Assessing the impact of inter-firm relationships on supply chain quality management practices

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Management; (41) Total Quality Management, Kaizen and Six Sigma.

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Abstract

Purpose:

Inter-firm relationship has long been considered as a fundamental ingredient for the successful implementation of quality management practices. This importance has been echoed in Deming's (1986) comment in that the synergy of closer relationships with fewer suppliers would not only generate a constant flow of revenues but also and more importantly it brings about a sustainable competitive advantage for the firm. It is therefore mandatory for firms of all types and sizes to invest in effective supplier arrangements if their quality management practices are to succeed and delight customers. To further highlight the views of the founders of quality management towards the need for more effective supplier relationship, quality and supply chain scholars have made concerted efforts to theorize the interface between quality and supply chain management practices (referred to as 'supply chain quality management' – SCQM). Despite a surge of interest in measuring and reporting quality performance throughout the lengthy supply chain networks, there has been very little empirical investigation of the types of inter-firm relationship and more importantly the ramifications of types of inter-firm relationship on quality performance.

Based upon the insights gained from social network theory, the archetypes of interfirm relationship and extant literature pertinent to SCQM (e.g. Kuei and Madu, 2001; Kuei, Madu and Lin, 2001, 2008; Choi *et al.*, 2002; Cousins, 2002; Trent, 2005; Flynn and Flynn, 2005; Fynes, Búrca and Voss, 2005; Fynes, Voss and Búrca, 2005; Robinson and Malhotra, 2005; Lo and Yeung, 2006; Choi, 2007; Soltani et al., 2011), this research aims to address the question of 'what is the performance impact of types of inter-firm relationship – i.e. competitive, co-opetitive, cooperative and collaborative – on SCQM practices – i.e. customer focus, supplier focus, supply chain activities and leadership. To further operationalize this question, a research framework was designed, a list of hypotheses was derived and subsequently tested.

Design/methodology/approach:

To empirically test the developed research framework, a quantitative approach was adopted, and a multi-item scale web-based survey was utilised as our primary means of data collection. Overall, we collected a total number of 325 questionnaires from a sample of operations managers of UK manufacturing companies. In order to validate the

multi-item scale and test our hypotheses we utilized internal consistency and multivariate regressions, respectively.

Findings:

It was found that competitive relationships had a negative influence on the implementation of supplier focus and leadership practices; co-opetitive relationships had a negative impact on customer focus, supplier focus and supply chain activities; cooperative and collaborative relationships had positive effects on the implementation of all SCQM practices (customer focus, supplier focus, supply chain activities and leadership).

Relevance/contribution:

Unlike theoretically-driven previous studies on the performance impact of inter-firm relationships on SCQM practice, the present paper provides empirical support to the role of closer relationships towards the achievement of enhanced SCQM practices. This research therefore makes two significant contributions: (i) it contributes to the validation of theoretical assumptions underpinning the role of inter-firm relationships in the implementation of SCQM practices, (ii) it provides validated scales to measure these concepts in the context of manufacturing firms. Our findings also remind the practicing managers of the need for better understanding of how various types of inter-firm relationships impact on the implementation of SCQM practices. Such understanding and awareness is of paramount importance not least because in today's competitive business environment, this is the management of supply chains which competes against supply chains and that managers are under increasing pressure to comply with quality standards and consumers' expectations.

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