

Preface

INTRODUCTION

This book aims to address the main issues of interest within the Digital Economy. Since Don Tapscott's 1997 bestseller, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, introduced the concept, the Digital Economy has seen a huge development. It is the main driver of change, innovation and competitiveness for all sorts of companies and entrepreneurs alike.

In particular, this book will emphasize emergent and innovative aspects of design, development and implementation of Digital Economy initiatives, highlighting the relationship and interaction between humans and the technologies they routinely use to operate and live in a Digital Economy.

In addition, this book aims to explore and discuss innovative studies and reports as key developments such as e-Business, e-Commerce, e-Government, e-Learning, e-Health, Smart Cities and e-Society Developments, all contributing to the Digital Economy phenomenon. It also embraces the emerging entrepreneurship phenomenon, with focus on digital entrepreneurship and digital entrepreneurial ecosystems.

This book aims to address a range of approaches including, but not limited to, the conceptual, technological and design issues related to the mentioned developments. It covers a wide range of topics, organised into the following sections:

Section 1: E-Business, E-Commerce as the Key Aspects

Section 2: E-Government, E-Learning, E-Health

Section 3: Smart Cities, Digital Economy, and E-Society Developments

Section 4: Innovative Implementations

In the next paragraphs, the book structure is detailed, with its sections and respective chapters.

SECTION 1: E-BUSINESS, E-COMMERCE AS THE KEY ASPECTS

Chapter 1, “Next Step for Prosumerism Within the Rapidly Changing Agile IT Market”, written by Costello, explores the concepts of prosumers, customer-centricity, collective intelligence and Enterprise 2.0 within the IT sector. The author examines relevant literature to understand the innovative processes that the IT industry is adopting to enhance production. This chapter shows that there are several business models and strategies in place to include the contribution of prosumers. When developing innovative products it is essential to consider all stakeholders, namely the customer. Hence, businesses should

Preface

develop initiatives that promote consumer loyalty and branding and they should integrate personalised features originating from the clients. Also, in a context of swift change, it is crucial to have the capacity to adapt to the volatility of global demand.

Chapter 2, “Digital Marketing: Relationship Between Real Madrid’s Actions and Brand Promotion and Customer Loyalty”, by Da Mota and Isaias examines the phenomenon of football branding through the new media, by using the case of Real Madrid Football Club. The author resorted to an online questionnaire that was distributed among sports and football supporters to determine the relationship between the club’s digital marketing actions and its promotion as a brand and the loyalty of its fans. The results of the questionnaire demonstrate that the majority of the respondents use Real Madrid’s social channels and networks, especially Facebook; they know the team players; and they search for information about the club. Also, the club’s digital marketing campaigns do have a positive impact on the promotion of sponsors.

Chapter 3, titled “Digitalisation as a Strategic Opportunity and Co-Creation Value With Users: Evidence From Italian Grocery Smaller Retailing Firms” by Tongiani and Luca, addresses the digitalisation of the retailing sector, by examining how two smaller retailer Italian companies from the grocery sector are employing digital tools and strategies to maximise the specific characteristics that their reduced size involves. The authors distributed a questionnaire among the customers of the two retailers in order to assess their level of satisfaction with the retailers’ digital marketing strategies. The results demonstrated that the customers had a high level of satisfaction with regards to the use of a cashback website that was created to increase the number of customers. Also, the clients showed interest in the development of simple promotion mechanisms, namely cash prizes.

Chapter 4, titled “Electronic Commerce and Actual Problems of Taxation: The Key Underlying Issues” by Teixeira and Paiva, explores the issues concerning the direct international taxation of e-Commerce and highlights the solutions that are implemented by the current fiscal structure. International legislation has different models for e-commerce taxation, namely origin-based taxation, tax withheld at the source and technology based solutions. This chapter proposes the use of a system in which the tax is withheld at source by financial intermediaries or the application of technological solutions, in which software is used to apply the relevant tax rate, at the moment of purchase, according to the destination country. The authors also recommend that the EU should invest in the global and fiscal harmonization among its member states countries, in order to eliminate the persistent loopholes that exist for e-commerce.

