



# Business Transformation Using Lean Six Sigma (LSS)

January 2023



# Quality-Cost-Delivery (Speed) – 3 Key Elements of Operations



## Quality

**Quality** refers to the usability (in functional and psychological aspect), reliability, and safety. Also, influence on the third parties, society, environment, and future generations needs to be considered.

- **Quality** is not only meeting the stated requirements of customer but identification & meeting latent requirements as well



## Cost

- **Value (Price)** is what customer is willing to pay for the product or service.
- Competition decide the price.
- **Cost** is the only element where manufacturers / suppliers / service providers can have control.
- Cost decides profitability.



## Delivery

- **Delivery (Speed)** would affect the customer satisfaction; no customer would like to wait for the goods and services.

# Are you facing any of the following issues related to QCD?



**Missing Delivery deadlines due to long lead time**



**High cost due to rejection / rework**



**Repeat customer complaints**



**Low productivity**



**New product launch not successful**



**Poor employee morale**



# Potential Solution to overcome these issues is 'Lean Six Sigma'

**Cost =  $f$ (Quality, Speed)**

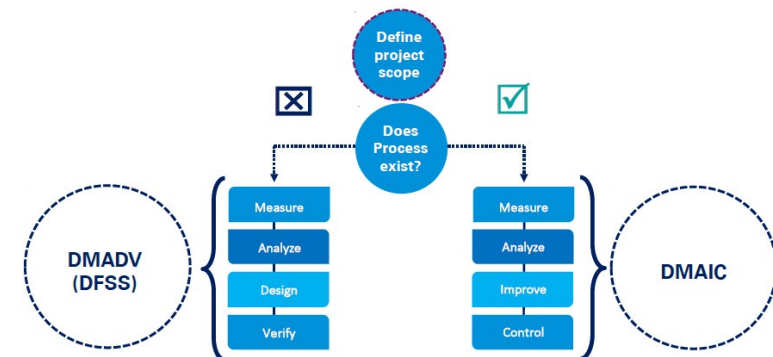
**Lean** – address the wastes in the process to deliver **SPEED**

**Six Sigma** – address the defects and variation in the product & process to deliver **QUALITY**

**Lean Six Sigma methodology has 2 frameworks:**

**DMAIC** – for improving existing processes

**DMADV** – for new product / process design



# What is 'Lean Six Sigma'?

## Lean

**Lean**, pioneered by Toyota, focuses on the efficient operation of the entire value chain.

### Focus areas:

- Remove non-value adding steps to:
  - Reduce cycle time
  - Improve quality
- Align production with demand
- Reduce inventory
- Improve process safety and efficiency



## Six Sigma

**Six Sigma**, developed by Motorola, made famous by GE, can be defined as a:

- Measure of process capability
- Set of tools
- Disciplined methodology
- Vision for quality
- Philosophy
- Strategy

