OE Partners

Lean Six Sigma

Green Belt

APMG International™ Lean Six Sigma | IN PARTNERSHIP WITH LSSA lean six sigma academy

OE Partners

Delivering better performance together

Contents

Welcome to Operational Excellence

Businesses achieve competitive success in one of three ways...

- **Product Leadership (Apple, Nike, Walt Disney)**
- **Customer Intimacy (IBM, SAP, Big 4 Consultancies)**
- **Operational Excellence (McDonalds, Toyota, Costco)**

Most businesses are not Apple, selling the latest “must have” product. Similarly, most businesses are unable to achieve the level of business integration and depth of relationship that SAP or IBM are able to. The majority of organisations operate in a directly competitive marketplace where similar companies offer a somewhat similar product or service.
In today’s world of ever increasing disruption & competition businesses that are able to achieve operational excellence hold a competitive advantage.

MBA programs from the world’s leading institutes all include operational excellence as a foundation component for leadership development.

Recent job market studies show that at any one time, more than 10,000 jobs related to operational excellence (1) are listed in Australia alone. According to Money’s “Highest-Paying Skills for $100K+ Jobs” (2) Lean Six Sigma Green Belts and Black Belts earn an additional 8.7% and 10.5% higher salary than their peers, respectively.

Lean Six Sigma is a well-established and well-respected approach to achieving operational excellence and Lean Six Sigma skills continue to be in high demand.

OE Partners in partnership with APMG International and the Lean Six Sigma Academy have designed this course to give you practical skills to transform businesses and accelerate your career.

We look forward to partnering with you on your journey.

Lean Six Sigma Green Belt

Today's organisations face performance pressures, potential disruption and a continually changing marketplace. It takes skill and knowledge to simplify the complexity and zero in on what the strategic priorities for the business should be.

After just 4 weeks you will be ready and supported to lead change in the workplace. You'll be ready for your new career in operational excellence

A Lean Six Sigma Green Belt can eliminate waste and improve the performance of any business process. The 80 / 20 rule was developed by Vilfredo Pareto in the 19th century and it is more relevant than ever in the 21st.

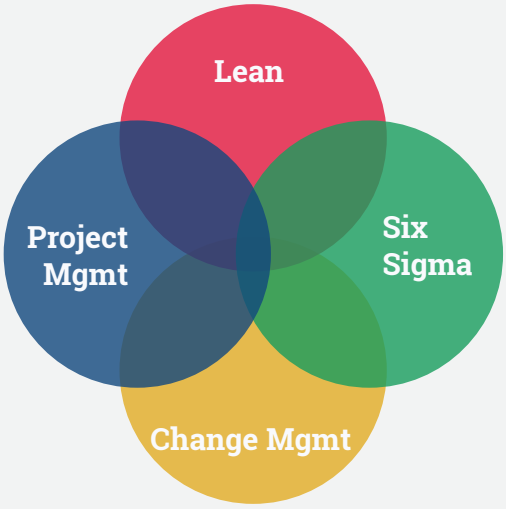
OE Partners' Lean Six Sigma Green Belt isn't an ordinary Green Belt course. It is a minimum 4 week skill development program designed to embed the foundations of Lean Six Sigma and build practical skills for business improvement and business transformation.

After successfully completing this course you will learn how to …
- Take poorly defined organisational issues and define them as clear business projects
- Accurately quantify, with the right numbers, the organisation's current performance
- Engage with teams and data to uncover the systemic root causes of poor performance
- Develop simple and effective solutions to make measurable gains

Having spent years in the field executing 100's of business improvement projects and transformation programs ourselves, at OE Partners we understand that getting change to happen requires more than just technical knowhow and numbers. It requires working with people and through extended teams. This is why our program also includes the latest thinking on Change Management and Project Management Practices

You will learn…

- **The right change management approach to take**
- **How to best engage with stakeholders**
- **The right leadership style to employ depending on the situation**



Case Studies

Lean Six Sigma Green Belts and Black Belts identify the priority problems that companies face. They simplify the complexity into defined and manageable problem statements, then work with data and teams to bring about effective solutions.

The following examples show how Lean Six Sigma methods brought about significant change.

