

PRODUCTIVITY IMPROVEMENT-A CASE STUDY

PRAMOD A. DESHMUKH¹ & A. B. HUMBE²

¹Director, ICEEM, Aurangabad Technical Campus for Engineering & MBA, Maharashtra, India

²Assistant Professor, ICEEM, Aurangabad, Maharashtra, India

ABSTRACT

Six Sigma is a philosophy based on setting attainable short-term goals while striving for long-term objectives. Six sigma is a highly disciplined approach used to reduce the process variations to the extent that the level of defects are drastically reduced to less than 3.4 per million process, product or service opportunities (DPMO). Six Sigma, in many organizations, simply means a measure of quality that strives for near perfection. Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects (driving towards six standard deviations between the mean and the nearest specification limit) in any process; from manufacturing to transactional and from product to service. The Six Sigma method allows us to draw comparisons to other similar or dissimilar products, services, and processes. In this manner, we can see how far ahead or behind we are. Six Sigma helps us to establish our course and gauge our pace in the race for total customer satisfaction.

The work is carried out at Tulja Engineering Aurangabad, a Medium scale manufacturing unit. The project aims to reduce tool changing time at grinding wheel station. This problem was rectified to a great extent using Metrics, why? Why? Analysis and root cause analysis techniques. This work is expected to increase number of Six Sigma users after the impact of this result on the performance of the firm.

The authors are trying to prove that six sigma could be implemented with the existing improvement approach to small as well as medium scale industries. Six sigma can also be used to solve the complicated problems which may be of technical or non-technical in nature. We conclude that successful implementation needs top management support, involvement of people concerned, organizational infrastructure, training of manpower and thorough process analysis.

KEYWORDS: Metrics, Cp, DMAIC, Root Cause Analysis