



Supply Chain Management and Marketing Integration : A Major Source of Competitive Differentiation

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Abstract

The goal of Supply Chain Management (SCM) and marketing integration is to create unique competitive advantages by linking together customer values with a more effective flow of products and goods. This paper supports the emerging view that SCM strategy and marketing strategy are highly connected. Understanding barriers of SCM and marketing integration is crucial for firms in achieving competitive advantages. This research works in this direction and provides conceptual frameworks as well as models for integration of supply chain and marketing functions. It also emphasizes role of supply chain and marketing integration in delivering the right product - in the right quantity, at the right location, and at the right price.

Key words: *Supply Chain Management, Marketing, Integration, Collaboration, Customer Value Proposition*

Introduction

Many organizations while focusing on developing sophisticated supply chains had become myopic and lost sight of their markets and customers. The customers, failing to realize their expectations, in turn, had switched their loyalties. It is highly essential to understand the marketing perspective also while focusing on supply chain decisions (Walters, 2006). Marketing combined with dynamic supply chain management provides greater flexibility to satisfy customer demand based on the needs of individual customers and their value to a company.

Supply Chain Management (SCM) refers to all of the processes, technologies, and strategies that together form the basis for working with internal as well as external sources of supply. SCM is the collaborative design and management of seamless value-added processes to meet the real needs of the end customer (Fawcett and Magnan, 2004). While, marketing management refers to all of the processes, technologies, and strategies that companies use to generate and sustain demand. Marketing is primarily concerned with identifying and satisfying customer needs and wants which clearly involves directing the flow of

goods and services from producers to end customers.

Conflict between SCM and Marketing: Major Areas

Conflicts arise in the organization between SCM and marketing departments due to differences in their perspectives and focuses on the deliverables. Marketing stresses on the revenue maximization while SCM works on cost minimization. The main areas of conflict between SCM and marketing are summarized below:

1. **Control:** Who monitors what process, ownership of functions, sub functions and activities for better performance.
2. **Availability of Data and Information:** Limited data availability restricts better control, hinders decision-making capability and ultimately results in increased level of conflicts.
3. **Risk Mitigation:** Difference in definitions of strategy for mitigation of risk.
4. **Crisis Handling:** Crisis situations and event handling roles remains undefined.



5. *Failure Handling*: Responsibility and ownership in case of under achievement

of targets and failure.

Table 1, below contains a list of often-heard and complementary issues from SCM and marketing managers.

Table 1: Conflicts between SCM and Marketing	
Marketing Issues	SCM Issues
<ol style="list-style-type: none"> 1. Inadequate production capacity 2. Very high production and distribution lead time 3. Insufficient inventory of finished products 4. Insufficient product assortment 5. Very high supply chain and field service costs 6. Resistance to and even insufficient execution of product customization process that enhance market competitiveness 	<ol style="list-style-type: none"> 1. Inaccurate long-range sales forecasts 2. Imprecise short-range sales forecasts 3. Excessive inventory of finished products 4. Too large a range of product availability calling for small, and uneconomical production runs 5. Unrealistic requirements for customer service, product delivery time and quality standard 6. Unnecessary and / or costly product customizations and design changes

(Source : Developed by Author)

Rational analysis can play an important role in resolving these conflicts by allowing managers on both sides of an argument to objectively evaluate and reconcile their differences.

SCM and Marketing Issues: A Major Cause of Sub-Optimal Performance

The deleterious results of not integrating the SCM and the marketing efforts are becoming increasingly evident. SCM operations chronically underperform if they fail to analyze and respond to the needs of end customers. A company can't reach its full potential in terms of developing, refining, supporting, or delivering products and services without using marketing insights to shape and refine the SCM. The company may achieve economies of scale in production, but it may lose opportunities for product refinement, enhancement and breakthrough performance. Specifically, divergence of SCM and marketing results in:

1. Sub-optimal product development as consistent and timely information on customer needs doesn't flow across the supply chain partners.
2. A lack of product and service differentiation as customer information doesn't flow to supply chain functions, leading to commoditization and relentless pressure to consistently reduce cost from supply chain processes.
3. Inefficiencies as companies can't provide the necessary back-office supply chain resources to customers according to their value to the

company.

