Preface

In today’s digital world, rapid changes in organizations and their management are one of the basic conditions that are necessary for an organization’s success. The development and mastery of digital computing are the most important areas for the new digital economy, while its impact will also include new emerging uses of innovation technology. Innovation is a broad concept; the term “innovation system” has often been used to describe the interaction between an individual firm, on one hand, and firms and institutions that can provide such resources on the other hand. Innovation systems have received attention from researchers, as well as policy-makers, as possible instruments for improving the innovation capacity of enterprises.

Furthermore, innovation is the most important part of the modern world. The best approach to this world would be to seek solutions when problems occur, for it is clear they do. A possible idea of modern e-business would be the development of a knowledge-based society that can be shared by everyone on the planet: Knowledge Society for All. This concept involves total mobility for anyone - anywhere - anytime. Therefore, eBusiness has emerged as a solution to the problem of carrying the weight of the international trade.

The innovation capacity of an enterprise thus rests on the foundation of its resources, which have been accumulated as a result of their previous activities. These resources have been shaped by the needs of the past and are subsequently applied in the current innovation process to respond to the needs of the future. The ability to come up with new solutions will therefore depend on the ability to adapt the resources in response to the new requirements of the innovation process (see Eisenhardt & Martin, 2000; Pek-Hooi, Mahmood, & Mitchell, 2004; Teece, Pisano, & Shuen, 1997).

As suggested by its title, the Driving Innovation and Business Success in the Digital Economy volume displays various cross- and multi-disciplinary approaches. Against the background of the complex landscape of issues in the field of digital economy, the volume explores several known or less known research directions, while approaching topics on which there has been said a lot, but never enough.

The target audience of this book can be composed of researchers, professionals and university students working in the field of information systems with an interest in innovation and business success in the digital economy. The people about whom I am going to write in the following pages, as well as their contributions to the International Journal of Innovation in the Digital Economy, are part of a world in which not only the scientific result is important, but also its impact on the society. The authors of the papers in this volume propose practical solutions to the need to implement new innovative technologies that help enterprises to adapt to changes in the markets as well as to exploit digital market opportunities. For this reason, I believe that the content of this volume represents a starting point for finding answers to demands posed by today’s world.
Therefore, the 18 papers published in *Driving Innovation and Business Success in the Digital Economy* invite any reader to explore the main factors that contributed to the configuration of the digital economy, such as the use of IT and telecommunication technology within educational environments, using new technology effectively in the organizations, the digital divide and the effects of the digitalization.

The first part of the book includes some papers that address subjects related to the business innovation. Innovation is inevitable in today’s dynamic business environment; thus, companies are increasingly forced to become more innovative and faster in their product development, in order to bring new products into markets and in this way, remain competitive in order to survive. 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 advantages of the information and communication technology, as a direct result of innovatively approaching the old management tools regarded in the context of the new economy, are emphasized by Rauno Rusko, the author of the first chapter “Strategic Turning Points in ICT Business: The Business Development, Transformation, and Evolution in the Case of Nokia”. Starting with an in-depth literature review, the author discusses further of the business development, transformation and evolution possibilities in the ICT business. This study introduces a long-term perspective turning points and path dependency in the case of Nokia and considers the potential (unintentional) co-evolution development between Nokia and Ericsson. Therefore, his article argues that it is important to provide a framework comprising of research agenda explaining the relationships between IT Capability and Firm Innovation.

The key message of the article “Impact of Innovation on the Entrepreneurial Success in Selected Business Enterprises in South-West Nigeria” is that the business enterprises should engage more in the innovation of their production process to improve their product quality and even enhance a good corporate image. Olu Ojo presents the impact of innovation on the entrepreneurial success in selected business enterprises in South-West Nigeria. The results revealed that there is a positive relationship between innovation and product quality, as well as between innovation and a good corporate image and that both of them significantly affect entrepreneurial success.

The focus of the chapter “Taming of Openness in Software Innovation Systems” is on the fact that the innovation-related practices of two different open source software communities differentiate them into corporate- and community-led. Such taming rests on the dual desires of this emergent community of firms to unleash the innovation potential of open source software and to drive it to a certain direction, so as to emerge in the form of various organizational activities. By drawing on a sample of large-scale open source software ecosystems, Mehmet Gencer and Beyza Oba discuss that the methods employed for taming are isomorphic and overview the emerging strategic pattern for establishing systems of innovation. After reviewing the fragmented literature on project success in software research, the authors argued that while these two different worlds collaborated, they adopted and transformed some of the practices and structures from each other and retained some others.

