E-Entrepreneurship and ICT Ventures: Strategy, Organization and Technology

Tobias Kollmann
University of Duisburg-Essen, Germany

Andreas Kuckertz
University of Duisburg-Essen, Germany

Christoph Stöckmann
University of Duisburg-Essen, Germany
Chapter 1
An Integrated Business Model Innovation Approach: It Is Not All about Product and Process Innovation

Roman Boutellier, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland
Markus Eurich, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland
Patricia Hurschler, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland

On the basis of Schumpeterian innovation, this chapter will pioneer in describing business model innovation as addendum to Abernathy’s and Utterback’s dynamic model of process and product innovation. Thereby, an integrated business model innovation approach will be initiated, overcoming the drawbacks of unilateral innovation. The integrated business model innovation approach proposes a framework for long-term differentiation and competitive advantages. Different examples, in particular regarding ICT-ventures, will clarify the effect of integrated business model innovation.

Chapter 2
Internationalization Strategy in New E-Ventures: Towards a General Model and New Research Agenda

Maria Gracia Garcia-Soto, University of Las Palmas de Gran Canaria, Spain
Antonia Mercedes Garcia-Cabrera, University of Las Palmas de Gran Canaria, Spain

Recent literature highlights the fact that research in the fields of internationalization and entrepreneurship appears to overlook the internal and external context in which the international strategies are conceived. This chapter contributes to filling that gap by answering two basic questions: What is it about e-ventures that allows them to compete globally? And what is it about e-ventures that makes it a specific mix of strategy shaping processes necessary to formulate a born global strategy?
Chapter 3
Market Orientation in Emerging Firms: Towards a More Rigorous Understanding of Entrepreneurial Marketing

Malte Brettel, RWTH Aachen, Germany
Andreas Engelen, RWTH Aachen, Germany
Florian Heinemann, RWTH Aachen, Germany
Andreas Kessell, RWTH Aachen, Germany

While studies on the effect of market orientation in established and young companies have indicated a positive influence on firm performance, the questions whether and in what form this effect can also be found empirically in emerging firms is still a largely unexplored issue. Applying rigorous procedures in the development of the measurement instrument and using a unique sample of 141 young companies, this chapter confirms that market orientation does also have a significant and positive effect on the performance of emerging firms. However, results indicate significant differences to established firms, which are discussed. In conclusion, founders of emerging firms should pursue an individual way of market-oriented behavior that seems most appropriate when considering the company-specific liabilities.

Chapter 4
Crossing Borders: Overcoming Political Barriers to Technology-Led Economic Development

Nicholas Maynard, RAND Corporation, Arlington, USA
Aaron McKethan, Brookings Institute, Washington, DC, USA
Michael I. Luger, Manchester Business School, University of Manchester, Manchester, UK
Alekhya Uppalapati, Kenan-Flagler Business School, The University of North Carolina at Chapel Hill, Chapel Hill, USA

This article explores how some non-urban counties that are contiguous but located in different US states have worked with their state governments, developing institutional mechanisms to overcome the artificial barrier to technology-based economic development that state borders create. The chapter argues that political boundaries that transect otherwise integrated economic regions often impede economic development coordination and cooperation in general, and for technology access, workforce training, and business innovation in particular. Case study evidence from several successful cross-border efforts in the United States and internationally demonstrates the critical success factors required to overcome political boundaries and initiate technology-based development. These success factors include the creation of diverse funding sources, effective leadership by a coordinated team, and the development of formal legal entities to confront legal and infrastructure challenges.

Chapter 5
Legitimizing Innovative Ventures Strategically: The Case of Europe’s First Online Pharmacy

Andreas Kuckertz, University of Duisburg-Essen, Germany
Karsten Jörn Schröder, University of Duisburg-Essen, Germany

Organizational legitimacy is a key resource that is necessary for every venture to acquire other crucial resources, which will subsequently stimulate growth. This chapter illustrates this legitimacy-growth relationship by analyzing the case of Europe’s first online pharmacy DocMorris. Given that this ICT
venture started as extremely illegitimate, this case provides a rich background to identify various strategies that are potentially helpful to enhance a venture’s level of legitimacy. Building on interview data collected from the firm’s key actors, the chapter shows how the perception of a firm’s legitimacy from the viewpoint of various internal and external stakeholders can be managed strategically.

