**Complexity metrics for measuring the understandability and maintainability of Business Process Models using Goal-Question-Metric (GQM)**

ABSTRACT

Business Process Models (BPMs), often modeling language such as UML activity between the created using stakeholders in the can provide us a diagrams, Event- Driven Process Chains Markup Language (EPML) and Yet Another Workflow Language (YAWL), serve as a base for communication that adequate software development process. In order to fulfill this purpose, they should be easy to understand and easy to maintain. For this reason, it is useful to have measures information about understandability and maintainability of the BPM. Although there are hundreds of software complexity measures that have been described and published by many researchers over the last few decades, measuring the complexity of business process models is a rather new area of research with only a small number of contributions. In this paper, we provide a comprehensive report on how existing complexity metrics of software were adapted in order to analyze the current business process models complexity. We also proposed a Goal- Question-Metric (GQM) framework for measuring the understandability and maintainability of BPMs.