

Guest Editorial Preface

Special Issue on Digital and Social Transformation for a Better Society and Economic Growth in the Mediterranean Region

Adamantia Pateli, Ionian University, Greece

Panos Kourouthanassis, Ionian University, Greece

João Vieira da Cunha, IÉSEG School of Management, France

Panos Markopoulos, University of Cyprus, Cyprus

The power of digital technologies to enable firms to innovate has been grasped by the term digital innovation, a common theme in the IS research agenda. However, within the last few years, we are witnessing a shift of research interest for IS researchers from the digital innovation to the digital transformation theme. At a high level, digital transformation encompasses the profound changes taking place in organizations, but also in industries and societies through the use of digital technologies.

This special issue focuses on the upcoming role of digital technologies to trigger changes for society and human lives. The social transformation may take the form of encouraging social inclusion, enabling cultural reform, assisting social mobility, safeguarding social cohesion and justice, or provoking social change in general. In this issue, we have invited scholars from all over the world, and especially from the Mediterranean region, to reflect on the potential of digital technologies to change humans' life but mostly to yield better economic and social systems. This issue contains five papers. Earlier versions of these papers have been presented and discussed in the Mediterranean Conference of Information Systems, which took place on September 28th – 30th, 2018, in Corfu, Greece.

The first paper, titled “Employee Information Security Practices: A Literature Review on Challenges and Measures” by Eli Hustad, Frode Mathias Bekkevik, Ole Reidar Holm and Polyxeni Vassilakopoulou, provides a review in the information security area, by focusing on the role of employee practices, commonly discussed in the literature. The authors show that although organizations can put in place advanced technical measures for preventing, detecting and responding to security threats, there are persistent challenges that relate to weak practices and non-secure employee behavior. Specifically, in extant empirical research, several challenges related to employee practices were identified. The human factor is quite important, since security challenges are associated not only to systemic-organizational aspects of security arrangements (security procedures and structural characteristics) but mainly to idiosyncratic-human aspects of the communities within the organization and the individual employees (culture and personal characteristics). The paper stresses the need for further research in the IS security area regarding the role of human beings in accommodating or impeding security measures imposed by organizations, as well as the impact of these measures on employees' behavior and performance.

The second paper, titled “User-Centered Gamification: The case of IoT-enabled Energy Conservation at Work” by Dimosthenis Kotsopoulos, Cleopatra Bardaki, Thanasis Papaioannou, Katerina Pramataris, and George Stamoulis, proposes that gamification has the potential to lead to significant changes in human energy-consumption behavior at work. They contribute with a structured, user-centered process for designing effective serious games guided by the users’ current behavior, motivational profile to adopt gamification and preferences of game elements. They have validated this process while designing a serious game for energy conservation in three European workplaces, two of them in the Mediterranean region. The authors also describe a mechanism that formulates personalized messages recommending energy saving based on the users’ profiles, aspiring to increase engagement and behavior change. This paper shows how gamified systems can fuel social transformation starting from the workplace where people spend a significant amount of their time. This research conducted in Europe and, mostly in the Mediterranean region, can inspire future researchers and practitioners to design and implement effective user-oriented gamified interventions that encourage social change in terms of improved energy consumption behavior.

The third paper, titled “Multimedia Content’s Brokerage: An Information System based on LeSiM” by Ioannis Karydis, Andreas Kanavos, Spyros Sioutas, Markos Avlonitis, and Nikos Karacapilidis, proposes the innovative architecture and a web-based implementation of a music information brokerage system, called LeSiM. The authors propose the application of a metadata-based similarity measurement for validating the content selected from multiple sources. The proposed system collects information from various music providers, homogenizes the presentation of collected data by use of data-warehouse processes and finally presents related results based on the users’ query. All in all, such a service can act as “one-stop-shop” for multimedia content, while also providing alternative channels for content acquisition/ purchase. While being more technical than the other papers included in this special issue, this paper indicates the need for changing the way in which digital content (i.e. videos, text, photos) is collected from several different social networks and digital platforms, and finally gets validated and distributed for personal use. The impact of such change may be significant for digital content industries (e.g. news, music) as well as for individuals who daily consume and distribute large volumes of digital content through their social networks.

In the fourth paper, titled “Identifying the Ideal Types of Online Shoppers: A Qualitative Analysis of Online Shopping”, Eeva Kettunen, Tiina Kemppainen, Matias Lievonen, Markus Makkonen, Lauri Frank and Tuomas Kari wish to increase understanding of online shopping behavior by analyzing consumer experiences and purchase paths through a qualitative study, which involved 31 participants. They identify five ‘ideal types’ of online shoppers; conservative shoppers, rational shoppers, hedonistic shoppers, spontaneous shoppers, and vanguard shoppers. All types are described in more detail on the basis of a certain set of online shopping antecedents, sourced from previous IS and marketing literature. These antecedents include: personal factors (perceived value, perceived risk, self-efficacy), online store characteristics (usability and gamification) and social factors (social interaction). The paper contributes to the special issue theme by proposing the use of ‘ideal type’, an analytical construct originally presented by sociologist Max Weber, in order to understand, differentiate and highlight the most essential aspects of a social phenomenon, such as the online shopping behavior of people in digital stores is.