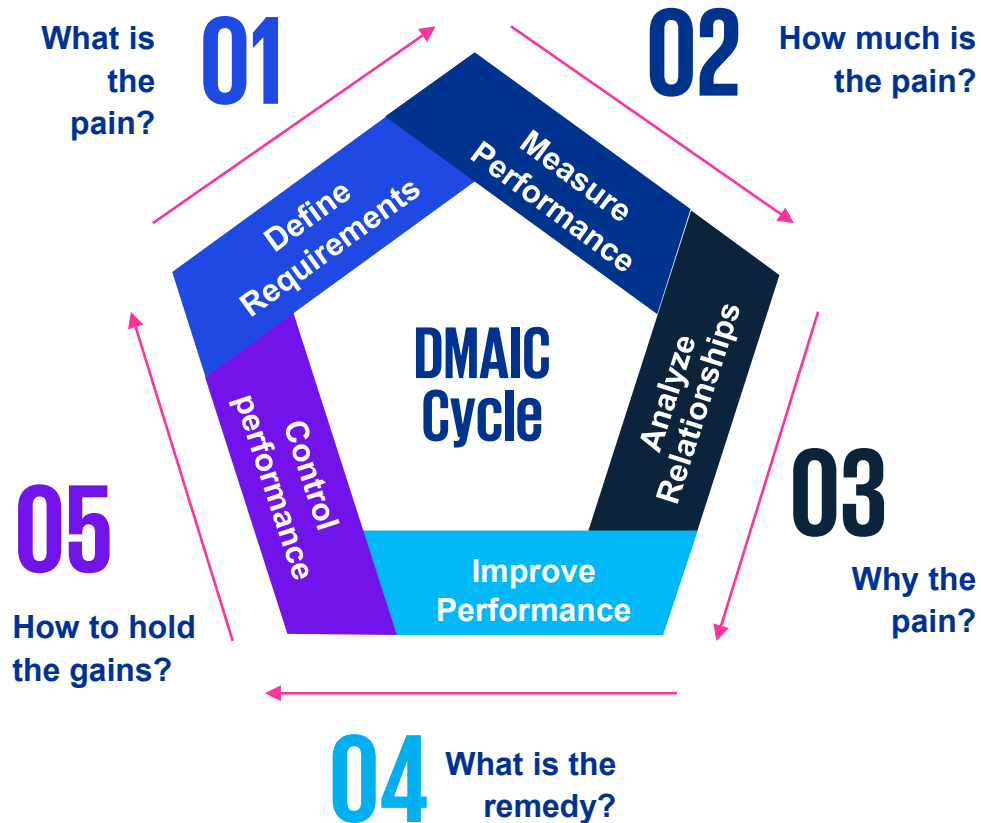


## Lean Six Sigma

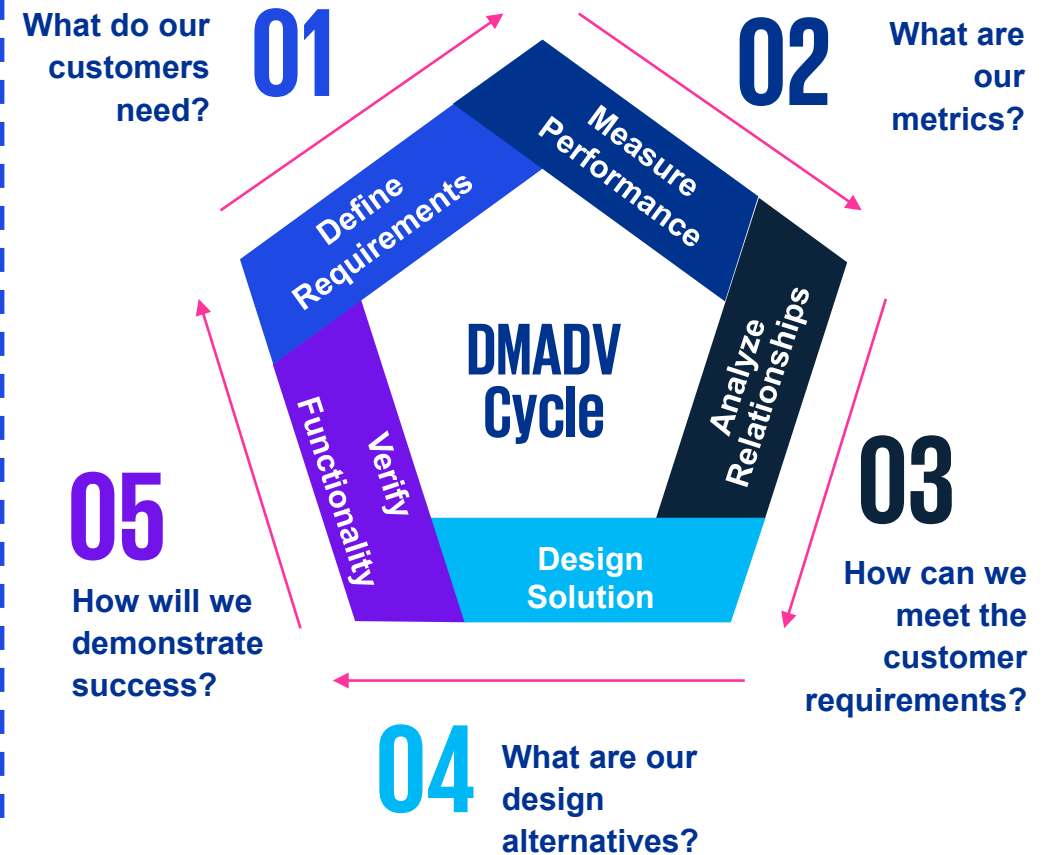
**Lean Six Sigma (LSS)** is a combination of two powerful and proven process improvement methodologies Lean and Six Sigma, that builds on existing organization capability in quality, statistics, and project execution.

