
 - 3.9 Remove or change factors limiting gains from improvements.
 - 3.10 Modify systems to ensure appropriate possible changes are referred to other improvement processes.
 - 3.11 Institutionalise improvement.
- 4 **Establish parameters of current external improvement systems**
- 4.1 Review value stream systems that impact on improvement.
 - 4.2 Review procedures for deciding improvement methodologies.
 - 4.3 Identify current relevant metrics and their values, as appropriate.
 - 4.4 Determine yield of current improvement processes.
 - 4.5 Review results of improvements.
- 5 **Explore opportunities for further development of value stream improvement processes**
- 5.1 Review mechanisms for consultation with value stream members.
 - 5.2 Develop mechanisms for further improving joint problem solving.
 - 5.3 Develop mechanisms for increased sharing of organisational knowledge.
 - 5.4 Obtain support and necessary authorisations from process/system owners.
 - 5.5 Capture and standardise improvements.
 - 5.6 Improve factors limiting gains from kaizen.

6	Review systems for compatibility with improvement strategy	6.1	Review all systems which impact or are impacted on improvements and the improvement system.
		6.2	Analyse relationships between improvement systems and other relevant systems.
		6.3	Analyse practices caused by and results from the systems.
		6.4	Negotiate changes to the systems to improve the outcomes from improvement systems.
		6.5	Obtain necessary approvals to implement changes.
		6.6	Monitor the implementation of the changes.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (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.
Organisation systems include one or more of:	• problem recognition and solving • operational/process improvement • improvement projects • product/process design and development • processes for making incremental improvements.
Relevant metrics to determine the performance of the improvement system include one or more of:	• hurdle rates for new investments • KPIs for existing processes • quality statistics • delivery timing and quantity statistics • process/equipment reliability ('uptime') • incident and non-conformance reports • complaints, returns and rejects.
Resources for improvement include the consideration of all of:	• improvement budget • guidelines for trialling of possible improvements • mechanism for approvals for possible improvements • business case guidelines for proposed improvements • indicators of success of proposed improvement • mechanisms for tracking and evaluation of changes • forum for the open discussion of the results of the implementation • mechanisms for the examination of the improvement for additional improvements • organisation systems to sustain beneficial changes.
Capturing value stream improvements includes one or more of:	• revised contractual arrangements • revised specifications • signed agreements • other documented arrangements which formalise the raised base line.

- Systems impact/are impacted on improvements include one or more of:**
- office
 - purchasing
 - rewards (individual or team at all levels)
 - sales
 - marketing
 - maintenance
 - process/product
 - transport and logistics.
- Organisational knowledge includes one or more forms of information which is:**
- quantified or otherwise modified to make its outcomes measurable or observable
 - expressed in an accessible and distributable form appropriate to the organisation operations and stakeholders.
- Improvements include one or more of:**
- process, plant, procedures or practice
 - changes to ensure positive benefits to stakeholders are maintained.
- Manager includes one or more of:**
- a person who may has a formal, permanent position
 - a person who has an ad hoc role in facilitating the function of multiple teams in a workplace, departments or entire organisations.

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS408006 Develop and refine systems for improvement in operations

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to develop improvement systems for one (1) or more processes or systems and to:

- review current improvements and improvement processes
- improve the practice of kaizen and kaizen blitz
- explore opportunities for improvement to improvement processes along the value stream
- take steps to improve the outcomes from improvement systems.

Knowledge Evidence

Must provide evidence that demonstrates sufficient knowledge to interact with relevant personnel and be able to apply and improve the use of improvement systems, including knowledge of:

- distinction between and complementarity of kaizen and kaizen blitz
- influence, persuasion and negotiation techniques
- competitive systems and practices tools relevant to the process/system and value stream
- methods for the evaluation of the success of change.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence should use one or more of:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria
 - evidence of routine, day-to-day use of kaizen and kaizen blitz which together provides sufficient evidence
 - some combination of these.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.

- Assessment should use a real evidence from real kaizen and kaizen blitz outcomes for an operational workplace/value stream.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

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