Finally, the fifth paper, titled “Automated Analysis and Interrelation of Legal Elements Based on Text Mining” and authored by Zoi Lachana, Michalis Avgerinos Loutsaris, Charalampos Alexopoulos, and Yannis Charalabidis, discusses the value of designing legal IS systems based on text-mining techniques. Greece was selected as the case study of the research for the development of a legal information system using text mining due to the use of dynamic references in Greek Laws. The system can be considered as a good practice for countries facing similar issues, since it provides a set of innovative services based on text-mining. The paper concerns mostly a conceptual work that

stresses the power of digital technologies for re-engineering the public sector, solving major problems of societies, and facilitating citizens' everyday life.

As it is highlighted by the five papers presented in the special issue, there is an intense interest of IS researchers for following either a review, qualitative or quantitative approach for investigating human and social aspects of digital technologies, such as employee behavior, online shoppers' profiles, users' profiles in serious games, digital multimedia content aggregation and distribution, and facilitation of public inquiries in legal databases. The issue contributes with a set of more generic but quite challenging research questions for future research on the digital and social transformation theme:

- How the adoption of digital technologies may affect the employees' behavior in an either positive or negative manner? Or vice versa, how employees' behavior can affect the adoption and performance of digital technologies within organizations?
- How green can digital technologies be? How gamification practices can contribute to environment saving purposes, such as energy conservation at work, reduction of paper waste, etc.?
- How evolution in multimedia research could affect the validation and distribution of digital content, especially in cases where this is sourced from multiple sites and platforms?
- Which may be the 'ideal types' of digital technologies adopters? Adopters may be conceptualized as either individuals, organizations, communities or even business ecosystems.
- What is the social transformation that eGovernment 3.0 technologies promise to bring? Which are the ethical and legal issues that need special attention?

Future issues of the International Journal of E-Services and Mobile Applications could host conceptual as well as empirical papers on any of the above discussed research avenues.

Adamantia Pateli

Panos Kourouthanassis

João Vieira da Cunha

Panos Markopoulos

Guest Editors

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Adamantia Pateli is Associate Professor of Management of Information Systems and Innovation at the Department of Informatics of the Ionian University, in Corfu, Greece. She has a PhD on strategic technology alliances from the Department of Management Science and Technology of the Athens University of Economics and Business. Dr. Pateli has participated in a number of national and European funded research projects in the areas of Electronic Commerce and Information Systems. She has published her research in leading academic journals, such as Information & Management, R&D Management, Journal of Business Research, European Journal of Information Systems, and Management Decision. Her current research interests lie in the areas of digital innovation and transformation, crowdsourcing, digital business ecosystems, multi-sided digital platforms and open innovation.

Panos Kourouthanassis is Associate Professor of Information Systems and eBusiness at the Department of Informatics of the Ionian University, Corfu, Greece. He has a PhD from the Department of Management Science and Technology of the Athens University of Economics and Business. Dr. Kourouthanassis has extensive research and consulting experience. Since 1996 he has been involved in more than 40 leading edge national and European research projects in the fields of information systems, electronic commerce, and electronic government. His research has been published in leading academic journals, such as Information and Management, the Journal of Business Research, the Journal of Travel Research, the Journal of Strategic Information Systems, Telecommunications Policy, Expert Systems with Applications, and the Journal of Information Technology. His current research interests lie in the areas of digital transformation, pervasive computing and internet of things (IoT), e-collaboration, and digital government.

João Vieira da Cunha is an Associate Professor and Director of Research at IÉSEG School of Management in France. He has a Ph.D. in Management from the Massachusetts Institute of Technology. His research looks at the impact on leadership of information and communication technologies. His work has been published in journals such as Academy of Management Review, MIS Quarterly, Organization Science, and Journal of Management Studies.

Panos Markopoulos is an Assistant Professor at the Business School of the University of Cyprus. Dr. Markopoulos completed his PhD in the University of Pennsylvania studying the mechanism by which consumers receive information about products and services in electronic markets. His professional experience includes the Athens Stock Exchange, IBM Research, and McKinsey & Co, where he consulted for the top management of Fortune-500 corporations in Europe, USA and Canada. As an academic, he has taught undergraduate and MBA level courses in Cornell University and the Wharton Business School. His work on electronic markets has been published in top academic journals, including Management Science, the Journal of Management Information Systems, and HBS Press. His work on multi-sided platforms has attracted international grants.