Dialogical strategies for orchestrating strategic innovation networks: The case of the Internet of Things

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A R T I C L E   I N F O

A B S T R A C T

Strategic innovation has been shown to provide significant value for organisations whilst at the same time challenging traditional ways of thinking and working. There is less known, however, as to how organisations collaborate in innovation networks to achieve strategic innovation. In this paper we explore how innovation networks are orchestrated in developing a strategic innovation initiative around the Internet of Things. We show how a hub actor brings together a diverse group of actors to initially create and subsequently orchestrate the strategic innovation network through the employ of three dialogical strategies, namely persuasive projection, reflective development, and definitional control. Further, we illuminate how different types of legitimacy are established through these various dialogical strategies in orchestrating strategic innovation networks.

1. Introduction

> "A world, where everything that moves can talk to everyone, everywhere, all the time"
> [(*RFID Conference Presentation*)]

This is a vision which started in the early 2000s and has become commonly known as 'The Internet of Things'. Essentially, it reframed the Internet as not just connecting computers but envisioned a future where everyday objects would become part of computer networks. The RFID-based innovation was perceived to

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create novel and unprecedented forms of value by making fundamental changes to the way companies and industries operate, along with potentially significant impact on wider society. Such innovations constitute what is often referred to as strategic innovation, which is focused on capturing high growth and generating significant value through the redefinition of markets, customers, and business and operating models (Govindaraian & Trimble, 2012). However, the strategic innovation literature has traditionally focused solely on the organisational level as to how leaders and managers develop new strategic initiatives to gain new markets and beat competitors (c.f. Teece, 2009; Teece, Pisano, & Shuen, 1997; Schlegelmilch, Diamantopoulos, & Kreuz, 2003; Sillince, Jarzabkowski, & Shaw, 2012). This leaves a gap in our understanding of how wider innovation networks might work together to develop novel strategic directions, whilst remaining in formal competition with each other.

In this paper we seek to understand how such strategic innovations are brought about through the collaborative efforts of an innovation network guided by a hub organisation. In developing our understanding of collaborative strategic innovation, we draw on our longitudinal in-depth case study of the PhysNet innovation network to examine the underlying dynamics of a network brought together to create an 'Internet of Things'. Whilst earlier work has tended to focus on the types and structures of these networks, the factors that affect successful innovation, and the benefits they bring about (e.g. Kastelle & Steen, 2010; Klincewicz, 2009; O'Shea, Allen, Chevalier, & Roche, 2005; Steiner, Gil, Ehret, & Ploder, 2010; Williams, 2005), our particular emphasis on dialogical strategies builds on the less developed research on the processes of innovation within technology innovation networks (Swan & Scarbrough, 2005), particularly around the achievement of strategic innovation (Grant & Marshak, 2011).

Recent work (Heracleous, 2002; Jacobs & Heracleous, 2005) has highlighted the role of dialogue as an enabler of strategic innovation, particularly in the reframing of mental models. Dialogue enables the critical review of existing mental models and an opportunity for new mental models to be formed (Ford & Ford, 1995; Gergen, Gergen, & Barrett, 2004) with potential for fostering the fundamental changes needed for strategic innovation. Furthermore, dialogue, which draws on stakeholders' diverse values and interests, can expose assumptions and (re)shape values and interests, enabling innovation and knowledge creation (Tsoukas, 2009). It can reveal the differences between stakeholders, including variances in values and interests, facilitating mutual challenges to perspectives and consensual legitimation (Calton & Kurland, 1996, p. 170), particularly relevant in strategic innovation networks made up of heterogeneous actors.

Additionally, dialogue can legitimate management practices enabling leaders and managers to reasonably pursue particular valued goals (Green, 2004 cf. Abrahamson & Fairchild, 1999). As highlighted by Garud and Rappa (1994), 'without legitimacy, it is difficult to attract others to participate in developing the technology to a more advanced state. Thus, a new technology is in a precarious state during its early stages of conception' (p. 358). An important challenge then for innovation networks, and specifically those leading the innovation process, is to establish a degree of legitimacy, since it may be difficult to attract others to participate in its development (Birkinshaw, Hamel, & Mol, 2008; Schilling, 2005; Stjernberg & Philips, 1993).

Our paper focuses on how leading actors within innovation networks coordinate, direct and influence the network members (Nambisan & Sawhney, 2011) through, for example, facilitating knowledge flows and stabilising the network (Dhanaraj & Parkhe, 2006) in establishing legitimacy. The specific research question is: *How does a hub actor orchestrate a strategic innovation network and what is the role of dialogue in such an orchestration*?

Our findings reveal three dialogical strategies used by the hub actor responsible for assembling and orchestrating the innovation network, as well as for excluding some actors from participating in the development of strategic value. In so doing, we contribute novel insights on the dialogical strategies facilitating and constraining strategic innovation within innovation networks.

2. Strategic innovation and innovation networks

Strategic innovation is concerned with fundamental changes to the way organisations operate (Hamel, 1998). Given that maintaining competitive advantage is transitory (Ghemawat, 2002; Markides, 1999), strategic innovation can aid continuous innovation, avoiding the danger of going along with what may appear to be best practices but offer no sustainable uniqueness because all competitors are similarly