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.

It is our great pleasure to bring you the third number of the tenth volume of IJISPM. In this issue, readers will find important contributions on digital transformation and blockchain.

The first article, “From selling machinery to hybrid offerings – organizational impact of digital servitization on manufacturing firms”, is authored by Christoph Brosig, Susanne Strahringner and Markus Westner. According to the authors, the transition toward services has been imperative for manufacturing firms for years. The change from a product-oriented to a more service-dominant business model affects the organizational structure of firms. However, literature provides limited insights into how manufacturing firms organize themselves in this transition. Even though digital technologies are critical for the transition, it is unclear how to orchestrate digital and traditional Information Technology (IT) resources in manufacturing firms accordingly. The authors analyze the case of a typical manufacturing firm that has adjusted its structure to reorganize for solution offerings based on product, service, and digital components. Results describe a hybrid organizational structure that splits front- and back-end units. The back-end units are split along solution components. Digital IT resources are internalized and governed decentrally, with traditional IT resources being outsourced and steered centrally. The findings contribute to digital servitization research by clarifying the overarching as well as the digital and traditional IT-related organization for manufacturing firms.

The title of the second article is “Characteristics of Blockchain and Smart Services, for Smart Governments: A systematic review of the literature”, which is authored by Ahmed Alfatih D. Mohamed, Yazan M. Alkhateeb, Puneet Agarwal, Ahmed R. Abdelwahab, Osamah Alrababah, and Taghreed Abu Salim. The interest in blockchain technology has grown rapidly. This is simply because of the security and decentralization that it provides. Nevertheless, most government services around the world run on inefficient systems loaded with heavy bureaucracy. They lead to non-transparent systems and a loss of public confidence in government services. This article presents a systematic review of the literature on this topic, aiming to highlight the characteristics of blockchain technology that demonstrate its uniqueness, together with the characteristics of the smart government services that are required for efficient service delivery. It was found that the dominant characteristics of blockchain technology that are expected to provide the highest value for customers are decentralization and the capacity to be shared and public, whereas the most desired characteristics for the efficient service delivery of smart government services are speed, trust, and participation. The article examine how the use of blockchain technology in government services is impacting their delivery to customers. The findings help governments to develop a blockchain strategy.

The third article, authored by Ágnes Sándor and Ákos Gubín, is entitled “A multi-dimensional model to the digital maturity life-cycle for SMEs”. As companies try to maintain and strengthen their competitive advantage, they should be aware of the level of their digital maturity. This article presents a methodology that helps to determine the position of a small and medium-sized enterprise in the digital maturity life-cycle. This is performed on the basis of maturity and digital maturity models and company growth theories. A number of studies and models have been prepared to determine digital maturity on the basis of various sectoral criteria, but these are all one-dimensional. This article proposes a multi-dimensional model for determining the digital maturity life-cycle of small and medium-sized enterprises that takes into account companies’ digital maturity, the IT intensity of various sectors, and their organizational characteristics. The model defines five maturity levels together with their relevant characteristics, classified into three levels in terms of data-information. It can help small and medium-sized enterprises adopt more accurate decisions regarding areas in need of development.
“Executives’ role in digital transformation” is the fourth article and is authored by José Fernando López-Muñoz and Alejandro Escribá-Esteve. It is a conceptual article that revisits and updates the concept of top management support (TMS), which has been the long-established rationale for explaining the role of top managers in digitalization activities. In the authors’ view, the concept of TMS is grounded in technological determinism, accounts for attitudinal and behavioral aspects that appear to be little more than exhortation, and accepts the occasional responsibility of top managers in technology management. The authors consider both the crucial role that top managers may play in the digitalization process and the fact that digital technologies have become pervasive in today’s organizations. Then, they develop a model by which top managers and digital technologies are cooperatively involved in digitalization. For that, the authors have looked through the theoretical lens of imbrication and attention perspectives to reconstruct the role of top managers in the digital transformation process. Each imbrication layer can be viewed as a process where top managers form beliefs to act on digital opportunities for strategic action. Specifically, the model provides insights into how executives’ characteristics and social processes impact the likelihood of forming either beliefs about radical or incremental opportunities requiring strategic action. Additionally, the article offers several hypotheses that enrich the knowledge of the relationship between top managers and the digitalization process.

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.

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.