Long Range Planning 49 (2016) 103–116

Contents lists available at ScienceDirect

Long Range Planning

journal homepage: http://www.elsevier.com/locate/lrp

Entrepreneurial Orientation, Strategic Alliances, and Firm Performance: Inside the Black Box

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Prior research suggests that entrepreneurial orientation (EO) confers discretion in manipulating resources to create value, but the research lacks empirical evidence from interorganizational relationships and especially strategic alliances. The authors establish a parsimonious model that links alliance-partnering firms' EO to their performance through two knowledge management practices: knowledge acquisition from partners and knowledge creation within organizational boundaries. To further understand how interpartner co-opetition conditions entrepreneurial learning processes, the authors also examine the moderating effects of knowledge-leakage risk on the EO–knowledge management relationships. Data collected from 205 Chinese firms engaged in strategic alliances generally support the theoretical predictions and associated hypotheses.

Introduction

Entrepreneurial orientation (EO), a key initiative for innovation and value creation, is a competitive strategy that includes entrepreneurial innovativeness, proactiveness, and risk-taking (e.g., Covin and Slevin, 1989; Miller, 1983; Wiklund and Shepherd, 2003, 2005). The literature has well-documented the performance implications of EO in various contexts and fields (see Rauch et al. (2009) for a review). Although scholars have paid ample attention to answering *whether* EO affects firm performance, we know little about *how* EO affects performance, especially in interorganizational contexts such as interfirm strategic alliances.

The extant literature has focused predominantly on entrepreneurship at different levels of the organization (Welter, 2011). Although strategic alliances also offer entrepreneurial opportunities, few EO studies have considered strategic alliance contexts, leaving a "black box" in understanding the EO-performance relationship in strategic alliances. Alliances are inherently complex structures carrying bilateral information and knowledge, and often blending cooperation and competition among partners (Reuer, 2004). All strategic alliance parties and their dynamic interactions determine entrepreneurial activities within alliances. Yet the extant literature has failed to answer many important questions about *whether* and *how* EO generates superior performance outcomes in strategic alliances.

Examining underlying mechanisms that transmit EO effects to performance outcomes is crucial for advancing understanding of the EO-performance relationship (Li et al., 2009; Wang, 2008). The knowledge-based view (KBV) is deemed an appropriate perspective to explain the intermediate mechanisms in the EO–performance relationship (Hoskisson et al., 2000), but our study is one of the first to echo that suggestion. Specifically, we draw on the KBV and employ two knowledge management practices from previous studies: knowledge acquisition (how extensively the focal firm acquires valuable knowledge from alliance partners), and knowledge creation (how extensively the focal firm creates new knowledge within its organizational boundaries) (see Jiang and Li, 2009; Zhang et al., 2010), as mediating mechanisms through which partner firms' EO impacts their innovative and financial outcomes.

We focus on knowledge management practices as potential mediators based on their critical role in transmitting EO into real performance outcomes. On the one hand, entrepreneurial firms in alliances must share knowledge with one another to gain the heterogeneous expertise and experience they need to successfully accomplish innovative and financial objectives (Grant and Baden-Fuller, 2004; Jiang and Li, 2009; Li et al., 2010). On the other, those firms must combine existing knowledge to develop new knowledge within their organizational boundary, so as to exploit that expertise or experience for developing products and creating value (Li et al., 2009; Kodama, 2009; Nonaka and Takeuchi, 1995). Therefore, both knowledge

http://dx.doi.org/10.1016/j.lrp.2014.09.003
0024-6301/

acquisition and creation may be important mediating mechanisms that transmit EO's positive effects into innovation and financial outcomes.

Although EO benefits from the movement of interpartner knowledge, the benefits depend on whether partners simultaneously maintain cooperative and competitive relationships. Prior alliance research suggests that while firms expect to maximize the knowledge they acquire from partners, they also risk having partners imitate or appropriate their firm-specific knowledge and expertise (Oxley and Sampson, 2004). In forming alliances, therefore, firms potentially risk knowledge leakage or loss, especially when the partners are opportunistic (Li et al., 2008; Norman, 2004). Such risk forces firms engaged in interpartner coopetition to protect their core knowledge in the mutual learning process, although protecting knowledge inevitably constrains interpartner knowledge flows. Hence, knowledge-leakage risk greatly conditions entrepreneurial learning and associated knowledge movement outcomes. We thus posit that knowledge-leakage risk interacts with EO to affect knowledge acquisition and creation activities (the mediators).

