

Supply Chain Management and Marketing Integration for Competitive Advantage

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Abstract

Purpose: To explore the effect of the integration of supply chain management and marketing on the competitive advantage of enterprises.

Approach/Methodology/Design: The relationship between supply chain management and marketing, the importance of integration and strategy were expounded through theoretical analysis, and the actual cases of Apple and Amazon were analyzed.

Findings: It is found that supply chain management and marketing are closely related and interact with each other, and integration can improve customer satisfaction, reduce costs, improve enterprise efficiency and enhance innovation ability. Cases such as Brazil Company show the positive effects of integration, but there are also cases where relevant advantages are not fully utilized.

Practical Implications: TIt helps enterprises, government, academia and other parties to understand the importance and application of the integration of supply chain management and marketing in enhancing competitiveness and achieving sustainable development..

Originality/value: Put forward relevant theories and strategies for the integration of supply chain management and marketing, provide new ideas and methods for enterprise operation, and verify its effectiveness and practical significance through actual case analysis.

1. Introduction

In today's globalized economic landscape, the global market is showing a dynamic and complex development. According to the World Trade Organization, over the past five years, the value of

global trade in goods has increased by about 4% annually and the value of trade in services has increased nearly 6% annually, demonstrating the close interconnectedness and active exchange of the global economy. However, this has been accompanied by an increasingly fierce competition, and enterprises are as if they are in a fierce battlefield, facing unprecedented challenges.(Merve Demirbaş & Nurcan Deniz, 2024)

Viewed from the level of supply chain, global supply chain has been deeply intertwined and large scale. In the case of automotive manufacturing, the production of a single car requires the assembly of parts from around the world, which can involve hundreds of suppliers from more than 20 countries. Relevant statistics show that the global trade in automotive parts is as high as hundreds of billions of dollars annually, and the transportation routes are intricate and complex, and the logistics links are many(Xiangping Jia, Felicitas Schneider, Minghao Ning & Jiping Ding, (2024). The International Institute for Supply Chain Research reports that the average car's parts travel about 5,000 kilometers, and fluctuations at any one link in this long chain can trigger a chain reaction. In recent years, international trade friction has continued and tariff policy has been frequently adjusted, such as the high tariff imposed by some countries on imported steel and aluminum products, which directly caused the raw material cost of auto manufacturers to rise. At the same time, natural disasters such as the Japanese earthquake and the floods in Thailand have also damaged local auto parts production bases, which have affected the production plans of many global auto manufacturers, and the vulnerability of the supply chain has been exposed in these events.

In marketing, competition is also fierce. Take the smartphone market, for example, according to market research agencies, as many as hundreds of new smartphone models are launched worldwide every year. In this highly competitive market, consumer choice is extremely abundant, and brand loyalty is a huge test. According to statistics, the user replacement cycle in the global smartphone market has gradually increased, and the average replacement age is currently about 2.5 years, which means that companies need to grasp consumer needs more precisely to attract them to change products(Ruchi Garg, 2024). At the same time, consumers' requirements for products are no longer limited to basic functions, but more focused on brand image, user experience and after-sales service. For example, a well-known brand has gained a presence in the market by creating a unique ecosystem that tightly connects phones to other smart devices and provides a seamless user experience, which highlights the key role of marketing in meeting the diverse needs of consumers.

In such a complex and changeable market environment, more and more enterprises have realized that it is difficult to meet the diverse needs of the market and achieve sustainable development by relying solely on supply chain management or marketing. Supply chain management is committed to optimizing production processes, reducing costs and ensuring timely supply of products, while marketing is focused on insight into market trends, shaping brand image, to meet the psychological needs of consumers to promote sales. Both are like two wings of enterprise development, and they cannot be without one(Shaobo Wei, 2024). Only by closely integrating supply chain management and marketing, can enterprises emerge in the fierce global market competition, gain competitive advantage and set foot on the road of sustainable development.