Orrcon Steel

A. Business Problem:

Orrcon Steel is a leading Australian manufacturer and distributor of steel, tube and pipe. The business, owned by BlueScope Steel, employs some 600 people in manufacturing plants in Queensland and South Australia and distribution plants throughout Australia. At the heart of the Victorian distribution plant is an automated steel bar picking machine, a large and complex piece of equipment with four individual operating stations, which has been in place for 13 years. Orrcon took over this machine in March 2016, and quickly found that bottlenecks and inefficiencies meant next-day deliveries were often not being met.

B. How Lean Six Sigma Helped:

Through workshops the team developed an end to end site Value Stream Map, and collected key operational performance data. With a newly achieved visibility and understanding on how the process operated as a whole, the team then conducted "go & see" activities and further problem-solving workshops. The causes of bottlenecks were identified, and methods of operation changed to ensure next-day delivery of steel.

C. The Outcome:

DIFOT (delivery in full on time) is now being achieved for just over 90% of orders, compared to 60% previously. Customer satisfaction has improved markedly, machine replenishment systems have been improved, maintenance has been streamlined and labour needs have dropped by about 20%.

Incsub

A. Business Problem:

After a decade in business, WordPress website and blog developer Incsub had become one of the world's largest WordPress sites. The Australian-based company has three business areas: WPMU DEV, with around 100 subscription products for members; Edublogs, which provides millions of blogs in the education field; and CampusPress, which hosts educational WordPress sites.

Like many successful startups, Incsub had grown organically and rapidly. But a lack of proper systems and processes led to client losses because of mistakes, duplications and staff confusion as to how to approach tasks.

B. How Lean Six Sigma Helped:

Incsub's staff & stakeholders were interviewed and, two overall business objectives were set: build foundations to allow scale, and achieve measurable improvement of business performance in customer retention and growth. Two projects each had their own problem-solving team: reduction in bugs and member cancellations; and design, development and QA process improvement.

Lean six sigma data analytics were used to better understand how the process was currently performing and what issues were leading to customer cancellations. The team was trained in Lean problem solving and A3 reporting. A structured DMAIC (Define, Measure, Analyse, Improve, Control) problem solving approach allowed all team members to get on the same page and work together in a disciplined fashion towards achieving a measurable improvement.

C. The Outcome:

Reduction in software bugs and client cancellations was tackled first project. A 96% reduction in the number of reported but unsolved bugs was achieved, reducing from 878 at project commencement to 29 at completion. A 58% reduction in the number of member cancellations also resulted, down from 60 per week to 25 per week. The project has already delivered savings of hundreds of thousands of dollars, and will deliver millions of dollars of saving in the long term.

Why Lean Six Sigma?

Operational Excellence or "How" you run the business used to be an afterthought. Businesses were, in some ways, rightly focussed on the "What" – the product or service. Delivering to the customer, within the expected due date and to an acceptable level of quality was enough to operate a profitable business. Competition is increasing, and with smarter ways of working the gap between "average" companies and the best companies, is widening.

Lean Six Sigma gives companies a best practice framework to follow. It has shown to be effective in delivering tremendous savings to those who implement it well. Some of the world's most well-known and trusted organisations across a broad spectrum of industries have successfully adopted Lean Six Sigma methods...

Lean Six Sigma leads to change and improvement and the ultimate goal of increased business growth. Organisations and individuals who develop themselves in Lean Six Sigma become "fit for change".

Lean Six Sigma is an effective vehicle to shift the organisation's culture from complacency to proactive improvement. As such Lean Six Sigma is commonly used within world class organisations as a foundational skill set for all senior management candidates.

Lean Six Sigma in the Media

Lean Six Sigma has established itself as a well known and respected operational excellence strategy

> **"Companies reap bigger, more sustainable benefits by balancing Lean's hard and soft elements and developing their line managers' lean leadership skills"**
>
> *From lean to lasting: Making operational improvements stick – McKinsey Quarterly (3)*

> **"Instead of spending years in the classroom to learn an entire subject, give students and workers access to ad hoc courses and certifications. This will shorten the educational time commitment, thereby lengthening the time an individual has to actually master the skill on the job. ... Lean Six Sigma certifications center on hands-on learning. While there is the obvious bookwork, the programs require specific on-the-job training... These programs provide the tangible skill sets that employers seek"**
>
> *Mind the (Skills) Gap – Harvard Business Review (4)*