**Chapter 6**

Internet Portals in Rural Areas: An Investigation of Their Provision in Rural Scotland

Laura Galloway, Heriot-Watt University, UK
David Deakins, Massey University, New Zealand
John Sanders, Heriot-Watt University, UK

This chapter investigates the ownership structure, operating characteristics and sustainability of six rural internet portals located in Scotland. The study based on in-depth interviews discovered that two distinct forms of ownership structure existed. The first form of ownership structure involved dedicated private individuals, who self-funded their internet portal activities, while the second form was managed by not-for-profit organizations, such as charitable trusts. Differences between these forms are discussed. Despite the differences, both forms of ownership structure struggled to achieve commercial viability.

**Chapter 7**

E-Social Entrepreneurship and Social Innovation: The Case of On-Line Giving Markets

Alfonso Carlos Morales Gutiérrez, Universidad de Córdoba, Spain
J. Antonio Ariza Montes, Universidad de Córdoba, Spain

This chapter describes organizational features of a particular kind of social enterprises that have emerged since the development of Web 2.0: peer to peer charities and e-social banking. The chapter will explain how the philosophy of Web 2.0 offers new opportunities for the development and growth of social enterprises. Furthermore, the chapter details their main features obtained from the study of twelve initiatives. The chapter finally offers some reflections on main dilemmas and challenges that could be faced in a short term future.

**Section 2**

**Organization**

**Chapter 8**

Enlisting Online Communicators in Web 2.0

Gianfranco Walsh, University of Koblenz-Landau, Germany & University of Strathclyde Business School, Glasgow, UK
Simon Brach, University of Koblenz-Landau, Germany
Vincent-Wayne Mitchell, City University, London, UK

Information dissemination, which can enhance the success of on-line and off-line products, is increasingly outside the realm of influence of companies because in many markets, on-line communicators can play a central role in influencing others’ purchase decisions. E-Mavens are recognized as a consumer
type that engages in on-line communication. Using a sample of more than 2,500 consumers, the chapter profiles e-Mavens using demographic and psychographic characteristics as well as explore their motives for visiting music web sites. In addition, changes in e-Mavens’ music-related consumption behavior are investigated. Next, using cluster analysis, the chapter develops a typology of e-Mavens.

Chapter 9
The Role of Creativity (and Creative Behaviour) in Identifying Entrepreneurs

Debbie Richards, Macquarie University, Australia
Peter Busch, Macquarie University, Australia
Ayse Bilgin, Macquarie University, Australia

As the importance of creativity and in turn innovation for individuals, organizations, nations and thus the global community as a whole becomes recognized, so too does the value of identifying those individuals with the potential to become entrepreneurs. With opportunities for innovation afforded by the internet, the identification and development of a new breed of individuals known as e-entrepreneurs seems particularly worthwhile. This chapter focuses on scenarios within the field of information and communication technology. Results indicate innovators may present multiple personality styles, which offer strengths to entrepreneurial activities. Finally through identification of creative personnel, our approach offers a way for organizations to cultivate promising entrepreneurs.

Chapter 10
Education and Training for the Entrepreneurial Employee: Value of ICT-Enabled Learning

Cecilia Hegarty, University of Ulster, Northern Ireland

This chapter explores entrepreneurship education through the lens of ICT-enabled learning within university education. In the case study presented, learners extol the benefits of ICT-enabled learning on their entrepreneurship module. There are a number of implications for employers and educationalists. In this chapter, the value of entrepreneurship education via ICT-enabled learning is discussed. For the entrepreneurial firm, recommendations are made about providing training in entrepreneurship for employees.

Chapter 11
Open Scientific Entrepreneurship: How the Open Source Paradigm can Foster Entrepreneurial Activities in Scientific Institutions

Harald von Kortzfleisch, University of Koblenz-Landau, Germany
Mario Schaarschmidt, University of Koblenz-Landau, Germany
Philipp Magin, University of Koblenz-Landau, Germany

The objective of this chapter is to conceptually transfer the concept of open source software (OSS) development to scientific entrepreneurship and to hypothetically discuss the support potentials of this rather new development philosophy for what the authors than call open scientific entrepreneurship. The main thrust of the chapter presents open scientific entrepreneurship from two points of origin: OSS development as a specific form of scientific e-entrepreneurship and further on potential benefits of opening 'traditional' scientific entrepreneurship up by looking at specific action fields. The general benefits as well as downsides of the concept of openness are discussed on a generic level.
Chapter 12
Open Source: Collaborative Innovation ......................................................... 213
Avi Messica, The College of Management, Rishon-Lezion, Israel

This chapter reviews the current status of Open Source (OS) and provides new insights into the prerequisites of the OS process as well as the profile of OS contributors. Moreover, it extends the scope of possible business models such to augment those that exist or were already discussed in the past. While the term OS was coined in the context of software development and redistribution, this chapter presents and discusses the concept of OS to include any Open Collaborative Innovation in both software and hardware.