2. Attacking the Supply Chain: Supply Chain VS Marketing

From the standpoint of supply, this paper tries to summarize how to give full play to the potential of supply chain in the process of operation of iron triangle, which is called offensive supply chain. Demand management In the supply chain circle, the most easy to laugh at the topic is a variety of

plan changes, but from the perspective of the iron triangle, each corner has a "plan" function, the supply corner has a plan, the product corner has a plan, the sales corner has a forecast, and the plan of different roles focuses on different. From the SCOR model, the plan is placed at the upper level of the supply chain, and the other business is the plan execution level. Supply chain planning includes demand planning, procurement planning, production planning, inventory planning, delivery planning, the core of demand planning, demand planning is to be managed (Dahan Gavriel, 2024). Supply chain departments complain, often because demand management is not done well, or even the function of demand management. Supply chain should lead demand planning. Forecasts are never accurate and plans are never constant, which is the beauty of requirements management. Where does the supply chain demand planning come from? Obviously, from marketing forecasting planning, product planning, and then what? Don't expect product planning to be seamless and smooth, and don't expect front-line sales to fill in accurate forecasts for you, because his precious time is used to receive customers and do activities, so he breaks down the annual task data sheet to you.

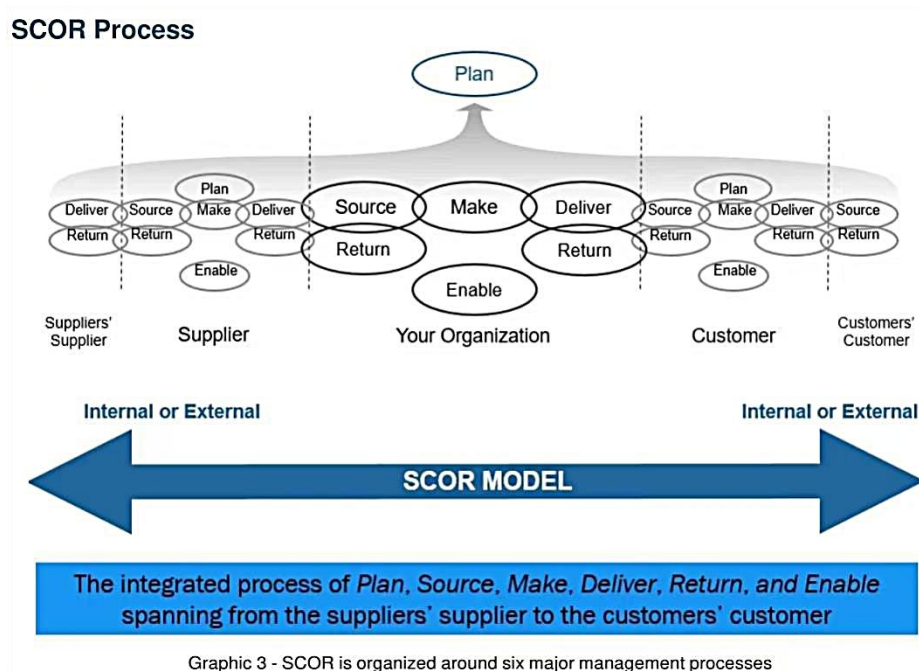


Figure 1 SCOR model

Supply chain should actively forecast, which can be divided into qualitative and quantitative. The qualitative part needs to be combined with marketing activities (marketing promotion), product planning and research and development progress, customer activities (such as channel operators' activities), and even market industry trends, holidays (such as the Spring Festival, Double 11) and other factors. The supply chain needs to fully communicate with the marketing corner. The forecast numbers given by the marketing can be used as a reference, at least he can show the trend. In the quantitative part, the supply chain needs to analyze the historical sales situation, the correlation of different products, the product life cycle and planning, and another important point that is easy to miss: The supply chain should grasp the data of sell in (products in the hands of customers (such as general agents)), sell through (products in the hands of customers (such as distribution channels)) and sell out (final consumers). This data is very important for marketing and supply chain and must be obtained.