SECTION 2: E-GOVERNMENT, E-LEARNING, E-HEALTH

Chapter 5, titled “Challenges for Using Massive Open Online Courses (MOOCs) in Latin America” by De Moura, Correa, Neto, Souza, and Viana, examines the influence that language, technological infrastructure and users’ competences have in the use of MOOCs in Latin America and reflects on the impediments that developing countries experience in their access to MOOCs. The authors provided a descriptive analysis of the results of a survey that was conducted in Brazil, Chile and Colombia and concluded that: the great majority of the respondents prefer to access content that is in their native language, namely subtitled or dubbed videos; overall, the participants’ differing levels of digital literacy impact their use of MOOCs; and the dissatisfaction with technological infrastructures when using MOOCs is unequally distributed among the surveyed countries.

Chapter 6, “The Educational Use of Digital Storytelling in Virtual Classes of Entrepreneurship: A Comprehensive Study of Students’ Perceptions” authored by Carvalho and Cibrão, focuses on the value of promoting students’ entrepreneurship competences, by using Digital Storytelling. The authors employed this methodology with 3rd year undergraduate students at Universidade Aberta (Portuguese Open University), in an entrepreneurship virtual class. The questionnaire that the students who participated in the class completed at the end of the semester depicted an overall positive experience. Digital Storytelling enhanced their autonomy, proactivity and creativity, as well as it encouraged collaboration among the students. The difficulties that were cited by the students, and that were generally overcome, mainly concerned the use of the technology and public presentation.

Chapter 7, “The Evolution of E-Learning in the Global Context and the Influence of Motivational Factors: Learning with the Support of Digital Technologies – Tool, Method, or New Learning Model?” authored by Cechella, Da Costa, and Colomby, explores the progress of e-Learning and the potential that a combination between cognition and affectivity can have on the improvement of students’ education within e-Learning. Through a review of existing literature and based on e-Learning’s own evolution, and learning theories and issues of an effective and cognitive nature, the authors propose strategies that can assist the design of learning models that enhance the use of digital technologies. More specifically, the chapter highlights the importance of selecting tools that are relevant for the students’ context and of concentrating in technology and the provision of training for both students and teachers.

Chapter 8, “The Control of Continuing Education Based on the Digital Economy” by Tolstykh, Vasin, Gamidullaeva, Nedelko, Eremina, Koshevoj, and Mkrttchian, reflects on the conceptual approaches that can be employed in the strategic management of continuing education, as well as on the innovative development of educational institutions management, to provide practical recommendations that are based on digital technology. The authors argue that innovation in the education sector should include digital technology, as it has the potential to extend the range of learning opportunities. Hence, it is crucial to develop precepts of self-organisation, innovative educational processes and to promote open information and learning spaces, to ensure that the students have the competences they require to face the competition of the labour market.

SECTION 3: SMART CITIES, DIGITAL ECONOMY, AND E-SOCIETY DEVELOPMENTS

Chapter 9, “The Entrepreneurial Spirit Based on Social Values: The Digital Generation” by Sánchez-Fernández and Ríos-Manríquez, presents an exploratory and quantitative study of the entrepreneurial spirit of the future entrepreneurs of Generation Z. The authors use the framework of Institutional Theory and socially responsible values as the base to examine what stimulates and influences Generation Z’s potential entrepreneurs in the implementation of Corporate Social Responsibility practices. They distributed a questionnaire among students in bachelor degrees in Administration, Business management and Economics at the University of Coruña, in Spain. The results show that coercive pressure is what exerts a greater influence on future entrepreneurs to implement social responsibility practices and that the respondents undervalue job creation and green initiatives, unless they result in economic benefits.

