



Australian Government

MSS407003 Analyse process changes

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSS407003A Analyse process changes

Application

This unit of competency covers the skills and knowledge required to quantitatively analyse past changes made in an organisation's operations, systems, process or environment to ensure the quantum of expected change has been achieved and that gains are maintained and are used as a basis for further gains.

The unit includes statistical and other mathematical analysis of data, methods for capturing data on implemented changes (quantitative and qualitative) and producing useful information from this data. It includes consultation with stakeholders both for data validation and consensus decision making for future improvements.

This unit applies to team leaders, technical experts and people with a similar sphere of influence/scope of authority and responsibility who already have a knowledge of statistics used in managing operations and of process capability improvement and some knowledge of factorial design, the selection and analysis of appropriate metrics, and the discrimination between valid and invalid interpretations of data

The unit applies to reviews of both intended and unintended consequences of change and the effectiveness of the implementation of the change. This unit is not intended to be applied to a technical or engineering review of a major capital expenditure or similar.

This unit takes a largely quantitative approach to the review.

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 | Analyse a change | 1.1 | Identify changes which have occurred. |
| | | 1.2 | Select a change or group of related changes to analyse. |
| | | 1.3 | Determine the initiation of the selected change. |
| | | 1.4 | Identify relevant metrics and predicted values for these metrics. |
| | | 1.5 | Gather data for these metrics prior to the change. |
| | | 1.6 | Gather data and information on the implementation of the change. |
| | | 1.7 | Gather data for these metrics after the change. |
| | | 1.8 | Survey all key metrics and identify anywhere variations may correlate with the change being analysed. |
| | | 1.9 | Discuss results of change with key stakeholders and identify other possible (qualitative or quantitative) results of the change. |
| | | 1.10 | Analyse this data to determine the results of the change. |
| 2 | Review results of change with stakeholders | 2.1 | Identify trends over time in all relevant metrics. |
| | | 2.2 | Analyse correlated metrics to determine causal relationship. |
| | | 2.3 | Audit health, safety and environment (HSE) impacts as a result of the change. |
| | | 2.4 | Present information in a form understandable by stakeholders. |
| | | 2.5 | Discuss analysed information with relevant stakeholders. |
| | | 2.6 | Modify information based on stakeholder input, as required. |
| | | 2.7 | Develop a consensus view of the result of the change which is supported by the information available. |

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| | | 2.8 | Validate the consensus view with stakeholders. |
| 3 | Identify future improvements | 3.1 | Discuss lessons learned from the change with stakeholders. |
| | | 3.2 | Capture key knowledge in accordance with systems and procedures. |
| | | 3.3 | Identify future improvements in collaboration with team members. |
| | | 3.4 | Validate identified changes with stakeholders. |
| | | 3.5 | Obtain sign-off from process/system owner. |
| | | 3.6 | Start the process for implementing future improvements. |
| | | 3.7 | Check that the planned improvements are occurring. |
| | | 3.8 | Take action to sustain improvement by standardising. |

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.
Change includes one or more of:	• plant, operations, products, procedures or practice • continuous improvement (or an improvement event/project) or implementing new products, technology or systems • intended to make an improvement or to implement new products, technology or systems.
Presentation of information may occur in one or more formats:	• in appropriate visual forms (e.g. graphs, charts and noticeboards • verbally or other forms able to be understood and used by stakeholders.
Stakeholders include one or more of:	• work team members • value stream members • managers.
Results of change include one or more of:	• an initial improvement followed by a return to previous performance • continued improvement • continued detriment or other variations over time.
Improvements include one or more of:	• changes to operations, process, plant, procedures or practice • changes to ensure positive benefits are maintained.
Sustaining improvement include one or more of:	• standard procedures and work instructions • standard practice • other relevant documents and practices.

- Team leader includes one or more of:**
- a person with a formal, permanent role
 - a person with an ad hoc role in facilitating the function of a team in a workplace.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS407003A Analyse process changes

Links

Companion Volume implementation guides are found in VETNet -

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