Implementing supply chain partnering in the construction industry: Work floor experiences within a Dutch housing association

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ABSTRACT

Although much research has been conducted about advantages and challenges for supply chain partnering (SCP) in the construction sector, focus has been mostly on formal aspects of implementation within organizations. Understanding social aspects, however, might be just as crucial to implementation of SCP as understanding managerial and intra-organizational dynamics. Therefore, this paper presents the results of a study in which a work floor professional together with a researcher tried to contribute to the implementation of SCP within the maintenance and refurbishment processes of a Dutch housing association. The results showed that stakeholders could not come to shared understanding of strategic needs, and that that pattern influences and was influenced by social aspects such as leadership and trust, which confirms the importance of explicit attention for social interactions at work floor level for successful implementation of supply chain partnering.

1. Introduction

Last decade, supply chain partnering (SCP) has increasingly been seen as a way to increase efficiency and quality of the production processes in Construction Industry (CI) (Akintoye et al., 2000; Bresnen and Marshall, 2000a, 2000b; Bygballe et al., 2010; Hongh-Minh et al., 2001; Khalfan and McDermott, 2006). CI is a fragmented industry (Bresnen and Marshall, 2000b; Horta and Camanho, 2014; Vrijhoef, 2011) and is known for its harsh, tough and competitive character (Tazelaar and Snijders, 2010). Combined with project uniqueness and therefore a low level of repetition, coordination problems and underperformance are common in CI (Vrijhoef, 2011). The main goal of SCP is to improve performance by establishing close relationships and integrating respective activities between upstream and downstream actors, such as project managers and (sub)contractors, in the supply chain (Bresnen and Marhall, 2000b; Bygballe et al., 2010).

Different approaches of the SCP concept have emerged, and resulted in a wide range of for example behavior, attitude at work floor level (Bresnen and Marshall, 2000b; Bygballe et al., 2010; Vrijhoef, 2011). An often-used definition of SCP is 'a long-term commitment (or it may be applied to a shorter period of time such as project duration) between two or more organizations as in an alliance for the purpose of achieving specific objectives by maximizing the effectiveness of each participant's resources' (CII, 2012). However, SCP is by no means universally applicable, and the way in which SCP is applied highly depends on circumstances and context (Bresnen and Marshall, 2000a; Vrijhoef, 2011). CI, for example, is characterized by location-bound design, on-off production, changing production coalition for each project, outdoor and environmental circumstances, multiple clients and suppliers involved in a single project, lack of a focal company, etc.

Much research has been performed on SCP in general and more specifically in the CI since its introduction twenty years ago (e.g. Bresnen and Marshall, 2000a, 2000b; Bygballe et al., 2010; Gadde and Dubois 2010; Vrijhoef, 2011). Many of these studies have a rather cognitive and rational character. Moreover, predominantly, prescriptive, formal SCP tools are addressed, such as selection procedures, workshops, charters, facilitators and measurements. Other scholars have studied 'critical success factors' required to develop partnering relationships and achieve the promised benefits of SCP (Bresnen and Marshall, 2000b; Bygballe et al., 2010). Bresnen and Marshall (2000b), Bygballe et al. (2010), and Gadde and Dubois (2010) found that in CI organizations, SCP is often interpreted as a technical–managerial problem, mainly involving the application of appropriate tools and techniques.

However, the focus on designing prescriptive tools for successful SCP implementation in CI does not provide insight in daily work floor experiences. Therefore, the implications of using the

tools at work floor level remain unclear. Also, many scholars have acknowledged the need to account for social aspects (Bresnen and Marshall, 2000a; Gadde and Dubois, 2010; Gruis, 2011; Kim et al., 2010). An extensive literature study by Kim et al. (2010) showed that commitment, trust, communication, and leadership are critical factors of success for partnering. Still, only few researchers have actually dug further into how these social aspects can be handled in daily work practice (Bresnen and Marshall, 2000a, 2000b; Kadefors, 2004; Kim et al., 2010; Wong, 2001; Wong et al., 2007).

The current perspective on rather technical-managerial determinants of SCP and a lack of empirical research in the dominant research discourse indicate a strategic choice paradigm. According to this paradigm, managers consciously, logically, and rationally analyze an organization's environment and its internal capabilities and based on that information they set intentions – in the form of plans, programs, strategies, etc. – to come to the best possible results. The manager's intention boils down the organization and in that way the organization becomes what it is (Stacey, 2011). Abstract tools, such as software or contracts, are provided to help the professionals to perform the intended plans, programs or strategies. This technical top-down approach and the use of abstract management models neglect actual experiences of professionals (Groot, 2010a, 2010b; Stacey, 2011). It is taken for granted that the plans, programs, and strategies are performed by autonomous individuals, who have their own individual background, knowledge, convictions, values and intentions and that these individuals give shape to and form the process of executing plans, programs, and strategies.