It's impossible to execute a marketing strategy that meets the unique needs of individual customers – cost, quality, variety, delivery, service – if the underlying support capabilities of SCM can't deliver. SCM and marketing that is not effectively tied to each other results in:

1. *Under delivering*: Front office marketing strategies and processes will increase customer interactions and customer expectations. But if the back office SCM process can't deliver on front end promises, customer satisfaction decreases.
2. *Over delivering*: Marketing processes and strategies that don't provide information sharing on cost transparency with SCM may result in delivering products or services that are unprofitable.
3. *Lost share of customer opportunities*: Without SCM and marketing integration, the supply chain can't capitalize on the customer needs information that marketing uncovers, and marketing can't implement new product development strategy that profitably increase the scope of its offerings.

The failure of SCM and marketing integration is a significant barrier to identifying and responding to customer demand, optimizing inventories and production runs, exploiting sales and product development opportunities, and servicing the customer base (Madhani, 2012). It also leads to either excessive inventories or out-of-stock situations. Poor collaboration leads to this situation internally, as well as up and down the external supply and marketing channels (Madhani, 2011).

linear and sequential causes the inability for an individual firm to excel at more than one discipline at a time. At the same time data and information can't be effectively shared among supply chain partners, customer-driven insight cannot be utilized in the system, operational inefficiencies can increase manifold, and opportunities for value creation can be lost permanently. SCM and marketing decisions in many companies are made in a sequential and uncoordinated manner, as shown in Fig.1.

The formation of SCM and marketing efforts that tend to be

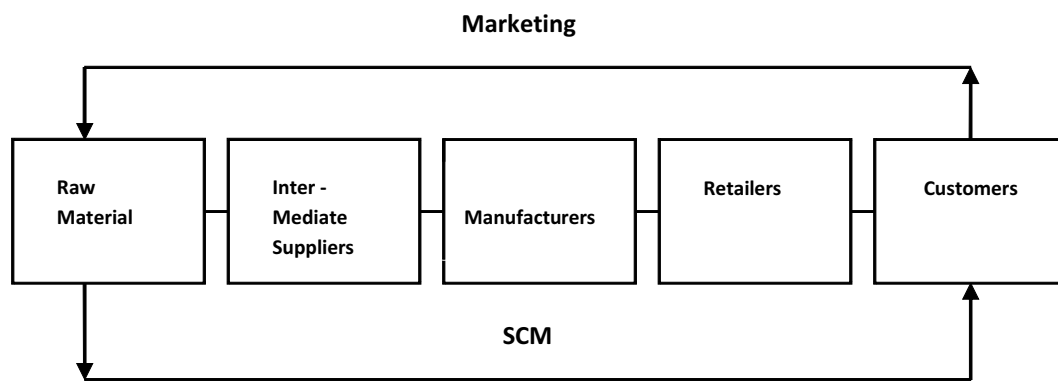


Fig. 1: Sequential Network - SCM and Marketing Functional Issues (Source: Model Developed by Author)

SCM and Marketing Functional Issues: Major Learnings

Following are well known examples of divergence of SCM and marketing activities. These examples are from different sectors viz. Auto, Computer, Consumer and Retail and companies discussed are Volvo, HP, Campbell's (Lee, 2001) and K-Mart (Madhani, 2010) respectively.

Volvo

In the mid-1990s, The Volvo Group - a Swedish producer of commercial and passenger vehicles (The company sold its car division to Ford Motor Company in 1999) found it had an excessive inventory of green cars at mid year. In order to reduce the inventory of green cars, the sales and marketing department began offering a host of promotional incentives through discounts, deals, and rebates on green cars to distributors. Because of great promotional efforts, sales of green cars soon picked up. However, the company's supply chain department was not aware of the promotional campaign and erroneously concluded that customer demand

for green cars was the impetus behind the demand spike. As sales increased, the SCM group decided to produce even more green cars to meet perceived customer demand. At year's end, Volvo had a substantial inventory of green cars due to divergence between its SCM and marketing.

