LEAN SIX SIGMA PROJECT MANAGEMENT COURSE



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Introduction

Lean Six Sigma Project Management examines how improvement projects are selected, chartered, controlled, and closed so that savings are real rather than estimated. This Training Course covers the DMAIC project method, project selection, project control, and benefit validation. Participants study the Lean Six Sigma methodology combining Lean waste elimination with Six Sigma variation reduction, DMAIC and DMADV project structures, project charters and problem statements, the SIPOC diagram and voice of the customer, CTQ trees and Kano analysis, value stream mapping for project scope, measurement system analysis and Gauge R&R, process capability with Cp, Cpk, Pp and Ppk, the PMBOK Guide performance domains applied to improvement projects, tollgate reviews and stage-gate governance, Statistical Process Control with control charts and run rules, cost of poor quality, and benefit tracking and hard versus soft savings. Furthermore, the programme connects method to delivery through DMAIC project labs, charter and tollgate workshops, and benefit validation simulations.

Lean Six Sigma Project Management Course Objectives

- Define Lean Six Sigma and its project-based deployment model.
- Apply DMAIC and DMADV project structures appropriately.
- Select improvement projects with value and feasibility screening.
- Write charters, problem statements, and business cases for projects.
- Build SIPOC diagrams and translate voice of the customer to CTQs.
- Map value streams to define project scope and boundaries.
- Apply measurement system analysis and capability studies.
- Apply the PMBOK Guide performance domains to improvement projects.
- Design tollgate reviews and stage-gate governance.
- Validate benefits as hard or soft savings with audit evidence.

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Course Methodology

- Interactive workshops using real improvement project files.
- DMAIC project charter and tollgate labs.
- SIPOC, CTQ, and value stream mapping exercises.
- Capability, control chart, and MSA workshops.
- Benefit validation and project closure simulations.

Who Should Take This Course

- Lean Six Sigma practitioners leading projects.
- Continuous improvement and quality managers.
- Process owners and operations managers.
- Project managers running improvement projects.
- Performance and business analysts.
- Finance staff validating improvement savings.
- PMO analysts supporting improvement portfolios.

Lean Six Sigma Project Management Course Outlines

Day 1: Lean Six Sigma and the Project Model

- Lean waste elimination combined with Six Sigma variation reduction.
- DMAIC and DMADV project structures and selection logic.
- The PMBOK Guide performance domains applied to improvement projects.
- Project roles: sponsor, champion, black belt, green belt, team.
- Project selection: Pareto, value screening, and feasibility.

- Common failures: hobby projects, no baseline, unvalidated savings.
- Building the improvement framework pack.

Day 2: Define Phase and Project Chartering

- Problem statements, goals, and scope boundaries.
- Project charter construction with milestones and tollgates.
- SIPOC diagrams and process boundary definition.
- Voice of the customer, CTQ trees, and Kano analysis.
- Stakeholder analysis and project team formation.
- Business case and cost of poor quality baseline.
- Building the Define phase pack.

Day 3: Measure Phase and Baselines

- Process mapping and value stream mapping for scope.
- Data collection planning and sampling.
- Measurement system analysis and Gauge R&R.
- Baseline performance and process capability: Cp, Cpk, Pp, Ppk.
- Descriptive statistics and graphical analysis.
- Tollgate review preparation at the measure gate.
- Building the Measure phase pack.

Day 4: Analyse, Improve, and Control Phases

- Root cause analysis: 5 Whys, fishbone, and hypothesis testing.
- Failure modes and effects analysis for risk.
- Solution generation, selection, and piloting.

- Implementation planning with project scheduling basics.
- Statistical Process Control with control charts and run rules.
- Standard work, poka-yoke, and control plan design.
- Building the Analyse, Improve and Control pack.

Day 5: Tollgates, Benefits, and Project Closure

- Tollgate review design and stage-gate governance.
- Hard versus soft savings definitions and verification.
- Benefit tracking, finance validation, and audit evidence.
- Project closure, documentation, and knowledge transfer.
- Failure modes in project deployment and portfolio balance.
- Preventing gaming: inflated baselines and unverifiable savings.
- Personal action plan and continuous improvement.

Conclusion

By successfully completing Lean Six Sigma Project Management, participants will have acquired a practical command of the DMAIC project method, project selection and chartering, baseline measurement, root cause and solution work, control planning, tollgate governance, and benefit validation. They will know how to select projects worth doing, baseline performance honestly before claiming improvement, and validate savings with finance rather than asserting them. In addition, the course prepares delegates to run tollgate reviews that stop weak projects early. As a result, they return to work ready to deliver improvement projects with defensible results. Gentex Training Center delivers this Training Course with a practical, standards-based approach.

