



# LEAN Six Sigma - Breakthrough Strategy for Manufacturing & Services

## What is the LEAN Six Sigma

Quality and delivery speed are the two most important features in improving any organization's profit performance. Lean Six Sigma enhances the company's performance in each of their important measures by combining the strength of today's two critical initiatives - LEAN and Six Sigma - into one integrated program.

LEAN Six sigma keeps improvements tied to business strategy. It leverages strong diagnostic capability of Lean to determine which projects will have the biggest and quickest impact on the organizations strategic and financial priorities. It unveils the secret to eliminating time traps that add delays and hinder speed in both service and manufacturing process. LEAN Six Sigma demonstrates the methodology to eliminate sources of unnecessary cost while attaining Six Sigma level of quality and dramatically improving share holder value.

## Who is a Certified LEAN Six Sigma Black Belt-(CSSBB)

The Certified Black Belt is a professional who can

- Explain Six Sigma philosophies and principles including supporting systems and tools.
- Demonstrate team leadership, understand team dynamics and address change management issues.
- Thorough understanding of all aspects of DMAIC model in accordance with Six Sigma principles.
- Basic knowledge of Lean enterprise concepts and specific Lean tools, with ability to identify non value adding elements and activities.

## Workshop Methodology

- Focus on Diagnostics
- Case Studies
- Exercises
- Simulated tests
- Hands on exposure
- Group discussion
- Small group

## Benefits

- Effective project selection for quickest impact.
- Better understanding and longer retention.
- Experiential learning with application focus.
- Learning from experiences of others.
- Test and reinforce learning.
- Personal attention to facilitate application of tools and techniques.
- Orientation for success in certification exam.

## Workshop objectives and deliverables

- Master the DMAIC methodology through specially designed cases and exercises for both services and manufacturing sector.
- Facilitate Six Sigma deployment on the five step improvement methodology for reducing defects in a process, product and service with simultaneous enhancement of value and process speed through Lean.
- Lead LEAN Six Sigma improvement teams to solve performance problems by use of a structured, disciplined, problem solving approach.
- Address Change Management issues while improving process performance.
- Align Voice of Business and Voice of Customer with Lean Six Sigma projects.
- Use of specially designed exercises, games and templates to shorten the learning curve
- Application focus through structured project engagement.

## Who should attend

- Quality and Business Excellence professionals involved in continuous improvement initiatives.
- All functional managers involved in operations constituting either service or manufacturing sectors.
- All functional Managers involved in transactional or support process.
- Healthcare professionals involved in operational, quality and administrative functions.
- R&D and design professionals
- Consultants and individuals who desire to enhance their professional skills and aspire for International recognition through CSSBB certification
- Any other professional involved in continual improvement initiatives

## What the business world says about LEAN Six Sigma

1. "Six Sigma) is the most important initiative GE as ever under taken... It is part of the genetic code of our future leadership." - **JACK WELCH, FORMER CEO, GE**
2. "Our future is LEAN Six Sigma." - **JEFF IMMELT, CEO, GE**
3. "We have taken the difficult but basic Six Sigma skill of reducing defects and applied it to every business process, from inventing and commercializing a new product all the way to billing and collections after the product is delivered. Just as we think we have generated the last dollar of profit out of a business, we uncover new ways to harvest cash as we reduce cycle times, lower inventories, increase output, and reduce scrap. The results, are better and more competitively priced products, more satisfied customers who give us more business, and improved cash flow" - **LARRY BOSSIDY, FORMER CEO, ALLIED SIGNAL**





American Society for Quality

&

FICCI Quality Forum

offers globally benchmarked

# Lean Six Sigma

## Black Belt Programme



### Combining LEAN Speed with Six Sigma Accuracy

### Leading to Internationally Recognised Certification

### FICCI Quality Forum

FICCI Quality Forum is management consulting division of FICCI working under the leadership of Lt.General H Lal(Retd.), former Director General of Bureau of Indian Standards and former Director General of Defense Quality Assurance Organization. FICCI Quality forum is facilitating business organizations in India and other developing countries to enhance global competitiveness through training and consulting interventions using the best practices adopted by leading companies of the world.