# Lean Six Sigma Implementation Approaches

## DMAIC Cycle for existing process



## DMADV Cycle for new process / product development

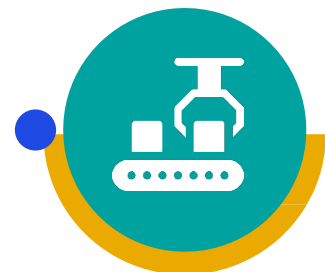


# Adoption of LSS across diverse sectors (a glimpse of few projects)



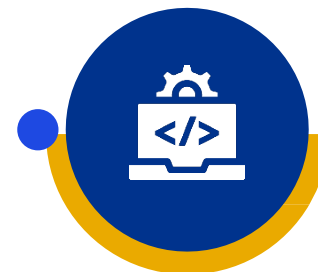
## Retail

- Reduction in procurement time
- Optimization In inventory cycle
- Improvement in delivery time
- Helps in identifying opportunities to eliminate waste and reduce variations
- Improve invoicing cycle time
- Streamline item order cycle
- Optimize and improve goods disbursement layout and cycle
- Improving customer satisfaction by reducing TAT for customer billing
- Improving transportation cycle and more....



## Manufacturing

- Production Cycle Time reduction
- Production/process defect reduction
- Breakage handling error reduction
- Changeover timings reduction
- Production planning accuracy
- Logistics optimization
- Inventory management
- Procurement /material acceptance accuracy
- Downtime reduction
- Capacity planning/ preventive maintenance and more...



## IT/ITES

- Delivery time reduction
- Defect reduction for high/medium/low severity bugs
- Robotic arm displacement accuracy for chip manufacturing
- Requirement stability index enhancement
- Requirement gathering accuracy
- RD-HLD-LLD translation accuracy
- SLA compliance/productivity enhancement
- TAT reduction for agreed KPI
- Lean processes – work value analysis and more...



## Healthcare

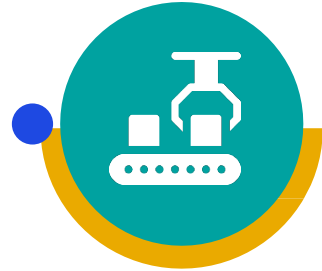
- Reduced OPD waiting time
- Faster billing cycle
- Increased manpower productivity
- Better patient management
- Improved coordination between departments
- Faster response rate
- Overall financial gains
- Increased response rate to emergency responses
- Improved quality of care
- Increased brand loyalty
- Increased shareholder value
- Reduced TAT for medicine issue from pharmacy
- Reduce TAT for patient discharge, lab and radiology reports and more..

# Adoption of LSS across diverse sectors (a glimpse of few projects)



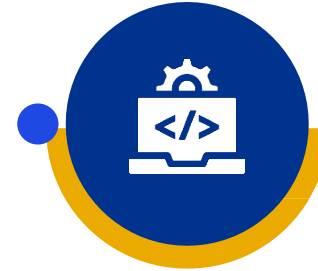
## Finance and Accounting

- Reduction of turnaround time for book closure
- System error proofing
- Reducing disbursement time
- Reducing the working capital and financial requirements
- Optimizing cash cycle
- Reduce instances for non-Compliance
- MIS data accuracy for statutory reporting
- Underwriting accuracy for loan/insurance processes
- Eliminate delay in application review
- Eliminating the possibility of erroneous data entry
- and more...



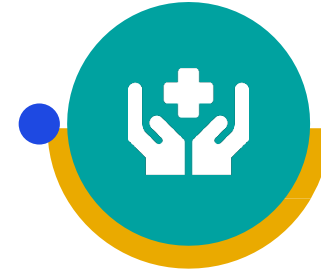
## Marketing and Sales

- Increasing the effectiveness of sales budget
- Optimizing sales to cash cycle
- Increasing the reach of existing products
- Identifying the potential in new market products
- Maintaining project timelines
- Optimizing new product development cycle
- Increasing customer engagement
- Market research data accuracy for product/service potential
- Pre-sales campaign accuracy
- and more...