> **"We say that Six Sigma is a common language because this enables us to bridge boundaries. We have about 90 master black belts within our company and our training enables us to communicate effectively and collaboratively"**
>
> *How Six Sigma Black Belts Slice Through Silos At Cummins – Forbes.com (5)*

> **"Lean Six Sigma is ideal for projects targeted at reducing waste, cycle times or process variance, or at increasing product or service quality. Business outcome owners, business process directors and senior IT managers should include LSS in their toolbox of business process improvement methodologies"**
>
> *Lean Six Sigma Is a Useful Tool in the Process Improvement Toolbox – Gartner (6)*

> **"Millions of dollars can be saved through improvement initiatives related to increasing productivity, reducing costs, stimulating innovation, and transforming businesses. Lean... and Six Sigma are some of the more well-known and used methodologies used by leading businesses over the years to develop these improvements"**
>
> *Creating Business Value Lean, Kaizen and Six Sigma – Engineers Australia (7)*

> **"Use a tested process improvement approach. Combining facts generated by analytical tools with techniques such as Lean Six Sigma can systematically uncover root causes and help create a road map for reducing complexity"**
>
> *Taming Complexity With Analytics – The Wall Street Journal (8)*

Transformation in all Industries

Lean Six Sigma has its origins in the manufacturing sector, however it has now been adopted in a wide range of industries:

Banking

DMAIC approach is used by banks to create rules based credit policies and faster credit approval processes (9)

Health

Veteran Affairs Medical centre improves operational inefficiency associated with the direct medical service delivery process (10)

Insurance

A major insurance company applies Lean Six Sigma methods to prioritise its pricing model and achieved a 10% boost in profits (11)

Utilities

Water and waste treatment plant reduced energy usage and cost with 2 major six sigma project initiatives (12)

Tech

The real value of technology is demonstrated and the deployment process improved when Lean Six Sigma is applied to major IT projects (13)

Retail

Projects to improve scanning accuracy delivered 8 figure savings for a major grocery retailer (14)

Supply Chain

Optimised inventory levels across the end-to-end supply chain the key to a major retailer's growth plans (15)

Government

Using lean principles regulatory agencies changed the way frontline leaders interact with customers to cut backlogs by 70% (16)

Program Structure & Certification

The goal of our program is to equip participants with the capabilities to apply Lean Six Sigma methodologies to a variety of business problems. Foundational theory and comprehension is the first step, then the program covers practical exercises to reinforce theory and a hands on simulated manufacturing process is used to get participants thinking about improvement in practice.

Participants looking to achieve certification have 3 options...

Participation Certification

- Complete the pre-reading & Quiz
- Attendance at 4 Day Workshop

Theory Certification – 60 Question Multiple Choice Exam

- Conducted in person in a classroom setting, invigilated by OE Partners
- Open book, maximum of 2 subject texts can be used
- 60 Questions, paper based (180 mins)
- Pass Rate is 63.3 % (38 marks out of 60)
- Formal Exam Assessment and Certificate Issued by APMG International

Project Certification – Submission of two Lean Six Sigma projects

- Project Coaching and Review is provided by an OE Partners Lean Six Sigma Black Belt Facilitator
- Formal Project Submission, Assessment & Certification by APMG International
- Each project must demonstrate an achievement of saving / cost avoidance of at least $30,000 per year

Our program is comprehensive and designed to ensure participants get the most out of their investment with a true capability build. By running our program over 4 weeks with 4 stages to ensure lasting capability is achieved

Our courses & trainers are independently certified by APMG International.

APMG International is the world's largest and most trusted certification body, running over 150,000 certification exams globally each year.

