

# Preface

## INTRODUCTION

Innovation has become a key success factor for the economic development of and a prerequisite for sustainable development in a country. In a complex and highly competitive global scenario, to compete and survive, enterprises have to innovate and develop commercially viable products and services faster than ever before. Furthermore, to meet these new challenges, enterprises must adopt new approaches to their innovation strategies and processes (Nørager, 2009). These include traditional concepts like R&D, but are increasingly inclined towards the concept of open innovation. Concepts like, technology exploitation or technology exploration, or more specifically, licensing in or licensing out, are becoming issues of common interest in the arena of modern entrepreneurship. Ranging from large multinational enterprises to corporate business houses to small firms, all are striving towards attempts to grab the market in ahead of others for economic gain, or value addition.

Enterprises consider innovations as a major driver to enhance their performance and to strengthen their competitive position in the market. In doing so, many firms have paid most of their management attention to a greater focus on internal efficiencies of the development process, team structures, decision making and cross functional interaction. However, as more and more companies are bringing innovation straight to the heart of their corporate strategies, developing internal innovation capabilities is no longer sufficient to gain and sustain competitive advantage over global competitors. Since innovation strategies look increasingly commoditized, more and more organizations try to further improve their innovation performance through intensifying collaboration across industry networks and partnerships, and opening up their innovation processes in line with the open innovation (Chesbrough, 2003, 2006; EIRMA, 2009).

However, while applying open innovation concepts and strategies to the cluster of enterprises, namely, small and medium enterprises (SMEs), situations do vary. Despite, being a major component in terms of contributions towards national economy or job creation, SMEs in many countries are lagging behind in adopting open innovation strategies for their business development. While searching for impediments along this route, researchers, academia, and practitioners have found almost similar reasoning, inclusive of scarce resources, skilled manpower, reduced product life cycle, and increasing global competitions (Rahman, 2010).

This book has tried to incorporate applications and researches on open innovation concepts and strategies that are being applied to the enterprise sector belonging to SMEs by accommodating theoretical perspectives, researches as practices, and case studies. The book has 16 chapters divided into four sections, namely concepts, researchers, and practices; innovation marketing, communication, and growth management; entrepreneurship, strategies, and crisis management; and creativity, collaboration, and co-creation.

## Where the Book Stands

Accommodating academic and research concepts that are being applied in real-life cases illustrating open innovation strategies for SMEs development, this book has the intent of being a common platform for raising knowledge on entrepreneurship and innovation. Covering diverse aspects surrounding the open innovation concepts in terms of policy, politics, economy, and culture, including opportunities, challenges, and risks, this book sets forth a benchmark in this field of interest. Furthermore, by incorporating scientific, theoretical, academic, and research concepts, as well as empirical and success cases focusing those concepts, this book will act as a guideline or flagship for those who are active in the aspect of open innovation paradigm for SMEs development. By far the book has the opportunity to be taken as a catalyst of knowledge repository in the field of business entrepreneurship for economic empowerment in a country, whether developed, developing, transitional, or under-developed.

## Target Audience

The very basic nomenclature of open and collaborative innovation in terms of entrepreneurship leads to the enormous extent of periphery of the target groups that one could think of. If one thinks of an entrepreneurship in a country, it may accompany issues and contexts of the entire community, ranging from the government or policy initiators; entrepreneurs and enterprises; researchers, practitioners, and academics; users and intermediaries; and the population at large. Hence, the potential audience of this book may comprise of all these stakeholders within an economy. Furthermore, on regional and global scenarios, this book will target development partners, international agencies, and their mediators.

## Organization of the Book

The book has been divided into four sections; concepts, researches, and practices; innovation marketing, communication and growth management; entrepreneurships, strategies and crisis management; and creativity, collaboration and co-creation. As a new field of research and practices on entrepreneurship, hardly one section or another could be separated very distinguishingly, but for the sake of readership, the intent is so. However, the book comprises 16 fine pieces of manuscripts focusing business development aspects of the small and medium sized enterprises sector covering almost every corner of research and practices of open innovation paradigm.

Innovation has become a major driver of economic growth in a country through sustained entrepreneurships. Moreover, recently coined “open innovation” is increasingly taking a lead in enterprise management in terms of sustained profitability. Foci of researchers and practitioners are revolving around innovation methods, processes, and strategies. Chapter 1, as the introductory chapter to the book, finds out open innovation researches and practices that are being carried out circumscribing development of SMEs through a longitudinal study. The chapter investigated researches that are being carried out by leading researchers and research houses across the globe, and at the same time, it also searched for open innovation practices that are being carried out for the development of SMEs. One may argue about the characteristics of researches or practices on open innovation in relevance to the SMEs development, this chapter sets forth the initiation of a new dialogue or a new dimension of research.