Chapter 13
Enterprise Resource Planning: An E-Entrepreneurial Challenge .......................... 235
John Douglas Thomson, RMIT University, Australia

This chapter addresses the Enterprise Resource Planning (ERP) entrepreneurial venture challenge for developing an ERP database using standard generic database software within existing resources and available data at lowest cost in minimum time for the Australian Department of Defence. The anticipation of the developers of the ERP database was that this entrepreneurial venture could not only help the Australian Department of Defence to become an inclusive knowledge based learning society, but to subsequently provide an inexpensive database model for other organizations, large or small.

Chapter 14
Delivery in the Net Economy ........................................................................ 251
Anthony Scime, State University of New York, USA
Anthony C. Scime, Purdue University, USA

In the Net Economy, delivery often has to leave the Net and be provided through traditional means. The firm’s delivery mechanism influences the design of the firm’s Net presence. This chapter examines the pursuit of e-entrepreneurial ventures by existing businesses with specific attention to the architecture of Web portals and to the delivery mechanisms of products. Additionally, outlined are features and facets of Web portals necessary to sell and deliver mark-up based and production based products and services in the B2C sector of the Net Economy.

Section 3
Technology

Chapter 15
Web 1.0, Web 2.0 and Web 3.0: Revealing New Vistas for E-Business Founders .................. 272
Tobias Kollmann, University of Duisburg-Essen, Germany
Carina Lomberg, Ecole Polytechnique Fédérale de Lausanne, Switzerland
Both Web 1.0 and Web 2.0 were linked directly to new stages in the development of e-business. Whereas the distinction between Web 1.0 and Web 2.0 became widely accepted in both literature and practice, we are merely at the beginning of the possibilities arising from current trends culminating in our information society. Information emerges increasingly as a major factor of production, allowing for the activation of innovative business opportunities. Against the background of an increasing information overload, the question to be asked is how technological and market-oriented future developments will cope with these challenges. This paper aims at clarifying this overall development with the objective of giving impulses for the 3rd generation of e-business. For this purpose, the characteristics of each generation (Web 1.0, Web 2.0, and Web 3.0) are clearly highlighted.

Chapter 16
OpenSocial: Structured Partnerships in the Context of Social Networking Platforms

Matthias Häsel, XING AG, Germany

The OpenSocial standard enables Internet-based businesses to create new kinds of value-creating partnerships without extending themselves beyond their own means or competencies. This chapter argues that by entering structured partnerships, e-ventures and social networks can gain a sustainable competitive advantage by integrating their highly complementary resources and capabilities. Building on the Resource-based View (RBV) of the firm and the concept of core competencies, it is shown that both partners can significantly benefit from the technology-induced possibilities that arise from the OpenSocial standard.

Chapter 17
Enabling Technologies in an Ambient Intelligence (AmI) System

Simrn Kaur Gill, National University of Ireland, Ireland
Kathryn Cormican, National University of Ireland, Ireland

This chapter introduces the concept of Ambient Intelligence (AmI) with regard to the enabling technologies and how they are combined to assist e-entrepreneurs. AmI is a new paradigm in the area of Information and Communication Technology (ICT). The aim of the chapter is to provide a better understanding of the AmI process and knowledge of the AmI system and tools. To this end, three of the enabling technologies are discussed, semantic web, multi-modal services, and radio frequency identification tags. These technologies are then examined within the AmI reference model.

Chapter 18
Creating Value Through Entrepreneurship: The Case of Artificial Intelligent Agents

Andrea Bikfalvi, Universitat de Girona, Spain
Christian Serarols Tarrés, Universitat Autònoma de Barcelona, Spain
Josep Lluís de la Rosa Esteva, Universitat de Girona, Spain

The chapter provides a case study analyzing the creation and development process of ARTIFICIAL INTELLIGENT AGENTS, S.L. (AIA), a company spin-off from the University of Girona (Spain). It
describes all phases, from concept to implementation, as well as the problems and challenges faced by
the entrepreneurial team composed of academics and professionals. Furthermore, it lays out the path from
developing a technology in the field of human automation attempting to sell a user-friendly technology
that would help customer intelligence and management.

Compilation of References ................................................................. 335

About the Contributors ........................................................................ 373

Index .................................................................................................... 382