



Workshop on Six Sigma Green Belt Certification

1. Program Overview

What is Six sigma? Six sigma is a management strategy with data driven approach to remove defect in any process, product and services. The defect rate must not exceed 3.4 defects/million opportunities. As it is a quality cum business initiative, it can be used to design new product/process/services and re-engineer existing product/process/services where there are more problems/pains. The success of six sigma is mainly based on the measurement of actual short term as well as long term actual data. It can be used for better decision making purpose. It is a proven, successful, tangible and structured methodology which applies tools and techniques to address Business needs.

Why Six Sigma Green Belt Workshop? In these days of economic revival, globalization and liberalization, competition in any business is getting tougher and tougher for any business organization/industry. In order to sustain in this fast changing business environment, delight the customers and release products as quickly as possible without quality deterioration, competing organizations should make a paradigm shift in their business approach. Customer orientation, Business objectives, Cost reduction, More profit, Shorter cycle time and the best ROI are the clear business related buzzwords. Precisely, this proposed Six Sigma workshop helps you to achieve these objectives. The workshop throws more light on various tools and problem analysis and solving techniques with more realistic examples and case studies for real time implementation.

What Six sigma workshop can do for you?

- Fine tune and improve you Analytical/Problem solving skill
- Improve your productivity level with Leadership skill
- Better career opportunities with more pay hike

Six Sigma methodology brings out the best breakthrough Improvements in organization's process/product /service

- Reduces Variation in any process/product/service
- Reduces Cycle Time of process/ product/service
- Reduces Defects of process/product/service



They are leads to the benefits of the following:

- Improved Customer Satisfaction
- Improved Bottom Line (Net Profit)
- Productivity level of Employees

2. Course content for Six sigma Green Belt Workshop

Session 1 and 2

Define Phase:

- Objectives of this training
- What is Six sigma?
- Six sigma History
- Why Six sigma?
- How Six sigma?
- Focus of Six sigma
- Six sigma certification process
- What is lean Six sigma?
- What is productivity?
- What is a process?
- High level process map
- Definition of SIPOC
- Stakeholder's focus/vision
- Quality Function Deployment (QFD)
- Understanding variability
- Cycle time reduction
- Improvement areas/objectives
- Brainstorming
- Multivoting
- Project charter
- Critical to quality (CTQ)
- Kano analysis



- Project plan etc.

Measure Phase:

- Measurement basics
- Basic Statistics
- Gathering Data
- Types of data
- Sampling
- Check sheet
- Characteristics of data
- Central tendency
- Frequency distribution
- Variation
- Histogram
- Importance of shape and spread
- Continuous data
- Normal distribution
- Process capability
- Discrete data
- Defects calculation
- DPU calculation
- Measurement system(R&R)
- Minitab

Session 3 and 4

Analyze Phase:

- Pareto chart
- Process Map
- Cause and Effect analysis and diagram
- Potential root causes
- Affinity Diagram
- Hypothesis testing

Improve Phase:

- Correlation & Regression



- Design of Experiments (DOE)
- Failure Mode Effect Analysis (FMEA)
- Evaluating solutions
- Decision analysis
- Action plan matrix
- Prioritization
- Cost benefit analysis
- Selecting solution
- Implementation planning

Control Phase:

- Documentation process
- Response chart
- Statistical Process Control (SPC)
- Change management
- Define new baseline and Review measurement
- Monitor the new process and its performance
- Project closure

Tools/Techniques to be learned as part of this workshop:

- SIPOC
- QFD
- Brainstorming
- Multivoting
- Kano analysis
- Process mapping
- Histogram
- Minitab
- Pareto chart
- Cause and effect diagram
- Affinity Diagram
- Failure Mode Effect Analysis
- Design of Experiments(DOE)
- Control Charts
- Modeling tool
- Case study and Exercises.



3. Eligibility Requirement/ Pre-requisites for the training

Any participant with degree/diploma with minimum of 1 year work experience

4. Target Audience

Students/IT professionals/Employees of any service/product/project organization

5. Date, Time and Delivery Method

- On Demand
- This online workshop would be delivered through four live interactive sessions with an experienced faculty. Each session is with the duration of 3.5 hrs with flexi time schedule to suit individual needs.
- Each participant should have a Computer with Broadband internet connection and High quality head set.

6. Programme Takeaways

1. Hand out of course content
2. Six sigma Green Belt workshop participation Certificate
3. Six sigma Green Belt Certificate
4. Knowledge on Six sigma implementation

7. Procedure for Certificate

1. Each participant needs to attend 4 sessions of workshop through virtual/on line classes and do a process improvement project to get a Six sigma Green Belt Certificate
2. Certificate of participation would be issued soon after the 4 sessions
3. Process improvement project can be done within 4 months duration and it would be guided by the faculty through online mode.

8. Faculty Profile

R.Wilfred Raju

MCA, M.Sc, PGDCA, Six Sigma Black Belt, ITILV3 (Foundation), Global Business Leadership certification from U21 GU, Singapore.



Raj InfotechBiz Solutions Pvt. Ltd.

Wilfred Raju is the founder and Managing Director of Raj InfotechBiz Solutions Pvt. Ltd., a Six sigma practicing company, who aims to help the organization to achieve improvement in the performance of the business processes. Improvement comes though by identifying business problems/pains, reduce the cycle time of a process/service/product and align the IT investments with Business objectives to maximize the ROI, reduce the TCO, delight the customers and increase the net profit of the business.

Wilfred has overall 26 years+(>15 yrs in IT) experience in IT Project/Program delivery management, Product development and Consulting- Business Process Re-engineering, IT Portfolio Rationalization, Process & Productivity Improvement, Resource Identification, Resource Placement and Six sigma consulting with a *capability to start new Business units/Practices*, manage and operate as profitable practices.

As he has played roles like Delivery Head, Principal Consultant, Program Manager, Project Manager and EDP/MIS Manager in IT companies like Satyam Computer Services Ltd.(Mahindra Satyam), NatureSoft and Geosoft and non IT Company like Central Warehousing Corporation, he is having expertise in multiple technologies- Microsoft, JAVA, Open source, Embedded and ERP and hands-on exposure to operations Management with the knowledge of business processes of Human Resource Management, Banking, Insurance, Finance, Warehouse & Transport (Logistics) Management; Import & Export Operation; Container Freight Station Management, Auto manufacturing & Port operational processes; Trading, Retail, Shipping Management and Supply Chain Management.

Wilfred was playing key role as part of recruitment team of Satyam Computer Services Ltd wherein he was involved in activities like Identification and selection of right resources and Competency development.

Wilfred has also given business solutions through consulting to many fortune 500 companies, mid and small size enterprises (MSE) like Honda Japan, World Bank, Satyam Computer Services Ltd, Kings Industries etc, As he is more strategic in his thoughts, he has developed, groomed and mentored many next generation leaders and they are part of leading multinational business organizations. He has **conducted many Six sigma, Quality process, 5S, BPR, IT Portfolio Rationalization, Process & Productivity Improvement, Software Estimation and Project Management workshops** for IT as well as non-IT employees

While Wilfred has authored books on Linux and **Software Project Management**, **he is currently writing a book on business solution techniques and tools for all business problems**. He has given series of talks, conducted workshops and seminar on topics like Effective business solutions, How to recover sick industries, Marketing Strategies, PEST & SWOT Analysis, Different roles in IT industry and emerging technologies. He has written motivation articles in leading news papers, magazines, etc. He has also given TV talks on Software Project Management, Linux, future of IT field etc.

Wilfred is a member of Board of Studies, Adhiparasakthi College of Arts & Science, Kalavai, Vellore Dist.
