The capability gap exploration of supply chain quality management

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ABSTRACT

Many firms have started to extend the QM practices to their supply chain. However, few firms can implement the integrated supply chain quality management (SCQM) successfully. To bridge the capability gaps between QM and SCQM, this study uses in-depth interview method to examine 17 firms in Taiwan. First, we adopt grounded theory to analyze the critical factors for SCQM implementation then we investigate the association between factors and analyze the developing process of firm capabilities by using formal concepts analysis. At last, we find some useful propositions that elaborate the capability gaps and help firms to reduce the risk of failure.

Keywords: Quality management, Supply chain management, Supply chain quality management, Knowledge management, Capability gaps

1. Introduction

Many quality management (QM) approaches have been adopted to improve organization performance including Total Quality Management (TQM), Just in Time (JIT), Six Sigma (6σ). There are beliefs that these approaches can help to increase firm’s competitiveness, but none of mentioned practices above can be applied perfectly to every industry and organization especially in today’s hypercompetitive environment [1]. Most of these studies only explored QM issues and focused on critical practices and the associated success factors rather than discussing how a firm can acquire the resources and develop capabilities for QM [6, 2].

While QM and SCM may have distinct characteristics and goals, they still share common elements that can be enforced by the other. The similar concepts of supply chain quality management (SCQM) framework are proposed in different ways such as combining QM and SCM in a synergy model, or extending QM into the supply chain. Several researchers have proposed the framework and definitions of SCQM which integrated the SCM and QM concepts [8], and they advocated that SCQM is a systematic improving approach to enhance organizational productivity and profitability. Moreover, the continuous process consists of several feedbacks and learning activities that strengthen firm’s knowledge management (KM) and herein is not merely a function of acquiring knowledge, but also a mediator to integrate resources for capabilities building. Further, accumulated knowledge and innovation from supply chain operation will lead the companies gaining competitive advantages.

We adopt the grounded theory method and the formal concept analysis (FCA), which helps us to examine the concept from qualitative analysis and understand the interrelationship between concepts. Finally, we elaborate the result to propose the different propositions for future researches.

2. Literature Review

2.1 QM & SCQM

Previous empirical researches in QM attempted to create instruments to measure QM practices and performance constructs [1, 1], such as quality training, process improvement, benchmarking, open culture, employee empowerment, and executive commitment.