Therefore, marketing and customers should establish channels. Capture data rigorously and establish processes to share data across the organization. Supply chain use a variety of technical

charts to analyze the above data, and then in turn with the marketing corner product corner evaluation, in order to obtain a relatively reliable demand plan. The author's company has the Iron Triangle weekly meeting mechanism, and the meeting content includes the above information communication. Supply chain to lead S&OP sales operations plan. Many companies have established S&OP operation processes, but often the S&OP operation is disrupted by marketing. The author often receives marketing urgent, marketing insert orders, and even marketing complaints. This is inevitable, for the supply chain to deal with calmly, first of all, the supply chain is facing all marketing units and suppliers, the supply chain should have overall confidence, not only consider a single demand, but also consider the overall order, not only consider the size and significance of the order, gross profit thickness, long-term account period - and marketing, financial comprehensive evaluation, It is also necessary to consider the supplier's material delivery flexibility, the factory's capacity flexibility, but also consider the cost and inventory pressure. Only an aggressive supply chain can respond to changes in marketing needs. The supply chain of the attack is not confined to the prediction of marketing, in order to prepare in advance, adjust in the matter, and remedy after the fact, as teacher Liu Baohong said that there are three lines of defense in the supply chain: demand forecasting, inventory planning and supply chain execution.

Supply chain and marketing conflicts often focus on delivery. Timely delivery rate (OTD) is one of the Tier 1 KPIs of the supply chain, which is divided into two types: Customer demand timely delivery rate (OTDD) and supply chain commitment timely delivery rate (OTDC). The delivery time is scientific, and the standard delivery time should be established within the supply chain. We are all in the SCOR model, from the supplier's supplier material preparation production and delivery, to the supplier's production and delivery, and then to the core manufacturer's production and delivery, each process has a standard cycle. Different materials have different procurement cycles, procurement should update the material cycle on the system in time, note several points: (1) the procurement cycle is the standard cycle promised by the supplier, rather than the procurement speculation. (2) The procurement cycle cannot be unchanged for several years and should be updated in time. (3) Timely pay attention to the business situation of suppliers, predict the risks of suppliers in advance (supplier inventory, capital turnover problems, supplier order capacity) and cooperate with all parties to deal with them. (4) The standard cycle is short and unchanged, but the matter is urgent, and the procurement should have the ability to temporarily expedite, and the delivery flexibility should also be used as one of the supplier KPIs. Similarly, core manufacturer production (self-produced/OEM) also has a standard cycle. In the accounting of the finished product delivery cycle, it may also include the business review cycle, research and development cycle, logistics cycle and so on. The standard cycle is not only the internal specification of the supply chain, but also the official release of the external, and the publicity and training of the marketing corner and the product corner, otherwise it will lose its meaning. This is also a technical learning for marketing and product novices, otherwise they may bury landmines for their supply chains when bidding for contracts. The company where the author works has a standardized delivery cycle, but with the change of time and products, the standard cycle is also changing. Unfortunately, the update is not released in time, so there are often disputes over delivery. Even with standardized delivery cycles and processes, the supply chain still needs to evaluate the delivery time of each marketing project in a timely manner, generally within 24 hours to make a commitment - different industries, different customers may require different requirements.

Marketing Management, Supply Chain Management Marketing? It sounds incredible, back to the days of "sell by production"? That's not how it works. The so-called supply management of

marketing refers to from the perspective of supply, guide marketing to promote more universal products to customers, faster delivery of products, and actively consume inventory. MOQ Management. For the supply chain, the larger the batch, the easier it is to reduce costs, reduce inventory and speed up delivery. However, some industries with the trend of customer customization go further and further, not only the products are losing more and more universal standardization, but also the minimum order quantity is getting smaller and smaller. The author once encountered a case: the marketing force received an order of 500 mobile phones, which belonged to customized products, and the supplier also had MOQ requirements, so he had to place an 8K order to the structural parts supplier! Query the historical orders of this product, from 2016 to 2018, the total order volume of 12K, I really do not know why such a product was planned in that year, and the marketing is still having a matching promotion! The bigger the order, the bigger the loss. What to do? MOQ management must have a complete process, timely update the MOQ volume of different products, and whether orders lower than MOQ can be accepted should have evaluation criteria, and marketing needs to bear additional costs. S&OP guided sales. As mentioned above, supply chain dominates S&OP operation. Supply chain can analyze sell-in-sell through sell-out data and combine the supply situation in a certain period, such as the material supply trend of the industry (such as the substantial price increase of a certain type of material), the operation situation of a material supplier, and the production capacity of the factory. Put forward supply risk suggestions for a certain period of time as the sales focus direction, so that sales to customers to promote better supply, faster delivery of products. Life cycle management. The product corner has a plan for the life cycle, and the supply chain should also make detailed material planning and capacity planning for the product launch, climb, and scale supply at the beginning of the project, and reach agreement with marketing and products. Pay particular attention to the guidance of the market period, although the product corner has been planned, but the material life cycle planning may not be professional enough, especially the electronic industry material life cycle is also short, and even industry problems, manufacturers suddenly shut down (now not uncommon), which is not able to plan in place for a long time in advance. This requires the supply chain to carry out a rolling analysis and early warning of at least 3-6 months in advance, and timely guide sales to seek advantages and avoid disadvantages. Sluggish sales. Manufacturing industry is bound to be sluggish, finished products sluggish, semi-finished products sluggish, materials sluggish, sluggish is also one of the supply chain KPI level. There are various reasons for the formation of sluggishness, which can not be simply attributed to inaccurate marketing prediction, order cancellation, unreasonable planning and other reasons. It is not correct to actively prevent and deal with sluggishness in the offensive supply chain, and passively deal with sluggishness in the movement mode. Recognizing this point, it is possible to do a good job of sluggishness treatment, and actively promote marketing consumption sluggishness.