## Human Resources

- Reducing onboarding time
- Salary normalization
- Compensation strategy
- /predictive analysis
- Data accuracy for cost of living analysis and others
- Resource initialization for T&M billing projects
- Resource loading/productivity improvement
- Salary/separation/PF disbursement for employee satisfaction
- Competency mapping accuracy
- Breach instance reduction for SLA
- and more....



## Operations

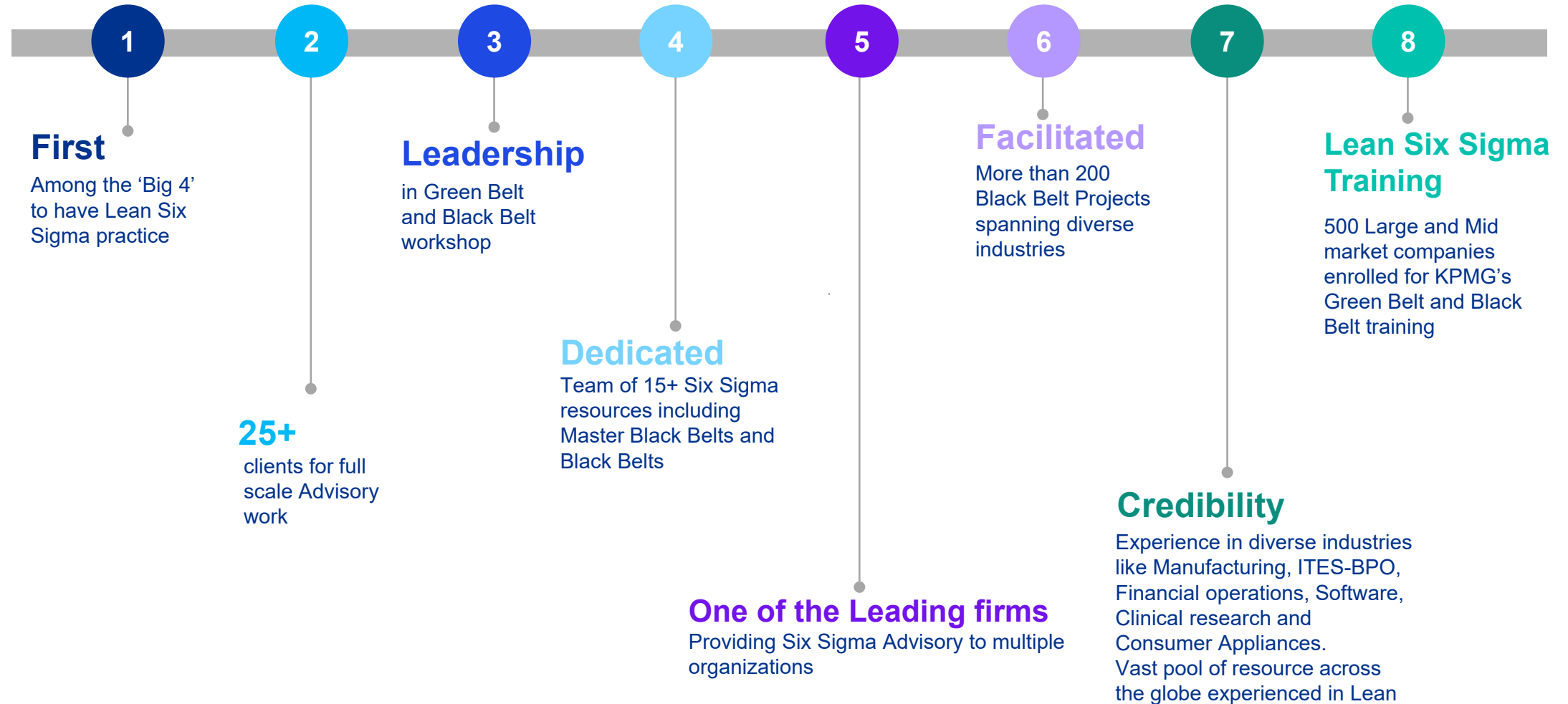
- Reduction of turnaround time
- System error proofing
- Optimizing product disbursement time
- Reducing the working capital and financial requirements
- Optimizing cash flow management
- Focused Cost reduction – facility management, transport management, energy management, travel management and related more
- Work flow optimization for faster process execution and more....





