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A Tool for Assessing Performance and Structural Quality of Business Process

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Abstract : Modeling business processes is an essential task when evaluating, improving, or documenting existing business processes. To be efficient in such tasks, a business process model (BPM) must have high structural quality and high performance. Evidently, evaluating the performance of a business process model is a necessary step to reduce time, cost, while assessing the structural quality aims to improve the understandability and the modifiability of the BPMN model. To achieve these objectives, a set of structural and performance measures have been proposed. Since the diversity of measures, we propose a framework that integrates both structural and performance aspects for classifying them. Our measure classification is based on business process model perspectives (e.g., informational, functional, organizational, behavioral, and temporal), and the elements (activity, event, actor, etc.) involved in computing the measures. Then, we implement this framework in a tool assisting the structural quality and the performance of a business process. The tool helps the designers to select an appropriate subset of measures associated with the corresponding perspective and to calculate and interpret their values in order to improve the structural quality and the performance of the model.

Keywords : performance, structural quality, perspectives, tool, classification framework, measures
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