



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MSACMG803A Develop models of future state manufacturing practice**

**Revision Number: 1**

## MSACMG803A Develop models of future state manufacturing practice

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers the establishment of processes for identifying future state models of best manufacturing practice that are then used as the template for both strategic decision making and goal setting. It may be applied to whole organisations or significant sections of the value chain.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies in an environment where manufacturing practices are standardised and there is a culture that accepts sustaining improvements and building on them. It is intended for managers and people with a similar sphere of influence.</p> <p>This unit applies to individuals who are familiar with competitive manufacturing, value chain mapping, and culture improvement. Where this is not the case the following units can be completed to supply the necessary skills:</p> <ul style="list-style-type: none"> <li>• MSACMS600A Develop a competitive manufacturing system</li> <li>• MSACMS601A Analyse and map a value chain</li> <li>• MSACMC613A Facilitate holistic culture improvement in a manufacturing enterprise.</li> </ul> <p>This unit may also be applied to service organisations applying competitive manufacturing principles.</p>
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## 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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Develop a shared future state model	1.1. Establish an appropriate representative team 1.2. Analyse a value chain map of an appropriate section of the value chain 1.3. Determine the current state of practice across the value chain 1.4. Identify overall organisation strategy, direction and competitive manufacturing philosophy 1.5. Validate view with process/system owner
2. Develop and review a collaborative best practice model	2.1. Develop a future state model of practice 2.2. Review model with process/system owners and other stakeholders across the value chain as appropriate 2.3. Modify model to deliver better results for the customer and reduce wastes 2.4. Develop implementation plan in consultation with stakeholders
3. Provide the resources necessary to move to the future state	3.1. Identify changes required to infrastructure 3.2. Determine benefit/cost for required changes 3.3. Prioritise required changes 3.4. Obtain required authorisations 3.5. Facilitate the provision of resources needed to implement plan
4. Review future state model	4.1. Manage the implementation of improvements 4.2. Identify measures of progress towards agreed future state 4.3. Review progress towards future state 4.4. Agree methods of improving areas which could progress better 4.5. Agree on methods for evaluating future state 4.6. Validate measures and methods with relevant managers

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- decision making
- communication at all levels
- situation analysis

#### Required knowledge

- competitive manufacturing principles
- workplace strategy and vision
- ways of determining competency gaps

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Demonstrates skills and knowledge required to:</p> <ul style="list-style-type: none"> <li>critically review current and future state maps and ensure their alignment with organisation strategy and philosophy.</li> </ul> <p>In particular look for evidence of:</p> <ul style="list-style-type: none"> <li>analysis of value chain maps</li> <li>reviewing of progress towards future state and taking corrective action</li> <li>alignment of future state with organisation strategy.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment may occur on the job or in an appropriately simulated environment. Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</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>Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.</p>
<b>Method of assessment</b>	<ul style="list-style-type: none"> <li>Assessment must satisfy the endorsed assessment guidelines of the Manufacturing Training Package.</li> <li>Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge.</li> <li>Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application.</li> <li>Assessment may be applied under project related conditions (real or simulated) and require evidence of</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>process.</p> <ul style="list-style-type: none"><li>• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.</li><li>• Assessment may be in conjunction with assessment of other units of competency where required.</li></ul>
<b>Guidance information for assessment</b>	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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>	
<b>Codes of practice/standards</b>	Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used
<b>Health, safety and environment (HSE)</b>	All changes implemented are expected to be at least neutral, or preferably beneficial, in their impact on health, safety and environment
<b>Organisation</b>	<p>Organisation includes:</p> <ul style="list-style-type: none"> <li>• any part of a manufacturing or service organisation</li> <li>• companies, government bodies or other body of people aiming to produce a product to service a customer</li> </ul>
<b>Representative team</b>	<p>Representative team includes:</p> <ul style="list-style-type: none"> <li>• members from the value chain representing key parts of that chain and may, or may not, include members from outside the organisation</li> </ul>
<b>Current state</b>	<p>Current state of manufacturing practice includes:</p> <ul style="list-style-type: none"> <li>• output quantities and qualities</li> <li>• variability in quality and quantity</li> <li>• up time</li> <li>• causes and times for the different wastes</li> <li>• key performance indicators (KPIs)</li> <li>• investment hurdle rates and actual rates of return</li> <li>• HSE indicators</li> <li>• reliability indicators</li> <li>• other indicators appropriate to the organisation and its technology and processes</li> </ul>
<b>Infrastructure</b>	Infrastructure includes:



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• policies and procedures</li> <li>• plant and equipment</li> <li>• materials, energy, utilities and other consumables</li> <li>• workforce arrangements including employee numbers, organisation structure, competencies and competency mix</li> </ul>
<b>Future state model of practice</b>	<p>The model of practice will be an improved future state model which will:</p> <ul style="list-style-type: none"> <li>• help achieve the required organisation strategy and philosophy</li> <li>• give direction to improvements and actions</li> <li>• include forecasts of: <ul style="list-style-type: none"> <li>• output quantities and qualities</li> <li>• variability in quality and quantity</li> <li>• HSE indicators</li> <li>• reliability/up time</li> <li>• rates of return</li> <li>• other indicators appropriate to the organisation and its technology and processes</li> </ul> </li> </ul>
<b>Measures of progress</b>	<p>Measures of progress include:</p> <ul style="list-style-type: none"> <li>• those metrics and other indicators defined and agreed before the commencement of implementation which provide feedback on the progress towards the future state</li> </ul>
<b>Competitive philosophy</b>	<p>Competitive philosophy includes that body of knowledge and techniques which together guides an organisation towards achieving best practice in their processes and includes:</p> <ul style="list-style-type: none"> <li>• manufacturing practice</li> <li>• lean manufacturing</li> <li>• agile manufacturing</li> </ul>
<b>Prioritising action</b>	<p>Prioritising of actions may include:</p> <ul style="list-style-type: none"> <li>• benefit/cost analysis</li> <li>• readiness analysis</li> <li>• tactical survival response</li> </ul>
<b>Manager</b>	<p>Manager may include:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>any person who may have either a permanent or an ad hoc role in facilitating the function of multiple teams in a workplace, departments or entire organisations</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	CM Graduate
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		