Program Structure

Program Structure Overview

Prepare

- Pre workshop study and confirmation of basic Lean Six Sigma concepts prior to workshop attendance
- Pre-reading – All Participants will receive a hard copy of the course text book "Climbing the Mountain - Mindset, skill set and toolset for Lean Six Sigma Green Belts" (17)
- Confirm your goals & specific learning objectives
- Discuss your business context and learning plan with your trainer on a 1 on 1 phone call

Train

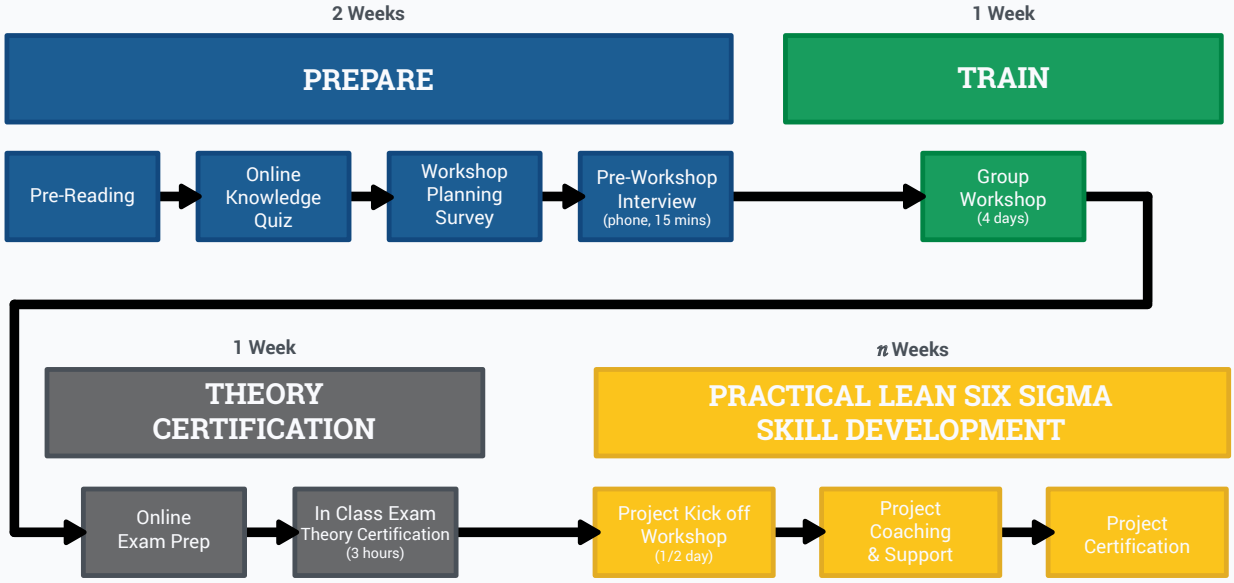
- Consolidate Theory
- Practice with simple case study examples and problems
- Hands on Improvement of a simulated process

Certify - Theory

- Online Exam preparation: Sample exam problems, additional exam problem training & explanation
- In class Certification exam. This is booked for 1 week after your workshop

Practical Lean Six Sigma Skill Development – Workplace based program

- Real business project implementation Coaching & Support
- 2 Projects need to be submitted and assessed for Project Certification to be achieved



Lean Six Sigma Green Belt Course Content

Unit 1. World Class Performance	E1. Competitive Strategies: E2. History of Continuous Improvement: E3. Philosophy and Principles: E4. Organizational Process Management: E5. Project Selection Process:
Unit 2. Process Improvement Deployment	E1. Management of Change: E2. Leadership: E3. Team Development
Unit 3. Project Management	E1. Team Formation: E2. Process Improvement Roadmaps: E3. Voice of the Customer (VOC): E4. Project Charter: E5. Project Management Techniques:
Unit 4. CIMM Level I – Creating a Solid Foundation	E1. Organized Work Environment: E2. Standardized Work: E3. Quality Management:
Unit 5. CIMM Level II – Creating a CI Culture	E1. Kaizen: E2. Basic Quality Tools: E3. Basic Management Tools:
Unit 6. CIMM Level III – Creating Stable & Efficient Processes	E1. Process Mapping: E2. Lean Performance Metrics: E3. Value Stream Analysis: E4. Reducing Muda (Waste): E5. Reducing Muri (Overburden): E6. Reducing Mura (Unevenness): E7. Value Stream Improvement: E8. First Time Right:
Unit 7. CIMM Level IV – Creating Capable Processes	E1. Critical to Quality (CTQ): E2. Six Sigma Performance Metrics: E3. Statistics: E4. Distributions: E5. Measurement Systems: E6. Hypothesis Testing & Confidence Intervals: E7. Correlation and Regression: E8. Process Capability & Performance: E9. Design of Experiments (DOE): E10. Statistical Process Control (SPC):
Unit 8. CIMM Level V – Creating World Class Products and Services	E1. Product Lifecycle Management (PLM): E2. Innovation Management:

What makes OE Partners Lean Six Sigma Green Belt so different?

