

Organizational Routines Impact on Interfirm Collaboration. Rationale and Research Framework

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Abstract

The paper analyses how pre - entry routines, i.e. organizational ones, influence a firm's propensity to enter inter-organizational collaborative relationships. The general question this paper addresses is how organizational routines and inter-organizational relationships interfere. Hence, the aim is to present a theoretical and methodological proposition, exploiting an evolutionary perspective and network approach, aiming to examine inter-dependencies between organizational routines and inter-organizational relationships. Strategic literature has devoted relatively limited attention to the organizational routines enabling firms to collaborate so as to achieve a fit over time and finally to survive in the overcrowded industry settings. We contribute to fill the research gap by exploring the routine approach. It allows investigating how firm's routines are associated with the propensity to operate in inter-organizational context. Consequently, the following hypotheses have been formulated: (1) The higher the level of routineness, the lower the propensity to collaborate; (2) Propensity to collaborate is positively related to organizational performance; (3) Environmental dynamics and environmental uncertainty moderate positively the relationship between routineness and propensity to collaborate; (4) Managerial execution-oriented performance moderates negatively the relationship between routineness and propensity to collaborate, (5) Managerial innovation-oriented performance moderates positively the relationship between routineness and propensity to collaborate; (6) External orientation positively moderates the relationship between routineness and propensity to collaborate; and (7) Internal orientation negatively moderates the relationship between routineness and propensity to collaborate.

Key Words: *Organizational Routines Inter-Firm Collaboration, Evolutionary and Network Approach.*

Introduction

The ascertainment that organizations are made up of individuals is quite elementary. It is also elementary that there is not any organization without routines. A central argument in an evolutionary vein is that routines are the fundamental units of analysis, and that the organization should be conceptualized as the repository of routines (Nelson and Winter, 1982). The concept of organizational routines has showed promising results for providing a deeper understanding of organizational change (e.g. Becker et al., 2005).

However, few attempts have been made to address the issue of routines from an inter-organisational or network perspective (e.g. Johanson and Kask, 2013; Mathews, 2001; Agostini and Nosella, 2015; Cantwell, Dunning and Lundan, 2009; Dyer and Hatch, 2006).

This paper extends the discussion concerning the factors that influence the formation of collaborative relationships between organizations as organizational existence may increasingly depend on a success in managing network relationships. Specifically, this paper analyses how pre - entry routines, i.e. organizational ones, influence a firm's propensity to enter inter-organizational collaborative relationships. The general question this paper addresses is how organizational routines and inter-organizational relationships interfere. Hence, the aim is to present a theoretical and methodological proposition, exploiting an evolutionary perspective and network approach, aiming to examine inter-dependencies between organizational routines and inter-organizational relationships.

Collaboration among business organizations requires fundamental strategic reconstruction, intensely affecting the capabilities, routines and practices that drive everyday business (Czikonta and Ronkainen, 2008; Doz, Santos and Williamson, 2003). As Martin and Eisenhardt (2010) state, we still do not know very much about the processes and the challenges involved in establishing collaboration. Collaboration is challenged by existing routines. Nevertheless, the importance and influence of aligning internal organizational routines to effective network ties is still in scarcity (Ben-Menahem et al., 2013). Yet, strategic literature has devoted relatively limited attention to the organizational routines enabling firms to collaborate so as to achieve a fit over time and finally to survive in the overcrowded industry settings. The importance of aligning internal routines and inter-organizational relationships seems to be recognized. In this paper, we contribute to fill this research gap by exploring the routine approach. It allows investigating how firm's routines are associated with the propensity to operate in inter-organizational context.

Linking Organizational Routines to Network Context

The notion of routines as an influential metaphor and fundamental issue for explaining organizational evolution of organisations has been widely accepted in evolutionary economics (e.g. Dosi, Marengo and Fagiolo, 1999) as well as in the management literature (e.g. Foss, 1999). The evolutionary approach would be useful in explaining how the firm's routines may affect its propensity to inter-organizational relationships and hereby to survive and prosper in the network settings. Given that the propensity to inter-organizational collaboration is endogenous to the routines organization possesses, it follows that the success or failure of relationship is likely to have much to do with the firm's routines.

Consequently, firm's internal routines may, to some extent, be contingent on the inter-organizational routines, which constitute the network 'context' (Dyer and Hatch, 2006). There are arguments for studying routines in the network context, i.e., Salvato and Rerup (2010) state it is worth examining 'how inter-organizational relationships may influence (...) routines'. Moreover, network theory provides a rich apparatus of concepts and methods to address that issue (Pentland, 1999).

Routines might contribute to understand drivers of endogenous organizational change and their impact on the organization (Becker et al., 2005). Hence, the important question is how inter-organizational relationships depend upon organizational routines. Specially, if routines are relevant as an adaptive mechanism, organizational routines indeed give further impetus to network performance and competitive advantage. Routines and relations underpin strategic activities (Mathews, 2001).

