



ELSEVIER

Contents lists available at ScienceDirect

Technovation

journal homepage: www.elsevier.com/locate/technovation

The effectiveness of relational and contractual governance in new product development collaborations: Evidence from Korea

Ludwig Bstieler^a, Martin Hemmert^{b,*}^a University of New Hampshire, Peter T. Paul College of Business and Economics, 10 Garrison Avenue, Durham, NH 03824-3593, USA^b Korea University, School of Business, 145 Anam-ro, Seongbuk-gu, Seoul 136-701, South Korea

ARTICLE INFO

Article history:

Received 9 July 2014

Received in revised form

15 July 2015

Accepted 18 July 2015

Available online 5 August 2015

Keywords:

New product development

Collaboration

Governance

Knowledge acquisition

East Asia

Korea

ABSTRACT

This study provides deeper insights into the management of new product development (NPD) collaborations and a better understanding of the ways that companies in East Asia govern these relationships to acquire external knowledge while achieving collaboration satisfaction. Looking through the lens of the relational view, we disentangle the effects of relational and contractual governance on collaborations outcomes. An analysis of survey data from 119 NPD collaborations in South Korea reveals that the strength of prior business ties between partners enhances relational governance and indirectly contributes to knowledge acquisition and collaboration satisfaction. Contractual governance does affect collaboration outcomes, but the impact is weaker than relational governance. The positive returns on collaboration satisfaction are diminishing when both governance mechanisms are applied simultaneously. The findings further suggest that managers engaged in NPD collaborations in East Asia should invest more in relational governance while maintaining a moderate level of contractual safeguards to enhance collaboration outcomes.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

New product development (NPD) collaboration is an attractive innovation mode for many firms. NPD collaboration is defined as a close interorganizational exchange relationship between two firms involved in the conception, testing, production or marketing of a new product. NPD collaboration offers multiple potential benefits such as the exploitation of market opportunities for firms that lack the necessary skills and technical expertise, a reduction of development cost and time-to-market (Littler et al., 1995), and new knowledge creation and innovation (Lawson et al., 2009). However, such collaboration implies extensive coordination cost as collaborating firms face the risk of free-riding, opportunism, or potential misappropriation of technological knowledge and strategic know-how (Littler et al., 1995; Bstieler, 2006). The creation and transfer of knowledge is a major objective of NPD collaborations. These relationships are exposed to a higher degree of uncertainty and exchange hazards than other types of interorganizational relationships such as channel relationships between buyers and suppliers, and licensing and outsourcing arrangements. In NPD collaborations, there is a mutual transfer of

technological knowledge and know-how between partners. However, incentives to prevent misappropriation are relatively weak (Dutta and Weiss, 1997). In addition to proprietary nature, information exchange in partnerships includes strategic and tacit know-how acquired through learning-by-doing that may augment a firm's competitiveness (Bstieler, 2006). How to effectively govern these types of relationships is a major concern for innovative companies.

Companies have two types of general governance mechanisms. The first mechanism applies contractual safeguards (contractual governance). The second mechanism relies on working closely with a collaboration partner (relational governance). While the relevance of these two mechanisms is widely acknowledged (e.g., Poppo and Zenger, 2002; Ferguson et al., 2005), two important research questions emerge for their effective application. First, do these two mechanisms work as complements or substitutes? Second, what is their relative importance in enhancing positive outcomes? A third related question pertains to the role of exchange history between collaborating companies when engaging in NPD collaborations (Rindfleisch and Moorman, 2001). How is the strength of prior business ties related to the usage of the two governance mechanisms? These three research questions have gained importance in a business-to-business context beyond general buyer-supplier relationships outside the Western world.

In contrast to the governance of inter-firm relationships in supply chains and distribution channels, previous studies paid less

* Corresponding author. Fax: +82 2 922 7220.

E-mail addresses: ludwigb@unh.edu (L. Bstieler), mhemmert@korea.ac.kr (M. Hemmert).

attention on how firms should employ governance mechanisms to facilitate knowledge acquisition and satisfaction in collaborative NPD (Rindfleisch and Moorman, 2001; Lawson et al., 2009). Given the potential uncertainty and hazards that come with such collaborations, how to effectively utilize governance mechanisms deserves more research attention. The extant research on the governance of NPD collaborations is predominantly based on studies in Western countries and asserts that both contractual and relational governance are important for achieving positive outcomes (Mayer and Argyres, 2004; Ryall and Sampson, 2009; Lawson et al., 2009). These studies suggest that contractual and relational governance complement each other in NPD collaborations because they can be effectively combined to reduce transaction costs (Mayer and Argyres, 2004) or curb opportunism (Faems et al., 2008). The exchange history between collaboration partners is sparsely considered as an antecedent of governance mechanisms. A major focus of Western research is the need to control collaboration hazards in the presence of high asset specificity and uncertainty in NPD collaborations (Mayer and Argyres, 2004; Faems et al., 2008).

