Preface

As today's global economic landscape is changing rapidly, the ability of businesses to introduce new innovative products to the market faster than their competitors is perhaps their most distinct competitive advantage. This becomes obvious by the significant market share that the innovative companies gain while increasing profitability. Extensive research in this field has shown that companies that are constantly innovating normally double their profits compared to others.

The term innovation refers to a process that comprises three stages: the conception of a new idea, its evaluation, and, finally, its practical implementation. Thus, innovation is an important element of modern entrepreneurship. Innovation management, namely, how a new idea is created, how and by what criteria it is assessed, or how it is financed, is a very tedious and demanding process, and a component element of effective entrepreneurship.

In this context, innovation management techniques and models of increasing sophistication are being developed internationally; these, in turn, serve as a basis for the development of many methodologies of measuring innovation at the individual, national, European, and international level. It is important to mention that according to the conclusions of the European Commission, based on the European Innovation Scoreboard (EIS), Greece is last in the list of the EU-15 area countries and one of the last in the EU-27.

The weakest points of the innovation system of Greece are identified in the production of new products, risk capital, patenting, broadband penetration, lifelong training, investment in research on the part of firms, high-tech exports, and finally employment in medium-high-technology manufacturing. This has resulted in low innovativeness and competitiveness of the Greek economy. Furthermore, it is noteworthy that both the inflow of foreign capital in Greece and the Greek direct investments abroad represent a very small proportion of the total output and input of the eurozone.

The important role of innovation in firm profitability and overall sustainable economic growth, coupled with the disappointingly low yield of the Greek Economy in this field, have made the design of an effective innovation policy in Greece imperative. It is obvious that such a policy can be based on young scientists and entrepreneurs who will have a sufficiently high level of knowledge in innovation and entrepreneurship.

This book aims to meet the needs of education and training in modern techniques of innovation and entrepreneurship, and focuses on the detailed presentation of successful business practices. The contents of this book are presented initially in two parts.

The first part deals with the process of innovation and its relationship to knowledge, learning, and creativity. The second part is about entrepreneurship and its interdependencies with innovation and the various innovation systems and policies.

Chapter 1 is an Introduction to Innovation providing the basic concepts and definitions of Technology, Invention, Creativity, and Innovation with emphasis on Technological Innovation. In addition, a historical, social, and technocratic perspective of Innovation is presented, with a brief reference to the process of Innovation Measurement.

Chapter 2 deals with Innovation Management, mainly through Education and Knowledge Management. Furthermore, the role of Knowledge in Innovation and the relationship between Knowledge and Learning are analyzed, and the Knowledge Process model is presented. Finally, the difference between Innovation and Invention is clarified, and the types and characteristics of Simple Innovation and Technological Innovation are listed.

In Chap. 3, through a detailed case study of a large company, the relationship between Innovation and Competitiveness is elaborated. This chapter also presents the concepts of Creativity, Innovation, and Competitiveness in Public and Private Sectors, and makes an attempt to analyze the role of the Public Sector in promoting these concepts.

The management of Technological Innovation and the consequent challenges is the subject of Chap. 4, an issue also presented through case studies. This chapter lists the different standard models of the Innovation Process with reference to (a) Intellectual Property Rights management and (b) the concept and the practice of Knowledge Management and Intellectual Capital.

Chapter 5 deals with the study of Innovation Systems. Special emphasis is placed on the presentation of the different types of Innovation Systems and their basic principles, on the Open and Closed Innovation Systems as strategic choices, and on simulation systems. Of particular interest is the configuration of Innovation Systems with the use of Systems Dynamics and the application of these standards in Sectoral, Regional and particularly National Innovation Systems. This chapter concludes with further analysis of Open Innovation Systems, Innovation Networks, Knowledge Societies, International Research Cooperation, and Innovation Indices.

In Chap. 6, which opens the second part of this book, there is an introduction to Entrepreneurship and its relationship with Innovation. Moreover, the different types of Entrepreneurship are presented, followed by an analysis of the concepts of Sustainable Entrepreneurship, the Learning Life Cycle model, and Strategic Learning. A reference to Business Incubators and Technology Clusters versus Knowledge Clusters is also made.

Chapter 7 seeks to shed light on the practices of Entrepreneurship and Innovation, with a focus on procedures such as Technology Management and Transfer, mechanisms and models of Technology Transfer, and barriers and facilitating factors for successful Technology Transfer. Finally, there is a detailed presentation of Cooperation Research and Development Agreements (CRADAs).

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http://www.springer.com/978-3-319-11241-1

Innovation and Entrepreneurship
Theory, Policy and Practice
Carayannis, E.G.; Samara, E.T.; Bakouros, Y.L.
2015, XVI, 218 p. 30 illus., 20 illus. in color., Hardcover
ISBN: 978-3-319-11241-1