The idea that routines shape the development of the firm is well grounded in the literature (e.g. Nelson and Winter, 1982). However, there is little theoretical or empirical research concerning routines and the way they influence relationship and shape the firm's strategy making (e.g. Zollo, Reuer and Singh, 2002). Scholars have emphasized the relationship-specific experiences i.e. "relational-specific routines" (e.g. Gnyawali and Park, 2011) behind the development of cooperative relations over time and emphasize the

partner specific interaction among firms, which develop in the course of repeated collaboration (Zollo, Reuer and Singh, 2002).

Relationships as a unit of analysis are influenced by organizational routines. Accordingly, organizational routines determine inter-organizational relationships since the focus moves to relations *per se*. Few prior studies (e.g. Johansson and Kask, 2013; Eyuboglu and Buja, 2007) considered the relationships as a unit of analysis. However, in the alliance research we can find that firm's general experience makes it more likely to opt for and be able to successfully manage collaborative arrangements (e.g., Zollo, Reuer and Singh, 2002).

The next argument justifying the study undertaken is that collaboration potential is at risk because actors in organizations fail to build solutions upon existing practices (Friesl and Silberzahn, 2012). Hence, organizational routines determine or may determine collaboration. Collaboration may then also be explained by its effect on survival and longevity (Stoelhorst, 2008). On the other hand, the most dangerous thing in times of turbulence and change is not the change itself, but how to operate with yesterday's logic (Drucker, 1980). Likewise, some research underlies that routines originate from previous routines (Felin and Foss, 2005; Nelson and Winter, 1982). Prior actor behaviour is embedded in past experience, i.e., specific actions cannot be understood out of their historical context (Jarzabkowski et al., 2015).

Subsequently, managers tend to remain trapped in the existing organizational routines. The self-reproducing nature of organizational structures and routines makes them inherently resistant to externally imposed change (Grinyer and McKiernan, 1990). In fact, organizations need ritual elements to survive and cohere (e.g. Meyer and Rowan, 1977) as well as current relationships are articulated in procedures or contracts and embedded in routines and tend to be naturally stable and hard to change (Doz and Kosonen, 2010).

Outcomes of collaboration may extend performance. On the basis of several references we have found the evidence to hypothesize a positive relationship between firm's routines, propensity to collaborate and the performance (e.g. Cowan, Jonard and Zimmermann, 2007; Cohen and Bacdayan, 1994; Nelson and Winter, 1982).

Research Framework and Hypotheses

The argumentation line presented in this paper emphasizes that routines may provide key insights into our understanding of (a) firm's propensity to collaborate and (b) the moderating effects of external and internal context on routineness – collaboration relationship associations.

Firm routines and the characteristics of firms from the perspective of organizational routines complementarity contribute to propensity to collaborate. On one hand, collaboration involves the distribution of resources and capabilities and is challenged by existing routines (Floyd and Lane, 2000). On the other hand, existing literature does not stress the role of organizational routines whereby such prerequisites may influence collaboration. As mentioned above, firm's ability to exploit, develop, refine and consider routines from the perspective of collaboration is essential.

We focus on whether and how organizational routines result in forming collaborative relationships. We hypothesize organizational routines imply firm's propensity to enter collaborative relationships. Nevertheless, the process is also under influence of contextual factors. Taking into account the perspective of collaboration to be examined, we are going to consider both external context, namely environmental dynamism and uncertainty and internal (organizational) context in terms of (a) managerial innovation *vs.* execution orientation, (b) external *vs.* internal orientation.

A general research framework has been presented in Figure 1.

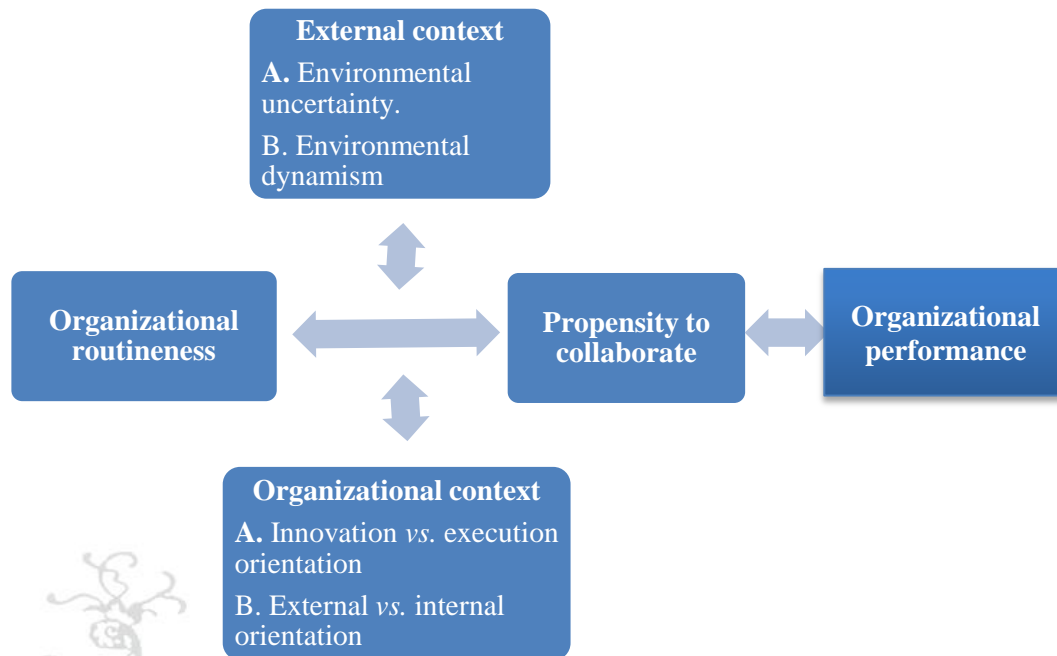


Figure 1. A research framework

Our framework aims to conceptualize organizational routines impact on entering collaborative relationships. Consequently, based on the prior research, the following hypotheses have been formulated:

Hypothesis 1: The higher the level of routineness, the lower the propensity to collaborate.

