Industrial Marketing Management xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Industrial Marketing Management

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

A framework for understanding strategic network performance: Exploring efficiency and effectiveness at the network level

Lyndie Bayne, Daniel Schepis, Sharon Purchase*

UWA Business School, 35 Stirling Highway, Nedlands 6009, Australia

ARTICLE INFO

Keywords:
Strategic networks
Performance
Efficiency
Effectiveness
Processes

ABSTRACT

There are currently limits in our understanding of strategic network performance due to the complexity of the underlying processes involved. Improving our understanding of performance is critical if we are to improve network functioning, an important managerial problem. This paper addresses a research gap in strategic network performance by investigating: efficiency and effectiveness at the network level of analysis. A multiple case study methodology is used to investigate two Australian agri-business strategic networks. The cases suggest that processes relating to building actor webs and collective sensemaking are crucial for improving strategic network effectiveness, whereas network efficiency is influenced by developing activity patterns and utilizing resource constellations. The cases also highlight potential trade-offs between network effectiveness and efficiency in relation to performance at the network level. The paper contributes an empirically informed theoretical framework for understanding how network level processes influence network performance.

1. Introduction

We have long recognized that firms are able to generate value through collaborative network approaches, which can be considered a well-established aspect of managerial strategy (Jarillo, 1988; Majava, Isoherranen, & Kess, 2013). While a plethora of studies have focused on evaluating the effects of networks on firm performance, very few address the performance of the network itself (Corsaro, Ramos, Henneberg, & Naudé, 2012). This paper takes up the call from Möller and Svahn (2003, p.227) who highlight that "empirical research is required to deepen and validate … management and assessment of the performance of different nets". However, evaluating network performance has been recognized as extremely complex and context dependent, contributing to our lack of understanding at this level (Provan & Kenis, 2008; Ferreira, Shamsuzzoha, Toscano, & Cunha, 2012; Möller & Svahn, 2003). Part of this issue stems from difficulties in identifying the processes to be evaluated, given perceptions often vary among participating firms and these may even evolve as the network develops (Lind, 2015). Despite these challenges, understanding performance at the network level has valuable managerial applications and can improve network functioning to achieve desired goals (Provan & Kenis, 2008).

Understanding performance is of particular interest to firms engaging in *strategic networks*, which are intentionally constructed by groups of actors to attain specific objectives and place emphasis on the management of collaborative processes (Möller & Svahn, 2003; Heikkinen, Mainela, Still, & Tahtinen, 2007; Huxham & Vangen, 2005). This form of network structure, distinguished from emergent networks, features across different theoretical perspectives, varying in name and application, however similarly interested in the issue of evaluating performance (Provan & Milward, 1995; Gulati, Nohria, & Zaheer, 2000; Corsaro et al., 2012). As Rampersad, Quester, and Troshani (2010) highlight, the strategic network level, which seeks to link managerial factors with network level outcomes, remains empirically undeveloped. As with approaches for evaluating organizational performance however, managers may interpret network performance in terms of its functioning and/or its perceived outcomes (Mouzas, 2006; Whelan, 2015). We understand network performance to align with network efficiency and effectiveness respectively (Möller & Svahn, 2003; Möller & Rajala, 2007; Jarillo, 1988; Provan & Kenis, 2008); while both relevant, no empirical frameworks have considered these concepts together to understand network performance.

This paper addresses this gap, by developing a framework to understand how strategic network processes contribute to efficiency and effectiveness and overall performance at the network level of analysis. In doing so we apply the Actors-Resources-Activities (ARA) model which identifies the processes of building actor webs, developing activity patterns and utilizing resource constellations, and include a collective sensemaking dimension of particular relevance to strategic networks (Håkansson & Snehota, 1995; Welch & Wilkinson, 2002).

* Corresponding author.
E-mail addresses: Lyndie.bayne@uwa.edu.au (L. Bayne), Daniel.schepis@uwa.edu.au (D. Schepis), Sharon.purchase@uwa.edu.au (S. Purchase).

http://dx.doi.org/10.1016/j.indmarman.2017.07.015
Received 1 April 2016; Received in revised form 15 June 2017; Accepted 28 July 2017

These processes are investigated empirically through two case studies set in the Australian agri-business sector which focus on network level performance perceptions from multiple actor perspectives. In taking this approach we address the following research question: How do strategic network processes influence its performance at the network level?

The remainder of the paper is structured as follows. The theoretical background is presented in Section 2, followed by a summary of the conceptual development in Section 3. The methodology is outlined in Section 4, after which the cases are presented and analyzed in Section 5. Discussion follows in Section 6 and finally conclusions are provided in Section 7.

2. Theoretical background

This section explores concepts of performance in business networks and introduces an initial conceptual framework of network processes relevant to our study. As introduced earlier, we focus specifically on strategic networks, which are understood as intentionally constructed subsets of three or more actors purposefully collaborating towards specific goals (Möller & Svahn, 2003). While strategic networks have sometimes been considered long-term endeavors (Jarillo, 1988), we align with perspectives that suggest they are not necessarily ongoing and can dissolve once goals are achieved (Brito, 2001, Ritvala & Salmi, 2010). Strategic networks can be distinguished from broader, emergent networks based on their strategic intent and the specific context for actor interactions (Möller, Rajala, & Svahn, 2005). Despite the diverse application of the concept, strategic networks have also been classified by type based on commonalities, indicating more general analyses are appropriate (Möller & Svahn, 2003; Möller et al., 2005). Therefore the strategic network level provides a more suitable lens to consider performance given the greater goal specificity and a bounded analytical focus through which to analyze internal processes (Alajoutsijärvi, Möller, & Rosenbröijer, 1999). This level of analysis offers opportunities to explore performance at the network level, given shared goals can to some extent offer a more coherent and identifiable perspective (Valkokari, 2015).

