R&D MANAGEMENT

The Role of Entrepreneurial Ecosystems in Technological and Social Challenges (SI: EE&TSC)

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Subject Covered:

Over the last 60 years, the way governments in advanced countries have adopted industrial and business policies have evolved (*e.g.* OECD, 2014). In the last 20 years, we have witnessed an escalation in the number of political initiatives and the level of funding committed to these activities in a process called developmental state (Block, 2008).
Entrepreneurship has been comprehensively studied in multiple streams, perspectives, and players. Consequently, policymakers are now beginning to recognize the value of a more systems-based way of support for "high growth entrepreneurship". This embodies a change away from enterprise specific involvements towards more holistic activities which focus on *developing networks, aligning priorities, building new institutional capabilities and fostering synergies between different stakeholders* (OECD, 2014, p. 5).
Within some different perspectives, one emerging approach very recent is focused on 'entrepreneurial ecosystems' (EE) (Isenberg, 2014; Stam, 2015; Zacharakis et al., 2003).
The predominant metaphor for fostering entrepreneurship as an economic development strategy is the "entrepreneurship ecosystem". In this respect, the term ecosystem was originally labelled by James Moore in a seminal article in *Harvard Business Review* published during the 1990s.

Today's economies are concerned with their innovative and entrepreneurial capacity and, by extension, their competitive position in the globalized world. However, there has been a need for a more regionally and 'local' oriented policy and entrepreneurship is not only the output of the system, entrepreneurs are important players themselves in generating the ecosystem and keeping it healthy (Carayannis and Campbell, 2009; Carayannis et al., 2018). As state Carayannis et al. (2018), "*regions are increasingly being viewed as eco-systemic agglomerations of organizational and institutional entities or stakeholders with socio-technical, socio-economic, and socio-political conflicting as well as converging (co-opetitive) goals, priorities, expectations, and behaviors that they pursue via entrepreneurial development, exploration, exploitation, and deployment actions, reactions and interactions* (p. 148).
In this context, prosperous entrepreneurial and open innovation systems (Dabrowska et al., 2019) are likely to have some initial and existing economic advantages and this will involve governments supporting locations that are already favored by this environment (Carayannis

et al., 2016). Silicon Valley shows, successful EE generate internal dissimilarities (OECD, 2014). What is done to the spatial "losers" that are produced by this policy is not clear.
Recently, the open innovation research has devoted on *the evolution of collaboration from closed innovation towards open innovation in networks and ecosystems and including an increasing breadth of strategic interactions with a variety of external stakeholders* (Dabrowska et al., 2019, p.4). Furthermore, new open innovation initiatives (e.g. accelerators, living labs, social innovation labs, open labs), involve players working together to co-create both business value and societal impacts (Silva and Wright, 2019).

In this context, EE have become a widely used approach to stimulating entrepreneurship, innovation and technological development. While there is a growing consensus about what an EE is, how different ecosystem "engagements" lead to different outcomes remains unclear. In particular, how do ecosystems, which are intrinsically based on the role of 'local' fertilization, interact with regional clusters and innovation platforms? How do the dynamics of EE interact with technology and social change? Businesses do not advance in a 'vacuum' and highlighted the relationally embedded nature of how firms interact with stakeholders. Furthermore, it is argued that in a dynamic capability perspective on knowledge-based ecosystems firms have better opportunities to grow (Rosted, 2012), and they need to develop a business model at the ecosystem level to create sufficient innovative capacity and entrepreneurial fitness (Borgh et al., 2012).

An EE approach offers a new and distinct perspective on the geographical clustering of economic activity, though integrating many of the themes from this former literature.
Despite many studies on the subject, its study linking EE dynamic towards technological and social challenge/impact is scarce and there is also a lack of theoretical underpinning to understand this phenomenon.

With this in mind, the purpose of this special issue is to shed light on the role of EE in technological and social change in their empirical and theoretical dimensions, addressing current societal challenges. We are especially looking for both empirical and conceptual papers that focusing on different levels of analysis, from micro-foundations at the microeconomic level to dynamics at the meso and macro level that fostering entrepreneurial, innovative, and smart ecosystems.
From an open-ended list of possible topics, we offer a small sample of research questions appropriate for this special issue:

- What we do know (and do not know) about EE?
- What is the role of EE in technological development?
- What is the role of EE in social changes?
- What is the role of EE in innovation networks and knowledge clusters
- How should an entrepreneurial, innovative and smart ecosystem be? What are the domains?
- How do EE perform with the different forms of innovation and in terms of aggregate welfare effects?
- What are the antecedents to the EE approach?
- What are the entrepreneurial players within ecosystems?
- What kind of models, dimensions, metrics and theories of EE can be designed?
- What policies and/or barriers exist for an EE?
- Which institutions or policies affect EE development?

- How do entrepreneurs build their businesses in view of high uncertainty (and a not very supportive institutional environment)?
- What the role of the digitalization in a configuration of EE?
- How an EE can be measured?

Important Dates:

- **Submission Deadline for Full Paper: 30 June 2021.**

Contacts and Notes:

- Papers should be original, unpublished, and not currently under consideration for publication elsewhere. Before submitting manuscripts authors are advised to ensure that they have conformed to the requirements detailed in the instructions to authors that can be found on the journal homepage. Manuscripts which are incorrectly formatted or do not contain all the required elements may be returned to authors for correction prior to review.
- Prospective contributors are invited to informally discuss their proposed paper with the Guest Editors prior to submission.
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- ***Please make sure to clearly indicate in the subject "RADMA Special issue on EE&TSC"***

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