Conceptual Framework for the Integration of Business Functions

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Abstract. In this paper, relationships among functional departments and suppliers are investigated. When integrating business functions, conceptual framework for relationships among marketing, operations, R&D, logistics, purchasing departments is developed. Generally, conflicts among business departments can be occurred because of the difference of each department’s objective, characteristics, culture, etc. The proposed model considers conflicts as well as relationships among business functions. It can be applied to the research on the investigation of cooperation and collaboration among departments.

Key Words: Business functions, Modeling, Integration, Conflict

1 Introduction

After the concept of supply chain management (SCM) prevailed in the world, the integration of entire supply chain as well as functional departments in an organization has received great attention by researchers and top management in order to obtain a competitive advantage [7]. There are two types of drivers of competitive advantage: Cost driver and uniqueness driver [10]. Cost driver includes economics of scale, learning, capacity utilization, linkages, integration, timing, location and discretionary policies that affect cost. Uniqueness is concerned with availability, quality, rapid new product introduction, product uniqueness, responsiveness to customer request and custom designs. Both drivers for competitive advantage are highly related to the integrations of functional units and other organizations. Marketing department plays an important role on surveying customers’ needs, analyzing market trends, demand management and choosing correct marketing channel. Production unit impacts the performance of other functional units by controlling production capacity, inventory, sequencing and scheduling, and manufacturing process. Research and development (R&D) department influences the process of other units by new product development, design process, and development chain management. Logistics unit affects other
departments by delivering correct items ordered to customers, meeting the due date, and selecting adequate transportation [8].

According to the researches on practical area or academic area, the integration of internal functions and external suppliers in corresponding supply chain is really important. Well-managed supply chain helps stakeholders to achieve high level of cost saving and customer value by employing cost reduction and value creation. However, poorly managed supply chain has a weak point in integration as depicted in [7]. This means higher level of integration leads to higher level of organizational performance.

The integration of business functions as well as suppliers is an essential factor for the achievement of better organizational performance, as discussed in the literature [11]. However, in order to obtain the benefits of integration among departments and suppliers, three important antecedents (environmental uncertainty, information sharing and flexibility) which influence the level of integration, should be investigated because these three factors are related to cost and uniqueness for customer satisfaction. Organizational performance measures related to SCM have been used to evaluate employed systems and mechanisms. As Miller [5] depicted, organizational performance is dependent on the fitness between organizational strategy and environment. Therefore, the analysis of relationships among internal integration, external integration and organizational performance is needed.

2 Literature Review

Integration can be divided into two categories: internal and external integration. Internal integration focuses on the integration of different functional departments in a single organization. However, external integration addresses the integration between organizations such as suppliers, customers, etc. Pagell [7] refers integration to "a process of interaction and collaboration in which manufacturing, purchasing and logistics work together in a cooperative manner to arrive at mutually acceptable outcomes for their organization" since he examined the integration between only three internal supply chain functions.

With integration of marketing and other departments receiving a great attention, researchers have studied cross-functional coordination. Since marketing plays a coordinating role, connecting customer demands to internal functions such as R&D, manufacturing, logistics, etc., marketing's interaction with other departments is an important factor to achieve customer satisfaction as well as high performance [3]. However, when coordinating functional departments together, the potential for conflict exists between any business functions because of integration barriers. Supply chain management stresses harmony and provides the high level of customer value by working together for value creating processes [7].

Even though SCM emphasizes harmony from raw material suppliers to customers, early studies on coordination of departments has focused on only internal integration. Many firms have reported success when applying SCM to their organizations. Therefore, external integration concerned with suppliers and customers is included to study the collaboration of supply chain. Because of these trends, the performance
measures to evaluate a certain effect have changed from simple financial, manufacturing or marketing measures to SCM related measures or balanced system measures.

3 Conceptual framework

3.1 Relationship between marketing and R&D

When investigating the relationship between marketing and R&D, there has been much research about the differences between both departments. Six personality dimensions (time orientation, professional orientation, bureaucratic orientation, tolerance for ambiguity, types of projects preferred, perceptions of integration needed) with 14 personality differences were presented to find teamwork barriers when coordinating both functions [9].

