Developing a supply chain performance tool for SMEs in Thailand

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Abstract

Purpose – This paper aims to present a supply chain performance assessment tool that measures the performance of key supply chain activities of a firm under different performance dimensions.

Design/methodology/approach – The tool was developed based on an extensive literature review. The nine key internal supply chain activities, as proposed by Grant et al. in 2006, constituted the backbone of the assessment framework, while performance was measured based on three dimensions: cost, time, and reliability. The tool was pilot-tested on 44 local SMEs. The results were then compared with existing performance benchmark as well as within the benchmarked group itself and a high performing Thai multinational in order to see whether the developed tool could identify performance gaps in the trial group.

Findings – The results obtained from the tool provide a description of a firm’s internal supply chain activity. The utilised supply chain performance framework can isolate each individual supply chain activity. The results are therefore precise enough for firms to identify individual areas of strengths and weaknesses. The tool is relatively simple and easy to use and understand.

Research limitations/implications – Limitation is related to the availability of the required assessment data. The availability of data is a reflection of systematic data collection and storage procedures of the respondent firms.

Originality/value – The tool was developed on clearly defined theoretical foundations. The three dimensions of cost, time and reliability can balance both financial and non-financial characteristics of supply chain performance. The data required are simple and objective.

Keywords Supply chain management, Assessment, Benchmarking, Small to medium-sized enterprises, Thailand

Paper type Research paper

1. Introduction

Supply chain management has become common practice across industries since it addresses long-term strategic alliance, supplier-buyer partnerships, cross-organizational logistics management, joint planning, control of inventory, and information sharing. Effective supply chain management will lead to a lowering of the total amount of resources required to provide the necessary level of customer service to a specific segment and improving customer service through increased product availability and reduced order cycle time. Partnerships have the potential benefit of eliminating redundant pools of inventory and duplicate service operations while reducing costs (Chan et al., 2006). Knowledge of supply chain performance can help improve overall business capability of both firm and industry level since it can enhance understanding and cooperation among supply chain members (Shepherd and Günter, 2006). Supply chain performance measurement does not only provide feedback information to reveal progress, enhance motivation and communication and diagnose problems but also facilitates inter-understanding and integration among supply chain members, as a result, overall customer satisfaction as well as competitiveness and profitability should be increased. It is therefore of critical importance for firms to be able to assess their own supply chain performance as a starting reference. This paper aims to formulate, develop and test a new tool to assess supply chain performance entitled the “supply chain performance assessment tool” or “SCPAT” in short.

Even though the literature on the importance of supply chain performance is numerous and many diagnostic tools assessing the performance of supply chain operations are available (Foggin et al., 2004), many of them are complicated and difficult to use in real business settings. As an example, the SCOR model (www.supply-chain.org) or the Enkawa supply chain logistics scorecard (www.ie.me.titech.ac.jp) which has been used in Thailand was discovered to be too complicated, especially when dealing with small and medium enterprises. SMEs were not able to apply such assessment tools on their own.

In Thailand, an enterprise is categorised as an SME when it has less than two hundred employees and/or its fixed capital is less than around US$60 million[1]. Previous studies on Thai SMEs indicated that most owners and managers of local SMEs lacked adequate empirical knowledge on business practices and entrepreneurship capacity (Visara and Hunt, 2008) including the capability to assess their own supply chain performance. This is one of the reason why Thai SMEs...