This study contributes to the literature by extending entrepreneurship to the domain of strategic alliances. We investigate an important yet underexplored topic in the alliance literature: how entrepreneurial strategic orientation impacts innovation and financial performance in strategic alliances. We also contribute to alliance-context knowledge management research by exploring EO's impacts on partner firms' performance via knowledge acquisition and creation, the relationship between knowledge acquisition and knowledge creation, and the risk condition that may shape EO–knowledge management relationships. Our interest moves beyond *whether* EO impacts partner firms' performance and expands into the mediating and moderating processes regarding *when* and *how* EO affects performance outcomes. We believe that a more detailed investigation into mediating and moderating effects on entrepreneurship in alliance contexts may help alliance managers translate entrepreneurial strategies into performance outcomes.

Next, we introduce our hypotheses regarding direct, mediating, and moderating effects. We then clarify our research design and describe our sample. We report on our tests of hypotheses through data collected by interviewing two key informants in each of 205 Chinese firms engaged in alliances. Then we elaborate on the analyses and the results. Finally, we discuss theoretical and practical implications of our study and offer suggestions for future research.

Theoretical background and hypotheses

Prior research on entrepreneurial orientation

In the past three decades, EO has become a central concept in the entrepreneurship domain (e.g., Covin et al., 2006; Covin and Slevin, 1991; Lumpkin and Dess, 1996; Miller, 1983; Wiklund and Shepherd, 2003) and is generally rooted in the strategy literature (Rauch et al., 2009; Richard et al., 2004). Along that research tradition, EO has been viewed as the entrepreneurial strategy-making process that concerns the “methods, practices, and decision-making styles” and the “intentions and actions of key players functioning in a dynamic generative process” (Lumpkin and Dess, 1996, 136–137). EO can partly explain managerial strategic behaviors that allow firms to outpace the competition by being receptive to innovations, tolerant of risk, and highly proactive toward market opportunities (Matsuno et al., 2002; Wiklund and Shepherd, 2003). Accordingly, entrepreneurial firms have three characteristics: innovativeness, risk-taking, and proactiveness (Covin and Slevin, 1989; Miller, 1983).

Specifically, innovativeness taps propensities to engage in novelty, experimentation, and R&D activities that may generate new products or new technological processes (Lumpkin and Dess, 1996). It highlights the spirit of creating new business from ongoing practices and rejuvenating stagnant companies by introducing breakthrough innovations. *Risk-taking* refers to propensities to “venture into the unknown,” “commit a relatively large portion of assets,” or “borrow heavily” (Baird and Thomas, 1985, 231–232). Firms with risk-taking propensity willingly devote necessary resources to opportunities that may be costly failures (Naman and Slevin, 1993). *Proactiveness* identifies propensities to anticipate and act on future needs by seeking new opportunities (Lumpkin and Dess, 1996), introducing new products and services before the competition and anticipating future demands (Rauch et al., 2009). The emphasis on proactive action toward new opportunities cultivates capacities for creating products and services ahead of competitors and ahead of customers' recognition (Lumpkin and Dess, 1996).

EO and firm performance in the alliance context

Alliance firms that have high EO can identify potentially valuable partnering opportunities, and initiate preemptive actions in response (Sarkar et al., 2001). Firms that pursue entrepreneurial collaborative strategies position themselves to regularly and systematically recognize and exploit external alliance opportunities (Marino et al., 2002). Firms that can identify and exploit entrepreneurial value-creating opportunities together with complementary partners have advantages over those who cannot or are unwilling to do so (Lado et al., 1997; Sarkar et al., 2001). Based on those arguments, we propose that partner firms' EO is positively related to their performance in alliances.

With high EO and help from their partners, firms can react to early signals from the collaborative environment by targeting premium market segments and “skimming” the market ahead of competitors outside the alliance. Their first-mover advantages also benefit them in partner space and increase their ability to preempt geographic, technology and customer perceptual spaces (Lieberman and Montgomery, 1998).

Cope (2005) regarded entrepreneurship as an inherently dynamic phenomenon, and introduced a dynamic learning perspective to explain entrepreneurial activity. This dynamic learning perspective offers considerable possibilities for relating