

Tactical Business-Process-Decision Support based on KPIs Monitoring and Validation

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Abstract. Key Performance Indicators (KPIs) can be used to evaluate the success of an organization, facilitating the detection of the deviations and unexpected evolution of the behaviour of a company. The difficulty for enterprises is to ascertain what to do when a deviation is detected. In this paper, we propose a modelling approach to improve the operational business-level and to ascertain the possible actions that can be executed to maintain the right direction in a company. For business process-oriented companies, it entails knowing how KPIs can be affected by the business processes. It implies not only pointing out that a system malfunction exists, but also to know what to do when a deviation is detected. Our proposal presents a methodology that covers: (1) an extension of the existing models in order to combine KPIs, goals of the companies, and the decision variables together with business processes; (2) a methodology based on data mining analysis to verify the correctness of the enriched proposed model according to the data stored during business evolution, and; (3) a framework to simulate the evolution of the business according to the decisions taken in the governance process, thereby supporting governance activities to achieve the defined objectives by exploiting goals and KPIs from the proposed model.

Keywords: Governance · Business process · Decisions Support · Fuzzy logic · Modelling knowledge · KPIs

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