

The GLC Guide for implementing the DMAIC model

DMAIC (Define, Measure, Analyze, Improve, Control) is the heart of six sigma model for process improvement.

The major tasks within each phase are outlined as follows:

Define

- You define the different Critical to Quality (CTQ) issues
- Identify your customers and their expectations
- Identify projects needed for improvement
- Develop the Project Charter and identify critical processes

Measure

- Start data collection for the identified processes
- Develop a matrix for each process that identifies defects or flaws
- Benchmark, if needed, to recognize shortfalls and to determine the accuracy of the collected data

Analyze

- Determine root cause using the collected data and process flow diagrams
- Identify the different opportunities for improvement (OFIs)
- Identify gaps between current situation and your goal
- Prioritize OFIs and start dealing with the different ways to implement improvement
- Variation is the next thing to deal with; identify sources of variation and ways to reduce variation

Improve

- Develop strategies to improve the process and to eliminate future out of control situations
- Use the different project management tools and continuous improvement methodology to create solutions
- Implement the improvement plan

Control

- Document the improvement plan
- Develop a monitoring plan to keep the improved process on track
- Keep the improvement process ongoing through the PDCA cycle