Genuine Capability Build

By running our program over 4+ weeks*, utilising a combination of text, online resources, face to face workshops, sample problem exercises, hands on process simulation and real-life project coaching, we enable participants to achieve the genuine capability build they are seeking.

Workplace Based Project Coaching & Support

The real learning happens when you apply your Lean Six Sigma skills in the workplace. Should you choose to take the Project Certification Option, OE Partners is here to support each step of the way.

With our Project Kick-off workshops we get you over the initial hurdle of "How do I start?" Then we make sure you successfully implement your first project by providing you with the regular project coaching support of a Master Black Belt practitioner.

Learn from in-the-field Black Belt Practitioners

All our Trainers are practicing, in-the-field, Lean Six Sigma Black Belt Consultants. Gain a deeper and practical understanding by learning from those who solve complex business problems with Lean Six Sigma on a daily basis.

Achieve a Globally recognised & validated Certification Standard

OE Partners trainers and courses are accredited by APMG International. The Lean Six Sigma certification you receive is issued by APMG International, the world's leading accreditation, certification and examination institute.

- **Issues certificates in 150 countries**
- **Runs 150,000 certification exams annually**
- **90% pass rate for candidates who train with an APMG accredited training organisation**

* the duration extends for participants also pursuing the Project Certification Option

How to Apply

Apply

Online at **www.oepartners.com.au/apply-lssgb**

Intended Audience

Mid to senior level professionals who are working in a role that involves the review and improvement of a process and its performance.

Those looking to lead business improvement projects, drive productivity initiatives or other measurable business outcomes Lean Six Sigma is commonly used within world class organisations as a foundational skillset for all senior management candidates

Prerequisites

It is recommended that participants have a minimum of 3 years working experience in a professional role and firm grasp of applied mathematics and basic statistics.

References

(1) The following online job websites were surveyed, seek.com, careerone.com.au, adzuna.com.au and Linkedin.com, using the following search terms; Lean, Six Sigma, Operational Excellence and Process Improvement.

(2) http://time.com/money/4322700/highest-paying-skills-job-career/

(3) https://www.mckinsey.com/business-functions/operations/our-insights/from-lean-to-lasting-making-operational-improvements-stick

(4) https://hbr.org/2012/09/mind-the-skills-gap

(5) https://www.forbes.com/sites/jeffthomson/2014/02/21/how-six-sigma-black-belts-slice-through-silos-at-cummins/#26ee282b71c2

(6) https://www.gartner.com/doc/2685022/lean-sigma-useful-tool-process

(7) https://www.engineersaustralia.org.au/portal/event/creating-business-value-lean-kaizen-and-six-sigma

(8) http://deloitte.wsj.com/cio/2015/12/21/taming-complexity-with-analytics/

(9) http://www.bain.com/about/client-results/lean-six-sigma-solves-a-commercial-banks-growth-problem.aspx

(10) https://www.ncbi.nlm.nih.gov/pubmed/20924252

(11) http://www.bain.com/publications/articles/lean-six-sigma-for-services-industry.aspx

(12) https://www.epa.gov/sites/production/files/2013-11/documents/eum-lean-guide.pdf .

(13) https://www.cio.com/article/2439918/it-organization/six-sigma-for-better-it-operations-and-customer-satisfaction.html

(14) http://www.cspdailynews.com/industry-news-analysis/corporate-news/articles/six-sigma-retail

(15) https://www.wsj.com/articles/todays-top-supply-chain-and-logistics-news-from-wsj-1506335200

(16) http://www.factcheck.org/UploadedFiles/2014/04/McKinsey.pdf

(17) All Participants will receive a hard copy of the course textbook

"Climbing the Mountain: Mindset, skill set and toolset for Lean Six Sigma Green Belts"
Theisens, H.C.; LSSA 2015, ISBN: 978-94-92240-06-4