

## Requirements Catalog for Business Process Modeling Recommender Systems (Extended Abstract)\*

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The manual construction of business process models is a time-consuming and error-prone task. To improve the quality of business process models, several modeling support techniques have been suggested spanning from strict auto-completion of a business process model with predefined model elements to suggesting closely matching recommendations. While recommendation systems are widely used and auto-completion functions are a standard feature of programming tools, such techniques have not been exploited for business process modeling although implementation strategies have already been suggested. Therefore, this paper collects requirements from different perspectives (literature and empirical studies) of how to effectively and efficiently assist process modelers in their modeling task.

With our research, we aim to provide a holistic view on requirements for Process Modeling Recommender Systems (PMRSs). For achieving this, relevant scientific works were inspected as well as the wishes and needs of practitioners were gathered in order to better understand the design space for PMRSs. Understanding both, the research side with the current literature as well as the practitioner side, is crucial. Firstly, we have consulted relevant literature by conducting a systematic literature review. Secondly, requirements of business users (i.e. practitioners and students that may become prospective practitioners) were gathered from different studies. This step assures that users who create business process models and are familiar with BPM tools were also involved in the elicitation of our collection of requirements. With regard to this we performed three studies, namely (i) a short online-survey about modeling support functionality, (ii) a case study, and (iii) a survey at a major fair that was based on a live-demonstration of a prototypical implementation.

The condensation of requirements represents a comprehensive catalog, which constitutes a solid foundation to implement effective and efficient PMRSs. We expect that our contribution will fertilize the field of modeling support techniques to make them a common feature of BPM tools.

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