

A Probability Analysis of Construction Project Schedule Using Risk Management Tool

Authors : A. L. Agarwal, D. A. Mahajan

Abstract : Construction industry tumbled along with other industry/sectors during recent economic crash. Construction business could not regain thereafter and still pass through slowdown phase, resulted many real estate as well as infrastructure projects not completed on schedule and within budget. There are many theories, tools, techniques with software packages available in the market to analyze construction schedule. This study focuses on the construction project schedule and uncertainties associated with construction activities. The infrastructure construction project has been considered for the analysis of uncertainty on project activities affecting project duration and analysis is done using @RISK software. Different simulation results arising from three probability distribution functions are compiled to benefit construction project managers to plan more realistic schedule of various construction activities as well as project completion to document in the contract and avoid compensations or claims arising out of missing the planned schedule.

Keywords : construction project, distributions, project schedule, uncertainty

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