Industrial Marketing Management xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Industrial Marketing Management

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

Cross-functional knowledge sharing, coordination and firm performance: The role of cross-functional competition

Nguyen Phong Nguyen[a], Liem Viet Ngo[b,*], Tania Bucic[c], Nguyen Dong Phong[d]

[a] School of Accounting, University of Economics Ho Chi Minh City, Viet Nam
[b] UNSW Business School, The University of New South Wales, UNSW Kensington Campus, Sydney, NSW 2052, Australia
[c] UNSW Business School, The University of New South Wales, UNSW Kensington Campus, Sydney, NSW 2052, Australia
[d] University of Economics Ho Chi Minh City, Viet Nam

ARTICLE INFO

Keywords:
Cross-functional coopetition
Coordination
Competition
Cross-functional knowledge sharing
Transition economy

ABSTRACT

This study advances extant literature in cross-functional knowledge sharing by developing and testing a model of coopetition that examines (1) the relationships of various coordination mechanisms (formalization, lateral relations, informal networking, and shared vision) with knowledge sharing, (2) the moderating effect of cross-functional competition on these relationships, (3) and the mediating effect of organizational innovativeness on the relationship between cross-functional knowledge sharing and firm performance. Results from a sample of 224 large firms in a transition economy show that lateral relations, informal networking, and shared vision as coordination mechanisms relate significantly to cross-functional knowledge sharing, whereas formalization does not. The findings also indicate a moderating effect of cross-functional competition for lateral relations and informal networking but not for formalization or shared vision. Finally, organizational innovativeness partially mediates the relationship between cross-functional knowledge sharing and firm performance. These findings lead to several theoretical and managerial implications.

1. Introduction

Cross-functional knowledge sharing, between marketing and multiple disparate functions, can enhance innovation (Hansen, 1999; Lee & Lan, 2010; Tsai, 2001), new product success (Atuahene-Gima & Evangelista, 2000; Ernst, Hoyer, & Rübsaamen, 2010; Griffin & Hauser, 1992), market learning, and performance (Luo, Slotegraaf, & Pan, 2006). The determinants of such cross-functional knowledge sharing efforts likely involve intra-firm coordination mechanisms, as predicted by the coordination–sharing–performance (C-S-P) model (Tsai, 2002; Willem, Buelens, & Scarbrough, 2006). Such coordination mechanisms include not just formal methods, such as formalization and lateral relations, but also informal networking and shared visions that collectively promote varied communication channels that can enable cooperation and social interaction and act as conduits for cross-functional knowledge sharing (e.g. Ghoshal, Korine, & Szulanski, 1994; Gupta & Govindarajan, 2000; Willem & Buelens, 2007, 2009).

Despite some significant research advances regarding cross-functional knowledge sharing, we still confront some gaps in our understanding of the interplay of the simultaneously unifying and diverging contextual forces of intra-firm cooperation and competition (Raza-Ullah, Bengtsson, & Kock, 2014), as well as how this interplay affects cross-functional knowledge sharing across disparate units. Specifically, few studies examine the competition–cooperation paradox (Gnyawali, Madhavan, He, & Bengtsson, 2016), and fewer still empirically compare the relative importance or effects of intra-firm coordination mechanisms (e.g., formalization, lateral relations, informal networking, and shared vision) on cross-functional knowledge sharing. Yet managers need to understand how various coordination mechanisms might facilitate cross-functional knowledge sharing so they can develop effective knowledge management strategies. In addition, extant C-S-P models tend to ignore the potential moderating effects of cross-functional competition. In particular, the question of whether competition facilitates or inhibits the coordination–sharing relationship remains unanswered. Finally, cross-functional knowledge is a key strategic idiosyncratic resource; realizing its potential value "requires alignment with other important organizational elements" such as organizational innovativeness (Ketchen, Hult, & Slater, 2007, p.962), but extant literature does not offer a clear operationalization of such alignment.

In addressing these research gaps, we make two main contributions. First, we combine social capital and social embeddedness theory to examine, for the first time, the effects of both intra-firm coordination

* Corresponding author.
E-mail addresses: nguyenphongnguyen@ueh.edu.vn (N.P. Nguyen), liem.ngo@unsw.edu.au (L.V. Ngo), t.bucic@unsw.edu.au (T. Bucic), phongnd@ueh.edu.vn (N.D. Phong).

https://doi.org/10.1016/j.indmarman.2017.12.014
Received 24 May 2016; Received in revised form 8 December 2017; Accepted 12 December 2017

mechanisms and cross-functional competition on cross-functional knowledge sharing, thereby extending the C-S-P model (Brandenburger & Nalebuff, 1995). This extension reveals that intra-firm coordination and competition between marketing and other departments coexist and assist in aligning the functions to achieve better firm performance. By considering the effects of all coordination mechanisms on cross-functional knowledge sharing and the moderating effect of cross-functional competition, we clarify which intra-firm coordination mechanisms are relatively more important for facilitating cross-functional knowledge sharing; they do not influence cross-functional knowledge sharing to the same extent. The resulting insights also indicate which coordination mechanisms and competition forms are complementary and beneficial for cross-functional knowledge sharing.