Hewlett-Packard (HP)

In 1995, Hewlett-Packard (HP) also learned a hard lesson from the lack of coordination between SCM and marketing when it first introduced the Pavilion (its home personal computer) in the market. When demand for the Pavilion started to fall due to aggressive price cuts by its competitors viz. Compaq and Packard Bell, the SCM group of HP decided to curb production of the Pavilion, only to discover later that their sales and marketing department had decided to match the competition's price cuts. The end result was that HP faced crippling stock-outs of the Pavilion during Christmas season.



Campbell's Soup's

Campbell's Soup's promoted the chicken noodle soup product heavily around the winter season, when demand usually remains very high. The end result was that an even greater spike of product demand occurred in the winter season. In order to meet this sharp increase in demand of chicken noodle soup, Campbell's had to prepare the chicken well in advance in large quantities in the spring period, using excessive storage capacity for the chicken and other ingredients of chicken noodle soup, and deploy full production capacities during the winter season for large scale production of soup. In fact, production facilities were used at peak level round-the-clock during the winter season. In order to make enough room for such huge production capacities in the winter, Campbell's had to manufacture other products in advance, leading to high inventory of such products and subsequently more storage needs. The overall result was that the increase in revenue due to the increased demand of chicken noodle soup stimulated through promotion scheme was weighed down by the huge production costs incurred to produce the product. The lack of detailed cost analysis of the real production cost of chicken noodle soup in pricing and promotion decisions led to considerable strain on operating and financial performance, what Fortune Magazine termed "the Dumbest Marketing Ploy Ever" (Sellers, 1992).

K-Mart

A core theme of K-Mart's marketing communication (MARCOM) strategy was to issue promotional pamphlets and circulars for promoting sale items. The mailers increased store traffic and invariably increased retailer SCM is focused on the supply chain; marketing is focused on the demand chain. But when viewed as a whole, these two strategies combine to form the overall value chain. This is a basic premise of SCM and marketing integration. While SCM deals with the buy-side of the enterprise, marketing management addresses the sell-side of the enterprise. Tackling one independently of the other, leads to sub-optimal solutions. SCM has traditionally sales. However, the marketing efforts were not tied into SCM operations. As a result, there were frequent shortages of promoted sale items. Customers came in to buy the promoted 'sale' item, were frustrated that it wasn't in stock, and left the K-Mart store with disappointment.

K-Mart's repeated out of stock item notices were major cause of customers' grievances. After several such repeated experiences, customers began ignoring the K-Mart's promotional flyers altogether. Furthermore, after finding out that promotional flyers and pamphlets did not work well, K-Mart announced a new retailing strategy in 2001. According to new marketing strategy K-Mart decided to stop the weekly flyers and tried to lure customers by cutting prices on thousands of store items. But as customers were not informed of the price cut, this resulted in sales drop for K-Mart. Lack of coordination between SCM and marketing generated a brand nightmare and failure of K-Mart's marketing strategy (Madhani, 2010).

SCM and Marketing Integration: Key Strategy for Competitive Advantages

Integration of SCM and marketing decisions should be a prime concern of any profit maximizing firm. Firms that have linked their SCM and marketing management capabilities helps SCM and marketing managers reconcile the issues (mentioned earlier in Table 1) between opportunity losses due to insufficient capacity for meeting unexpectedly high demand and real losses due to excess capacity for meeting forecasted demand that is not realized. If SCM and marketing integration is achieved, it results in bringing often conflicting objectives more closely together. The congruence between the objectives of the marketing concept (to mobilize total organizational effort to satisfy customers and generate a profit) and the concept of SCM (to link organizational and inter-organizational units to improve levels of service and reduce costs) is key concept of SCM and marketing integration as explained in Fig. 2.

