“Need for Speed”: Framework for Measuring Construction Project Pace – Case of Road Project
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Abstract
The construction industry is active within its environment. The desirability to deliver construction projects within the schedule or even ahead of it is examined. Nowadays, this industry relies on time-to-delivery and time-to-market to gain competitive advantages and increase profit margins. This has created an increased demand for a high performance project delivery system that can achieve an intense reduction of the project life cycle, from the start to the handover of the project.

The aim of this paper is to develop a framework for measuring the project speed within a certain time of the project execution phase and compare it with the optimal average project speed based on difficulties and stimuli in that time, which should be defined based on other project parameters. This will be done by identifying a range of key performance indicators (KPIs). This identification of KPIs helps set a benchmark for measuring the speed of a construction project. In this paper, a conceptual framework is presented to reflect the idea behind the use of performance measurement in measuring the speed of construction projects, and then a performance measurement system tailored to a real case of a road construction project. The framework and its KPIs are customized to road construction projects, but it is very possible to tailor it to other construction projects.

Keywords: Project speed; Construction project; Time to delivery; Performance measurement; Key performance indicators