



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 eighth volume of IJISPM. In this issue readers will find important contributions on data science analysis, ERP, IT Governance, IoT project implementation, and Project portfolio risk management.

The first article, “MIDST: an enhanced development environment that improves the maintainability of a data science analysis”, is authored by Jeffrey S. Saltz, Kevin Crowston, Robert Heckman, and Yatish Hegde. As the authors state, with the increasing ability to generate actionable insight from data, the field of data science has seen significant growth. As more teams develop data science solutions, the analytical code they develop will need to be enhanced in the future, by an existing or a new team member. Thus, the importance of being able to easily maintain and enhance the code required for an analysis will increase. However, to date, there has been minimal research on the maintainability of an analysis done by a data science team. To help address this gap, in this article the data science maintainability was explored by (1) creating a data science maintainability model, (2) creating a new tool, called MIDST (Modular Interactive Data Science Tool), and then (3) conducting a mixed method experiment to evaluate MIDST. The new tool aims to improve the ability of a team member to update and rerun an existing data science analysis by providing a visual data flow view of the analysis within an integrated code and computational environment.

The title of the second article is “How IT Governance can assist IoT project implementation”, which is authored by David Henriques, Ruben Pereira, Isaías S. Bianchi, Rafael Almeida, and Miguel Mira da Silva. Internet of things (IoT) is considered a key technology for the Industry 4.0 revolution. Information Technology (IT) governance (ITG) is now an increasingly important tool for organizations to align their IT strategy and infrastructures with the organizations’ business objectives. The most adopted ITG framework is COBIT, which defines seven enabler categories. These enablers aim to facilitate the implementation, identification, and management of IT. This research aims to determine, explore, and define which are the most suitable IT governance enablers to assist managers in IoT implementation. Results indicate that data privacy, data protection, and data analysis are currently the most relevant enablers to consider in an IoT implementation because they increase the efficiency of the solution and enhance data credibility.

The third article, authored by Moutaz Haddara and Angelo Constantini, is entitled “Fused or Unfused? The Parable of ERP II”. One of the major visions is having one system that covers all business functions and satisfies virtually all the standard processes and routine transactions within organizations. In the last decade, several academics and practitioners have predicted the rise of what is called enterprise resource planning systems II (ERP II). ERP II was sought to be a digital platform that is capable of supporting timely decision-making through covering all business functions’ processes through having preloaded modules that will minimize the need for external systems like separate customer relationship management (CRM), e-business platforms, and supply chain management (SCM) systems, among others. While ERP systems nowadays have matured, and several packages come with CRM modules and other solutions, however separate CRM systems are still widely adopted by organizations. Thus, this study investigates why organizations that currently have ERPs with CRM modules are still investing in separate CRM systems. The results show that the current ERP systems did not reach the ERP II state as envisioned, as most organizations are inclined to adopt separate CRM systems. The authors have presented five main reasons for this inclination, which are: scoping during ERP implementations, costs, features and functionalities, user-friendliness and ease of use, and finally integration with e-business platforms.



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“Project portfolio risk management: a structured literature review with future directions for research” is the fourth article and is authored by Camilo Micán, Gabriela Fernandes, and Madalena Araújo. Project Portfolio Risk Management (PPRM) has been identified as a relevant area regarding project portfolio success. This paper reports on a structured literature review of PPRM. The content analysis reveals four main recurrent topics in PPRM: (1) The influence of RM on project portfolio success, based on project portfolio impact level, moderators or contingency factors between RM and project portfolio success, and PPRM dimensions; (2) risk and project interdependencies, highlighting resources, technology, outcome, value, and accomplishment project interdependencies; (3) project portfolio risk (PPR) identification, where four main risk source categories are identified; and (4) PPR assessment, composed of risk measures and the main methods used for risk assessment. This study also provides an overview of PPRM as a research field, while it also promotes four future research directions: (1) PPRM as part of organizational RM; (2) RM, success dimensions and strategic impact; (3) mechanisms for PPR assessment, and (4) PPRM as a complex and dynamic system.

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,

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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 of ProjMAN – International Conference on Project MANagement.

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