The major goal is both to reduce or if possible eliminate buffers of inventory in the supply chain and at the same time deliver what the customer demand.

considered that the customer demand pattern is exogenous. Hence, the market demand for products or services is viewed as the key input to SCM. But in fact, demand is never truly exogenous. Another important side of the organization, i.e. marketing, also uses its own instruments to influence demand for product under consideration as well as related products. These instruments include pricing, promotions (discounts,

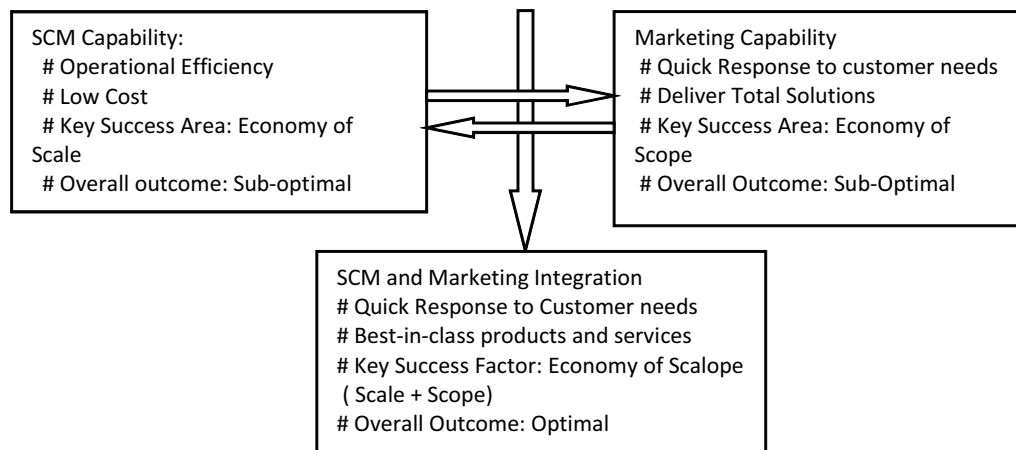


Fig. 2: SCM and Marketing Integration: Key Benefits (Source: Model Developed by Author)

rebates etc.), product mix or assortment, shelf management, order lead-time, and other special deals (terms and conditions, price protection, return policies etc.). A common pitfall of SCM is that either the people who manage the supply chain fail to recognize that demand was actually influenced by the enterprise's marketing department or, conversely, the marketing department fails to use the appropriate instruments that truly maximize value of the organization. As explained earlier several organizations paid dearly for not addressing this disconnect.

SCM and marketing must work together in order to achieve organization goals. SCM and marketing integration is increasingly being recognized by business firms as a key driver for improving financial and operating performance. As this recognition emerges, SCM is becoming much more closely linked with sales and marketing and leading edge companies are making SCM a competitive edge by integrating marketing efforts of demand creation activity with supply chain capability. With SCM and marketing integration, supply chains are much more customer focused - they deliver great service at lower cost and a key ingredient of their success is strong collaboration between SCM partners, as well as marketing group where all are focusing on the customer value proposition as explained in Fig. 3.

SCM and marketing integration links marketing decisions with supply chain planning and execution decisions, so that demand can be anticipated and met with the right amount of inventory. Otherwise, either excessive leftover

inventory or stock-outs will result. Real time SCM - marketing collaboration boosts and creates demand for new products. As customer data and information is shared with the SCM partners, quality enhancements and product innovation process accelerates and time to market decreases drastically. A tight linkage between SCM and marketing can improve the product strategy and overall decision making related to it. Integration of SCM and marketing can enhance an organization's ability to introduce new products and enhancements of existing products.

