UNDERSTANDING THE RELATIONSHIP BETWEEN PLANNING RELIABILITY AND SCHEDULE PERFORMANCE: A CASE STUDY

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ABSTRACT

The earned-value method (EVA) monitors the progress of the project using dollar value or man hours as the metric by comparing the amount of work completed against the work planned to be complete and indicate if the project is on or behind schedule by means of the Schedule Performance Index (SPI). The Last Planner System (LPS™) increase planning reliability by reducing workflow variability, through analyzing and removing activity restrictions, analyzing causes for not fulfilled plans and monitoring its improvements by means of Percentage of Plan Completed (PPC).

The paper presents two cases studies about the application of the mentioned project control techniques and shows evidence that demonstrates the relationship between planning reliability (PPC) and project schedule performance (SPI). This relationship was tested statistically showing positive trends. The results show that project time is improved by increasing planning reliability during construction phase. These findings can help project managers understand the relationship between workflow reliability and project time, and prove that the role of the professional manager needs to become more proactive.

KEY WORDS

Project control, earned-value, last planner, planning reliability and schedule performance.

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