



Australian Government

Department of Education, Employment and Workplace Relations

MSS405041A Implement improvement systems in an organisation

Release: 1

MSS405041A Implement improvement systems in an organisation

Modification History

New unit, superseding MSACMT641A Implement a continuous improvement system - Not equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to introduce and institutionalise continuous improvement and breakthrough improvement processes in an organisation.

Application of the Unit

This unit applies to an individual responsible for the introduction of improvement systems across an organisation. The systems will include a continuous improvement system sometimes also known as kaizen, and breakthrough improvement sometimes known as kaizen blitz.

The continuous improvement (kaizen) system consists of strategies for continuously monitoring for and implementation of incremental improvements to processes, operations and products. Breakthrough improvement 'events' (kaizen blitz) covers the identification of improvement opportunities that are best undertaken in a single exercise.

This unit primarily requires the application of skills associated with teamwork, problem solving, initiative and enterprise, and planning and organising skills in order to identify, implement and institutionalise kaizen activity. Communication skills are required to gather information and consult with team members and other stakeholders. This unit also requires aspects of self-management and learning to ensure feedback and new learning is integrated into continual improvement.

Depending on the starting point for the continuous improvement program in the enterprise other relevant units may need to be selected, including:

- *MSS402080A Undertake root cause analysis*
- *MSS405011A Manage people relationships*
- *MSS405040A Manage 5S system in an organisation*
- *MSAPMSUP390A Use structured problem solving tools.*
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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	Prepare for improvement systems implementation	1.1	Determine scope of improvement systems
		1.2	Identify key performance indicators (KPIs) for inclusion in improvement systems
		1.3	Prepare operating instructions and other required documentation for continuous and breakthrough improvement systems
		1.4	Ensure compliance with health, safety and environment (HSE) and other regulatory requirements are addressed in improvement instructions
		1.5	Identify and brief implementation team
		1.6	Prioritise areas operation, or processes requiring early action
		1.7	Prepare communication strategy for employees and other stakeholders
		1.8	Make infrastructure and support arrangements for improvement systems
		1.9	Obtain required approvals for commencement of improvement systems

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| 2 | Implement improvement systems | 2.1 | Arrange for initial training in continuous improvement (kaizen) and related competitive systems and practices for employees |
| | | 2.2 | Facilitate the development of operating protocols for continuous improvement at the team level |
| | | 2.3 | Establish decision making mechanism for system level continuous improvement |
| | | 2.4 | Invite suggestions for breakthrough improvements |
| | | 2.5 | Establish mechanism for prioritising breakthrough improvements |
| | | 2.6 | Establish breakthrough teams and implement priority breakthrough events |
| | | 2.7 | Clarify points of disagreement/uncertainty over improvement systems implementation through consultation and, where required, by reference to procedures or other relevant authority |
| 3 | Monitor implementation of improvement systems | 3.1 | Consult stakeholders on processes and perceived success of early implementation of continuous and breakthrough improvement events |
| | | 3.2 | Analyse processes and operations to quantify variations in KPIs over early period of implementation of improvement systems |
| | | 3.3 | Identify and solve ongoing performance issues |
| | | 3.4 | Negotiate any differences between problems and proposed solutions |
| | | 3.5 | Develop plans and obtain agreements to implement further improvements |
| | | 3.6 | Implement improvements |
| | | 3.7 | Measure changes and calculate benefits |
| | | 3.8 | Complete all relevant documentation |
| | | 3.9 | Communicate achievements to stakeholders |

- 4 Institutionalise continuous improvement
 - 4.1 Arrange for regular reviews of improvement systems
 - 4.2 Integrate improvement system reports with other reporting processes, including visual management systems
 - 4.3 Arrange for regular reporting of improvement system results to customers and other critical stakeholders

Required Skills and Knowledge

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

Required skills

Required skills include:

- implementing continuous and breakthrough improvement in a variety of contexts, including a mixture of supportive and non-supportive team environments
- undertaking self-directed problem solving and decision-making
- communicating across all levels in the organisation and to people of different levels of literacy
- analysing customer features/benefits, organisation goals and past performance and setting KPIs for inclusion in a continuous improvement system
- prioritising improvement suggestions in terms of:
 - the extent to which they add to customer features/benefits
 - feasibility
 - cost
- preparing operating procedures and other documentation, including establishing version control and amendment procedures
- analysing information and data to identify variation and evaluate improvements
- measuring and calculating performance variables
- solving problems to root cause
- identifying waste (muda)