Open innovation has gained popularity in recent years. But a question arises: is this concept new or does it express old realities? Chapter 2, while trying to find out an answer in this aspect, discovered that

the term “open innovation” is recent, and that its development has been facilitated largely by technological innovations. As a case study it collected data over a period of eight months from an agrifood SME in Quebec, Canada, and found that components associated with the basic open innovation model such as intellectual property, joint R&D, and co-product development are present there.

As a case of a business development company in the field of ICTs, Chapter 3 explores, describes, and examines the story and circumstances of building and managing innovative business ideas in an Egyptian small business enterprise. The chapter addresses specific circumstances, opportunities, and challenges with which a small enterprise pursuing innovation strategies is faced, and analyzes how effective deployment of innovative business ideas and bringing them to the market has contributed to strategic competitiveness. The study used qualitative research strategy in connection with theory to gain full understanding of a natural setting, and as a comprehensive method of substantiating or un-substantiating the context of achieving strategic competitiveness through new innovations and technologies, and provided insights into the nature of management of innovations, from which lessons can be drawn for other organizations both in small business sector organizations and generally.

With recent developments of open innovation concept as a formal management discipline, many organizations are thriving to raise internal competencies that can be leveraged to generate measured success. Chapter 4 presented a model with simple, but elegant structure necessary for the design and implementation of a successful open innovation program. The chapter explores the leading causes of failure in a new open innovation program, and offers guidelines and criteria that open innovation leaders and practitioners can use to avoid these pitfalls, and to establish a program that generates tangible returns.

With the advent of innovative technologies and multi-dimensional researches along the setting of entrepreneurship development philosophy, context and business management have been transformed from being traditional to innovative. Depending on diversity and nature of the transformation, innovation has been shifted from closed peripheries to open dimension. Looking at the immense benefits, ranging from small entrepreneurs to corporate to multinational business houses, all are adopting various innovation techniques. However, Chapter 5 argues that there is a research gap within the context of SMEs development through open innovation strategies. The chapter initiates a research model for carrying out researches on the development of SMEs through utilization of open innovation strategies. To set the research model, the chapter has developed an innovation opportunity framework, both at the policy level and at the entrepreneur level.

As mentioned earlier, innovation is vital to sustain and advance current activities, as well as it can be vital to growing new businesses. In this aspect, the challenge for organizations operating in a global environment is to meet the evolution of the marketplace, social needs and the needs of society. Open innovation allows organizations to draw from the global pool of knowledge to design products and business modes that provide value while meeting social needs. Chapter 6 looks at several SMEs in South America that are working in the entrepreneurship acting as social innovators by drawing on a range of technologies to create products and services or to commercialize existing products in a new way in order to meet pressing social needs around the world.

Chapter 7 presents a model of open innovation as a collaborative effort of firms in Israel, mostly SMEs that are managed under a government support programme with the assistive involvement of academia. While normally industry-academia cooperation is R&D focused, the chapter presents a model of open innovation not involving dedicated R&D. It deals with the process of assimilating existing technologies and methodologies. The model focuses on search, identification, and implementation phases to improve competitiveness through open innovation strategies. The model claims that specifically for SMEs, innovation not related to R&D, and especially open innovation, is hard to deal with alone.

Chapter 8 investigates a mechanism of organizational innovation serving to make sense of a maturing university community involving educational executives, academic staff, and students in the occasion of a new campus development in Macau SAR. The case study is aimed to investigate from the perspective of a learning enterprise, a reflective way of forward thinking to record the author's observation and interpretation of what is entailed in this process of upbringing a relatively young university in this age-old city, famous for its rich heritage of East (Chinese) meeting West (Europeans – Portuguese). The chapter examines the accountability framework for undergraduate curriculum reform, and by treating the electronic transformation (e-transformation) as one of the open innovation strategies, it explores the e-transformation of the university environment, based on holistic concerns of the campus community. The study argues that in practice, the lessons learned behind the e-transformation of the learning enterprise should benefit all walks of the local community, including the community of the SMEs.

Chapter 9 investigates and analyzes the sources of innovation and success in food service industry of Finland. It also discusses of what kind of network management capabilities were needed in these SMEs cases. The chapter demonstrates that the SMEs have a good chance to succeed if they can harness the external knowledge in their start up process. The chapter thus contributes to the prior strategic management and business networks research by analyzing the selected SME cases in the food service industry.

Recent scholarly discussions on open innovation put forward the notion that an organization's ability to internalize external knowledge and learn from various other sources in undertaking new product development is crucial to its competitive performance. However, little attention has been given to growth-oriented small firms in identifying and exploiting entrepreneurial opportunities related to such development, in an open innovation context, from a social learning perspective. Chapter 10, based on an instrumental case-firm in UK, demonstrates analytically how learning as entrepreneurial action takes place, drawing on situated learning theory. The chapter argues that such learning is dynamic in nature and is founded on specific organizing principles that foster both inter- and intra-communal learning.