3. Case study of Apple

In 1985, as co-founder of Apple, Jobs and CEO Sculley became increasingly at odds and eventually irreconcilable. The board chose to support Sculley, and Jobs left Apple in anger. Today, in the articles you can see, almost all are crying out for Jobs. Just look at his "report card" : in the five years since Apple went public, the Nasdaq stock market has risen 43%, while Apple's share price has fallen 45% (see chart 2). The primary goal of corporate existence is shareholder return, and Jobs can't give shareholders a return, and it's only natural that the board doesn't support him and let him go.



Figure2: Apple's stock price has lagged far behind the broader market, and Jobs was a business failure before 1985

After leaving Apple, Jobs founded NeXT, developed a computer that did not perform well, but what we do know is that the product cost too much, costing \$6,500 (\$14,200 in 2020 dollars), and sold few units. This is just a microcosm of Jobs's "exile" career: in the entire "exile" of 12 years, Jobs not only did not make any money, but also posted the original profit in Apple stock, which can only be said to be one business failure after another. One of the main reasons for Jobs's failure in business is that supply chain operations can't keep up. You know, Apple has always been technology driven, has always been at the forefront of technology, has a pretty good product; Jobs is a top marketing expert who can define and direct needs well and effectively drive research and development to make good products and sell them at a good price. However, it is not enough to have good products and good marketing, but also to have first-class supply chain operations to do the cost and delivery. Jobs's shortcomings in the supply chain, or Apple's shortcomings in the supply chain, were never patched up until he met Cook, his successor. When Jobs returned to Apple in 1997, one of his major moves was to poach Cook from Compaq Computer. Cook is a supply chain expert, in IBM, Compaq years of experience, know how to manage the supply chain, cost down, speed up. The story that followed is familiar: Jobs focused on products and markets, developing one good product after another, each destined to go down in history; Cook specialises in operations and has built a world-class supply chain that replicates these products at high quality, low cost and fast speed. Apple's stock price soared, and Apple became the most valuable company in the world. Before Cook joined, Apple's supply chain was a mess and inefficient. Just look at their main product, the computer: the supplier is in Asia and the assembly plant is in Ireland; At the end of each year, there are many calls for materials from Asia to be flown to Europe; The finished products are assembled in a rush and then shipped by air to Asia for sale. No wonder Apple doesn't make money - it goes to the airlines. Soon after Mr. Cook joined, he began closing factories in the United States and Europe and outsourcing assembly to Foxconn. At this time, the parts supply is in Asia, the manufacturing is in Asia, the main consumer market is in Asia, the entire supply chain is more compact, the supply chain is more efficient, the overall inventory is lower. When Cook first arrived at Apple, compared to research and development (product management) and marketing (demand management), Apple's supply chain has two characteristics: (1) the team strength of the supply chain is weak; (2) Low integration with R&D

and marketing . Simply put, the supply chain at that time was a miscellaneous organization: R&D selected suppliers, and the supply chain negotiated prices; Sales get the order, supply chain to rush the goods.