The fourth chapter of this book, entitled “Innovation Implementation: The Critical Facets”, presents the implementation of innovations in successful organizations. After a critical analysis of innovation-implementation literature, Neeta Baporikar pursues questions such as: How does the implementation of technological innovations like new computer systems differ from the implementation of non-technological innovations such as new managerial, educational, training, or patient-treatment interventions? How does success or failure at implementing an innovation in one team or location spread through an organization or community? More exactly, the author concludes that in the absence of effective implementation, the benefits of innovation adoption are likely to be null.
The second part of the book addresses issues related to sustainable development and the growth of the green economy. The objective of Vanita Yadav in “Sustainable Development Challenges in Developing Countries: Can Technology Provide Inclusive Solutions?” is twofold: to review the emerging literature on inclusive innovation and to examine the case of the Aadhaar Project in India, which aims to address the issue of poverty and inclusive development. Moreover, Yadav explains that in a sustainable development process, there is basically a need for a harmonious, balanced use of three types of capital - economic, social and natural. The paper also explores the inclusive innovation ecosystem around the Aadhaar project and discusses its potential to address institutional voids in India. As a result, new innovative business models can be built through exploiting the benefits offered by the Aadhaar platform.

The next chapter “The Challenge of Mechanical Innovation and Their Impact on Agricultural Sustainability of Maghreb Countries: An Empirical Analysis by 3SLS” makes an interesting contribution regarding the concept of sustainable development. This concept has spread during the ‘90s in scientific research, both locally and worldwide. All the researches agrees that the achievement of sustainable development depends on the respect of three essential principles: equity between nations and generations, the equilibrium of the economic situation and the protection of the environment. Rachida Khaled tests the effects of mechanical innovation on the agricultural sector in the three Maghreb countries (Tunisia, Morocco and Algeria) by a model of simultaneous equations. The estimation results show that mechanization used by Maghreb farmers is unsustainable. For this purpose, it is unable to achieve the sustainable development objectives in the agricultural sector of Maghreb countries.

The third part of the book refers to the Internet Advertising. For decades, marketers and advertisers have amassed an array of strategies, tactics and principles that, it is claimed, can be applied to any particular advertising campaign. In today’s technological world, the challenge is to apply that knowledge to the discipline of Internet Advertising. At the same time, companies whose target users have mostly interest-driven e-lifestyles must be aware that the click rate on internet ads by these users is very low. They must work on developing strategies for attracting such users to internet advertisements, or try to communicate their advertising messages in another way.

Francina Cantatore in “The Migration of the Book across Territorial Borders Copyright Implications for Authors in the Digital Economy” examines whether territorial copyright borders still afford book authors effective copyright protection in the digital economy, and furthermore, whether the culture of the book is being eroded through the prevalence of extra-territorial publications. She discusses how this changing publishing sphere has impacted on authors’ copyright protection. The article concludes that territorial copyright borders have become blurred, difficult to enforce in view of recent precedent, and are ineffective in preserving authors’ copyright and the cultural dimensions of their books.

“The Importance of Electronics News Brand Trust: The Case of Online Newspapers in Indonesia” is an article which tests the importance of trust to increase the loyalty of e-news brand readers in Indonesia and to test its antecedents. Throughout this study, Elia Ardyan and Vincent Didiek Wiet Aryanto state that it is difficult to predict the readers’ loyalty. Based on these considerations, authors launch the idea that there are three things that must be built in order to increase the trust of readers. Firstly, make it an interesting attribute of electronic new brands. Secondly, create positive experiences to the reader, and last but not least, reduce consumer confusion.

According to Mehdi Behboudi and Hamideh Mokhtari, the authors of the chapter “Online Advertising: Experimental Facts on Ethics, Involvement and Product Type”, answers to the following concerns; from the publisher’s point of view, is the ethic a matter of fact in accepting Internet advertisements to publish? Secondly, provided a preliminary insight into the advertising of pleasant and objectionable
products, which one is more important? Thirdly, what kind of involvement (rational or emotional) used
to publish more Internet advertisements? In pursuing these goals, the content of 649 ads through 205
websites and 751 ads through 138 weblogs was analyzed by authors. They used content analysis to verify
the data and observed that there are different behavior on weblogs and websites.

