
Overview

This unit covers the competences required for carrying out a Six Sigma process mapping activity. It requires you to select a suitable process on which to carry out the process mapping activity, and to identify the key stages that form the overall process under investigation. These would be the process input variables and the process output variables, and would include things which are controllable, critical, noise, and standard operating procedures.

You will be required to contribute to the construction of the process map for the Six Sigma project and to identify the value added and non-value added steps in the process. You will also need to consider the information gathered in the Six Sigma mapping activity, and to suggest areas where improvements can be made to the process as a result of the information gathered.

Your responsibilities will require you to comply with organisational policy and procedures for the activities undertaken, and to report any problems with the activities that you cannot solve, or that are outside your responsibility, to the appropriate authority. You must ensure that all the necessary documentation/visual representation is completed accurately and legibly. You will be expected to take full responsibility for your own actions within the activity, and for the quality and accuracy of the work that you produce.

Your underpinning knowledge will provide a good understanding of Six Sigma process mapping, and will provide an informed approach to the techniques and procedures used. You will need to understand the principles and the application of Six Sigma process mapping, in adequate depth to provide a sound basis for carrying out the activities to the required criteria.

Applying safe working practices will be a key issue throughout.

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Carrying out Six Sigma process mapping

Performance criteria

You must be able to:

- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
- P2 select a suitable process on which to carry out the process mapping activity
- P3 identify the key stages that form the overall process under investigation
- P4 collect the data necessary to construct the Six Sigma process map
- P5 carry out the construction of the process map for the Six Sigma project
- P6 identify value added and non-value added steps in a process
- P7 identify improvements to the process as a result of the information gathered in the Six Sigma mapping activity

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Knowledge and understanding

You need to know and understand:

- K1 the health and safety requirements of the area in which you are carrying out the process mapping activity
- K2 the benefits of carrying out Six Sigma process mapping
- K3 what a Six Sigma process map is and how it is constructed
- K4 how the Six Sigma process map integrates within a Six Sigma project
- K5 what is meant by key process input variables (KPIVs) and key process output variables (KPOVs)
- K6 the data collection point for the key process input variables and key process output variables (such as gauges, forms and samples)
- K7 what the main types of key process input variables and key process output variables are in terms of being controllable, critical, noise, or standard operating procedures
- K8 who should create a Six Sigma process map
- K9 the difference between a value added activity and a non-value added activity
- K10 the roles and responsibilities of individuals within a process mapping team
- K11 the extent of your own authority within the project, and to whom you should report in the event of problems that you cannot resolve

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Additional Information

Scope/range related to performance criteria

You must be able to:

1. produce a process map, which identifies:
 - 1.1. the key process input variables
 - 1.2. the key process output variables
2. classify both the key process input variables and the key process output variables as **one or more** of the following:
 - 2.1. controllable
 - 2.2. critical
 - 2.3. noise
 - 2.4. standard operating procedure
3. identify and add to the process map the specifications of **both** the:
 - 3.1. key process input variables
 - 3.2. key process output variables

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