

<b>GP1022</b>	<b>Development of Six Sigma Implementation Guideline for Indian MSME</b>		
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Six-Sigma getting well accepted in the manufacturing industry today. The fact that Six-Sigma focuses on attaining perfection and leads a company's pursuit towards zero defects has led many manufacturing firms, especially OEMs and large scale industries, to start the journey of Six-Sigma. But unfortunately, this is not the same case with micro, small, and medium enterprises. Many of the MSMEs are still not even aware about the basic concept of six-sigma. The objective of this project is to assist MSME in the implementation of six-sigma. MSME face various challenges ranging between manpower instability to infrastructure lacunas which will hinder their initiative towards Six-Sigma implementation.

This project has covered the various challenges being faced by MSME and the current scenario of quality in MSME, the pre-requisites for starting the journey towards six sigma and detailed framework for implementing six sigma. The Six manufacturing companies, which are into CNC machining and turning, in Peenya Industrial Area, Bangalore, were surveyed and the opinions of the different stakeholders were considered by having personal interactions with them and understanding their concerns and the issues they are facing. The assessment sheet contained 9 major factors – Leadership, Strategic planning, Information Management, Human Resource focus, Human Resource satisfaction, Customer and Market focus, Customer satisfaction, Processes, and Company specific Business Results. All the companies were then rated based on the average of the two scores in the assessment sheet. After obtaining the scores of the individual companies, analysis was carried out with the help of bar charts, prioritization matrix, and ANOVA techniques.

The top priorities from the assessment sheet questions were identified and a generic Six-Sigma framework that can be applied in all MSME was formed. Guidelines that need to be followed for successfully completing each of the phases in this framework were then formed. The common guidelines among the six companies were then selected and combining these with the results of ANOVA, the guidelines for implementing Six-Sigma in Indian MSME were formed.