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FAQs for the Lean Six Sigma Project Management course

Q1 What is the "Lean Six Sigma Project Management" course about?

It is a five-day programme on selecting, chartering, controlling, and closing improvement projects so that savings are real rather than estimated. It covers the DMAIC and DMADV project structures, project charters and SIPOC diagrams, CTQ trees, value stream mapping, measurement system analysis, process capability, tollgate governance, control charts, and benefit validation.

Q2 What are the key benefits of the "Lean Six Sigma Project Management" course?

Participants gain the ability to select projects worth doing, baseline performance honestly before claiming improvement, and validate savings with finance rather than asserting them. They also learn to run tollgate reviews that stop weak projects early rather than letting them drift to closure.

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Q3 What skills will I gain from the "Lean Six Sigma Project Management" course?

Method foundations with DMAIC and DMADV structure application, project selection screening, and PMBOK performance domain use on improvement projects, project definition work with problem statement writing, project charter construction, milestone and tollgate planning, SIPOC diagram development, process boundary definition, CTQ tree construction, Kano analysis, stakeholder analysis, and cost of poor quality baselining, measurement work with process and value stream mapping, data collection planning, sampling design, measurement system analysis, Gauge R&R studies, capability index calculation across Cp, Cpk, Pp and Ppk, and descriptive and graphical analysis, and improvement, control and closure with 5 Whys, fishbone and hypothesis testing, FMEA application, solution generation and piloting, implementation planning, control chart application, run rule interpretation, standard work design, poka-yoke design, control plan construction, tollgate review design, hard and soft savings definition, benefit verification with finance, audit evidence preparation, project closure, knowledge transfer, and anti-gaming practice.

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Q4 What tools, methods, or standards are covered in the "Lean Six Sigma Project Management" course?

The course covers Lean waste elimination combined with Six Sigma variation reduction, DMAIC and DMADV project structures and selection logic, the PMBOK Guide performance domains applied to improvement projects, project roles across sponsor, champion, black belt, green belt and team, project selection with Pareto, value screening and feasibility, common failures across hobby projects, no baseline and unvalidated savings, problem statements, goals and scope boundaries, project charter construction with milestones and tollgates, SIPOC diagrams and process boundary definition, voice of the customer, CTQ trees and Kano analysis, stakeholder analysis and project team formation, business case and cost of poor quality baseline, process mapping and value stream mapping for scope, data collection planning and sampling, measurement system analysis and Gauge R&R, baseline performance and process capability across Cp, Cpk, Pp and Ppk, descriptive statistics and graphical analysis, tollgate review preparation at the measure gate, root cause analysis across 5 Whys, fishbone and hypothesis testing, failure modes and effects analysis for risk, solution generation, selection and piloting, implementation planning with project scheduling basics, Statistical Process Control with control charts and run rules, standard work, poka-yoke and control plan design, tollgate review design and stage-gate governance, hard versus soft savings definitions and verification, benefit tracking, finance validation and audit evidence, project closure, documentation and knowledge transfer, failure modes in project deployment and portfolio balance, and preventing gaming across inflated baselines and unverifiable savings.

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Q5 How is the "Lean Six Sigma Project Management" course applied in real-world practice?

Delegates apply it through improvement frameworks, project selection matrices, Pareto analyses, value screening scorecards, feasibility records, problem statements, project charters, milestone plans, tollgate schedules, SIPOC diagrams, process boundary maps, voice of the customer analyses, CTQ trees, Kano surveys, stakeholder analyses, team formation records, business cases, cost of poor quality reports, process maps, value stream maps, data collection plans, sampling plans, measurement system analysis records, Gauge R&R studies, baseline records, capability studies across Cp, Cpk, Pp and Ppk, descriptive statistics reports, graphical analyses, tollgate review packs, 5 Whys analyses, fishbone diagrams, hypothesis test records, FMEA worksheets, solution shortlists, solution selection matrices, pilot plans, implementation schedules, control charts, run rule assessments, standard work documents, poka-yoke designs, control plans, tollgate criteria, benefit registers, hard savings calculations, soft savings assessments, finance validation records, audit evidence files, closure reports, knowledge transfer records, portfolio balance reports, gaming risk assessments, and improvement programme plans. They also use them to chair tollgate reviews and to present validated results to sponsors and finance.