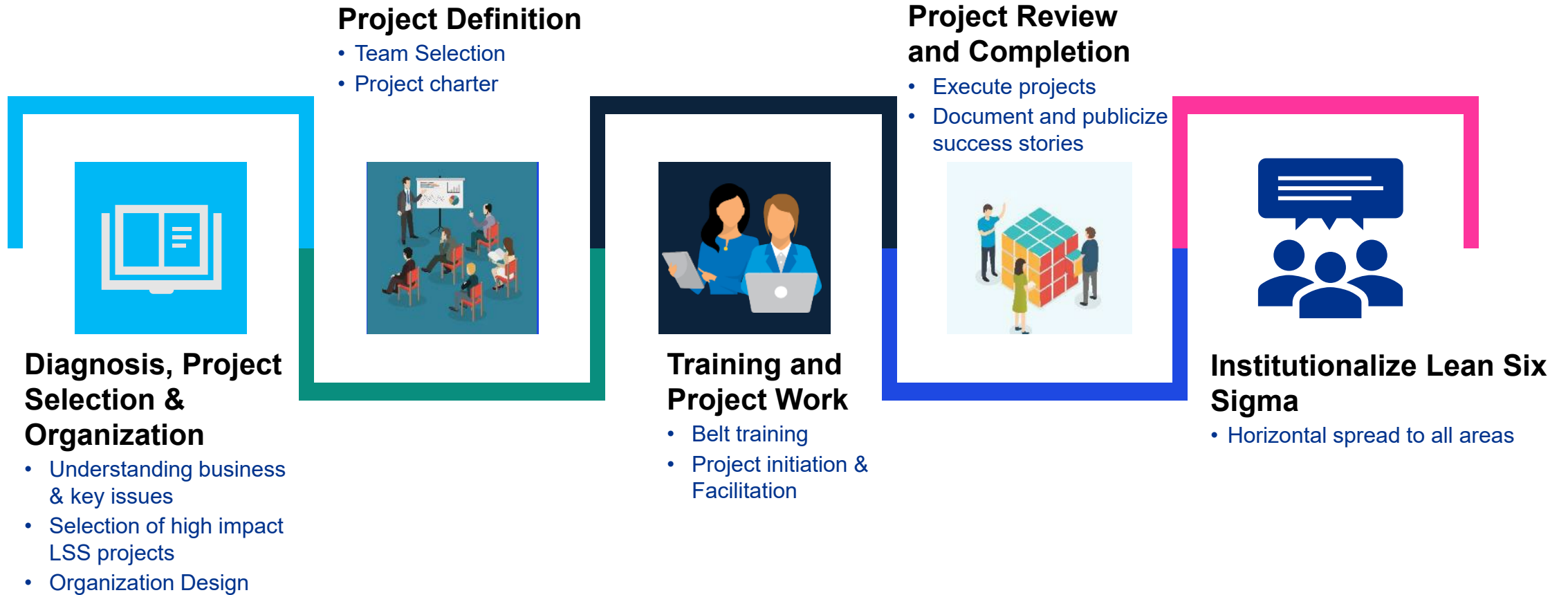
# How KPMG could help clients in LSS Deployment

