The Crest of the Innovation Management Research Wave

Edited by Marcus Tynnhammar ISPIM, United Kingdom

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Preface

The ISPIM Dissertation Award was launched in 2011 to recognise the prolific contribution that PhD dissertations make to the field of Innovation Management each year. The 2019 ISPIM Dissertation Award casts its spotlight beyond the top three awardees to a much greater number of top submissions on a broad range of topics through this publication illustrating the crest of the wave in innovation management research. This is following on last years book catching different themes in research.

Due to catching a broader spectrum this year, the book is divided into chapters, and the chapters cover a wide variety of topics within Innovation Management. Research. The first chapters are, as a common trend within the field, on Open Innovation and collaboration. The following chapters cover both firm-level research and process research. Digitalization is still a strong topic in Innovation Management. As seen towards the end of the book, several chapters cover digitalization of the production system in the form of the fourth industrial revolution.

The ISPIM Dissertation Award is growing every year and manages to catch a wide variety of topics within and related to Innovation Management. There is a trend of several European based submissions, but every year we manage to get submissions from several continents. Everyone is then invited to our main conference, which was held in Florence in 2019, in Europe. The top three finalists have already been selected before the event, but the winner is not known until the conference takes place.

The publication provides both a showcase of what the latest generation of scholars are contributing to the innovation management body of knowledge as well as the insight into what they find significant and what might become important for the field as a whole over time. This year the book has a wider base and the selection made gives a good insight into the upcoming field and interesting empirical areas to research.

As soon as the previous year's award ends, a new process to find next year's finalists starts. If you have or know someone that has finished a PhD in Innovation Management in 2019, please submit for The ISPIM Dissertation Award 2020!

Chapter 1

Knowing the Ropes in Open Innovation: Understanding Tensions through a Paradox Lens

Ioana Stefan

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Abstract: Open innovation processes may be challenged by tensions between co-creating and capturing value, often dubbed as paradox. Potential negative outcomes thereof, e.g. misappropriation of ideas, are still not fully avertable and may lead to lost jobs and hampered economic and technological growth. This chapter sets out to provide a deeper understanding of this phenomenon and related tensions. The chapter comprises five papers based on quantitative, qualitative and conceptual studies. The findings reveal: (1) characteristics of tensions, (2) factors that create tensions and (3) possible solutions and pitfalls to managing said tensions. Key findings also relate to dual-role factors that lead to either pitfalls or solutions, depending on their intensity. The findings contribute to theory on open innovation, appropriability and organizational paradox, and have important implications for practitioners and policy makers.

Keywords: paradox theory; paradox lens; tensions; value co-creation; value capture; openness; appropriability; virtuous cycles; vicious cycles; misappropriation.

1.1. Introduction

It is increasingly difficult for companies to innovate in isolation, and one way to solve this problem is to open up the innovation process. Open innovation (OI) has many benefits, such as sharing costs and risks with external partners in innovation. Yet there are also challenges, some of which remain unresolved. One such challenge relates to the tensions that emerge between co-creating and capturing value in OI settings (Laursen and Salter, 2014). Such tensions were initially highlighted by Nobel Prize laureate Kenneth Arrow through a "fundamental paradox" (Arrow, 1962, p.615). One of the most severe negative effects of such tensions is misappropriation of intellectual property (IP) and failure to appropriate rents. Smaller firms are more often victims of such issues, as can be observed in the case of misappropriation in the collaboration between a start-up and a large digital library (Lohr, 2010). Indeed, smaller, young companies often struggle with limited resources and have low bargaining power in the face of partners that are large, established firms (Hallen et al., 2014). Yet it is not only smaller companies that are challenged by risks of misappropriation when opening up the innovation process. At a European Commission conference (EC, 2012), delegates of several large multinational companies, including Alstom, DuPont and Michelin, disclosed their own experience of various cases in which proprietary trade secrets had been misappropriated by partners. The delegates also highlighted possible consequences of misappropriation: lost jobs (a company whose IP has been misappropriated may, for instance, struggle to continue employing all its staff), diminished revenues (not profiting enough or at all from the co-created IP reduces profits), and overall shrinking innovation and economic growth (EC, 2012). Issues related to misappropriation of IP or risks thereof also raise questions concerning ethics and fairness in practice. It is thus crucial to understand how such tensions emerge between partners in OI and how they can be managed effectively or alleviated, so that negative effects in the form of misappropriation may be avoided. Nevertheless, neither researchers nor practitioners or policy makers have clear answers concerning these challenges.

In research, this "fundamental paradox" (Arrow, 1962, p.615) has been widely investigated, yet evidence is dispersed across various fields of study and under different labels. This scattering generates a rather fuzzy understanding of the paradox. Moreover, a comprehensive and in-depth grasp of the inner workings of this paradox is still missing in extant research. Recent studies point out that contemporary settings in which innovation processes tend to be more open pose increasingly complex challenges to participating stakeholders (Laursen and Salter, 2014) and that tensions between co-creating and capturing value have not yet been reconciled (Lorenz and Veer, 2019).

One way to gain a deeper understanding of this intricate phenomenon would be to apply a lens that might capture its complexities. Organizational management theorists propose the use of paradox as a lens to investigate complex phenomena (e.g. Schad et al., 2016). Researchers often value 'good' theories that are focused and narrow, yet this may also lead to a failure to completely grasp more intricate phenomena. A possible solution would be to apply a paradox lens to such phenomena (Poole and Van de Ven, 1989; Schad et al., 2016; Smith and Lewis, 2011). Therefore, this chapter also employs a paradox lens to investigate tensions between value co-creation and value capture in the context of OI.

The overall purpose of this chapter is to gain a deeper understanding of tensions between value co-creation and value capture by (1) delineating the

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