Journal of Business Research xxx (2015) xxx–xxx

Contents lists available at ScienceDirect

Journal of Business Research

Interorganizational collaboration and firm innovativeness: Unpacking the role of the organizational environment☆

Alexander S. Alexiev [a,*], Henk W. Volberda [b], Frans A.J. Van den Bosch [b]

[a] VU University Amsterdam, The Netherlands
[b] Erasmus University Rotterdam, The Netherlands

ARTICLE INFO

Article history:
Received 1 November 2013
Received in revised form 1 January 2014
Accepted 1 July 2015
Available online xxxx

Keywords:
Firm innovativeness
Interorganizational collaboration
Environmental turbulence
Market heterogeneity
Competitive intensity
Organizational environment

ABSTRACT

In firm decisions to engage in interorganizational collaboration in the context of innovation, conceptions of the organizational environment play an essential role. In this paper, we develop a multidimensional model of how managers use interorganizational collaboration as an organizational response to particular environmental conditions and an important instrument to boost firm innovativeness. Based on a literature review on the subject, we investigated the role of environmental turbulence, market heterogeneity and competitive intensity as such conditions. The analysis of firm data from a broad range of industries showed that environmental turbulence and market heterogeneity have an indirect association with firm innovativeness through interorganizational collaboration. The relationship of market heterogeneity was fully mediated suggesting that collaboration is unavoidable for firms in heterogeneous markets. Contrary to arguments in the literature, the findings demonstrated that although competitive intensity is associated with less interorganizational collaboration and lower firm innovativeness, the mediation relationship was not significant.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

For many firms, improving innovativeness, or the capacity to introduce new products and services, is an issue of primary concern and a key source for competitive advantage and growth (Crossan & Apaydin, 2010; Damanpour, 1991). Both researchers and practitioners discuss the process of innovation and its extent relative to the boundaries of the organization as one of the main issues in innovation management (Crossan & Apaydin, 2010; Gupta, Tesluk, & Taylor, 2007). While some researchers have explored internal organization of innovation by examining portfolio-based (Faems, Van Looy, & Debackere, 2005) and project-based (Blindenbach-Driessen & Van Den Ende, 2010) approaches, others focus their attention on interorganizational forms of collaboration in the development and commercialization of new products and services (e.g. Ahuja, 2000; Powell, Koput, & Smith-Doer, 1996; Yli-Renko, Autio, & Sapienza, 2001). These studies discuss various outcomes that such strategy could cultivate, including: types of collaborations firms engage in (De Faria, Lima, & Santos, 2010; Un, Cuervo-Cazurra, & Asakawa, 2010), mechanisms for partner selection (Emden, Calantone, & Droge, 2006), value creation (Bhaskaran & Krishnan, 2009; Gadde, Hjelmgren, & Skarp, 2012; Sobrero & Roberts, 2002), and modification or termination of the interorganizational relationship (Young-Ybarra & Wiersema, 1999). These important advances notwithstanding, we still know much less about a firm's decision to engage in interorganizational collaboration and the conditions that motivate this choice (Fiedler & Welpe, 2010; Sriram, Krapfel, & Spekman, 1992).

The strategic choice perspective on organizational decision-making suggests that managers make strategic decisions by considering important dimensions of the organizational environment (Child, 1972, 1997; McCarthy, Lawrence, Wixted, & Gordon, 2010). Interorganizational collaboration is often such a strategic choice, but existing literature has not yet explored how managers' evaluations of different dimensions of the organizational environment are likely to influence it. Few studies investigate the simultaneous role of multiple environmental dimensions, although strategic choice theories suggest that this may be illuminating for key decision processes in organizations (Dess & Beard, 1984; Forbes, 2007; McCarthy et al., 2010).

Based on arguments in the literature, the study here investigates the role of environmental turbulence, market heterogeneity and competitive intensity as three environmental dimensions relevant for the context of interorganizational collaboration aimed at innovation. The study responds to a gap in the literature about more theory and evidence needed to better understand how firms make decisions for

☆ The authors are grateful to the comments on versions of this paper made by an anonymous reviewer, editors Arch Woodside and Roger Baxter, Brian Tjemkes, Oli Mihalache, Elco van Burg, as well as the participants of seminars at VU University Amsterdam, Imperial College London, the University of Lausanne, the Strategic Management Society (SMS) and the European Academy of Management (EURAM) conferences.

* Corresponding author at: VU University Amsterdam, FEWEB, Department of Management & Organization Studies, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands.
E-mail address: a.s.alexiev@vu.nl (A.S. Alexiev).

http://dx.doi.org/10.1016/j.jbusres.2015.09.002
0148-2963/© 2015 Elsevier Inc. All rights reserved.

ARTICLE IN PRESS

interorganizational collaboration and which dimensions of the environment managers are evaluating when deciding to collaborate with other organizations. In this paper, the relationships between these environmental characteristics and firm innovativeness are hypothesized and tested. The study proposes also that interorganizational collaboration plays an important role as a mediator of these relationships.

By doing this, the study here delivers three important contributions to the existing literature. First, the study contributes to research on interorganizational collaboration by offering a refined view on the role of the organizational environment in firm innovation strategy making and highlight collaboration as a bridge between the complexities in external conditions and firm innovativeness. This contribution is helpful for uncovering different mechanisms by which important environmental dimensions relate to firm innovativeness and how managers can successfully use interorganizational collaboration to this end. The present study proposes a model where interorganizational collaboration mediates between the decision makers' evaluations about environmental turbulence, market heterogeneity and competitive intensity on the one hand and firm innovativeness on the other. The study extends existing perspectives on the firms' choice to engage in interorganizational collaboration by exploring further how managers consider both the opportunities and threats of collaboration while aiming at reducing the information complexities that these costs and benefits might entail.

