

# Evaluation of Automatically Generated Conceptual Database Model Based on Business Process Model: Controlled Experiment

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**Abstract.** This paper presents the results of the controlled experiment that we have conducted in order to evaluate an approach to automated design of the initial conceptual database model based on the collaborative business process model. The source business process model is represented by BPMN, while the target conceptual model is represented by UML class diagram. The results of the experiment imply that the approach enables generation of the target conceptual model with a high percentage of completeness ( $> 85\%$ ) and precision ( $> 85\%$ ), which confirms the results of the initial case-study based evaluation.

**Keywords:** BPMN, Collaborative Business Process Model, Conceptual Database Model, Evaluation, Experiment, Model-driven, UML.