Second, this study unpacks the cross-functional knowledge sharing–performance relationship according to its mediating mechanisms. Haas & Hansen (2005, p. 1113) caution that "obtaining and using knowledge from other parts of the firm does not necessarily improve the performance of task units within the firm ⋯ scholars need to move beyond studying facilitators of cross-functional knowledge sharing to examine how a firm's knowledge resources are utilized by task units to improve their performance." We respond to this call and illuminate the relationship by detailing how organizational innovativeness mediates the relationship between cross-functional knowledge sharing and firm performance.

In the next section, we review prior research on the C-S-P logic, then turn to social capital and social embeddedness theory to develop our intra-firm coopetition model, which integrates coordination mechanisms (formalization, lateral relations, informal networking, and shared vision), cross-functional competition, cross-functional knowledge sharing, organizational innovativeness, and firm performance. Following our hypotheses, we detail the research methods and data analysis. Finally, we discuss the findings and their implications for further research.

2. Conceptual framework and hypotheses

Competition implies a rivalrous, conflict-laden relationship among incumbents (Bengtsson & Kock, 2000) that arises from their divergent interests and creates a win–lose scenario or zero-sum game structure (Walley, 2007). Coordination instead emphasizes cooperative interdependencies with fully converging interests (Walley, 2007). In this sense, coordination is a critical factor for strategic success, offering growth for all parties, because of its inherent positive-sum game structure (Griesinger, 1990; Hill, 1990). However, the seeming polarity of competition and coordination has attracted criticism; they can equally affect important interdependencies within relationships (Bengtsson & Kock, 2000; Shih, Tsai, Wu, & Lu, 2006). In intra-departmental relationships for example, interfunctional conflict is common (Massey & Dawes, 2007; Massey & Kyriazis, 2007), and managers struggle with coordinating tasks due to prioritization disagreements and a lack of cooperation (Maltz & Kohli, 1996; Ruekert & Walker, 1987). This kind of conflict sparks coopetitive tensions (Fernandez, Le Roy, & Gnyawali, 2014) that lead to reduced cross-functional knowledge sharing (Persson, 2006) or avoidance of knowledge sourced from other teams, to avoid perceptions of influence or control (Maltz & Kohli, 1996). For example, marketing and other departments cooperate to achieve common organizational goals (Narver & Slater, 1990), but they simultaneously compete to pursue their own strategic priorities (Dougherty, 1992) and defend their status or power (Houston, Walker, Hutt, & Reingen, 2001; Hutt, Walker, & Frankwick, 1995; Walton & Dutton, 1969). Their interaction thus may be a double-edged sword that involves both coordination and competition (Luo et al., 2006).

According to social embeddedness theory, individual behaviors are affected by the weak or strong social structure of their relations (Granovetter, 1985; Luo et al., 2006). Weak ties are characterized by competition, infrequent interaction, lack of trust and limited affect (Dahlstrom & Ingram, 2003; Granovetter, 1985; Gulati, 1998; Uzzi, 1999), while strong ties are characterized by a high level of cooperation and frequent interaction regulated by reciprocity, trust or group norms (Granovetter, 1973; Rindfleisch & Moorman, 2001). Thus, we argue that the interplay between cross-functional coordination and competition is of paramount importance in cross-functional knowledge sharing.

Building on social capital theory and social embeddedness theory, we develop an intra-firm coopetition conceptual model as shown in Fig. 1 to examine the complementarity between the coordination mechanisms and competition in fostering cross-functional knowledge sharing.

2.1. Effects of coordination mechanisms on cross-functional knowledge sharing

Social capital theory suggests three dimensions of social capital including structural, cognitive, and relational dimensions (Inkpen &

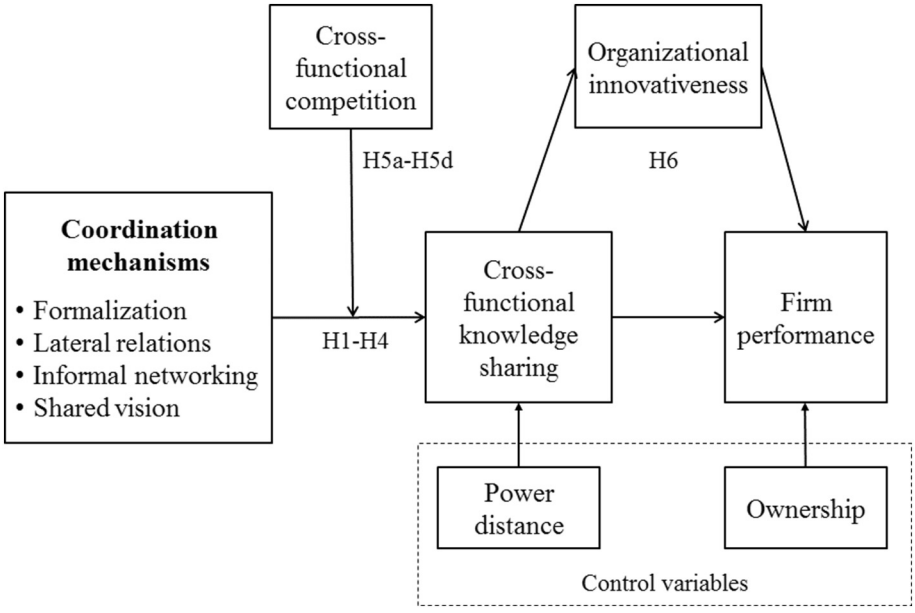

Fig. 1. Theoretical framework.