Managing Supply Chain Transformation Projects in the Manufacturing Sector: Case-based Learning from Sri Lanka

H. Niles Perera

The University of Sydney, Australia

Amila I. G. Thibbotuwawa

École des Mines de Nantes, France

C. Rajasooriyar and P. T. Ranil Shanaka Sugathadasa

University of Moratuwa, Sri Lanka

1. Introduction

This empirical research investigates three supply chain transformation projects at three Sri Lankan subsidiaries of Multi-National Corporations (MNCs). The research builds on extant literature in both Supply Chain Management as well as Project Management to identify how the principles of both these increasingly important fields of management could be used in cohesion to achieve corporate objectives. Hence, this research seeks to clarify how applications from project management aid production supply chain transformations. In addition, this research builds on the existing knowledge base of the newly shaping study area known as "Supply Chain Project Management" by being a pioneering empirical study in the field, not only in Sri Lanka, but globally as well.

2. Background

The focal supply chains of the research were three MNCs representing the cement, dairy and FMCG manufacturing industry. All three of the focal firms were market leaders in their respective industries at the time of the study (2012). This was purposely designed to be so in order to capture the best-practices in supply chain transformation projects from industry leading companies with the assumption that market leaders in each industry were enjoying this status due to their innovative supply chains which were the best in their respective industry; going along the notion that modern day business competition is between supply chains as opposed to products. Furthermore, it was assumed that MNCs would be better poised to utilise supply chain and project management principles best-practices than Sri Lankan companies, due to their international exposure.

3. Methodology

The research methodology was a combination of semi-structured interviews along with a systematic review of extant literature in both academic and corporate spheres. The triangulation method was used to verify the research outcomes.

The subjects for the study were intra-organisational, managerial level stakeholders of the three identified supply chain transformation projects. The data were collected from 21 participants through semi-structured interviews based on mixed methods. The collected data pool comprised of both quantitative and qualitative data. The quantitative data were statistically analysed and the qualitative data were used to fill in the contextual gaps and explain the quantitative outcomes of the research.

The semi-structured interviews consisted of several Likert scales with ranges from 1 to 5, with the latter being the most significant in the element under question being true. The interviews and data collection were structured based on work conducted by James B. Ayers in his book titled *Supply Chain Project Management* (2009, CRC Press) as well as empirical evidence gathered from industrial know-how and inputs from industry practitioners. Ayers' descriptions on causes for supply chain transformation projects to hinder projects as well as factors driving the implementation of such projects were widely tested among the participants.

4. Analysis

Figure 1 portrays how "improving processes" are the most prolific driver of supply chain transformation projects while assessing the rest of the key drivers motivating such projects.
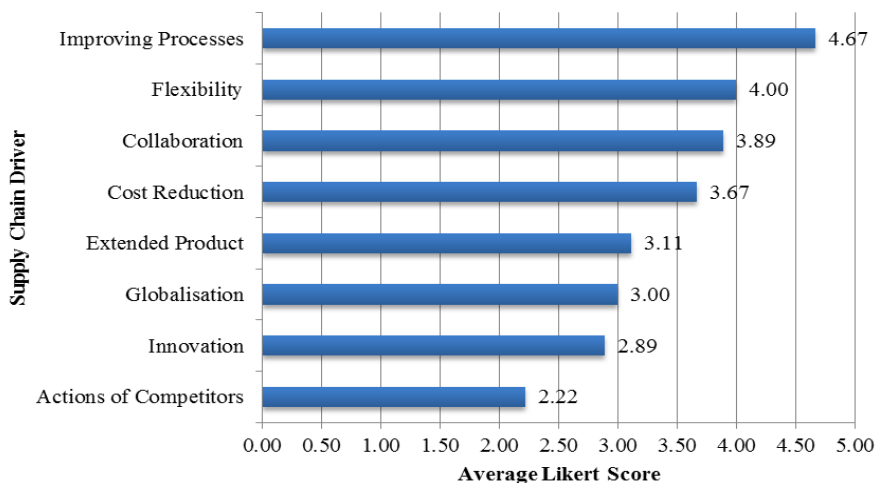

Figure 1: Key Drivers for Supply Chain Transformations

Going beyond that, the research uncovers key reasons that can derail a supply chain transformation projects, in the eyes of the respondents [Figure 2]. The research identifies that "organizational roadblocks" generated within the organization as well as inadequate technical capacity as well as rigidity of supply chains amounted most to the hindrance of the focal supply chain transformation projects.
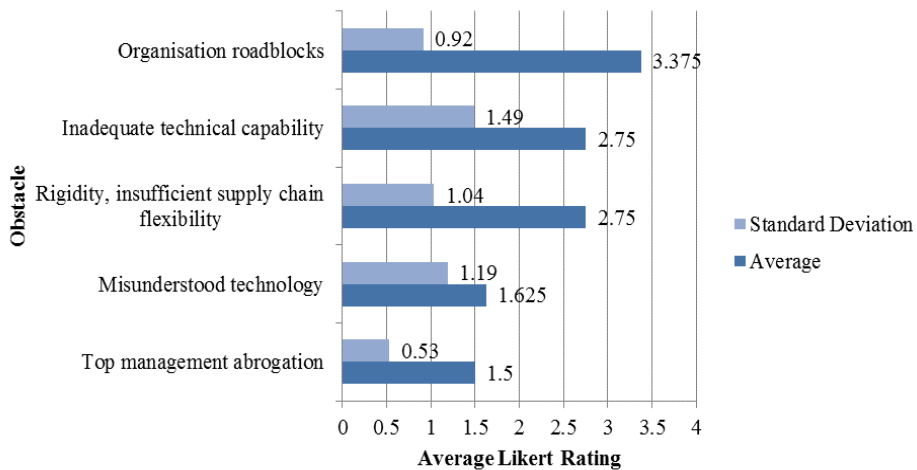

Figure 2: Key Obstacles for Supply Chain Transformations

5. Conclusions

By triangulating the data gathered for this research, a 7-step model [Figure 3] is proposed by the authors of this research to be followed by organisations when managing supply chain transformation projects.

Figure 38: The 7 Step Model for managing supply chain transformations.

In conclusion, the research identifies and underscores the importance of "Change Management" in balancing aspirations of project stakeholders in planning and implementing supply chain transformation projects for their success.

Keywords: *Supply chain, project management, manufacturing supply chains, supply chain transformations, supply chain management*