Open innovation in entrepreneurship finds its acceptance at all levels of the business industry for adding value to the business. The value could be in the form of economic gain or enhancement of knowledge leading to a sustained financial base. Open innovation adopts various strategies to accomplish the task for enhancing the value gain. Depending on size, nature, pattern, or characteristics of the firm, various strategies are being adopted by enterprises. In recent years, open innovation is also becoming increasingly adopted in SMEs and the trend is rapidly increasing. However, despite the potency of open innovation strategies, most of the enterprises are yet to find a sustained business model, especially for the SMEs working at the periphery of that value chain, which is the focus of Chapter 11. The chapter is trying to formulate a business model incorporating partnership approach from academia, research houses, intermediaries and other stakeholders to be applicable for SMEs.

However, the nature of the relationships between business and risk factors in one country or another does not fit exactly into a "model" nor does it have a pure placebo effect. But, models' simplicity may appeal to managers and regulators in understanding important business risks and crisis related phenomena. Backed by this idea, Chapter 12 underpins a comparative study on SMEs handling risk and crisis management according to a new tailored model of a Balanced Scorecard. This new model of a risk and crisis management aims at improving both SMEs management adaptation and performance across all crises' stages, something not attempted so far in the literature. The application of such a Balanced-Scorecard comes from the author's experience as a banker financing various SME industries, as a bank consultant on risk management, as well as from the results of a survey performed on a sample of 48 Romanian and Cypriot SMEs, selected from the area of trading, manufacturing, and services.

Open source communities such as the ones responsible for Linux and Apache became well known for producing, with volunteer labor innovating over an open communication channel, high-quality software that has been widely adopted by organizations. In the web server market, Apache has dominated in terms of share for over 15 years, outperforming other corporations and research institutions. The resource-based view (RBV) of firms posits that an organization outperforms its competitors because it has valuable, rare, imperfectly imitable, and non-substitutable resources. Accordingly, one concludes that Apache possesses such resources to sustain its competitive advantage. However, one does not know what those resources are. This chapter is an effort to locate them. While trying to find an answer for the question, “What resources enable Apache to outperform its for-profit competitors consistently?” this research draws on the RBV to develop a series of propositions. Additionally, for each proposition developed, methods for their empirical validation are proposed.

Chapter 14 describes a new sustainable business model, Innovation 2.0, led and deployed by the author with the goal of increasing the innovation level at the telco service portfolio for the end-user, with thanks to the convergence of Internet and Telco worlds and the fresh and effervescent proposals created by start-ups. The model, created by a Spanish company leader in marketing and strategy issues, under the premises of fairness for the different players, requires an open-minded view of the businesses and, in fact, is a model for open innovation in telcos, which traditionally tend to address innovation from a prism more reactive than proactive. The model proposed has been deployed in Telefonica with very good results, deploying 12 commercial services, which have generated more than 10 million € in income and 8 million of savings in investments. Innovation 2.0 is a sustainable model, finding a balance for all parties in a win-win basis and constitutes an appropriate model for the twenty-first century telcos.

The nature of innovation is rapidly changing, and the concepts of open innovation and crowdsourcing need to be embraced. Innovation has quickly become not only the edge on which competition can occur but rather the characteristic of existence, the means to basic survival. Several forces are driving the rapid change in innovation as it is understood today. These forces tend to have a technological impetus, the very impetus that open innovation and crowdsourcing are built on. SMEs are facing a triple blow in the light of the evolving face of innovation. Survival is the eminent challenge that must be overcome. Chapter 15 elucidates on the major challenges faced by SMEs in crowdsourcing and the hindrance they face exposing to open innovation situations.

France has long been associated with a state-directed ‘dirigiste’ model of linear R&D focused on large programmes, such as development of the TGV high-speed train. Contemporary France has, however, largely left the state-centered model behind, introducing a range of devices since the turn of the 21st century aimed at opening French innovation to international and cross-sectoral collaboration for increased productivity and national competitiveness. Chapter 16, as a case study, traces the opening of the French innovation system and the way one new academic, industrial, and government collaboration aims to make use of new features of the system to accelerate development of an eco-innovation cluster focused on cities of the future.

## CONCLUSION

Entrepreneurship, a crucial element of economic expansion for a country, essentially plays the same role in all spheres of social and democratic processes among developed, developing, and transitional economies. Similarly, innovation is the term newly evolved and at the same time equally adopted by

governments, scientists, academics, and entrepreneurs to progress further for exploration of new knowledge and ventures for economic and value gain. In this aspect, open innovation perspective of business development, especially for the SMEs, deserves scholarly attention from every corner of research dimensions. Contribution of similar researches and practices has already been acclaimed by leading countries in the arena of knowledge economy, and a book of this nature will certainly find its position among the communities of innovation dynamics.

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