CONSTRUCTION ENGINEERING: ROLE OF SIX SIGMA APPROACH

SUWARNA B TORGAL

Assistant Professor, IET, DAVV, Indore, MP, India

ABSTRACT

Construction projects are a set of unique activities that are performed to achieve a particular goal. It can be very well said that these projects need very accurate monitoring to achieve the results or desired parameters for the customer. Project needs are to be managed for deriving such results.

The continuous tracking of these projects are possible only when there is a structured mechanism to be followed for monitoring. In the present study, existing technique of control like 'lean Six Sigma' is contemplated for monitoring such processes in a project. Further, special attention has been given to the problem of inaccurate monitoring of project parameters.

The study is based on designing and analyzing a methodology that improves the project risk management process by having efficient monitoring system for these projects. The monitoring should be based on the risk sensitivity of the various parameters of the project. These parameters, derived through exhaustive literature survey and expert advice, are given special references while monitoring the project for risk analysis. Six Sigma level of accuracy is conceptualized in this study for the execution of the projects.

On analyzing the possibility of risk occurrence on Sigma levels for each pre-decided parameter, it is found that technical parameters have got the maximum number of risks associated with them. The methodology proposed in the paper provides a guideline for risk monitoring for Power transmission construction projects.

This study bridges the gap between uncertainty and well-planned project management which will help to enhance the project performance.

KEYWORDS: Project Risks, Six Sigma, Risk Management, Construction Projects