VALUE ADDED 616

Lean Six Sigma Green Belt Course Outline and Taxonomy

Introduction (4 Hours)

People are the most important aspect of any continuous improvement culture. The key to a smooth Lean enterprise transformation is obtaining buy-in from key stakeholders in the organization and developing teams that work well together, even in a virtual environment.

- ➢ Objective (level 2 comprehension): describe what is meant by "Lean is a management style and culture."
- ➢ Objective (level 1 knowledge): state how Lean and Six Sigma are able to enhance your organization.
- ➢ Objective (level 3 application): lead, schedule, plan and facilitate process improvement events.
- ➢ Objective (level 3 application): build, train and mentor a project team.
- ➢ Objective (level 2 comprehension): discuss the key characteristics of Kotter's eight steps in organizational change management.
- ➢ Objective (3 application): interpret and communicate process improvement effort to leadership in a relevant and effective manner.

1. Define (8 Hours)

Identify the problem and define the project from several perspectives: customer, business, process and stakeholders.

- ➢ Objective (level 3 application): construct a project charter with input from project sponsor and team members that aligns team members and develops the project plan and mission.
- ➢ Objective (level 4 analysis): collect and analyze voice of the customer data to assist in understanding the problem.
- ➢ Objective (level 3 application): produce a SIPOOC analysis to define inputs and outputs for the event.
- ➢ Objective (level 3 application): develop process metrics to monitor, evaluate and improve operational performance. Describe
- ➢ Objective (level 2 comprehension): identify and record possible risks using the risk tool.
- ➢ Objective (level 3 application): build a communication plan that informs all stakeholders.

2. Measure (8 Hours)

Document "as-is" process and measure baseline performance.

- ➢ Objective (level 3 application): go and see where the work is actually done and collect unbiased relevant data.
- ➢ Objective (level 3 application): determine the appropriate data to collect based on the process metrics and prepare a data collection plan.

- ➢ Objective (level 2 comprehension): compute and interpret statistical results that measure location, variation and shape.
- ➢ Objective (level 6 create): create a process map.
- ➢ Objective (level 3 application): categorize and annotate value-added, non-value added and business value added on the process map.
- ➢ Objective (level 5 evaluate): evaluate the process and identify waste.

3. Analyze (4 Hours)

Analyze information about the process and prove root causes of the problem.

- ➢ Objective (level 3 application): apply root cause analysis to analyze process problems.
- ➢ Objective (level 2 comprehension): describe the Lean principles of value, value stream map, flow, pull and perfection.
- ➢ Objective (level 4 analysis): identify and investigate constraints within the process.

4. Improve (8 Hours)

Improve process by addressing root causes implementing solutions.

- ➢ Objective (level 2 comprehension): confirm the importance of benchmarking.
- ➢ Objective (level 6 create): present and justify possible process improvement solutions.
- ➢ Objective (level 5 evaluate): invent proof of concept and / or learning launch plan for implementation.
- ➢ Objective (level 5 evaluate): evaluate possible failure modes using the FMEA tool.
- ➢ Objective (level 1 knowledge): identify opportunities for mistake proofing.
- ➢ Objective (level 5 evaluate): design solutions for implementation.

5. Control (4 Hours)

Control the new process and maintain gains achieved during implementation.

- ➢ Objective (level 3 application): apply 5s in your workplace.
- ➢ Objective (level 2 comprehension): discuss the importance of visual controls.
- ➢ Objective (level 3 apply): develop standard work within a process.
- ➢ Objective (level 5 evaluate): examine key performance indicators to assess the process.
- ➢ Objective (level 3 application): develop the control plan to monitor and sustain implemented improvements.
- ➢ Objective (level 2 comprehension): discuss the importance of properly documenting and following-up on completed projects / events.

6. Closeout (4 Hours)

Requirements include a final DMAIC tollgate brief and written exam.

- ➢ Final DMAIC tollgate prep time and delivery.
- ➢ Final exam review game and delivery.