

International Journal of Information Systems and Project Management

ISSN (print):2182-7796, ISSN (online):2182-7788, ISSN (cd-rom):2182-780X Available online at ijispm.sciencesphere.org

Editorial

The mission of the *IJISPM* - *International Journal of Information Systems and Project Management* is the dissemination of new scientific knowledge on information systems management and project management, encouraging further progress in theory and practice.

We are pleased to bring you the first number of the 11th volume of IJISPM. In this issue, readers will find important contributions to digital transformation, Robotic Process Automation, visual analytics, and change requests management.

The first article, "Supporting the digital transformation of SMEs — trained digital evangelists facilitating the positioning phase", is authored by Jukka Kääriäinen, Leila Saari, Maarit Tihinen, Sari Perätalo, and Timo Koivumäki. As digital transformation (DT) sweeps over society, the exploitation of digital solutions is obvious, especially for large enterprises. Unfortunately, small- and medium-sized enterprises (SMEs) struggle with DT because of limited resources, understanding, and implementation skills. Thus, SME companies need both methods and tools to proceed with DT as well as support to exploit them. This article presents a study in which adult learners with professional experience are trained to use a digitalization development method and tools to analyze target organizations' digitalization state and identify improvement ideas. Thirty trained digital evangelists used the tools and methods while conducting digitalization status analyses in eleven organizations. The study results show that the method and tools work in the context presented in this research. The study's findings are beneficial for educational professionals interested in educating students toward helping SME organizations along their digitalization pathway.

The title of the second article is "Employees' perception of value-added activity increase of Robotic Process Automation with time and cost efficiency: a case study", which is authored by Arafat Salih Aydıner, Selman Ortaköy, and Zehra Özsürünç. Drawing upon the theory of Task-Technology Fit, this study explores the emerging consequences of Robotic Process Automation (RPA). Data related to the time and cost of processes before and after the RPA implementation were collected and descriptively analyzed. Even though time and cost efficiency improvements occurred in 50 out of 54 of the processes, the results indicated no labor reduction after the RPA implementation and no cost reduction in some business units, contrary to reports in the literature. To investigate what happened to the human resource environment, the authors surveyed 106 employees affected by the implementation of RPA. No variance was found between the characteristics of the employees and the changes in the working environment. However, the descriptive results of the survey revealed that employees' perception of value-added activities increased. These results provided that considering RPA as a routine process without calculating the strategic value creates process-oriented transformation with a lack of time and cost-efficiency.

The third article, authored by Alireza Khakpour, Ricardo Colomo-Palacios, and Antonio Martini, is entitled "Towards a framework for developing visual analytics in supply chain environments". Visual Analytics (VA) has shown significant importance for Supply Chain (SC) analytics. However, SC partners still have challenges incorporating it into their data-driven decision-making activities. A conceptual framework for the development and deployment of a VA system may provide an abstract, platform-independent model for the whole process of VA, covering requirement specification, data collection and pre-processing, visualization recommendation, visualization specification and implementation, and evaluations. In this paper, the authors propose such a framework based on three main aspects: 1) Business view, 2) Asset view, and 3) Technology view. Each of these views covers a set of steps to facilitate the development and maintenance of the system in its context. The framework follows a process structure that comprises activities, tasks, and people. The final output of the whole process is the VA as a deliverable. This facilitates the alignment of VA activities with business processes and decision-making activities. The authors presented the framework's applicability using an actual usage scenario and left the implementation of the system for future work.



International Journal of Information Systems and Project Management

ISSN (print):2182-7796, ISSN (online):2182-7788, ISSN (cd-rom):2182-780X Available online at ijispm.sciencesphere.org

"Improving the evaluation of change requests using past cases" is the fourth article and is authored by Otávio da Cruz Mello and Lisandra Manzoni Fontoura. As one of the leading causes of project failures, requirements changes are inevitable in any software project. The authors propose an intelligent approach to facilitate the risk analysis of a change request by providing information about past cases found in similar change requests, the solutions adopted, and a support tool. The proposed approach uses case-based reasoning to retrieve previous cases similar to the current case. This approach also uses association rules to analyze patterns in the dataset and calculate the probability of risks associated with change requests. The authors validate the proposal in a case study by analyzing the most frequent challenges in change management and considering how it can solve or minimize such problems. Results show that the proposed approach successfully assists decision-making, predicts potential risks, and suggests coherent solutions to the user. The authors have developed a support tool to evaluate this approach in practice with experts and obtained four different outcomes. The use of case-based reasoning and association rules has proven advantageous in change management despite validity threats associated with the small number of test cases and experts involved.

We would like to take this opportunity to express our gratitude to the distinguished members of the Editorial Board, for their commitment and for sharing their knowledge and experience in supporting the IJISPM.

Finally, we would like to express our gratitude to all the authors who submitted their work, for their insightful visions and valuable contributions.

We hope that you, the readers, find the International Journal of Information Systems and Project Management an interesting and valuable source of information for your continued work.

The Editor-in-Chief, João Varajão University of Minho Portugal



João Varajão is currently a professor of information systems and project management at the *University of Minho*. He is also a researcher at the *ALGORITMI Research Center* at the *University of Minho*. Born and raised in Portugal, he attended the *University of Minho*, earning his Undergraduate (1995), Masters (1997), and Doctorate (2003) degrees in Technologies and Information Systems. In 2012, he received his Habilitation degree from the *University of Trás-os-Montes e Alto Douro*. His current main research interests are related to Information Systems and Information Systems Project Management success. Before joining academia, he worked as an IT/IS consultant, project manager, information systems analyst and software developer, for private companies and public institutions. He has supervised more than 100 Masters and Doctoral dissertations in the Information Systems field. He has published over 300 works, including refereed publications, authored books, edited books, as well as book chapters and communications at international conferences. He serves as editor-in-chief, associate editor and member of the editorial board for international journals and has served on numerous committees of international conferences and workshops. He is the co-founder of CENTERIS – Conference on ENTERprise Information Systems and ProjMAN – International Conference on Project MANagement.