Second, the finer and multidimensional conceptualization of the organizational environment advanced in this study, allows to spotlight the different roles these dimensions may assume. Existing empirical research has often favored variables that characterize the environment in terms of turbulence while it has neglected other key strategic dimensions such as market heterogeneity and competition (Ang, 2008; Mehra & Floyd, 1998). Although existing works have studied the role of the environment in interorganizational collaboration, this paper elaborates further on the mechanisms which can show how collaboration can be a strategy to deal with the decision-making demands caused by its different dimensions.

Third, the study here offers empirical evidence for the studied relationships from multiple industries and firms of different sizes. Most existing studies may be limited in explaining only a fraction of a firm's motives for collaboration and in being biased toward larger and R&D-intensive firms (Frishammar & Åke Hörte, 2005; Van De Vrande, De Jong, Vanhaverbeke, & De Rochemont, 2009). However, many firms use collaboration strategies to bridge innovation deficiencies caused by the unavailability of large R&D investments. Furthermore, many organizations do not concentrate development within a separate R&D unit. In many service firms for instance, innovation streams are distributed across the organization and innovation may be based on the combination and exchange of intangible resources and co-production with external parties (Bowen & Ford, 2002; Sundbo, 1997; Van der Aa & Elfring, 2002). This paper provides a broader evidence base for the existing literature discussing interorganizational collaboration as a means to address the need to understand innovation processes beyond firm investments in proprietary R&D capabilities.

2. Theoretical framework

2.1. Interorganizational collaboration and the organizational environment

To elaborate the conceptual model, this study includes reviewing existing literature on the antecedents of interorganizational collaboration and how researchers conceptualize the organizational environment in these works. The definition of interorganizational collaboration adopts a distinction which encompasses the perspectives of innovation as a process and as an output (Crossan & Apaydin, 2010). In this paper, interorganizational collaboration is conceptualized as a feature of the innovation process related to the extent to which other organizations—firms or institutions—take an important part in the innovation process. Innovation activities can be also distributed across the organization and not necessarily concentrated in an R&D department (Den Hertog, 2000) and that interorganizational collaboration can be an aspect of these activities throughout the complete innovation value chain (Love, Roper, & Bryson, 2011; Roper, Du, & Love, 2008; West & Bogers, 2014). The argument in this paper is that an organization-wide conceptualization of the innovation process where interorganizational collaboration can be used at each stage of the innovation value chain (Hansen & Birkinshaw, 2007) allows for a framing of the innovation processes in organizations unbound by structural configurations that involve formalized R&D processes. "Firm innovativeness" is the outcome of the innovation process, defined as the capacity of the firm to develop and introduce new products or services.

The main premise of strategic choice theories (Child, 1972, 1997; Doty, Glick, & Huber, 1993; Venkatraman & Prescott, 1990) is that senior managers' reflection and understanding of the firm environment is what plays a critical role in shaping key organizational choices (Nadkarni & Barr, 2008). Some authors have warned against conflating various effects of the environment under a single construct (e.g. instability) (Atuahene-Gima & Li, 2004; Forbes, 2007). Researchers have argued that the organizational environment has multiple dimensions and that the different kinds of information associated with these dimensions can affect the managerial processes underlying strategic decision-making (Huber & Daft, 1987; McCarthy et al., 2010). As interorganizational collaboration is a strategic decision which involves investments in organizing and coordinating innovation activities as well as initiating and managing relationships with external parties, the conditions in which managers make these choices are of important concern. Based on a review of the literature, this argument in this paper is that the decision for interorganizational collaboration in the pursuit of innovativeness can be theoretically related to three important dimensions of the environment. These are environmental turbulence, market heterogeneity and competitive intensity.

2.2. Environmental turbulence

Environmental turbulence is one aspect of the organizational environment that can be related to firm innovativeness and a firm's choice for interorganizational collaboration. Frequent shifts and multiple changes in markets pose heavy demands on the cognitive capacity of senior managers to process and integrate information in the strategic decision-making process. Managers that recognize this challenge and are aware that a comprehensive gathering of information is unattainable are able to design organizational responses to it. These responses include establishing and maintaining interorganizational collaboration relationships with external parties. When quantity or determinacy of the available information from the environment is low, there is a shift from "making the so-called 'right' decision toward managing the strategy-making process" (Mosakowski, 1997: 414). For managers to build elaborate internal structures to track, analyze and integrate environmental information in their decision-making makes little sense (Forbes, 2007). Nonetheless, the need to stay abreast of environmental changes remains critical as failing to do so may directly threaten the survival of the organization. Increasing innovation is a typical response strategy in such turbulent markets. As managers have to quickly execute decisions without a full understanding of the causal links to important strategic outcomes (Eisenhardt, 1989), they can use interorganizational collaboration to trade their comprehensive understanding and control over the environmental information for an increased responsiveness and adaptability. Building an internal capability for sensing market shifts is therefore less efficient than engaging in collaborations with external parties that might be better able to provide timely and valuable information or offer specialized forecasts of market changes (Burt, 1992, 2004; Nahapiet & Ghoshal, 1998). For example, a firm may collaborate with a market research firm rather than invest in the firm's capability for observing market changes. Although choosing partners under uncertainty is based on heuristics, having access to

Please cite this article as: Alexiev, A.S., et al., Interorganizational collaboration and firm innovativeness: Unpacking the role of the organizational environment, *Journal of Business Research* (2015), http://dx.doi.org/10.1016/j.jbusres.2015.09.002

Download English Version:

https://daneshyari.com/en/article/10492879

Download Persian Version:

https://daneshyari.com/article/10492879

Daneshyari.com