

A Business Process Modelling Based Approach to Investigate Complex Processes: Software Development Case Study

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ABSTRACT

Projects that include many complex processes tend to be extremely difficult to managers and staff in terms of shared understanding, analysis, and improvement. Therefore, a new approach is developed to investigate complex processes, such as software development processes, using business process modeling. Particularly, this paper presents an investigation into the use of Role Activity Diagramming (RAD) to model complex processes in the software industry sector, with reference to the process of TestWarehouse. Systematic extension and quantitative analysis to RAD models has led to discover process bottlenecks, identify cross functional boundary problems, and focus discussion about automation of processes. Further research work is being undertaken to replicate this study on other application domains and thus generalize the adopted approach.