

ISO 13053-1:2011 – Quantitative methods in process improvement – Six Sigma – Part 1: DMAIC Methodology

Overview of ISO 13053-1

ISO 13053-1:2011 describes a **methodology** for the business improvement methodology known as Six Sigma. The methodology typically comprises five phases: define, measure, analyze, improve and control (**DMAIC**).

ISO 13053-1:2011 recommends the preferred or **best practice** for each of the phases of the DMAIC methodology used during the execution of a Six Sigma project. It also recommends how Six Sigma projects should be managed and describes the roles, expertise and training of the personnel involved in such projects.

It is **applicable** to organizations using manufacturing processes as well as service and transactional processes.

Key Clauses of ISO 13053

- Clause 4:** Fundamentals of Six Sigma projects within organization
- Clause 5:** Six Sigma measures
- Clause 6:** Six Sigma personnel and their roles
- Clause 7:** Minimum competencies required
- Clause 8:** Minimum Six Sigma training requirements
- Clause 9:** Six Sigma project prioritization & selection



- Clause 10:** Six Sigma project DMAIC methodology
- Clause 11:** Six Sigma project methodology – Typical tools employed
- Clause 12:** Monitoring a Six Sigma project
- Clause 13:** Critical to success factors for Six Sigma projects
- Clause 14:** Six Sigma infrastructures within an organization.

Benefits of ISO 13053?

Organizations that have implemented Six Sigma correctly, have achieved **significant benefits**. E.g.

- ✦ GE produces annual benefits of over \$2.5 billion across the organization from Six Sigma;
- ✦ Six Sigma reportedly saved Motorola \$15 billion over the last 11 years;
- ✦ Honeywell recorded more than \$800 million in savings.

Some examples of these benefits include:

Improved quality of product or process as perceived by the customer; Decrease in total defects; Improved process flows; knowledge; Increased productivity; Reduction in process cycle times; Development of staff skills; Common language throughout the organization; Decreased time to market; etc.,

DMAIC Methodology

