

A survey of business process complexity metrics.

ABSTRACT

Business processes have an inherent complexity which if not controlled can keep on increasing with time, thus making the processes error-prone, difficult to understand and maintain. In the last few years, several researchers have proposed a number of metrics which can be used to measure and therefore control the complexity of business processes. In this study, a survey of business process complexity metrics is conducted with the goal of investigating if there are any gaps in literature. Initially, a description of the process of metrics definition and validation is presented, followed by an analysis of business process complexity metrics that have appeared in literature in the last 5 years. The reviewers checked whether the identified metrics have any tool support, whether they have been validated and whether validation results are significant or not. Findings show that few business process complexity metrics have been proposed so far and that even fewer have been validated. In order to address these issues, some future research directions are proposed.

Keyword: Business process; Complexity metrics; Empirical validation; Theoretical validation