The iron must be hard before it is hard. One of Cook's big moves has been to strengthen team building in the supply chain, including hiring more professionals. For example, around 2003, when I was studying business school at Arizona State University, four or five Chinese students among my alumni were recruited by Apple (at that time, the school's annual supply chain MBA was only 30 or 40). These excellent professional managers expand the supply chain team, and promote the integration of supply chain with R&D and marketing, such as early involvement in product development, and promote the synchronization of product design, process design and supply chain design; Closely connect with the market and sales, improve the accuracy of demand forecasting, and drive the supply chain to respond early. In the mid-2000s, thanks to better resources and capacity building, the circle of Apple's supply chain became larger and more closely integrated with its two internal customers. With the successful introduction of iPod, iPhone and iPad, Apple embarked on the road of rapid growth, Apple's supply chain function is also developing rapidly, the strength of the team is becoming stronger and stronger, and the integration with research and development and marketing is also becoming higher and higher. As a result, Apple became the Apple we know: not only good products, but also good operations, and the supply chain became a pillar of Apple's success. Everyone knows that Apple is one of the most innovative companies in the world. Apple's success is the success of its products. But not everyone has noticed that Apple has also become the best company in supply chain management, ranking first on Gartner's Global Supply Chain 25 for many years in a row. So, in terms of Apple's revival, the ostensibly inspirational story of Jobs is actually a perfect supply chain case that highlights the value of supply chains to companies. The history of Apple and Jobs proves once again that a good product is not enough, and a good product and a good supply chain can make a great company. We're not saying that Apple owes what it is to its supply chain. As a technology enterprise, if there is no good product, it is impossible to achieve and maintain a leading position by relying on the supply chain, that is to say, the supply chain is not a sufficient condition for the success of the enterprise. Blackberry and Nokia are typical examples: blackberry once occupied the fourth place on Gartner's top 25 global supply chain rankings, and Nokia is the classic of supply chain classics, but product innovation can not keep up, and both have soon become history in the mobile phone industry. We say this, to clarify that the supply chain is a necessary component of enterprise success, especially the economic downturn, enterprises face a "growth trap", need to improve in cost control, return on assets soon.

Through the analysis of Apple's historical marketing behavior, the following five innovative marketing behaviors are found: takeaway marketing, emotional marketing, experience marketing, care marketing and health marketing.

Apple has created a new marketing channel to sell iphones, joining forces with Ele. me and Meituan to enable customers to buy their favorite phones, tablets and computers on the food delivery software. Apple pioneered the use of food delivery software to sell products and delivery people for delivery services. Innovation advantages: increase consumer groups, reduce time costs, and more favorable prices. The 4P marketing mix strategy is used for analysis, as shown in the figure. On the delivery App, consumers can buy the newly launched iPhone. The Price promotion strategy offers a lot of coupons, and when you grab a coupon, the price will be cheaper than other stores, starting at 4,849 yuan for the iPhone 15. Promotion through advertisements in takeaway app and Weibo, breaking the inherent thinking that takeaway can only deliver food, and making more people curious and aware of this new purchase path and channel.

In recent years, Apple's annual Spring Festival blockbuster and its behind the scenes has become one of the most iconic brand marketing activities in the Chinese market. Apple's Lunar New Year series of micro films are short films full of humanistic feelings and Chinese Spring Festival elements, which are shot using the iPhone in the whole process. So far, the campaign is Apple's first. And other manufacturers do not have such publicity methods. Innovative marketing behavior, using STP strategic analysis. In terms of market segmentation: Apple divides the Chinese market and conducts marketing promotion under the specific cultural background of the Chinese Spring Festival. In terms of target market selection: Apple chose to shoot the Spring Festival micro film to target those customers who are curious about Chinese culture or have recognition of the Apple brand. In terms of market positioning, Apple Spring Festival micro films usually focus on the themes of family, affection and friendship, emphasizing the ease of use, innovation and humanized design of Apple products. In this way, Apple has successfully combined its brand with the Spring Festival, a special cultural symbol, to create a unique and emotionally resonant market image.

Apple introduces different types of free courses for consumers who are interested in its courses. The instructors are Apple Store employees or world-class masters to impart knowledge and skills, making the courses more valuable and professional. Let customers in the course for a long time to experience the product and love these products. Through the course to form a community to expand the consumer group, down to young children, up to the elderly. Politically, protecting the rights of people with disabilities; Economically, the market for accessible products is expanding. The awareness of social inclusion is enhanced, and the marketing behavior improves the brand image and user experience. This demonstrates Apple's commitment to social responsibility and respect for a diverse user base, driving overall customer satisfaction.

