

## **Guest Editorial Preface**

# **Special Issue on the Rise of the Business Ecosystems: Business Models, Structures, Processes, and People**

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Business ecosystem as an open system can be analyzed and studied at people, organizational, industry and economy levels. The fast pace of change in local and global business environment has brought important changes to the contemporary management practices and business models. Several scholars and practitioners have echoed the importance and relevance of business ecosystem view in the 21<sup>st</sup>-century business environment (c.f. Selander et al., 2013; Karhu et al., 2014; Kelly, 2015; Gomes et al., 2016; Ritala and Almpantopoulou, 2017; Huang et al., 2018). Organizational boundaries have evolved beyond their traditional specific and general environments, and towards complex business ecosystems. In the past few decades, we observed a transition in the nature of the competition from the ones which were based on “companies competing with each other” to the ones which are based on “supply chains competing”. We are now observing a new dimension of competition where “business ecosystems” are competing and interacting with each other. Successful companies are either creating their own business ecosystems or joining/functioning within rich business ecosystems. This special issue provides notable insight toward a better understanding of business ecosystems.

### **INSIDE THIS ISSUE**

The first paper in this issue is an empirical study in the healthcare sector that explores how new business models can enable organizations to better contribute to the development and evolvments of the business ecosystems. In this study business models are viewed as enablers of dynamic organizational capabilities within the general business ecosystem. In this paper, the role of the Internet of things (IoT) is also highlighted as a platform that supports the advancements in research and practice of connected health ecosystems.

The second paper also echoes the need to develop new business models that can better explain and utilize the new forms of organizational development and interactions within the context of business ecosystems. This paper addresses a gap in the literature by “defining business models for crowd-driven ecosystems in the context of IoT”. Exploratory as well as explanatory research approaches are used in this study. This paper explains how the studies of business models and business ecosystems have started to integrate and align with each other in recent years.

The third paper explores the implications of the changing business models and opportunities that stem from new practices and capabilities including the expansion of IoT platform and big data analytics. This study primarily focuses on the Small and Medium Enterprises (SMEs) operating in the data-driven business ecosystems. This study also discusses the social implications of the changing business models. The authors explain that the rise of the Internet of Intelligent Things (IoIT), machine-

to-machine communication, artificial intelligence (AI) and third-party knowledge providers are among the notable factors that affect the knowledge-based management practices and strategies.

The fourth paper provides quantitative techniques and analysis for location optimization for soybean cultivation in Iran. At the industry level, one of the important questions facing businesses and policy-makers is the decision about the geographic location of the actors in the business ecosystem. Using Data Envelopment Analysis (DEA) and Principal Component Analysis (PCA) the authors conduct an empirical study to specify the most suitable cultivation locations. The authors of this study have considered several factors that contribute to the selection of the optimized location; these factors include: “cost of cultivating rapeseed and soya per hectare, human development index (HDI), annual precipitation, sunlight, water resources, number of oil extraction factory, amount of areas under cultivation [and the] population”.

The fifth paper provides a network view of resource allocation. Using empirical modeling the authors provide a quantitative model for water distribution volume in the case of Tunisia. The techniques presented in this study have attracted significant attention in recent years to explore the networks aspect of the business ecosystems. This study provides a practical analytical tool with implications for policymakers and system managers.

This sixth paper in this issue focuses on social stratification in entrepreneurial ecosystems. The paper explores the topic in the contexts of the U. S. using data from the U.S. Census Bureau. The authors argue that there are opportunities for policymakers and businesses to better promote the integration of minority entrepreneurial ventures across business ecosystems. The paper also provides discussion on whether the business environment should be viewed as a single ecosystem or as fragmented ecosystems as it relates to racial groups. The authors in this paper also provide roadmaps and directions for fruitful future studies.

The seventh and final paper in this issue investigates innovation in insular ecosystems and explores “how insular ecosystems create and commercialize value “. The authors provide a discussion about the insular ecosystem and how innovation and value creation can be challenging for actors in such ecosystems. The insular ecosystem can shape as a result of “natural disasters”, “climate change”, “limited institutional capacity”, “poorly diversified economies” and difficulties in accessing “external capital”. The authors argue that the creation of and the access to networks at internal and external levels are among the factors that determine the success and failure of value creation and commercialization in the insular networks. The study furthermore provides insightful recommendations and directions for future studies.

## CONCLUSION

This special issue aims to promote and disseminate study and understanding of business ecosystems at different levels of analysis, namely: business models, organizational structures, business processes and people. In the era of business ecosystems, the business models (value creation and profit formula) are further evolving. Organizational structures are affected by and influence the business ecosystem. The management of inter- as well as intra-organizational business processes as it related to the changing business ecosystems, are fruitful areas of study. Furthermore, the management of people along with their interactions with processes, technology, structure and new business models are challenges facing organizations as well as employees at the age of business ecosystems.

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