SCM and Marketing Integration: Major Barriers

Despite the inarguable benefits of SCM and marketing integration, only a small number of firms have been able to build it. The challenges of implementation are big: vastly different cultures between marketing (customer relationship, sales and service) and SCM functions; hard-to-match information, measurements, and incentives; and increased concerns about relentlessly accelerating customer needs and expectations. Understanding barriers of SCM and marketing integration is crucial for firms in achieving competitive advantages. Following are three such barriers:

Vastly Different Culture Between SCM and Marketing Operations : Many firms have had big success in SCM and marketing initiatives when measured in isolation as a stand alone function. SCM managers in most firms have made significant progress in reducing time and costs in production, procurement, and distribution, while improving product and service quality, and managing

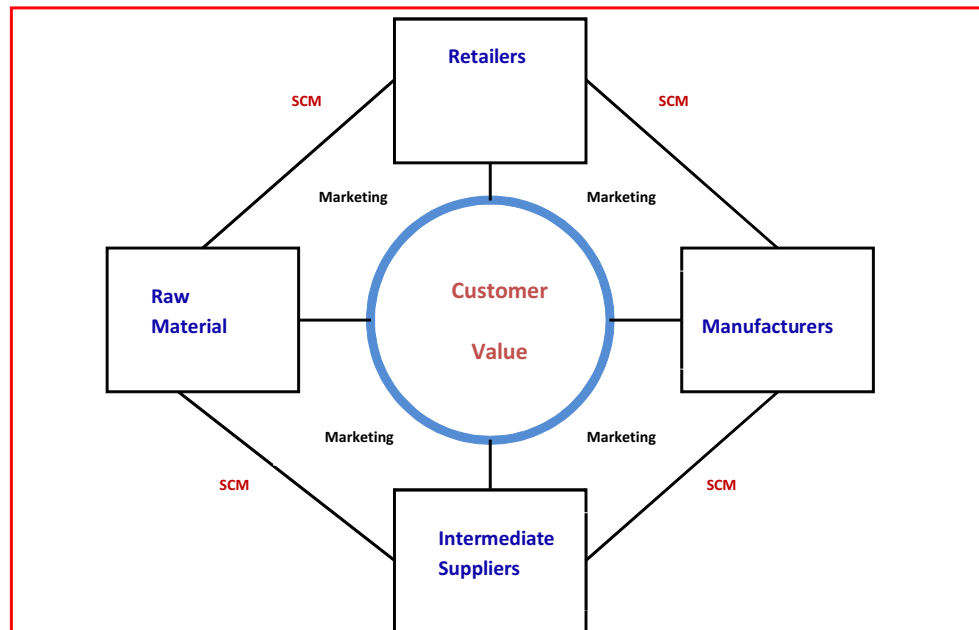


Fig. 3: Ring Network - SCM and Marketing Functional Synergy(Source: Model Developed by Author)

inventory. At the same time, managers in customer-facing front end functions such as marketing, sales and services have been improving customer loyalty mainly through marketing and CRM initiatives. However, in most firms these SCM and marketing/CRM initiatives typically have operated independently. In part, this is due to the long-established practice of functional excellence – managers of SCM (including production, warehouse and distribution) and marketing focused on improving their piece of the overall value chain.

Fearing loss of control, they often become resistant to cross functional initiatives that may tamper with their finely tuned close loop operations. Further amplifying the gap between the SCM (or supply side) and marketing (or customer side) are differences in their working styles. Because they are continually measured on improving the way goods are produced and delivered, SCM people are process-oriented and thus more focused on operational details and rooting out workflow inefficiencies. On the other hand, marketing people are product oriented and thus focus more on identifying needs of customer segments, buying patterns, new product introduction, product enhancement and marketing communications.

