



Australian Government

MSS405037 Facilitate application of theory of constraints

Release: 1

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Modification History

Release 1. Unit code changed. Unit title changed. Application changed. Elements changed. Performance Criteria changed. Foundation Skills populated. Range of Conditions removed. Assessment Requirements changed. Workplace outcome changed. Supersedes and is not equivalent to MSS405024 Apply the theory of constraints.

Application

This unit describes the skills and knowledge required to facilitate the application of the theory of constraints to maximise output from a capacity-constrained process or system.

This unit applies to managers, technical specialists or those in similar roles with responsibility and technical expertise to apply a systems view of the constraint and guide and assist others to identify and address the constraint and adapt related systems to increase and improve capacity.

This unit applies to any organisation that is implementing continuous improvement or more formal competitive systems and practices.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Identify the constraint and throughput	1.1 Identify goals and objectives of organisation 1.2 Identify process to be examined based on organisation goals and objectives 1.3 Determine throughput of steps in process 1.4 Identify capacity-constrained process 1.5 Determine optimum throughput of capacity-constrained process

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	(drum) 1.6 Determine maximum throughput based on the capacity-constrained process
2. Optimise constraint throughput	2.1 Determine optimum accumulation (buffer) before capacity-constrained process 2.2 Determine appropriate supply schedule and trigger (rope) for buffer 2.2 Provide information and guidance to personnel to implement buffer and rope to match drum 2.3 Monitor capacity-constrained process to ensure optimum throughput 2.4 Take required actions to minimise non-productive rate at capacity-constrained process 2.5 Consult with key stakeholders to confirm or adapt actions to optimise throughput
3. Prioritise processes and resources to maximising output at the constraint	3.1 Provide information and guidance to personnel to ensure non-constrained locations protect buffers and prevent build-up of work except at buffer locations 3.2 Identify operations that conflict with maximising constraint performance 3.3 Determine and guide implementation of measures to address identified conflicts
4. Determine strategy to reduce capacity constraint	4.1 Examine causes of constrained capacity 4.2 Develop possible ways of increasing capacity 4.3 Analyse and rank possible alternatives for increasing capacity 4.4 Draft strategy for increasing capacity based on analysis 4.5 Obtain required approval for response strategy
5. Implement a process of ongoing improvement	5.1 Develop implementation plan appropriate to organisation 5.2 Undertake implementation in accordance with plan 5.3 Monitor implementation and modify implementation plan to make improvements 5.4 Identify next capacity-constrained process and initiate action

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret workplace documentation
- Writing skills to communicate implementation plans
- Oral communication skills to guide and assist others
- Numeracy skills to determine capacity.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

No equivalent unit.

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 MSS405037 Facilitate application of theory of constraints

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- facilitate application of the theory of constraints, involving at least 2 other people, to at least one constrained process.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- theory of constraints, including five focusing steps, types of constraints and methods of optimising process throughput, including drum, rope and buffer
- operations of the process and process steps
- approaches to reducing the constraint
- strategic plans for reducing the constraint, how they are developed and what they include
- underpinning values relevant to competitive systems and practices and application to technical role and/or implementation projects including:
 - respect for people
 - respect for process
 - transparency and culture of learning
 - go and see and/or go to the source decision-making
 - empirical development
- communication styles and methods to suit a range of audiences.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - relevant data
- modelling of industry operating conditions.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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