Apple has managed to capture an increasingly health-conscious consumer base, targeting it with precision and targeting it directly at the pain points. Coupled with Apple's continuous introduction of new features, it can maintain the freshness and market competitiveness of the product, attract more consumers, and is a successful model of health marketing in the field of smart watches.

4. Conclusion

In today's fierce market competition environment, the integration of supply chain management and marketing has become the core path for enterprises to obtain competitive advantages. Through this integration, companies are able to achieve significant improvements in a number of key areas to drive their continued growth.

Integrating supply chain management and marketing can effectively improve customer satisfaction. In today's increasingly diversified market demands, customers expect products and services that are more suited to their needs, and have higher requirements for delivery speed and quality. For example, a well-known e-commerce company integrates supply chain and marketing, using big data to analyze customer purchasing behavior and preferences, and passes this information to the supply chain. The supply chain department has optimized inventory management, ensured adequate supply of popular items, and accelerated distribution, achieving the majority of orders within 24 hours of placing orders. At the same time, the Marketing Department formulated precise promotion strategies according to customer segmentation, highlighting the personalized characteristics and advantages of products, which greatly improved the shopping experience and satisfaction of customers, and then promoted the promotion of customer loyalty.

Cost reduction is another important result of integration. Supply chain management can reduce raw material procurement costs, production costs and transportation costs by optimizing procurement channels, rationally arranging production plans and logistics distribution. On the basis of accurately positioning target customers and formulating effective marketing strategies, marketing can improve the return on investment of marketing activities and reduce unnecessary marketing expenses. For example, a manufacturing enterprise can obtain a more favorable purchase price by establishing a long-term and stable cooperative relationship with a supplier, while optimizing the production process and reducing the production cost per unit of product. Through accurate market research, the Marketing Department carries out targeted advertising and promotional activities for the target customer groups, avoiding the cost waste caused by large-scale blind marketing, so that the overall cost of the enterprise is effectively controlled.

Increased efficiency is another significant benefit of integration. Building cross-departmental teams breaks down barriers between departments and facilitates the flow of information and collaborative work. For example, in the process of launching a new product in a fast-moving consumer goods company, the supply chain management department communicates with the Marketing Department in advance about the time of product launch and the expected sales volume, so as to rationally arrange production and inventory. The Marketing Department develops marketing strategies according to the production capacity and inventory status of the supply chain to ensure that products can be successfully introduced to the market, avoiding production delays or inventory overstocking caused by poor communication between departments, and greatly improving the operational efficiency of the enterprise.

Enhancing innovation ability is also an important embodiment of integration value. The Marketing Department pays close attention to market dynamics and changes in customer demand to provide innovative direction for supply chain management. Supply Chain Management drives product and process innovation through collaboration with suppliers and partners. For example, the Marketing Department of a technology company sees a potential demand for a phone with a foldable screen and feeds this information back to supply chain management. The supply chain management department and the supplier jointly developed the production technology and solution of the foldable screen, which achieved the innovative breakthrough of the product and enhanced the competitiveness of the enterprise in the market.

In order to realize the effective integration of supply chain management and marketing, enterprises should adopt a series of strategies. Building cross-functional teams is the foundation to ensure that people from different departments can work closely together to develop and execute integration strategies. Strengthen information sharing, build an efficient information system, and realize the real-time flow of data between the supply chain and the Marketing Department to provide accurate basis for decision-making. Optimize product design and pricing, fully consider the market demand and supply chain cost in the product design stage, formulate a reasonable price strategy, and improve the market competitiveness of products. Coordinate the supply chain plan and marketing plan to align their goals and actions to ensure that product supply matches market demand. Establish partnership with suppliers, distributors, etc., to achieve resource sharing and complementary advantages, and jointly improve the overall efficiency and competitiveness of the supply chain.

Through the implementation of these strategies, enterprises can realize the organic combination of supply chain management and marketing, comprehensively enhance the overall competitiveness of enterprises, achieve sustainable development in the complex and changeable market environment, and win a broader market space and development opportunities.

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