Incompatible Information, Performance Measurement, and Rewards System: The incompatibility of information, performance measurement, and incentives of SCM and marketing management related functions often don't match. SCM managers keep their own information on customer orders and shipments records; marketing and service people keep their own records on those customers, in different systems and formats that can't be integrated easily with the data that SCM managers possess. But incompatible information and technologies are not only point of the difference. Performance measurement and reward systems can be so incongruous that SCM and marketing managers won't even identify ways of creating mutual benefits. For example, SCM managers rewarded on achieving the lowest costs of production and distribution, will view products and delivery customization as a threat to their operating performance. On the marketing or customer-facing side, the monthly sales incentives that drive higher sales also drive huge artificial peak in product demand, followed by drastic drop-offs as the next delivery cycle gets underway, causing much higher production and logistics costs in the supply chain.

Constantly Increasing Customer Expectations: In this era of globalization, customers are getting overly accustomed to faster delivery times, customized products and delivery options, and continually ask for more. Hence, increased customer expectations create strain in relationship between



SCM and marketing functions.

How to Achieve SCM and Marketing Integration?

Overcoming the challenges to integrate SCM and marketing in a firm begins not with a huge business process overhaul or the creation of a new corporate structure. Rather, it starts with the integration of key linkages between the supply and demand sides of the firm. By connecting and sharing collaboration-based information, SCM and marketing management functions can take several big first steps toward aligning themselves with overall business goals. With SCM and marketing integration, the market side's knowledge of the end consumer's needs and behavior is combined with the logistics' knowledge of how demand is being satisfied through product availability, effective flows and correct information.

In order to achieve SCM and marketing integration there are both internal and external alignments to consider. Internal alignment focuses on putting together SCM and marketing efforts. Based on SCM and marketing a common demand chain strategy is created. The external alignments include customer relationship management that target customers and perform one-to-one marketing and it also maps the customers' explicit and implicit needs and requirements. Customer value is created through well planned, systematic use of market knowledge to shape flexible logistic and supply chain systems. The flow of goods and services must be adjusted constantly according to the development of the customers and the market.

Conflicts between SCM and marketing are very common and widely prevalent in the industry. In the cross functional environment, if such situation is not controlled at the initial stages, it can aggravate in to a fireball giving rise to chaos, buck passing and loss to the company. The conflicts could be handled or rather avoided by:

1. Integrated system:
 - a) Use of communication and information technology (IT) is vital in managing dynamic interface of various functions of the organization such as SCM and marketing.
 - b) Use of standardized IT system for data collection and acquisition, for better visibility in the forecasts, customer behavior and marketing effectiveness.
2. Analytical tools:
 - a) Usage of analytical tools for planning processes and policy decisions like inventory policy (finished goods and WIP), forecasting models, logistics optimizations

for maximizing product availability and minimizing cost.

- b) Extensive market research provides a constant stream of inputs into the product development process rather than discrete decisions in batches.
3. Role and Job definitions:
 - a) Restructuring of the process flows for control on activities of the entire cross-functional areas.
 - b) Performance linked job and role definitions for process owners and teams.
 - c) Locating various business functions in close proximity allows the various functions to coordinate and take joint decisions very quickly.
 4. Alignment of KRA and KPI:
 - a) Linking of KRA (Key Review Areas) and KPI (Key Performance Indicators) of the SCM and marketing functions for avoiding conflicts.
 - b) IT based performance management for visibility and faster corrective actions.

Conclusion

The globalization of manufacturing and distribution, increasingly demanding customers, and tightening firm margins have raised the stakes for retailers, consumer products, manufacturing, transportation and distribution companies. During recent years, firms all over world have tried to make the supplies and flows of product and goods more efficient. In this era of globalization and intense competition, great efforts have also been made to cut costs and adjust flows in supply chain to increase profits. The goal of SCM and marketing integration is to create unique competitive advantages by linking together customer values with a more effective flow of products and goods. The flow must always be refined and create customer value proposition in a constantly changing market. By encouraging SCM and marketing people meet in new interesting scenario, firms can develop unique competitive advantages. SCM and marketing integration helps in enhancing customer value proposition by delivering the right product - in the right quantity, at the right location, and at the right price. This paper supports the emerging view that SCM strategy and marketing strategy are highly connected.

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