Australian Government
Department of Education, Employment and Workplace Relations

MSACMS601A Analyse and map a value chain

Revision Number: 1

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

MSACMS601A Analyse and map a value chain

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the skills needed to analyse and map a value chain, including the clear identification of the place of a manufacturing enterprise in the value chain and its contribution to the value chain. The unit will cover the identification of enterprises in a value chain, including their relationships and the activities undertaken by value chain enterprises. The identification skills include identification at the virtual or information level, the technical or process level and at the physical or logistic level. The unit includes the analysis of value adding and non-value adding activities and the information needs for successful value chain mapping, including information technology (IT) needs. This unit covers the analysis of the supply chain, the demand chain as well as the overall value chain.

Application of the Unit

Application of the unit	In a typical scenario, the person (who may be a production/plant manager, purchasing/technical officer or similar) needs to analyse a value chain, a supply chain or a demand chain in order to understand the interactions between all members and determine the value added/potential value added by each member. This is the basis for the design of ***Just in Time*** (***JIT***) and for the determination of ***waste***. Value chain analysis is not just a one off activity but rather an ongoing activity of re-analysis as the value chain changes as its members progress towards truly competitive manufacturing.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	*MSACMT631A*	*Undertake value analysis of product costs in terms of customer requirements*.

Employability Skills Information

Employability skills	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

ELEMENT	PERFORMANCE CRITERIA
1. Map the value stream	1.1. Select a product/product group for analysis 1.2. Identify ultimate customer/s 1.3. Identify ultimate supplier/s 1.4. Identify all organisations between ultimate supplier and ultimate customer 1.5. Identify all steps in own organisation
2. Define customer need	2.1. Determine the features/benefits obtained by customers from product/s 2.2. Determine methods of measuring the contribution to each features/benefits 2.3. Identify possible data sources for required measures 2.4. Implement measurement of contribution to features/benefits
3. Assess the value added at each step	3.1. Identify value contributed by each external organisation 3.2. Determine value added by each internal step 3.3. Determine method of measuring value added
4. Reduce waste	4.1. Compare value added to customer benefit/feature 4.2. Identify activities which do not add to customer benefit/features 4.3. Liaise with external value chain members to determine methods to reduce overall waste 4.4. Take required actions to reduce waste

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
• analysis • problem solving • communication • calculations • negotiation
Required knowledge
• purpose of value chain analysis • methods of value chain analysis • types of waste and methods of reducing it • process used to make product • processes employed by other members of the value chain sufficient to have meaningful dialog with them

Evidence Guide

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 requirements	The person will have a current value map and will be continuously updating the analysis of the value chain to drive further improvement both in their own organisation and also others in the value chain.
What are the specific resource requirements for this unit?	Access to an organisation following competitive manufacturing.
What critical aspects of evidence are required to demonstrate competency in this unit?	Evidence of a current analysis of the value chain should be available, along with the waste reductions which flow from it.
In what context should assessment occur?	Assessment needs to occur in an organisation pursuing competitive manufacturing, or by use of a project or case study.
Are there any other units which could or should be assessed with this unit or which relate directly to this unit?	This unit could be assessed concurrently with other units related to development and improvements of systems for competitive manufacturing.
What method of assessment should apply?	Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria, skills and knowledge. A holistic approach should be taken to the assessment. Assessors should gather sufficient, fair, valid, reliable, authentic and current evidence from a range of sources. Sources of evidence may include direct observation, reports from supervisors, peers and colleagues, project work, samples, organisation records and questioning. Assessment should not require language, literacy or numeracy skills beyond those required for the unit. The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace. The method of assessment should be discussed and agreed

EVIDENCE GUIDE	
	with the assessee prior to the commencement of the assessment.
What evidence is required for demonstration of consistent performance?	Where evidence is provided from an initial value chain analysis, then this may provide sufficient evidence. Where evidence is from an ongoing updating of an analysis then evidence is required from a range of analyses/products.

Range Statement

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.	
Value chain	Competitive manufacturing organisations encompass the entire production system, beginning with the ***customer***, and includes the product sales outlet, the final assembler, product design, raw material mining and processing and all tiers of the value chain (sometimes called the supply chain). Any truly 'competitive' system is highly dependent on the demands of its customers and the reliability of its suppliers. No implementation of competitive manufacturing can reach its full potential without including the entire 'enterprise' in its planning.
Value added	Value added is measured against its contribution to the customer benefits/features and may be in the form of: • technical benefits/features • location benefits/features • aesthetic benefits/features • information benefits/features.
Just in time (**JIT**)	Just in time (JIT) is a production scheduling concept that calls for any item needed at a production operation - whether raw material, finished item, or anything in between, to be produced and available precisely when needed, neither a moment earlier nor a moment later.
Waste	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. Within manufacturing, categories of waste include: • excess production and early production • delays • movement and transport • poor process design • inventory • inefficient performance of a process

RANGE STATEMENT	
	• making defective items. Waste for this unit may include activities which do not yield any benefit to the organisation or any benefit to the organisations customers.

Unit Sector(s)

Unit Sector	CM Systems

Co-requisite units

Co-requisite units	

Functional area

Functional Area	