While this research has generated important insights into the joint effects of governance mechanisms in Western industrialized countries, the effective governance of NPD collaborations in other regions is less understood (Cetindamar et al., 2009). The largest increase in research and development (R&D) expenditures in recent years comes from East Asia (OECD, 2013) and firms in this region increasingly use NPD collaborations (Lin et al., 2009; Chen et al., 2011; Kang and Park, 2012). Thus, the appropriate utilization of governance mechanisms in East Asian NPD collaborations is of significant interest. However, there is a void of research on the joint effects of these types of governance in collaborative NPD in East Asia. Due to the prominence of social relationships in East Asia (Gu et al., 2008), how these mechanisms act jointly is of great interest. There is reason to believe that the governance of NPD collaborations in East Asia is guided by principles different from Western countries because inter-firm collaborations are focused primarily on relationship building instead of transaction cost minimization (Chen, 2001; Chen and Miller, 2011; Gupta, 2011). This suggests that a different theoretical lens should be considered when studying NPD collaborations in this region. Therefore, we introduce a perspective that is more reflective of the cultural context and traditions of thought, and we examine the governance of NPD collaborations through the lens of the ‘relational view’. While Dyer and Singh (1998) have proposed the relational view as a broad concept for enhancing a firm’s competitive advantage through investment in interorganizational relationships, Chen and Miller (2011) suggest a more nuanced perspective in relationship building grounded in the cultural context and thought traditions prevalent in East Asia.

Hierarchies and complex webs of personal and business obligations may influence how managers span organizational boundaries for collaboration in China and other countries with similar cultural orientations (Gu et al., 2008), including South Korea (henceforth, Korea). However, emerging regulations and their enforcement may diminish the importance of socially embedded practices (Peng, 2003). As a consequence, it is important to advance our understanding of idiosyncratic practices and the interplay between contractual and relational governance that facilitate successful NPD collaboration in this region. There is a culturally embedded reluctance of trusting external parties, which poses significant challenges for interorganizational collaboration (Huff and Kelley, 2003). The dynamism of the economic environment in East Asia amplifies the volatility and uncertainty for effective governance (Hitt et al., 2003).

In this study, we contribute to the literature on NPD collaborations by introducing a new perspective on the governance of

these collaborations (the relational view) and by examining the outcomes of mixed forms of governance in Korea, which is considered a major representative East Asian country (Li, 2002). Specifically, we disentangle how the strength of prior business ties between collaboration partners affects contractual and relational governance mechanisms, shed light on the relative importance of contractual and relational governance mechanisms for knowledge acquisition and collaboration satisfaction, and elaborate on the complementary versus substitutive effects of contractual and relational governance.

The results of this study indicate that prior business ties play an important role in determining the governance and outcomes of NPD collaborations in East Asia. Furthermore, relational governance facilitates positive outcomes more than contractual governance, while the effectiveness of contractual and relational governance in enhancing collaboration satisfaction diminishes when both mechanisms are emphasized simultaneously. These findings are in contrast with results based on a Western context, which report complementary effects of these governance mechanisms. The governance of NPD collaborations in East Asia appears to work differently from those in the West. Thus, future studies of collaboration governance should take into account cultural context and regional traditions of thought.

2. Framework and hypotheses

2.1. The transactional view of NPD collaborations

The current research on governance in Western NPD collaborations demonstrates the importance of contractual governance (Mayer and Argyres, 2004; Ryall and Sampson, 2009) and relational governance (Bosch-Sijtsema and Postma, 2009; Lawson et al., 2009) for enhancing the outcomes of NPD collaborations, including knowledge acquisition and collaboration satisfaction (e.g., Poppo and Zenger, 2002). Knowledge acquisition is defined as the degree of information acquired via collaboration that extends a firm’s knowledge base about user needs, new product development, and production and manufacturing processes, and is a major objective in NPD collaborations (Rindfleisch and Moorman, 2001; Lawson et al., 2009). Partners pool their resources to ‘test the water’ for longer-term collaboration. Higher levels of satisfaction will have positive consequences for future collaboration. Collaboration satisfaction is a positive affective state resulting from the cumulative appraisal of all aspects in a working relationship over its duration (Jap, 2001).

In addition, Western NPD collaboration research tends to suggest that contractual and relational governance mechanisms mostly work as complements rather than substitutes to achieve positive outcomes in NPD collaborations. For example, Mayer and Argyres (2004) found that in sequential software development collaborations, contractual details increase over time and the process of writing these contractual specifications in response to ongoing problems enhances mutual communication and trust formation. Similarly, Faems et al. (2008) observed that contractual specifications and trust formation co-evolve in R&D alliances. In a study on technology development collaborations, Ryall and Sampson (2009) found that formal contracts and relational enforcement mechanisms work together as complements. Lawson et al. (2009) reported that in manufacturer-supplier NPD collaborations, formal managerial tools enhance knowledge sharing through informal socialization mechanisms. These findings are similar to the studies for other types of knowledge-intensive collaborations such as close information technology (IT) and R&D outsourcing relationships (Poppo and Zenger, 2002; Blomqvist et al., 2005; Carson et al., 2006), and strategic alliances (Reuer and Ariño, 2007).

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات