

## GUEST EDITORIAL PREFACE

# Special Issue on the Role of Digital Technology in Innovation Projects and Product Development

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Companies are increasingly forced to become more innovative and faster in their product development, in order to bring new products into markets and so remain competitive. They are also expected to become continuously innovative throughout the product development (PD) project. In the competition among the fastest and the fittest, project organizations enjoy growing importance. The accelerating speed for new products underlines the role of digital technologies in innovation PD. Digital technologies enable relative low cost exploring and testing during the project, and become important factors affecting PD. Within digital PD, company's development teams face an interesting challenge to be not only efficient in their task, but also creative.

As a world-wide academic Journal, IJIDE has numerous regional dimensions among its readers and contributors. This current special issue is based on *Role of Digital Technology in*

*Innovation Projects and Product Development in the Northern Dimension*. All writers of this special issue come from northern Finland. The issue reflects and makes visible the regional particularities of the North such as distance, the weather and northern nature. Methodologically, the issue emphasizes qualitative methods, which are rather seldom applied within the field information technology. The underlying theoretical perspectives, however, are following and contributing to the well-known body of theories such as information management, value co-creation, resource-based view, innovation and practice-based perspectives.

In this special issue, we want to examine features and effects of the digital product development approaches from various perspectives. We start with an organization level perspective that focuses on planned and goal oriented development projects. The call for innovations and creativity within the efficiency frames is

not restricted to profit oriented companies, but also includes public sector government organizations. The article of *Syväjärvi et al.* discusses information management within smart city governance. The authors report that often development areas are delegated to experts, and digital information management practices are scattered over projects, rather than following any holistic vision. Such dispersion is not seen as offering the organization open opportunities to develop something new. The authors argue that e-government development approaches should not focus on technology, only, but also take into account the role of the social and human capital, as well the ICT related practices used within the organization.

The article of *Lohikoski et al.* highlights the role of organizational virtual communication practices within digital product development. They show that communication practices are often based on project manager's and team members' prior experiences and preferences rather than specific predefined communication processes and suggest that extensive experience in the cross-cultural virtual collaboration of individual team members, can be seen as tacit knowledge. They argue that organizational virtual communication skills can be developed through years of working in virtual settings and through systematic training. Virtual communication skills can enable transferring tacit knowledge and so overcome the need for personal presence.

Apart from the single organization perspective, industry and society level questions arise as well. *Laine and Parkkari* focus the attention on a project within entrepreneurship society in Finland and describe how practices within this project create strategic agency for a large number of people, and for IT technology. *Laine and Parkkari* consider how the co-constitution

of the social and material produce strategic agency. They draw from "sociomateriality as a practice" the dynamic construction of strategic agency in and through the continuous (re) configuring of human actions, information technology, and other materialities. Similarly like *Syväjärvi et al.*, the authors point out that focusing on IT or other materialities as such is not sufficient when studying the effects of IT. The authors describe how strategy making within the entrepreneurship society follows a top-down mode, and constructs project members with the identity of an IT entrepreneur. The article shows how agency gets both enabled and constrained through the entanglement of human action and IT, leading to the effects of inclusion and exclusion.

We editors, *Merenheimo and Rusko*, want to widen the perspective from planned development projects to approaches within the large internet society. We study tourism destination branding as a co-creative process of the destination and consumers. It is a process that cannot be fully controlled by any single participant. We consider how branding approaches within a wide internet society create opportunities for co-create value, and scrutinize their contribution to sustainable competitive advantage. Following the resource based view we argue that the internet society can contribute to changes in societal meanings related to the digitalization itself, and in its relation to a particular destination. Such a change can improve a destination's position compared with its competitors.

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