Hypothesis 2: Propensity to collaborate is positively related to organizational performance.

Hypothesis 3: Environmental dynamics and environmental uncertainty moderate positively the relationship between routineness and propensity to collaborate.

Hypothesis 4: Managerial execution-oriented performance moderates negatively the relationship between routineness and propensity to collaborate.

Hypothesis 5: Managerial innovation-oriented performance moderates positively the relationship between routineness and propensity to collaborate.

Hypothesis 6: External orientation positively moderates the relationship between routineness and propensity to collaborate.

Hypothesis 7: Internal orientation negatively moderates the relationship between routineness and propensity to collaborate.

Proposed Measurement Instruments

We are going to use data from interviews of managers from a high-tech sector that represents high-velocity industry in which collaborative relationships are extremely important. The following measures are going to be used in the study proposed:

Routineness

Aiken and Hage's (1966) routineness scale has good reliability where coefficients range from 0.74 – 0.94 in a series of studies. It would be also adopted Kaufmann and Dant's (1992) contract norm 'reciprocity' scale

or the relational norms scale based on Relational Contracting Theory developed by Macneil (2000). They both reveal good reliability scores.

Propensity to Collaborate

Propensity to collaborate constitutes the construct that is still under-investigated. We propose a self-constructed measure that would be a result of the pre-survey study – semi-structured interviews with IT managers.

Environmental Uncertainty

We will look for a possible moderating effect of environmental uncertainty divided into market (four-item measure) and technological uncertainty (three-item measure) on relationship choices. The items are based on measures used by Sutcliffe and Zaheer (1998) and Zaheer and Venkatraman (1995).

Environmental Dynamism

It will be measured using Schilke's 5-items scale that reveals Cronbach's alpha 0.81 (Schilke, 2014).

External vs. Internal Orientation

We are going to adopt a study of Rodrigues and Pinho (2012) addressing the relationship between internal and external market orientation. Three dimensions of external/internal market orientation (information generation, information dissemination, and information response) have been considered to be measured. The reliability of most of the constructs met the recommended standard of 0.70.

Execution vs. Innovation Orientation

Managerial innovation-oriented performance, in contrary to execution-oriented performance, emphasizes the manager's ability to devise and implement novel initiatives within the firm. It is expected that execution vs. innovation orientation have significant effects on propensity to collaborate and subsequently on corporate performance. We propose here to adopt the dimension called behavioural innovativeness as a construct describing innovation oriented performance. We propose to use Wang and Ahmed's (2004) innovation orientation measure revealing Alpha of Components 0.8736 and counterproductive work behaviour scale (Ho, 2012) as a construct describing execution oriented behaviour with reliabilities for the task-focused items 0.88.

Performance

It is going to be measured using non-financial performance scale (Bolat and Yilmaz, 2009; Tseng and Lee, 2014) representing 0.963 Cronbach's reliability.

Control Variables

We propose the following control variables: (a) *Past collaboration experience* - it has been argued that a firm's general relational experience makes it more likely to opt for and be able to successfully manage future collaborative arrangements (e.g., Zollo, Reuer and Singh, 2002), assessing the firm's level of experience in managing inter-organizational relationships; (b) *industry type*; (c) *technology turbulence*, 4-item scale (Jaworski and Kohli, 1993); and (d) *technology orientation*, 4-item scale (Gatignon and Xuereb, 1997).

Conclusion and Discussion

The paper provides insights into the field of inter-organizational networks incorporating evolutionary lens, i.e. organizational routines. It has been assumed that organizational routineness has impact on organizational propensity to collaborate and that the relationship between those two constructs is moderated by both external context and internal one what has been formulated in aforementioned hypotheses. Some future research directions may be identified. First, it may be considered to conduct multi-level studies as some of constructs proposed concern an organizational level and the others an individual one. Second, not only is collaboration salient in a high-tech sector, yet also coopetition relationships are, so it is suggested exploring that realm in the context of organizational routines. Finally, organizational routines reflect two contrary hallmarks, i.e. ostensive and performative aspects (e.g. Feldman and Pentland, 2003) that determine contrary ways of operating - routines can both embody and generate innovation and creativity. It leads simultaneously to the aspects of multiplicity and ecologies of routines - how relationships among connected routines affect in which way creative routines emerge, and how existing routines favour or hinder innovative activities. Hence, it is interesting how those two faces of organizational routines affect propensity to collaborate.

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