# Book Review

## *Handbook of Research on Techno-Entrepreneurship*, 2nd edition. Edited by François Thérin. Edward Elgar Publishing Limited, UK. 2013. ISBN: 978-1-78195-181-1. 400 pp. Hardcover, £130.

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Techno-entrepreneurship is one of the critical fields gaining momentum in today's acute economic crisis where both developing and developed economies are interested to bring about the technological breakthrough by innovation, research, and commercialization. This book aptly documents the major and Pragmatic research work in the field, and provides a succinct and quick glance to the multiplicity, importance, and interest in the field of entrepreneurship to its readers.

In this handbook, François Thérin has accumulated the research knowledge from diverse but related perspectives of technological innovation to deepen the understanding of both business and technology entrepreneurs, related to antecedents and consequence of technology intense entrepreneurship. The series of papers presented in this compendium covers broad spectrum of research at the intersection of technology and imperative business and economics fields of enquiry, such as venture capital, venture incubation, economic development, and sustainable development.

The book is divided into five major parts: foundation of the field, process, incubation and technology transfer, industry specific e-entrepreneurship, and biotechnologies; spread over 18 chapters, written by 30 contributors coming from 16 different countries. Major topics expanded in this book by diverse researchers are defining, characteristics, and skills required for techno-entrepreneurship; innovation, capital venture and commercialization of techno-start ups; role, attributes, avenues for academic entrepreneurs, supply chain, and sustainable technology-based entrepreneurship in emerging economies. The new edition expands the horizon of the topics to family business, effectuation, techno-intrapreneurship, academic entrepreneurship, and frugal innovation.

One of the authors introduces the field in the opening article as "Techno-entrepreneurs aim at creating and capturing economic value through the exploration and exploitation of technology-based solution." Techno-entrepreneurship focuses on opportunity recognition and tapping the potentially exciting future through technological innovation. In fact is redrafting the future trends by sensing a possibility of change. The interaction of information gathering, interpretation and business concept creation with learning and empirical anchoring through field actions and interactions creates market potential and path of action and expected impact. While recognizing the opportunity various heuristic rules can be applied like: knowledge accumulation, generation of new knowledge, accuracy, and plausibility which result in new structures and patterns, future orientations and path of actions, emerging markets and impacts. Another explicated elements of technological entrepreneurship as: university R&D, individual R&D, and corporate R&D, leads to university and corporate spin-off, hand

in with research centres and SMEs, supported by financial firms to leverage through capital. culminates to market the innovative products. The model heavily relies on clusters, technology parks, co-functioning of business and universities, and supported by the government through policy and funding.

Peter Drucker wrote, "Wherever you see a successful business, someone once made a courageous decision." The process of creating and sustaining techno-entrepreneurship firms is a daunting challenge, where only 1 to 3 percent of new technology-based firms survive in the long run. The sustenance largely depends on further development and commercialization of university or government lab technologies. Another author argues that two most important support factors emerge for new ventures after gleaning the thick literature: mentors and business incubators. Mentors are individuals with pertinent expertise, who help entrepreneurs to create a sound foundation for their companies, whereas business incubators are facilities equipped with certain components deemed necessary to support a fledgling venture.

One of the most important parts of the book covers incubators and technology transfers and specifically emphasizes upon the role of universities in technology transfer through university business incubators and start-ups; which are termed as academic entrepreneurship. It is appositely mentioned that roles of universities is enlarging by adding the research commercialization and technology transfer in parallel to teaching research and executive education. Universities should have 'university business incubators' to start-up, creation and development of concepts of new products, and provide pre-seed and seed phase to nascent companies through strong corporate and research bonding. The procedures, barriers and economic impact of academic entrepreneurship are outlined to the reader with current examples and models.

A growing phenomenon in techno-entrepreneurship is E-entrepreneurship. It is defined as. "establishing a new company with an innovative business idea within net economy, which is using an electronic platform in data networks, offers it products and/or services, based upon a purely electronic creation of the value. What is essential is the fact that this value offer was only made possible through the development of information technology." The net economy is based on four technologies: telecommunication (T), information technology (I. media technology (M), and entertainment E), which are termed as TIME markets. This TIME model has reshaped the 'net economy' and 'electronic value chain'. The success factors to support the value chains in net economy are identified as: management, product, process. finances, and market access through network, along with support systems of IT infrastructure and security. This section further strengthened by providing evidences from research studies regarding the role of socio-demographic characteristics, and virtual alliances in creating E-entrepreneurship.

The last part of the book surveys the history and survivors of biotech firms. Biotech start-ups have been initiated by bio-scientists who contributed with their modes financial resources supported by those of venture capitalists and later stabilized through limited partnerships. The centre of attention of these companies is development and industrial utilization of recombinant DNA, and exploring new and complex pathways to exploit the DNA-RNA biomechanisms, with a promising impact on the economy. One of the articles portrays the profile of a number of companies in this field with their achievements, failures, barriers. success factors, by researching and introducing bio-tech products with an aim to provide

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There is a definite need for the exploitation of existing findings and their integration into readable frameworks and for the exploration of the numerous aspects of entrepreneurship in technology-intensive industries. This book is an essential reading for academic researchers, practitioners, entrepreneurs, and post-graduate student interested in the nexus of entrepreneurship and technology. It offers a sound research base and practical penchant to bring theory into action.