The integration of marketing, manufacturing and R&D has navigated in respect to the strategic phases of NPD in Gerwin [1]. He argued marketing and R&D functions interact together at the early stages of NPD process, and then manufacturing joins the interaction by concurrent engineering. However, recent emerging trends show that partnerships among marketing, manufacturing and R&D are an important factor in the opening stages of NPD by focusing on the design strategy.

3.2 Relationship between marketing and manufacturing

It is generally accepted that coordination and integration of marketing and manufacturing improves firm performance by removing suboptimal practices. Coordinating mechanisms such as referral upward, decision rules/controls, planning processes, personal contacts meetings, liaison roles, committees task forces were investigated and the correlation among mechanisms were presented in [11]. Karmarkar [4] mentioned about the integrative research in marketing and operations management. He provided the schematic levels of integration from the integration by recognizing cross functional interactions, with the integration via joint decision making to the complete integration of functions. He compared consumer marketing and industrial marketing with operations role. This article provided insight of constructs when integrating marketing and manufacturing functions.

Generally, the conflicts between marketing and manufacturing generate negative impacts on firm's performance. That means the cooperation between marketing and manufacturing improve the performance measure. However, if we design a strategic incentive system well, not all conflict is bad.
3.3 Relationship between marketing and logistics

Since both marketing and manufacturing have different responsibilities, it is not easy to accommodate both functions [11]. The responsibilities of marketing department are to define target customers, understand customer needs, determine marketing strategy including 4P (product, price, place, promotion) strategy, and decide customer service level. However, the responsibilities of manufacturing are to make a decision on capacity expansion, determine facility layouts, plan production schedule, and control product quality. Even though marketing and manufacturing have quite different objectives, there is a strong interdependency in order to achieve the harmony and high performance of supply chain.

Kahn and Mentzer [3] studied the integration between marketing and manufacturing. They suggested two types of integrations: Interaction and collaboration. Interaction emphasizes on the communication between departments such as meeting and information flows. However, collaboration focuses on the sharing resources, common goals and mutual understanding. It was shown that both types of integrations affect positively to performance outcomes. However, there was a research which showed logistics-marketing integration does not impact on performance [2]. They said the high level of logistics-marketing integration does not lead to better performances developed. But, firms with high level of logistics-production integration achieved high performance.

3.4 Relationship between marketing and purchasing

Purchasing has not received much attention because of the passive role in the business organization. By the 1990s, both practitioners and academic researchers gave more attention on strategic purchasing because purchasing ability influences the speed to market as well as cost competency in the rapidly changing competitive business environment. It is considered purchasing, production and distribution are the three important functions in internal supply chain.

There is not much research on marketing and purchasing relationship in the literature. Pagell [7] studied the integration among operations, purchasing and logistics. Purchasing integration and practices were studied by Narasimhan and Das [6]. They defined purchasing integration, foundational element of SCM integration, as "the integration of strategic purchasing practices and goals. Then, they referred purchasing practices to activities related to purchasing-supply interface”. It was shown that purchasing integration has a positive relationship with manufacturing performance.

3.5 External integration

There are three types of integration related research in the literature: relationship between internal integration and performance, relationship between external integration and performance, and relationship between both internal and external integration and performance. External integration of marketing-logistics and
manufacturing-logistics was explored by Gimenez and Ventura [2]. They presented the variables in the questionnaire concerning internal integration, external integration and performance.

As Pagell [7] mentioned, external integration focuses on the coordination that occurs between organizations. Studies on buyer-supplier relationships can be considered in this category. Since SCM is the integration of activities associated with goods and information flows from raw material to customers, external integration is essential factor in SCM to achieve sustainable competitive advantage.

4 Conclusion

This paper proposes the modeling procedure for integrating business functions. Conflicts are considered in the model because they can occur when coordinating business departments. Since the objectives of each department are different, relationships among marketing, operations, R&D, logistics, purchasing departments are investigated for better trade off to reduce conflicts. Also, external integration is considered for suppliers in the supply chain.

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References