

Six Sigma Black Belt

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Quick View

Program Objectives

- ✓ Impart an understanding of Six Sigma to drive process and result oriented improvement culture.
- ✓ Equip with skills to identify and implement Black Belt level improvement projects and to assist Champions / Master Black Belts.

Duration: 8 Days

Batch Size: 15 - 20 (Recommended)

Participant Profile

- ✓ Candidates desirous of Lean Six Sigma Green Belt level qualifications
- ✓ Work experience (2+ years) from Manufacturing, IT/Technology, ITES/BPO/KPO/ITIM, Services or other industries.

Assessment

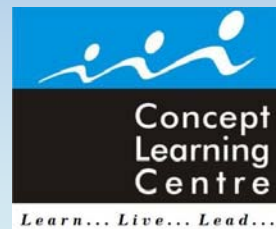
- ✓ Written Test (Multiple choice objective type questions)

Certification

- ✓ Six Sigma Black Belt (Participation and Course Completion) Certificate.

Concept Learning Centre

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www.managementconcept.com



Successful participant's name will be listed on
www.sixsigmaconcept.com

What is Six Sigma?

Six Sigma is a disciplined data driven approach for reducing variation in any process - from manufacturing to transactional and thereby eliminating defects. The goal is to achieve near perfection (*3.4 defects per million opportunities*).

Process improvements and variation reduction are achieved through application of *Six Sigma improvement projects*, which in turn, are executed following either the **DMAIC** (Define, Measure, Analyze, Improve, Control) or **DMADV** (Define, Measure, Analyze, Design, Verify) methodologies. **Black Belts** are the key players in execution of Six Sigma improvement projects.

Why this program?

- Six Sigma initiative has become a rage in the western world as well as in India. Every organization wants to embrace Six Sigma for improving market share and organization speed while keeping the cost of doing business at its minimum.
- However, our experience shows that many a times the project leaders suffer from adequate understanding of the appropriate tool to apply in a real life situation. Consequently, prior knowledge or experience takes precedence over data analysis. In fact, it is not uncommon to find projects, where a known (or assumed to be known) solution is recommended based only on ROI analysis!
- This program aims to provide an in-depth knowledge to the participants, so that the trained and certified Black Belts are able to
 - Select appropriate tools for successful and efficient execution of the improvement projects
 - Keep the improvement process data driven
 - Deal with the projects independently
 - Act as an internal change agent and resource person for quality

Registration fee (Special Introductory Offer)

INR 25,000/- per participant covering the cost of course material, tea / coffee, Indian Lunch, kit, project guidance and limited plant visits, if possible. Participants not having Laptop may have to pay Rs. 5,000/- extra for computer rent.

Program schedule

8 Days : Class room sessions

Program content (class room sessions)

Six Sigma overview:

Introduction to Six Sigma
Breakthrough strategies, Financial Benefits and Organizational Impact
Roles of six sigma players
Deployment of six sigma
Selection of six sigma projects
DMAIC Overview

Define phase:

Project Definition
SIPOC
VOC
Kano model
CTQ / CTB
COPQ Concept
Team and Project Charter, Roles Responsibilities

Measure phase:

Process Mapping (As-Is Process)
Data Attributes (Continuous Versus Discrete)
Measurement system definition and analysis (Gauge R & R)
Data Collection Techniques and Plan
Understanding Variation (Run Chart, Histogram, Mean, SD, Range)
Measuring Process and Performance Capability
Concept of "Waste" and VA/NVA ratio
Calculating Cycle time / Yield / Throughput
Calculating Sigma Metrics
Probability Distributions Concept
Baseline representation

Analyze phase:

Process flow charting
Brainstorming
C&E diagram , Matrix
FMEA
Stratification
Scatter, Correlation, Regression (Simple Linear and Multiple Linear Regression)
One Way ANOVA

Two way ANOVA
Determining Opportunity for Improvement
Hypothesis Testing (t Test, F Test, Chi Square)
Analyze Phase Review

Improve phase:

Brainstorming and Multi-voting
Failure Modes and Effects Analysis (FMEA)
DOE Concept
DOE Fractional Factorial Design, Full Factorial Design
Pilot solution and implement change
Manage change
Poka yoke

Control phase:

Process Control methods (Control charts, Mistake-proofing, 5S, Visual Standards)
Establishing Process Standards for Inputs, Process and Outputs
Develop Process Control Plan
Control Phase Review
Implement process control
Recognize team

Assessment and Feedback

* No of Topics may increase and decrease depending upon participant's prior knowledge.

Participants have to complete at least one Six Sigma Project

Training Methodology:

Lecture
Presentation through Audio- Video
Case Studies
Desk Top Exercises
Group Exercise
Games

Profile of Faculties:

- 1) M.B.A, Certified Lead Auditor (IRCA, UK), Certified TS 16949 IQA, Approved Sr. QMS Consultant (QCI), Six Sigma Black Belt (ISI-SQC-OR). He is Co-Chairman of Quality Committee in one of the leading Industrial association. He has been into Business improvement roles as a consultant, auditor and trainer for manufacturing and service industry for over 10 years. He has trained more than 4000 professionals. He has exposure in transactional processes, development and design processes, automotive manufacturing, electronic industry, bpo's, chemicals and pharma

industries, food processing, hospitality industries, healthcare and hospitals among others.

- 2) Master Black Belt Trainer, Statistician, who lead Indian Statistical Institute for 30 years. More than 30 people have done Ph.D under his guidance, Has published international paper on Quality and Productivity, DOE. Recipient of Kirloskar Award for Quality. Certified QMS Lead Auditor.

TRAINING REGISTRATION FORM

Full Name (Mr/Ms.): _____

(To appear on the certificate- limit to sixteen characters)

Nomination Type: _____ Age (years): _____ Country of residence: _____

(Company sponsored / Individual)

Designation: _____ Organization: _____

Industry sector: _____ Function: _____

Academic qualifications: _____ Industrial exp. (years): _____

Address (Office): _____

Address (Home): _____

Tel (Office +Ext #): _____ Telephone (Res): _____

Mobile: _____ Will you bring a laptop (Y/N): _____

E-mail (Official): _____ E-mail (Pers.): _____

Previous exposure to 6-Sigma:

if any, (Y/N and details)

Key Expectations: _____

(Why enrolling for this program?)

PAYMENT DETAILS

Amount: INR _____ Payment Mode: Cheque/DD/EFT (✓) Bank/Branch:

_____ Cheque/DD/Instruction date: _____ Cheque/DD/Instruction No.: _____

We request you to please fill in these details to enable us to communicate faster.