

## **Assessing the Impacts of an IT LPS Support System on Schedule Accomplishment in Construction Projects**

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### **Abstract**

This paper seeks to identify improvements in the level of implementation of the Last Planner System (LPS) with the use of information technologies (IT) based on its methodology. In addition, we correlate the level of implementation of specific LPS components to the plan percent complete (PPC). The conjoint analysis of IT benefits in implementation and correlation to PPC allowed identification of two critical components: the standardization of the planning and control process, which can be quantitatively assessed by the PPC, and the systematic analysis and removal of constraints assessed through the percentage of constraints removed (PCR). A sample of 50 projects was used to corroborate that projects that have higher PPC and PCR also have better performance, measured by the schedule accomplishment and number of noncompliances. Consequently, results inferred that projects that use IT systems based on LPS have a more systematic planning and control and better constraint management that also correspond to better schedule accomplishment and less noncompliance..