Preface

Chapter 10, “Toward a B-Society Model: The Digital Media Art Experience” by Da Veiga, Tavares, and Alvelos, explores the pervasiveness of digital media in all sectors of modern and developed societies, by using art as an example. The authors use the digital media art ecosystem to examine how the needs of the individuals have become the core economic and social drive of current times. They argue that the concepts of three dichotomies are at the origin of a growingly blended society: material and virtual, entertainment and activism and (permanent) ownership and (fleeting) experience. These concepts are a result of neoliberalism and the experience economy and they are expected to produce the grounds for entrepreneurial initiative in pertinent sectors.

Chapter 11, “Smart City, Information Technology Systems, and Sustainability: Some Insights From the Italian Context” by Truant, focuses on the concept of smart city and on how information technology systems can be applied to different city projects to facilitate the sustainable development of urban territories. The authors use a multiple case study analysis to examine and compare how three Italian smart cities that take the lead in the smart city national ranking, Genoa, Milan and Turin, have been executing high technological projects to support sustainability. The analysis of the diverse actions and projects that these cities implement show that they apply ICT and IoT systems to reduce traffic, and consequently, gas emissions, to reduce electricity consumption, to enhance the safety, well-being and health of their citizens and to promote social inclusion.

SECTION 4: INNOVATIVE IMPLEMENTATIONS

Chapter 12, “TEAMNET: New Dimension of Team Building and Management” by Malčík, Malach and Kantor, presents the TeamNet project which has the objective of providing a set of methodological and SW tools to service and industrial production corporations. These tools can be used in project teams and working groups to maximise social and professional relations, in order to have a more effective use of professional knowledge and accomplish projects more easily and efficiently. TeamNet is a team assessment and web portal system evaluation that has the ability to highlight the weak and strong aspects of working teams, without the need for the intentional participation of the team members. Its core advantage resides in the fact that it decreases the influence of the subject in the assessment of social and professional relations.

Chapter 13, “Cost Control Strategy for the Implementation of the User Innovation Potential in the Digital Economy” by Khvostikova, Semionova, Chernetsov, Mkrttchian, and Potapova, examines the theoretical issues associated with the improvement of cost management strategies for the development and implementation of innovation in the digital economy. The existing strategies for cost management neglect the specificity of the activities in the digital economy and the objective assessment of the opportunities for financial optimisation. Also, cost management strategies on innovation should be an integral part of the overall strategy of companies. The authors propose the use of cost management approaches for the implementation of user innovation. This strategy entails the application of a systematic and multi criteria approach that considers the issues that pertain to the digital economy.

Chapter 14, “Digital Model of Bench-marking for Development of Competitive Advantage” by Mkrttchian, Alexander, Alexey, Berezin, and Potapova, proposes a method to assist decision-making forecast of competitiveness patterns. The authors present relevant literature and argue that the existing methods to evaluate enterprises’ competitiveness demonstrate the possibility and need to create innovative tools for the management of competitiveness in companies in crises and in market conditions.

Competitiveness management based on the outcomes of modelling and forecasting provides an analysis of different scenarios of competitors' behaviours, with various influencing factors and offers a summary of recommendations that enable decision makers to attain competitive advantages in market conditions and crises settings.

Chapter 15, "About Russian Regional Users' Innovation Based on Digital Information" authored by Vasin and Gamidullaeva, reflects on the importance of using innovation intermediation combined with theories of innovation ecosystems to promote a system of managerial decision in the context of Russia regional management. This chapter reviews existing literature to argue the significance of the employment of innovation intermediaries as a primary control mechanism within regional innovation and as a strategy to assist all the relevant stakeholders throughout the entirety of the life cycle of innovations. The authors defend that the evolution of digital technology is at the origin of a new category of intermediaries, which assist companies to acquire technological solutions.

Pedro Isaias

The University of Queensland, Australia

Luisa Cagica Carvalho

Universidade Aberta, Portugal & Universidade de Evora, Portugal