Data Potential Academy

Six sigma Green belt course

4 Days Classroom training

OVERVIEW

Six Sigma (6σ) is a set of techniques and tools for process improvement. It seeks to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing variability in manufacturing and business processes. It uses a set of quality management methods, mainly empirical, statistical methods, and is supported by trained people within the organization who are experts in these methods.

The Six Sigma Green Belt course includes all the information, knowledge and tools required for successfully performing great Six Sigma projects independently. It is perfectly suited for individuals who want to make their career in Quality Management and also as a basic management skill for senior management roles. A Lean Six Sigma Green belt certified professional will have a thorough understanding on all the different phases of D-M-A-I-C. Attaining the Lean Six Sigma Green Belt certification will help an individual to enhance the skills and there by enables him to perform roles like Quality manager, Project Manager, Transformation specialist, etc.

What is D-M-A-I-C?

D-M-A-I-C is an acronym for Define, Measure, Analyze, Improve and Control. This is a Quality Strategy which is used to enhance the processes and implemented in Six Sigma and Lean Six Sigma to ensure the quality of the project.

KEY BENEFITS

- The highly qualified and senior industry faculty provides an unparalleled educational experience and practical business case studies.

- The program's format allows for sustained immersion in the learning environment, while minimizing time away from work

- The module learning experience dramatically expands your skill base and your breadth of understanding, enabling you to find new approaches to your business challenges and to consider a wider realm of potential opportunities and growth strategies.

- You will be able to Drive Six Sigma concepts and mentor teams within the organization

- Contribution to organizational growth plans by executing excellence and transformation projects

- Guide team members for relevant data collection, analysis and inference

- Achieve tangible/intangible benefits for the organization through operation excellence projects

- You can continue to use the sample size calculator and will receive a 30% discount on the use of statistical Data Potential Survey application.

- Tailored coaching & support for Career development

- Make new, life-long connections with experienced business people from a wide variety of cultures, industries and backgrounds.

- An exclusive Data Potential Academy "Certificate of completion" – Accredited by International Lean and Six sigma institute-UK .

- The candidates will be able to complete "Green belt Certification" on submitting two Green belt projects done by them. The projects will be reviewed by Data potential for good implementation of six sigma tools and methodology.

COURSE CONTENT

Introduction to Lean Six Sigma

1. Evolution and History of Six Sigma
2. Defining Six Sigma – management philosophy and approach
3. Overview of Six Sigma DMAIC process

Stakeholders & Setting up a Six Sigma Project

1. Identifying and documenting stakeholder requirements

   a. Identifying stakeholders and customers

   b. Data collection and analysis

   c. Determining critical requirements

2. Project Selection Criteria

   a. Identifying performance metrics

   b. Using financial criteria to evaluate project benefits

   c. Maximizing project benefits for the organization

3. Project Planning

   a. Creating Project Charter

   b. Charter Negotiation

4. Managing Team Dynamics – Change Acceleration

   a. Initiating teams

b. Stages of team evolution

c. Maslow's hierarchy of needs

d. Conflict Resolution Techniques

e. Management / Leadership styles

f. Roles played by people in a project

Is this the right course for me?

We recommend our Yellow Belt program for those looking to improve their leadership skills. It's also a great place to bolster your knowledge of Six Sigma fundamentals. Furthermore, it also helps if you aim to become a Subject Matter Expert or Executive Champion.

Are there any Pre-requisites for the course?

No pre-requisites are required for the Six sigma Yellow belt course. It is a foundation course for new Managers and Team Leaders to be successful in the managerial role.

This course provides the fundamental management concepts and data analysis skills required for Management roles.

Define

1. Inputs – Business case for Six Sigma project, Executive management sponsorship

2. Tools

    a. Organization hierarchy

    b. High level process maps – SIPOC / COPIS

    c. High level descriptive statistics

    d. Timelines and project milestones

    e. SMART goal statement

3. Outputs

    a. Project charter

    b. Established metrics

    c. Roles & responsibilities

    d. Project Y definition

    e. Defect definition

    f. Core team Identified, and roles assigned

    g. Project signoff

Measure

1. Objectives of Measure Phase

2. Inputs – the outputs of the Define phase

3. Tools

    a. Data collection tools and techniques

    b. Measurement system analysis

    c. Validation techniques (Gauge R & R)

    d. Statistical distributions

    e. Segmentation factors

    f. Data trends – time-based data collection

    g. Detailed Process map

4. Outputs

    a. Valid and reliable data collected

    b. Baseline process capability

    c. Process parameters affecting CTQs

    d. Cost of poor quality (COPQ)

    e. Measurement system validation

    f. Detailed process maps

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Analyze

1. Objectives of Analyze Phase

2. Inputs – outputs of the Measure phase

3. Data door vs Process door approaches

4. Tools

    a. Ishikawa diagram

    b. Failure mode and effects analysis

    c. Null Hypothesis creation

    d. P- value

    e. Types of errors (Alpha and Beta)

    f. Statistical Hypothesis testing

    g. Process capability study

5. Outputs

    a. Validated causes of defects

    b. Special and common causes of variation

    c. DPMO and sigma level

Improve

1. Objectives of Improve Phase

2. Inputs – outputs of the Analyze phase

3. Tools

    a. Returns on investment

    b. Solution design matrix

    c. Design of experiment

    d. Brainstorming methods

    e. Pilot selected solution

    f. Project planning and management tools

    g. Develop implementation plan

4. Outputs

    a. Cost / benefit for different solution

    b. Selection of solutions for implementation

    c. Implementation plan

Control

1. Objectives of Control Phase

2. Inputs – outputs of the Improve phase

3. Tools

    a. Control plan

    b. Statistical process control

4. Outputs

    a. Implemented solutions

    b. Revised measurement system

    c. Control plan for sustaining benefits

    d. Improves process capability

    e. Lessons learned

Internationally accredited Lean and Six sigma courses

The gold standard in quality professional certification, Data potential quality trainings and certifications instill a clear understanding of the quality concepts and rationale. Expert designed courses, most qualified faculty and International recognition and certification of our courses enables you to not only get a certification on your profile but builds the quality improvement skills to help you succeed in any role.