
Overview

This standard covers the competences required for contributing to the application of a structured Six Sigma methodology to a project. It involves contributing to the identification of the Six Sigma organisational infrastructure, roles and responsibilities and business-specific metrics that will apply. These will include financial, quality and process aspects of the project. You will be expected to contribute to identifying areas where the Six Sigma tools, techniques and activities can be applied, in order to demonstrate those factors that are critical to the customer, business and process.

Contribution to the identification of the cost of poor quality, by identifying the defects per million opportunities (DPMO), is a major part of this standard.

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 relevant authority. You will need to contribute to all the five phases of Six Sigma within the project (such as define, measure, analyse, improve and control) and to the completion of all necessary project documentation, which must be accurate and legible. You will be expected to take 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 the application of Six Sigma methodology, and will provide an informed approach to the techniques and procedures used. You will need to understand the principles and application of Six Sigma methodology, 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.

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. contribute to applying the structured Six Sigma methodology and approach to the selected project
3. contribute to identifying the Six Sigma organisational infrastructure, roles and responsibilities and business-specific metrics that would apply
4. contribute to identifying areas and producing a metric chart to show where the Six Sigma tools, techniques and activities can be applied
5. contribute to the identification of the cost of poor quality, by identifying the defects per million opportunities (DPMO)
6. contribute to relating defects per million opportunities to the sigma score and identifying the gap to improve Six Sigma performance

Knowledge and understanding

You need to know and understand:

1. how to work safely at all times, complying with health and safety and other relevant regulations, directives and guidelines
2. the Six Sigma methodology and how it is applied to a project
3. the Six Sigma infrastructure of the business
4. the benefits that could arise from a Six Sigma project
5. the parts per million opportunities goal of Six Sigma
6. the calculation of defects per million opportunities
7. the five phases of Six Sigma that are applied to a project
8. how to define a Critical to Quality Characteristic (CTQC)
9. how non-value added activity can serve as a roadblock to achieving Zero Defect
10. how to identify an 'opportunity for defect'
11. the different roles of the key people in the Six Sigma
12. the relationship between key process input variables and key process output variables
13. the extent of your own authority, and to whom you should report in the event of problems that you cannot resolve

Scope/range related to performance criteria

1. Contribute in Six Sigma projects which cover **two** the following:
 1. manufacturing
 2. quality level
 3. administration
 4. other specific area
2. Contribute to utilising the following **five** phases of Six Sigma within the project:
 1. define
 2. measure
 3. analyse
 4. improve
 5. control
3. Contribute to producing a metric chart for the Six Sigma projects undertaken, to include **all** of the following:
 1. financial
 2. quality
 3. process
4. Contribute to identifying the Critical To Quality Characteristic (CTQC) of the projects, to include **all** of the following:
 1. cost
 2. quality
 3. delivery
5. Contribute to identifying the Six Sigma organisational infrastructure and the roles of the following:
 1. Champion
 2. Mentor
 3. Yellow belt
 4. Green belt
 5. Black belt
 6. Master black belt

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