To get the knowledge and training skills on latest management tools and techniques, FICCI has networked with the premier global knowledge resources such as American Society for Quality USA, Lean Enterprise Academy UK, Kaizen Institute Japan etc.

### American Society for Quality

The American Society for Quality (ASQ) is the world's leading authority on quality. With more than 100,000 individual and organizational members, this professional association advances learning, quality improvement, and knowledge exchange to improve business results, and to create better workplaces and communities worldwide.

As champion of the quality movement, ASQ offers technologies, concepts, and training to quality professionals, quality practitioners, and everyday consumers, encouraging all to Make Good Great™. ASQ provides professional training and certification that are considered as global benchmark and utilised by leading organisations around the world to set an objective criteria to assess competency of quality professionals.

### ASQ & FICCI Professional Training Programs Offered in India

- Lean Manufacturing
- Lean Service
- Six Sigma Black/Green Belt
- Lean Six Sigma Black/Green Belt
- Certified Quality Engineer
- Manager of Quality/Organizational Excellence

For further information please contact



### FICCI Quality Forum

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4. "While Dr. Deming's theory of profound knowledge built management awareness and Dr. Juran's trilogy helped to establish the foundation of a solid quality 'Science' Lean Six Sigma break through strategy driven innovation has taken quality into Americas boardrooms." - **GREGORY WATSON, PAST PRESIDENT AMERICAN SOCIETY FOR QUALITY (ASQ)**
5. "Bank one knows that higher quality, faster services, delivered at lower cost is important to our customers and to our business. The integration of Lean process speed and Six Sigma process quality provides a powerful combination to achieve these goals. Lean Six Sigma will be valuable to any company needing to simultaneously achieve customer satisfaction and growth at low cost." - **DARYL GREENE AND MIKE FISCH BACH, SR.VICE PRESIDENTS, BANK ONE.**
6. "Mc Kesson is a \$ 50 billion revenue company primarily involved in Pharmaceutical distribution. As we embarked on our Six Sigma journey; we found we needed both Six Sigma process quality and the Lean process speed to improve our marketing, logistics, order fulfillment, and other process." - **JEFF REINKE, VICE PRESIDENT OF SIX SIGMA, Mc KESSON AND CO.**

### Curriculum Overview by Week

<b>Recognize</b>	<b>WEEK 1</b> Introduction, objectives and expectations Introduction to LEAN Management Six Sigma Overview	Hypothesis Testing Correlation/Regression ANOVA and Gage R&R Project planning
<b>Define</b>	LEAN Value Stream Mappings Process Mapping Failure Mode & Effects Analysis	DOE Introduction Randomized Blocks Full Factorial Experiments
<b>Measure</b>	Introduction to Minitab Introduction to Simulation Basic Statistics & Probability Rolled Throughput Yield Process Capability	Fractional Factorial Experiments Catapult Exercise Project Planning
<b>Analyze</b>	Non-normal Data Gage R&R Project Planning	<b>WEEK 3</b> Response Surface Methodology EVOP Control Plans Statistical Process Control Lean/Six Sigma Synergy
<b>Improve</b>	<b>WEEK 2</b> Central Limit Theorem Confidence Intervals Power and Sample Size Multi-vari Analysis	Kaizen & Lean Manufacturing Integration of Lean with Six Sigma Mistake Proofing Statistical Tolerancing Designing for Six Sigma
<b>Control</b>		

### Venue of the Course:

Federation House, Tansen Marg, New Delhi 110001, India  
At other Metros  
FICCI offices or Hotels  
In-house Program: conducted by ASQ accredited faculty in the client organisation. (Please ask FICCI for further details)