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Sourcing in or out: Implications for social capital and knowledge sharing

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ABSTRACT

The sharing of knowledge between a firm and its internal or external service suppliers has become an important element of contemporary sourcing arrangements. Moreover, the knowledge based view (KBV) has long suggested that due to stronger cognitive links within firms, internal compared to external service provision creates better conditions for knowledge sharing. Empirical evidence for this claim is however scarce, and the KBV does not explain the mechanisms for more knowledge sharing in internal sourcing in detail. Moreover, there is now some evidence to suggest that firms' relationships with external sourcing partners are becoming more similar to those with captive centres, which represent a less traditional form of insourcing setting. To scrutinize the possible knowledge sharing advantages of internal sourcing in more depth, we turn to social capital (SC) research. There are some theoretical claims that SC and knowledge sharing are stronger within than between firms, and there is ample evidence that SC facilitates knowledge sharing. Our survey results suggest that the extent of knowledge sharing and SC are indeed stronger in a captive than in an external sourcing mode, and that structural (tie strength), cognitive (shared understanding), and relational (trust) aspects of SC mediate the effect of sourcing mode on the extent of knowledge sharing. By contrast, network stability (a structural aspect) mediated knowledge sharing only indirectly, by reinforcing the other SC aspects. We highlight important contributions to research and practice of IS outsourcing and social capital.

1. Introduction

A recent and growing stream of research has been paying attention to knowledge aspects in information systems outsourcing (Chua et al., 2012; Dibbern et al., 2008; Møller-Larsen et al., 2013). Indeed, the sharing of knowledge between a client firm and its internal or external suppliers has become an important feature of contemporary sourcing engagements (Lacity et al., 2010; Vlaar et al., 2008; Leonardi and Bailey, 2008). Several studies have further argued that the ability to share knowledge contributes significantly to sourcing success (e.g. Chua and Pan, 2008; Koh et al., 2004; Kotlarsky and Oshri, 2005). Correspondingly, a number of case studies have provided evidence that in practice, intended sourcing outcomes such as cost reduction and service quality are not achieved when service providers and client units do not sufficiently share relevant knowledge. For example, if suppliers find it difficult to understand the idiosyncratic knowledge required to contribute

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to the receiving unit's product (such as software used in a particular electronic control unit for certain automotive engines), this can impede knowledge sharing and thereby increase transaction costs and quality issues (Dibbern et al., 2008; Zimmermann and Ravishankar, 2011, 2014).

Researchers in the tradition of the knowledge based view (KBV) have also claimed that knowledge sharing is easier within a firm than between firms (e.g. Grant, 1996; Kogut and Zander, 1996; Macher, 2006), which suggests that an internal sourcing mode (a form of making in house) is a better option for knowledge sharing compared to an external sourcing mode (buying from an external supplier) (see Willcocks et al., 2004). However, this research is underdeveloped in two ways. Firstly, empirical comparisons of knowledge sharing between internal and external sourcing modes are largely missing. Secondly, research in the tradition of the KBV (e.g. Grant, 1996; Kogut and Zander, 1996; Macher, 2006) has provided only a narrow perspective on the mechanisms responsible for differences in knowledge sharing within and between firms, by focusing primarily on cognitive aspects of intra- and inter-firm relationships (e.g. shared understanding) and shedding little light on how other aspects of relationships between sourcing partners may affect the extent of their knowledge sharing.

To address this shortcoming, we need a more comprehensive and fine-grained lens for studying the relationships within and between firms. Such a lens is offered by social capital theory. Social capital is commonly defined as the resources embedded within, available through and derived from the network of relationships with counterparts (Nahapiet and Ghoshal, 1998: 243). The notion of social capital comprises not only a cognitive dimension but also a structural and a relational dimension of relationships. Importantly, a number of researchers have suggested that social capital is generally stronger within than between firms (Inkpen and Tsang, 2005; Nahapiet and Ghoshal, 1998), and there is now ample evidence that social capital facilitates knowledge sharing (e.g. Hansen, 1999; Reagans and McEvily, 2003; Tsai and Ghoshal, 1998).

When comparing within and between-firm knowledge sharing, it is however important to take into account the particular organisational context, and the various elements that can make an internal sourcing setting equally challenging to an external sourcing setting. In certain forms of organisation, firm-internal boundaries may inhibit social capital and knowledge sharing within firms (Inkpen and Tsang, 2005). With regard to IS sourcing, it is therefore particularly relevant to examine the increasingly common case of captive centres (also called global in-house centres), wherein sourcing firms make products or services using a separate organisational unit, often in an offshore location (NASSCOM, 2015; Penter et al., 2009; Oshri, 2011). While the captive centre is considered a make option, implying fewer boundaries between the sourcing unit and the internal provider compared to an external supplier, its clear organisational distinction from the parent firm can create challenges to building relationships and sharing knowledge. A captive sourcing mode may therefore face barriers to knowledge sharing similar to those of the external sourcing mode (e.g. Levina and Vaast, 2008).

Conversely, the barriers for social capital and knowledge sharing between client firms and their *external* suppliers may be diminishing. In practice, there seems to be a trend towards less confrontation and more cooperation between firms (see Kedia and Mukherjee, 2009), and firms are increasingly disposed to taking a partnership approach to external IS sourcing. For example, Willcocks et al. (2004) describe an 'Enterprise partnering' sourcing option, whereby client and supplier firm take joint ownership of a new service-providing organisation. Joint governing boards can here serve to build social capital, which helps to leverage the potential to create knowledge. Moreover, IT suppliers have developed sophisticated knowledge exchange methods needed to ensure the flow of knowledge between the client and supplier on a regular basis (Kotlarsky et al., 2014; Oshri et al., 2007).[1] These developments make the current knowledge sharing advantages of captive sourcing settings yet more debatable.

Given these ambiguities concerning the effect of sourcing modes on knowledge sharing, and the indications that knowledge sharing affects outsourcing success (e.g. Lacity et al., 2010), it has become rather imperative to establish whether and why the extent of knowledge sharing may still be greater in a captive setting than an external sourcing mode. We hence seek to shed light on the role of social capital in the relationship between sourcing mode (i.e. captive centre versus external supplier) and the extent of knowledge sharing. We develop a conceptual model (presented in Fig. 1) to argue that the choice of sourcing mode affects the extent of knowledge sharing between providing and receiving units, and that structural, cognitive and relational aspects of social capital mediate this effect. Our hypotheses were tested in a survey of 150 large UK and US firms that engage in contracting work from both captive and external service suppliers.

Our research contributes to the IS outsourcing and the social capital literature, as well as the practice of conducting information technology outsourcing. We find that even in the case of a captive centre, firm boundaries are indeed crucial for knowledge sharing. We therefore complement previous research on knowledge sharing and firm boundaries by demonstrating that the effect of the sourcing mode on the extent of knowledge sharing is mediated by aspects of social capital. In doing so, we demonstrate that not only cognitive, but also structural and relational aspects of social capital are fundamental for this effect. Our study thereby goes beyond the KBV rationale and provides stronger reasons the knowledge sharing advantages of within-firm service provision. Furthermore, we advance previous attempts in the social capital literature (Inkpen and Tsang, 2005) to distinguish between different organisational forms with regard to their impact on social capital and knowledge sharing.

We now expand on the theoretical reasoning that underlies our hypotheses. After briefly introducing the two sourcing modes in question, we develop our first hypothesis based on the KBV of knowledge sharing within and across firm boundaries. We then develop our second hypothesis on the basis of research on social capital in relation to firm boundaries and

[1] We thank our anonymous reviewer 2 for this consideration.