2.1. Strategic network performance

While acknowledging the lack of research directed at network level performance, several related perspectives of performance in networks can be considered to inform this research. In referring to strategic networks, Jarillo (1988) considers performance in terms of competitive advantages over non-participating firms or superior returns to what can be achieved alone. This perspective however, focuses on organizational performance, in particular for the controlling hub firm (Jarillo, 1988). Möller and Svahn (2003) take a value creation perspective, focusing on the value generated through participation in the strategic network, which is greater than what firms can achieve individually. Network performance has been studied extensively in public administration literature, although different performance measures are used and the empirical focus is often on broader community outcomes (Raab, Mannak, & Cambré, 2015). As an example, Turrini, Cristofoli, Frosini, and Nasi (2010) summarize network level performance evaluations as the ability to reach stated goals; innovation and change; and sustainability and viability.

This paper argues that performance perceptions vary according to: (1) different individual and organizational participants (Huxham & Vangen, 2005; Ford & Håkansson, 2006) and (2) type/contextual nature of the network (Möller & Svahn, 2003). As initially highlighted, evaluating performance at a network level is difficult as it raises the question “effectiveness for whom?” (Provan & Kenis, 2008, p. 229). This indicates that strategic network performance perceptions need to align with organizational actor requirements (Lind, 2015; Ritvala & Salmi, 2011), yet this is not necessarily achieved (see Munksgaard & Medlin, 2014). Lind (2015) highlights numerous variations in which organizational (specific) goals are nested within strategic network (overall) goals, depending on how individual actors manage to pursue their individual goals. While multiple performance descriptors vary according to context and type, there remains a need to identify appropriate approaches to evaluating strategic network performance more broadly and holistically (Keast & Mandell, 2013).

Two distinct yet related concepts previously used for evaluating network performance are efficiency and effectiveness (Möller & Svahn, 2003; Möller & Rajala, 2007; Jarillo, 1988; Provan & Kenis, 2008). Although other conceptualizations of performance have been used (e.g. Ferreira et al., 2012; Turrini et al., 2010), we consider this an appropriate frame to develop an understanding of strategic network performance due to the prominence of efficiency and effectiveness in existing literature. Some research has focused on either efficiency or effectiveness (see Provan & Milward, 1995; Heikkinen et al., 2007), while others highlight that they need to be considered in combination (Jarillo, 1988; Möller & Svahn, 2003; Mouzas, 2006). In some instances improved strategic network efficiency can be interpreted as a measure of its effectiveness, however in this paper we refer to network efficiency in reference to network processes rather than outcomes (Möller et al., 2005), while acknowledging that network efficiency may indeed be the network outcome goal, thereby embedded in effectiveness. Whelan (2015) suggests the challenge in defining performance often leads to it being conflated with effectiveness despite it being a broader term. Jarillo (1988, p. 36) goes so far as to indicate that efficiency and effectiveness are “basic conditions [for the] existence of networks”.

2.1.1. Strategic network efficiency

Strategic network efficiency is aimed at reducing the transactional and/or operational costs through co-ordination of activities and resources, “in other words getting more out of the resources used” (Möller & Svahn, 2003, p. 218). This has been conceptualized as lower transaction costs (Jarillo, 1988); efficacious use of network resources (Möller & Svahn, 2003); integration of components and co-ordination of activities (Möller & Rajala, 2007); and measure of network outputs over inputs (Provan & Kenis, 2008). Increased efficiency is considered one of the main advantages of collaborating in networks over more hierarchical relationships, given it allows for greater flexibility (Whelan, 2015). While the above research outlines how network efficiency should be considered there is little empirical work evaluating which processes may influence network efficiency.

2.1.2. Strategic network effectiveness

Descriptions of strategic network effectiveness include: attainment of “positive network level outcomes” (Provan & Kenis, 2008, p. 230); achieving its desired end (Jarillo, 1988); relative measures of stakeholder outcome perceptions (Provan & Milward, 1995); and capability to generate value gains (Möller & Svahn, 2003). In acknowledging multiple approaches, there is ultimately no consensus in defining or measuring network effectiveness (Whelan, 2015). Moreover, contextual factors may also influence perceptions of effectiveness, such as the tasks/goals of network participants, stakeholders or even research frame (Raab et al., 2015). Network effectiveness needs to be better understood beyond specific contexts, while also not being equated with organizational effectiveness measures (Whelan, 2015). In recognizing multiple interpretations of effectiveness, for the purpose of understanding strategic network performance, we consider effectiveness to be attainment of network goals (Jarillo, 1988; Provan & Kenis, 2008), while also acknowledging that goals can be emergent or adaptive.

To better understand strategic network performance the relationship between efficiency and effectiveness needs elaboration. While Jarillo (1988) does not discuss whether such interaction occurs, others indicate trade-offs arise in aiming towards efficiency or effectiveness gains (e.g. Provan & Kenis, 2008; Mouzas, 2006; Möller & Svahn, 2003). Mouzas (2006) outlines that at the organizational level different