

Human resource allocation in business process management and process mining a systematic mapping study

Arias, M., Saavedra, R., Marques, M. R., Munoz-Gama, J., & Sepúlveda, M. (2018). Human resource allocation in business process management and process mining. *Management Decision*. <10.1108/MD-05-2017-0476> Accessed 01 Mar 2021.

Abstract

Purpose: Human resource allocation is considered a relevant problem in business process management (BPM). The successful allocation of available resources for the execution of process activities can impact on process performance, reduce costs and obtain a better productivity of the resources. In particular, process mining is an emerging discipline that allows improvement of the resource allocation based on the analysis of historical data. The purpose of this paper is to provide a broad review of primary studies published in the research area of human resource allocation in BPM and process mining. **Design/methodology/approach:** A systematic mapping study (SMS) was conducted in order to classify the proposed approaches to allocate human resources. A total of 2,370 studies published between January 2005 and July 2016 were identified. Through a selection protocol, a group of 95 studies were selected. **Findings:** Human resource allocation is an emerging research area that has been evolving over time, generating new proposals that are increasingly applied to real case studies. The majority of proposed approaches relate to the period 2011-2016. Journals and conference proceedings are the most common venues. Validation research and evaluation research are the most common research types. There are two main evaluation methods: simulation and case studies. **Originality/value:** This study aims to provide an initial assessment of the state of the art in the research area of human resource allocation in BPM and process mining. To the best of the authors' knowledge, this is the first research that has been conducted to date that generates a SMS in this research area..