Merenheimo and Rusko in the chapter “Cocreating the Christmas Story: Digitalizing as a Shared
Resource for Shared Brand” want to widen the perspective from planned development projects to ap-
proaches within the large internet society. The authors 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. They consider how branding approaches within a wide internet society can create opportu-
nities for co-created value, and scrutinize their contribution to sustainable competitive advantage. Follow-
ing this resource-based view, they 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 to its competitors.

The fourth part of the book includes three articles which are intended to present some aspects related
to a practical perspective of using the Digital Economy tools in business environment.

The study “Applications Driven Information Systems: Beyond Networks toward Business Ecosystems”
by Kayvan Lavassani and Bahar Movahedi investigates the evolutions of organizational information sys-
tems and business environments in the contexts of business ecosystem. Based on an evolutionary
study of organizational information systems and the business ecosystem, an ontological model is proposed
for the adoption of new technologies in real-world designs, with particular attention to the application
of technology. The authors interpret the results of the two sides of the paper (theoretical and practical)
and propose concrete solutions, founded by the used instrumentation.

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

Masudul Alam Choudhury discusses in “Cybernetic Approach for the Stock Market: An Empirical
Study of Bangladesh” the implementation of a model which formalizes the new architecture for the
macroeconomy and its relationship to the stock market. The author argues that this model is related
to a reconstructed state of the economy and the emergent structure of the financial architecture. Also,
money and its spending are treated as complementary elements of growth and development. Data used
are topical, refer to issues addressed in the article and have representativeness and utility value for ana-
lytical approach.
The fifth part of the book addresses issues related to education and the educational system. The economic, social and political landscape in which future development will take place has therefore also changed. It is widely accepted that the use of IT and telecommunication technology within educational environments has increased dramatically over the last years and that it will keep increasing in the future. In the three dimensions of technology implications (i.e., technology development, application, and innovation) categorized in “Comprehension of Technology in Parent-Child Activities Using Bloom’s Taxonomy of the Cognitive Domain”, the participants exhibited improved performance after the activity, indicating that the creativity competition activity helped the students understand water-saving technologies during the activity, trained them to proactively engage in exploratory learning and improved their creative thinking and problem-solving skills. The authors - Tzu-Hsiang Ger, Yao-Ming Chu and Mei-Chen Chang - investigate the influence of water conservation technology contests on the cognition of school children and their family members. The results suggest that the creativity contest provided diverse opportunities to improve the participants’ cognitive concepts of water conservation and that this activity also has positively influenced the learning of knowledge, attitudes and behaviors of water conservation technologies.

The article “Teachers Conceptions and Approaches to Blended Learning: A Literature Review” builds upon previous research on blended learning and conceptual framework by Picciano, by exploring how objectives from Picciano’s framework affect teachers’ approaches to both design and teaching in face-to-face and online settings. Vicki Caravias presents a critical review and synthesis of research literature in higher education exploring teachers’ conceptions of blended learning and their approaches to both design and teaching. She also suggests that teachers use multiple approaches including face-to-face methods and online technologies that address the learning needs of a variety of students from different generations, personality types and learning styles.

As indicated in the title of the chapter “A Techno-Economic Perspective of Constrained Application Protocol”, Tapio Levä et al. investigate a subject which continues to generate intense debates among academia society. The article examines how to be economically feasible for the potential adopters and other stakeholders participating in protocol deployment. Based on eleven expert interviews complemented with a literature survey, the authors identify potential deployment challenges for the Constrained Application Protocol, both technical and business-related, and suggest approaches to overcome them. The dense content, the accuracy of formulated ideas and the creative use of statistical and econometric tools make the presented research work authentic and valuable. Therefore this study takes interest in understanding the importance of the organizations to adopt technological innovations for competitiveness in the knowledge-based economy and it also discusses the role of the Constrained Application Protocol in the evolving the Internet of Things ecosystem.

Ionica Oncioiu
Titu Maiorescu University, Romania
REFERENCES

