

## Modeling Metrics for Monitoring Software Project Performance Based on the GQM Model

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**Abstract :** There are several methods to monitor software projects and the objective for monitoring is to ensure that the software projects are developed and delivered successfully. A performance measurement is a method that is closely associated with monitoring and it can be scrutinized by looking at two important attributes which are efficiency and effectiveness both of which are factors that are important for the success of a software project. Consequently, a successful steering is achieved by monitoring and controlling a software project via the performance measurement criteria and metrics. Hence, this paper is aimed at identifying the performance measurement criteria and the metrics for monitoring the performance of a software project by using the Goal Question Metrics (GQM) approach. The GQM approach is utilized to ensure that the identified metrics are reliable and useful. These identified metrics are useful guidelines for project managers to monitor the performance of their software projects.

**Keywords :** component, software project performance, goal question metrics, performance measurement criteria, metrics

**Conference Title :** ICCSSE 2014 : International Conference on Computer Science and Software Engineering

**Conference Location :** Sydney, Australia

**Conference Dates :** December 15-16, 2014