THE PUSH TOWARDS SUPPLY CHAIN COLLABORATION IN THE ICT INDUSTRY: AUSTRALIAN CASE STUDY

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ABSTRACT

This paper outlines the drive towards supply chain collaboration in the information communications and technology (ICT) industry, focusing on the Australian ICT situation and providing Macquarie Telecom as a case study to illustrate the various levels of collaboration. It is observed that the ICT industry and supply chain processes need to work closely together to create synergies across the entire value chain.

INTRODUCTION

The challenges facing ICT companies are their on–going ability to stay at the leading edge of technology service provision; to be able to integrate their existing systems with newer systems, across geographical regions as well as across the many diverse application platforms; and continued research and development into innovative product solutions and service offerings. The ICT industry and Supply Chain processes will need to work close together to create synergies across the entire buy-make-move-sell cycle, both from a perspective of how the ICT industry supports supply chains, and also how supply chains are used in the ICT industry.

SOME APPROACHES TO SUPPLY CHAIN COLLABORATION

Sabath and Frontanella assert that corporations that are true collaborators consistently outperform their peers in 'sales growth, return on assets, new product revenue, overall customer satisfaction, after-sales service, pre-sales service, machine utilization, minimum product rework, procurement cycle time and incidence of engineering change orders' [5]. The authors put forth four levels of collaboration that can be arranged in a continuum starting from self-focused operations (Level 1), basic information sharing (Level 2), special relationships (Level 3) to true collaborators (Level 4). The research suggests that the level of relationship formed is driven by the strategic value and benefits perceived. Alternatively, Tompkins defines six stages of supply chain excellence as prerequisite for true supply chain collaboration [1]. This process is leading from "business as usual" to collaboration, synthesis and velocity.

Benchmarking supply chain collaboration

A number of models exist from which an operations manager can benchmark new or existing supply chain collaboration strategies within and across their organization's industry. One of the more recognized ones is the Supply Chain Operations Reference (SCOR) model. SCOR is based on five distinct management processes: Plan, Source, Make, Deliver and Return. The model then provides a 3-level framework of these processes: Level 1 (top level), Level 2 (configuration level) and Level 3 (process element level). This was developed and endorsed by the Supply Chain Council (SCC) in 1996, with SCOR as the first cross-industry framework for evaluating and improving extended supply chain performance [7]. The SCC states that SCOR is a process reference model in that it integrates the well-

known concepts of business process reengineering, benchmarking and process measurement into a cross-functional framework [6][8].

Drivers of supply chain collaboration in hypercompetitive markets

Supply chain collaboration is inevitable in hypercompetitive and innovative markets such as the ICT industry mainly because no company can be self-sufficient. These companies are aware of the increasing pressure to move away from cost reduction as the primary driver of collaborative undertakings to strategic alliance across the supply chain to ensure quality services and customizations which offer profit-making opportunities. In other words, the winning orders for an ICT company are moving towards short lead-time, branding, customer relationships and flexibility at the operational level [2].

Low price and high performance will become the qualifying orders [2]. This means that there would be a push for a collaborative network to achieve these winning and qualifying orders. Most importantly, based on Fisher's 'uncertainty framework', the right supply chain strategy for an ICT company is an agile supply chain [4]. This is because an ICT company faces two challenges: a high level of demand uncertainty, and supply uncertainty.

According to Lee [3], a collaborative relationship is the building block for an agile supply chain. Since, agility is the competitive advantage and the key for sustainability of an ICT company in a hypercompetitive environment, then it is arguably the main driver for forming a 'true collaborator' network with the supply chain partners.

CASE STUDY: MACQUARIE TELECOM

Macquarie Telecom is a leading supplier of Information and Communications Technology (ICT) solutions -including voice, data, mobile and hosting - specializing in the business and government markets. The world class "Intellicentre" facility offers state-of-the-art hosting and security solutions. Macquarie Telecom provides services to more than 2,500 of the leading companies in Australia and Asia, with more than one million Australians using its services at work every day. Major competitors to Macquarie Telecom are any of the major players within the Australian ICT and Telecommunications industry: Telstra, (SingTel) Optus, Uecomm, PowerTel, AAPT, Pacific Internet and many more
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Supply chain collaboration for Macquarie Telecom and its customers

Macquarie Telecom is moving towards collaboration with many of its competitors and positioning itself as a supplier to provide innovative solutions to its customers. While supply chain collaboration is prevalent throughout the industry with the key players willing to collaborate with suppliers to gain reach across the country, Macquarie Telecom takes it to one more level through its supply chain collaboration with PC suppliers, software suppliers such as Microsoft, and various application providers to provide internet, security and other application based solutions to customers.

The greatest advantage of this level of supply chain collaboration for Macquarie Telecom is with its hosting business. Demand can be variable and seasonal and is volume driven, making planning for growth difficult. The supply chain of Macquarie Telecom allows the company to order solution components almost on demand and have them delivered in a known build state and cost. Most importantly, this allows the company to better manage cash flow and link expenditure directly to revenue from sale.

Macquarie Telecom follows the SCOR benchmark model [6][7][8] with each of the four major resellers and it has a *Level 3* supply chain with its suppliers in the hosting and data network space. Macquarie engages in a periodic process of forecasting demand, solution complexity, and delivery lead times with partners. This allows Macquarie to source from partners' equipment and services and therefore to get an advantage from greater volume pricing then the company could on its own. The partners gain the advantage of not only greater volume purchases but the in-house expertise of Macquarie Telecom at the configuration and implementation support - *Levels 3 and 4* of the SCOR model.

Challenges for collaboration

Macquarie Telecom is continually looking for better ways to integrate with customers and allow them to interactively leverage the Macquarie Telecom supply chain. Ideally, Macquarie Telecom would like to be able to create a relationship between customers and suppliers, and supply predefined information and communications products to the market and move to *Level 4* relationships with many of its partners on more products. The biggest challenge with this is not only the level and array of complex solutions that Macquarie Telecom offers but competing products that are offered by resellers and partners.

This challenge will be pushed back from resellers to maintaining market share and the loyalty of channel partners of suppliers that sell into many cross-sectional markets. With the current structural issues and the hypercompetitive market forces currently in play, this represents a strategy that would meet with a large amount of resistance.

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