

A STUDY OF SUPPLY CHAIN MANAGEMENT IN HEALTH CARE SECTOR

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Abstract

Supply Chain Management (SCM) is an integral part of our daily life. Today it influences more than ever a large number of human and economic activities. SCM has been considered as a competitive strategy for integrating service providers and customers with the objective of improving responsiveness and flexibility of manufacturing/service organizations. The optimal design of a supply chain is therefore an urgent and critical issue for SCM researchers and practitioners. As it is essential to treat the supply chain as an integrated system with physical flow of materials, manufacturing planning and control, as well as physical distribution, the development of models and approaches towards the optimization of supply chain priorities has become a challenging task for SCM. Nowadays, the corporate hospitals have consistently tried to enhance their business efficiency and effectiveness by reassessing their internal business operations such as purchasing, warehousing, materials management and distribution.

Keywords- Supply Chain Management, Health Care.

Introduction

Supply chain (SC) systems are nowadays entering the age of adaptive and intelligent supply chains, a new generation of networks that features collaboration and visibility features across the different partners to deal with the system dynamics, such as service providers failures or demand uncertainty. Supply chains systems are a set of separate and independent economic entities more interested in their local objectives than in the global system performance. Therefore, centralized management approaches, where a single partner such as the logistic center optimizes the global performance, are becoming less realistic and being replaced by decentralized management approaches, where each member optimizes its own performance, albeit knowing that collaboration with other partners can improve the individual and global performance. However, there is a very few literature survey article that deals with IT in SCM. However, it is impossible to achieve an effective supply chain without IT. Since service providers are located all over the world, it is essential to integrate the activities both inside and outside of an organization. This requires an integrated information system (IS) for sharing information on various value-adding activities along the supply chain. IT is like a nerve system for SCM. Organizations have consistently tried to enhance their business efficiency and effectiveness by reassessing their internal business operations such as purchasing, warehousing, materials management and distribution. These processes commit huge time and financial resources and therefore organizations are continually striving to make them more effective in order to improve their financial standing and market positions.

Review of Literature

Degraeve et al. (2000) The cost of purchasing materials and component parts was significant in most manufacturing organizations. Purchased products and services account for more than 60% of an average organization's total costs.

England and Leenders et.al. (2005) stated that manufacturing and service provider's selection was purchasing most important responsibility.

Later, Weber et al. (2001) made the same point by stating, In today's competitive operating environment it was impossible to successfully produce low cost, high quality products without

satisfactory service providers. Thus one of the important purchasing decisions was the selection of service providers.

Lee et al., (2001) The concept of supply chain management, more and more scholars and practitioners had realized that service providers selection was a vehicle that could be used to increase the competitiveness of the entire supply chain.

Panos et al., (2004) Manufacturing and service provider's selection had been gaining attention in both academic literature and health care hospital practice.

Choy et al (2003) stated that in the past decade the role of a manufacturer had evolved from the producer to one that coordinates or manages the supply chain entities. This greatly increased an organization's dependence on service providers which, in turn, increases the need for effective service providers or partner selection. Service provider's selection in such environments could be a complex process and had the potential to had a significant impact on supply chain performance.

Supply Chain Management

To ensure that the supply chain is operating as efficient as possible and generating the highest level of customer satisfaction at the lowest cost, organizations have adopted Supply Chain Management processes and associated technology. Supply Chain Management has three levels of activities that different parts of the organization will focus on: strategic; tactical; and operational.

- **Strategic:** At this level, organization management will be looking to high level strategic decisions concerning the whole organization, such as the size and location of manufacturing sites, partnerships with service providers, medicine and allied services to be manufactured and sales markets.
- **Tactical:** Tactical decisions focus on adopting measures that will produce cost benefits such as using organization best practices, developing a purchasing strategy with favored service providers, working with logistics organizations to develop cost effective transportation and developing warehouse strategies to reduce the cost of storing inventory.
- **Operational:** Decisions at this level are made each day in businesses that affect how the products move along the supply chain. Operational decisions involve making schedule changes to production, purchasing agreements with service providers, taking orders from customers and moving products in the warehouse.

Supply Chain Management Technology

If an organization expects to achieve benefits from their supply chain management process, they will require some level of investment in technology. The backbone for many large organizations has been the vastly expensive Enterprise Resource Planning (ERP) suites, such as SAP and Oracle. These enterprise software implementations will encompass a organization's entire supply chain, from purchasing of materials to service of items sold. The complexity of these applications does require a significant cost, not only a monetary cost, but the time and resources required to successfully implement an enterprise wide solution. Buy-in by senior management and adequate training of personnel is key to the success of the implementation. There are now many ERP solutions to choose from and it is important to select one which fits the overall needs of an organization's supply chain.

Since the wide adoption of Internet technologies, all businesses can take advantage of Web-based software and Internet communications. Instant communication between vendors and customers allows for timely updates of information, which is key in management of the supply chain.

Supply Chain Management at Health Care Sector in India

While the health care sector in India started developing in 1940s, distinct growth rates started only in 1970s. After economic reforms took place in India in 1991 that the health care sector started opening up. Thus, the mid-1990s are characterized by the entry of global health care providers through joint ventures in India. After the year 2000, further policy changes were introduced and the focus on development in the organization started increasing. There was a change in health care sector which where due to -

- The government has reduced regulation on the organization and more foreigners patients are coming for treatment purposes.
- Banks and other financing organizations started providing loans at reasonable interest rate.
- Medical policies have been started with lower premium and better facilities system.

The biggest challenge the most of the health care sector is change of mindset of the business approach. Service provider selection starts with setting of the strategic goal or strategic decision about the single sourcing and multiple sourcing (Demirtas and Ustun, 2008). After deciding the strategic goal, organization has to decide the various selection criteria based on organization's requirement. For service provider selection criteria,

combining supply chain performance measurement and service provider selection seems to be an important area. Although some researchers are on SCM environment, little attention has been paid on the influences on the whole supply chain if a certain service providers is selected. Some new criteria to reflect the whole supply chain performance should be developed in the process of service provider's selection.

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