# Introducing LSS Advisory

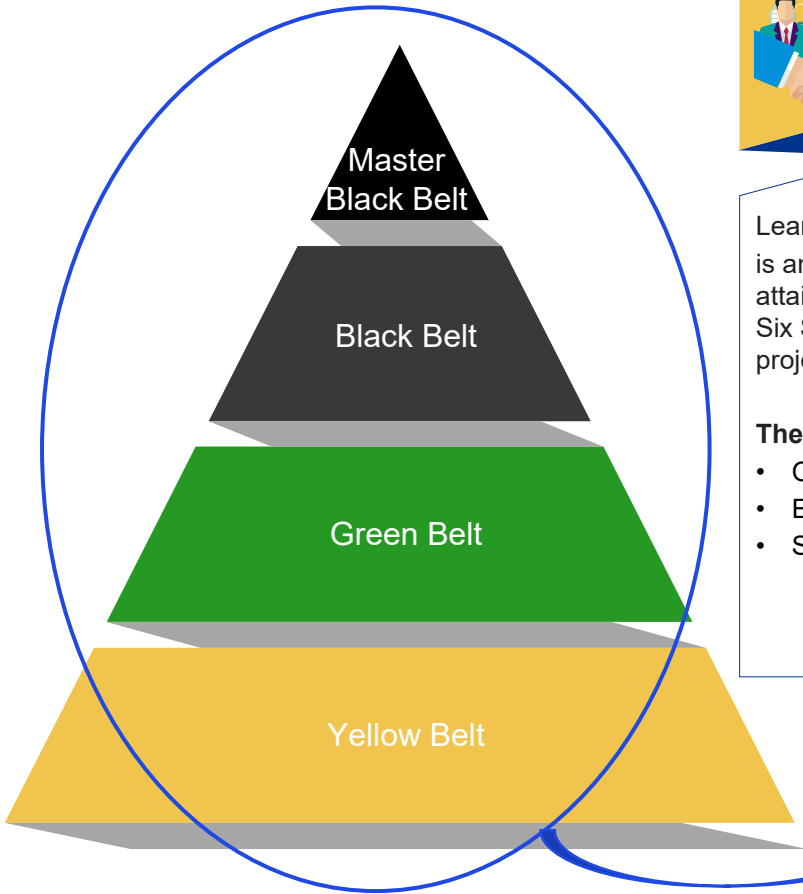


# How KPMG could help clients in LSS deployment

A Comprehensive Approach : Road Map for LSS Deployment in an organization



# Lean Six Sigma Competency levels

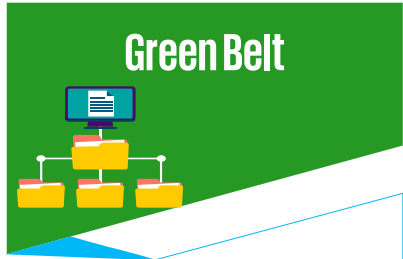


**Yellow Belt**

Lean Six Sigma Yellow Belt is an individual who has attained a basic knowledge of Six Sigma but does not lead projects on their own

**The training covers:**

- Overview of lean six sigma
- Explanation of DMAIC
- Seven QC tools



**Green Belt**

Six Sigma Green Belt is a certification course wherein you will receive a hands-on understanding of basic to intermediate statistical tools and techniques. These are essential for participating in improvement projects.

**The training covers:**

- Overview of lean six sigma
- Explanation of DMAIC
- Intermediate Statistical Tools



**Black Belt**

The Black Belt Certification is a third-level belt of the six-sigma family and the most exceptional level affirmation.

**The training covers:**

- Overview of lean six sigma
- Explanation of DMAIC
- Advanced Statistical Tools
- Project management Tools



**Master Black Belt**

Master Black Belts are experts responsible for the strategic deployment of Six Sigma within an organization.

**The training covers:**

- Strategic deployment of six sigma
- Stakeholder management
- Project management
- Team Management

**KPMG also offers a one-day 'Champions Program' to equip the Senior Management with managerial and technical knowledge necessary to drive Lean Six Sigma culture in the organization.**

# Establishing LSS Management Office (LSSMO) - Overview

## Purpose

To drive business transformation projects for realizing management vision and build a culture of continuous improvement using Lean Six Sigma

## Approach

KPMG will deploy Experts at client site and help build a structure for sustainable improvement

### Benefits to the Organization

- LSSMO support leadership in deployment of long term and short-term business plans
- Initiative managed by KPMG professional experts resulting into faster deployment of LSS
- Long Term Capability Building for driving such initiatives

### Benefits to the employees

- Working hand in hand with KPMG experts
- Multi perspective learning

# Establishing LSS Management Office (LSSMO) – Key Activities

- **Conduct diagnostic study and understand business issues**
- **Establish LSS Management office and governance structure**
- **Identify priority issues and high impact improvement projects**
- **Identify internal teams for various projects**
- **Capability building on LSS**
- **Driving projects by engaging senior leadership team and other resources**
- **Periodic review and management updates**
- **Publishing success stories**
- **Rotating PDCA / projects cycle continuously to realize management vision**
- **Handover of LSS MO to the organization**
- **Periodic review by KPMG on the LSSMO operations**

# Our Team



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Green Belt



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