EDITORIAL

It is our great pleasure to bring you the third number of the 13th volume of IJISPM. In this issue, readers will find important contributions on IT project portfolio risk, 4IR technologies project management, project tools misalignment, and public investment projects selection.

Systemic risk might jeopardize your IT project portfolio: A qualitative evaluation of risk measures

Julia Amend, Florian Guggenmos, Nils Urbach, Gilbert Fridgen

IT project portfolios consist of various projects which depend on each other. Including additional IT projects, which are interdependent with existing ones, affects the IT portfolio's systemic risk, which arises from these interdependencies. To handle this risk, organizations must quantitatively analyze the systemic risk of their IT portfolio. However, an overview and evaluation of risk measures for quantitatively analyzing systemic risk in IT portfolios has been missing. In our study, we first conducted a structured literature review to identify risk measures. We then determined evaluation criteria based on mathematical considerations on how risk measures can be modeled and insights from our literature review. Subsequently, we performed a qualitative, criteria-based evaluation to clarify which risk measure fits specific use cases. Finally, we delineated our findings as three recommendations. Our research supports organizations in better analyzing systemic risk in their IT portfolios by selecting the most appropriate risk measure according to their data or use case, contributing to a more successful IT portfolio management.

A framework for managing projects that integrate 4IR technologies

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The Fourth Industrial Revolution (4IR) signifies a new phase in project management. The swift progression of 4IR technologies requires a reassessment of current methods to address the complexities of contemporary project management adequately. The ability of project managers to rapidly adjust to emerging technology and evolving standards is crucial in determining the successful outcome of projects. It is imperative for proficient project managers to recognise the significance of their capacity to predict and respond effectively to these changes, as well as their subsequent effects on ongoing and forthcoming projects, to achieve success in their professional domain. The objective of this study was to examine the effects of the 4IR on the project management discipline. A qualitative technique was employed for the collection and analysis of data. A theoretical framework for project management in the 4IR was developed. The framework identifies (i) what constitutes 4IR projects in terms of characteristics, challenges and success factors, (ii) what skills and competencies are required to deliver these projects, and lastly, (iii) what tools and techniques can be employed to deliver these projects. There is a need for such a framework which offers valuable perspectives and a comprehensive plan for the effective management of 4IR projects, specifically targeting project management professionals.

Sources of project tool misalignment in multistakeholder projects

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Inter-organizational collaboration is recognized as one of the key success factors for complex project delivery. Simultaneously, tools and technologies play a growing role in project management and operations, especially as project work is increasingly being conducted in hybrid and remote settings. These tools play a critical role in achieving productive collaboration, and when properly selected, implemented, and aligned, they offer opportunities for increased project productivity. However, the selection of correct tools can be tricky, and at worst, tools can end up hampering project operations. This study empirically identifies key project tool-related challenges and clarifies the role of tools in relation to stakeholder collaboration. The results emphasize two-dimensional alignment for the selection and implementation of tools: by aligning with both project objectives and the teams executing the project, tools are better set to fulfill their role as a link that supports project organization toward its goals and fosters productive inter-organizational collaboration.

A decision support process for the selection of sustainable public ICT project investments

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The allocation of limited public resources to public investments necessitates selecting projects with the highest social and economic value, along with the greatest likelihood of success. However, the literature lacks well-defined criteria to measure the alignment of such projects with national policies, social benefits, and institutional capabilities. This paper aims to fill this gap by presenting a process methodology and a set of criteria for evaluating and prioritizing public sector ICT projects. A project selection process is defined with a comprehensive criteria set, and it was tested on 11 carefully selected information and communication technology projects. A process has been defined consisting of prerequisite elimination, criteria weighting, project scoring, and verification. Both AHP and TOPSIS methods were utilized. The study also attempts to measure social benefits with respect to Türkiye's national priorities, through more tangible sub-criteria. To the best of our available knowledge, the study provides the most comprehensive set of criteria for selecting ICT investment projects in the public sector. The findings reveal that projects aligned with national priorities and providing high social benefits were ranked highest. The fact that project criteria provide feedback from a broad perspective shows that information systems can also support project maturation, along with project selection.

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.

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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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