Required knowledge

Required knowledge includes:

- continuous and breakthrough improvement (kaizen and kaizen blitz) philosophy and process
- competitive systems and practices, including:
 - value stream mapping
 - 5S
 - Just in Time (JIT)
 - mistake proofing
 - process mapping
 - establishing customer pull
 - setting of key performance indicators/metrics
- types of KPIs and their impacts on performance
- improvement processes, including implementation, monitoring and evaluation strategies

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.

<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> • interpret operations, processes and products in terms of customer features/benefits and then set appropriate KPIs • prepare appropriate documentation for continuous and breakthrough improvement processes • establish decision making processes for considering system level continuous improvement suggestions • encourage and lead others in implementing continuous improvement system • problem solve implementation issues with continuous improvement system • lead and motivate others in planning, implementing and sustaining improvements.
<p>Context of and specific resources for assessment</p>	<p>Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices.</p> <p>Access may be required to:</p> <ul style="list-style-type: none"> • 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.
<p>Method of assessment</p>	<p>A holistic approach should be taken to the assessment.</p> <p>Competence in this unit may be assessed by using a combination of the following to generate evidence:</p> <ul style="list-style-type: none"> • demonstration in the workplace

	<ul style="list-style-type: none"> • 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. <p>In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</p>
<p>Guidance information for assessment</p>	<p>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.</p>

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.

<p>Competitive systems and practices</p>	<p>Competitive systems and practices may include, but are not limited to:</p> <ul style="list-style-type: none"> • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (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
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	<p>systems</p> <ul style="list-style-type: none"> • 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 <p>Competitive systems and practices should be interpreted so as to take into account:</p> <ul style="list-style-type: none"> • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
Scope of improvement systems	<p>The scope of the improvement systems includes:</p> <ul style="list-style-type: none"> • target divisions, operations, work processes, products and sites that stakeholders want included in a particular improvement system • goals and objectives of the organisation: <ul style="list-style-type: none"> • levels of targeting for the continuous improvement system, including the system level focusing on the value stream and the overall achievement of customer defined features/benefits • process level focusing on individual processes, teams and team leaders
Relevance of KPIs	<p>Relevance of KPIs includes:</p> <ul style="list-style-type: none"> • appropriateness (did they lead to/encourage desirable performance?) • currency (are they still encouraging desirable performance?) • unintended consequences (do they lead to outcomes which are not desirable – even if some performance is desirable?) • signal/noise (is the balance between desirable and undesirable outcomes strong and positive?)

Instructions for incremental or breakthrough improvement processes	<p>Instructions for incremental or breakthrough improvement process include:</p> <ul style="list-style-type: none"> • methods for employees to suggest incremental or breakthrough improvement • criteria for identifying a breakthrough improvement need • approval processes • monitoring and reporting processes
Procedures	<p>Procedures may include:</p> <ul style="list-style-type: none"> • work instructions • standard operating procedures • formulas/ recipes • batch sheets • temporary instructions and similar instructions provided for the smooth running of the plant, process or operation • good operating practice as may be defined by industry codes of practice (e.g. good manufacturing practice (GMP) and responsible care) • government regulations • required procedures under legislation or regulation, awards and enterprise agreements <p>Procedures may be:</p> <ul style="list-style-type: none"> • written, verbal, computer based or in some other format
Waste	<p>Waste (also known as muda in the Toyota Production System and its derivatives) is any activity which does not contribute to customer benefit/features in the product or process. Categories of waste include:</p> <ul style="list-style-type: none"> • excess production and early production • delays • movement and transport • poor process design • inventory • inefficient performance of a process • making defective items • activities which do not yield any benefit to the organisation or any benefit to the organisations customers
Solve performance issues	<p>Solving performance issues includes:</p> <ul style="list-style-type: none"> • generating improvement ideas (brainstorming/asking

	experts) <ul style="list-style-type: none">• selecting most appropriate improvement ideas to proceed with• conducting experiments where required to test idea• making final selection of improvement ideas• determining most appropriate improvement strategy (i.e. incremental or breakthrough (kaizen blitz) improvement)
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Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.