Similar to Stacey (2005), Schön (1983) refers to the gap between the highly abstract scientific discourse and the daily work practice of professionals: 'Formal models have been usefully employed to solve problems in such relatively undemanding areas as inventory control and logistics.' (Schön, 1983). In more complex situations, where the problem is not clearly defined, such as in our case study (see paragraph 3), models 'failed to yield effective results'.

Instead of using formal models and all their disadvantages, organizational life can be approached as emerging phenomena 'in complex, responsive processes of relating' (Stacey, 2005), which is called complexity theory. Complexity theory advocates that plans, programs, and strategies should be considered as 'gestures' (Stacey, 2005). A top down initiative to work according to principles of SCP might be considered as such a gesture. However, an organization is formed by how work floor professionals respond to these 'gestures'. Some gestures may shape the themes of communication. However, the meaning does not lie in the gesture itself, but in the processes of gesture-response. This process of gestures-responses strongly relates to Weick's (1995) concept of *sense making*. Sense making is a construction of meaning (Weick, 1995) and 'is about such things as placement of items into frameworks, comprehending, redressing surprise, constructing meaning, interacting in pursuit of mutual understanding and patterning.' Sense making is required to achieve changes in behavior. In the process of sense making, it is unlikely to expect that work floor professionals will silently obey and follow the rational decisions – or gestures – that are put upon them in a technical-managerial way. Instead, 'recipients need to be enabled to recreate their ways of working' (Balogun and Jenkins, 2003). Through formal and informal conversations, across all formal aggregation levels within and between formal organizations, professionals constantly negotiate and interpret all kinds of gestures and in that local interplay between people who are doing their work, the organization is formed, rather than through the overall plan.

Concerning SCP in CI, hardly any attention is paid on how work floor professionals respond to SCP. Studying daily work floor experiences might, however, give important insight in barriers that might slow down the development towards SCP in CI. As Bresnen and Marshall (2000a) argue, people and their relationships are the heart of collaborative approaches. Hence, this study aims at getting more understanding of work floor experiences of professionals in CI who are confronted with the principles of SCP. A Dutch housing association that is implementing SCP as a key strategy in their asset management served as the case in our study. This paper describes how the researcher (first author) and a work floor professional together tried to work according to the principles of SCP, which themes emerged from the interplay with other stakeholders, and the generated insights in how social aspects play a role in the emergence of the themes within the development towards SCP.

This paper is structured as follows: Section 2 describes the research paradigm, deliverables, function, approach, and methodology. Section 3 comprises narratives about work floor experiences. The narratives are analyzed and grounded in theory in Section 4. Section 5 presents our conclusions and places the results in a wider context.

2. Research methodology

According to Stacey (2011), the key debate on strategy process is about whether strategic management is a matter of intention (strategic choice paradigm) or whether strategies emerge through the interplay of local interactions (as complexity theory advocates). In our study, the latter perspective is adopted. The objects of research involve the practical problems of work floor experiences with SCP in their historical, social, cultural, and political context. Different professionals at various organizations might experience other problems, because their experiences highly depend on their context, personal convictions, and personal values that have developed throughout time. Therefore, our study will generate value-based knowledge.

The epistemology of value-based knowledge influences the function and the methodology of our study. First, as mentioned before, previous research focused on designing prescriptive tools for SCP. Stacey (2005) claims that focus on impersonal higher levels leads to a situation in which local experiences are disregarded as rather unimportant. By taking local situations and experiences seriously, we get a different notion of what is practical (Stacey, 2005; Oost and Markenhof, 2004). Therefore, the function of this study is describing and analyzing work floor experiences in order to get understanding of the problems in day-to-day-practice.

Second, concerning methodology, we assumed that, as Stacey (2011) suggests, an appropriate method for understanding of interactions between individuals is the use of narratives. The narrative is 'a spoken or written text giving an account of an event/action or series of events/actions, chronologically connected' about what the individuals consider important and what sense is made of the gestures (Creswell, 2007). Creswell (2007) suggests four steps to collect narratives, that can be performed in arbitrary sequence, which we deployed as follows.

2.1. Selecting one or more individuals to participate in the project

The first step is to select one or more individuals '*who have stories or life experiences to tell*'. In order to do so, we first had to choose an organization within the supply chain. We chose the perspective of a Dutch housing association. Especially since governments cut back subsidies, housing associations need to accomplish more with significantly less money and SCP is considered to be part of a solution to this problem by several housing associations (e.g., Bortel et al., 2013). Furthermore, the housing association sector dominates the building and construction sector, owning about 30% of the total housing stock and being one of the