Model Construction and Case Analysis of Collaborative Management of Distribution Channels in Omnichannel Marketing

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Abstract

This paper focuses on the core issues of collaborative management of distribution channels in the context of omni-channel marketing, and constructs a three-level collaborative management model covering strategic, tactical and executional levels. It proposes application paths from three dimensions: information sharing, resource complementarity, and service integration. The research shows that effective channel collaborative management can significantly enhance operational efficiency, reduce circulation costs, and optimize customer experience. The feasibility of the model is verified through case studies of domestic and foreign enterprises, providing theoretical support and practical references for the full-channel transformation of enterprises.

Keywords: Omni-channel marketing; Distribution channels; Collaborative management.

1. Introduction

The current business environment is undergoing profound changes. Consumer demands are becoming increasingly personalized and diversified, and shopping behaviors are acceleratingly shifting from traditional offline stores to online e-commerce platforms, evolving into a full-channel model where physical stores and online platforms are deeply integrated [1]. This change not only changes the operation mode of retail industry, but also requires enterprises to manage supply chain, control inventory and formulate customer service strategies. Omni-channel marketing has become a more powerful key strategy for enterprises. The most important thing is to put consumers at the center and mix all the channels of the brand well. Therefore, no matter what channel customers use, when and where they talk to the brand, customers can get a smooth connected experience. [2] In this case, managing channel allocation together is no longer just adding channels. This is a change from channel management to ecosystem operation. How to build a good system to manage the channel distribution within the whole channel has become a very important issue for researchers and enterprises.

Omni-channel marketing is a marketing strategy that combines all customer contact points online and offline. Its goal is to provide customers with a seamless and consistent shopping experience through cross-channel collaboration and data interoperability. It differs fundamentally from multi-channel marketing, which refers to brands conducting marketing activities on multiple independent channels, with usually little coordination among these channels. In contrast, full-channel marketing centers on the customer journey and emphasizes deep integration and data interoperability among different channels [3]. Distribution channel collaborative management refers to enterprises integrating and uniformly managing various distribution channels they control through information sharing, resource integration, and other collaborative methods, with the aim of achieving efficient resource allocation and coordinated business response, ultimately achieving the channel collaborative effect of "one plus one is greater than two".

2. The Theoretical Foundation of Cross-Channel Marketing and Synergistic Management of Distribution Channels

2.1 Evolution of the Omni-channel Marketing Theory

The development of the cross-channel marketing theory has undergone an evolution from basic integration to intelligent-driven. According to the depth of channel integration, cross-channel marketing can be divided into three stages. The characteristics of the basic stage are the initial connection of channel data, and enterprises begin to attempt to align the basic information of online and offline. The characteristics of the intermediate stage are real-time inventory and order synchronization, and consumers can obtain accurate inventory feedback and logistics information when placing orders in any channel. The characteristics of the advanced stage are intelligent prediction and personalized recommendations. Enterprises use big data and artificial intelligence technologies to conduct in-depth analysis of market data, accurately predict market trends, and provide customized product and service solutions for consumers [4]. Since the national-level policy opinions promoting the interaction between online and offline were released in 2015, the attention to cross-channel marketing research has significantly increased, and by 2025, the market size of cross-channel marketing management systems has exceeded 100 billion. The integration of online and offline has become the industry standard for channel marketing [5].

2.2 Core Logic of Channel Synergistic Management

The theoretical basis of channel collaborative management comes from the integration of supply chain collaborative

management theory and cross-channel marketing theory. Collaborative supply chain management points out that all parts of the supply chain must coordinate with each other to make it more efficient and powerful. In a cross-channel environment, this coordination should also include good cooperation with suppliers, logistics and other partners[6]. Cross-channel marketing theory explains that enterprises need to talk and sell with consumers through various channels, and these different channels must work well together to provide consistent and high-quality user experience. When you put these two theories together, you get the core of channel collaborative management: to make the whole channel as efficient as possible by sharing information, resources, interests and risks among channel members. The essence of chain synergy is that when chain members (such as manufacturers, distributors and retailers) jointly make products before salt, in salt and after salt, it can improve the company's reputation and brand awareness, while reducing the risk and pressure of individual members.[7]

2.3 The Theoretical Framework of Their Integration

The integration of cross-channel marketing and distribution channel synergistic management has formed a three-dimensional theoretical framework centered on consumers, driven by data, and through collaborative means. The first dimension is the consumer-centered dimension, which requires that the design and operation of all channels be centered around the consumer journey, transmitting consistent brand information throughout the entire process from cognition, consideration, decision-making to loyalty. The research shows that attribute consistency in cross-channel environment has an important positive impact on consumer loyalty, and the continuity of cross-channel experience is the key to maintain customer relationship[8]. The second dimension is a data-driven dimension, which emphasizes real-time sharing and in-depth cross-channel data analysis, and realizes accurate marketing and personalized recommendation by building a complete user profile[9]. The third dimension is collaborative operation, which requires online and offline channels to achieve deep integration of information, resources and services, break down barriers between channels, and ensure a unified experience and data consistency across channels. The introduction of online channels not only changed the pricing strategy of retailers, but also profoundly affected the competition and cooperation between online and offline channels[10].

3. Channel Collaboration Management Model Construction

3.1 Strategic Layer Model Design

The strategic layer is the top-level design of the channel collaboration management model, and its core task is to clarify the direction and principles for optimizing the channel combination. On the strategic level, enterprises must decide the number and type of channel level according to the demand of the target market. Channel terminals must meet the needs of consumers. At the same time, they need to consider the construction cost, operating cost and revenue, and choose the most relevant channel level. Under the market competition situation, enterprises must adjust the channel level according to the competitive environment in order to be stronger in the market. The strategic layer must also create a channel value evaluation model. Quantitative indicators need to be established in multiple dimensions, such as customer realization efficiency, cost structure and brand influence. This helps to find inefficient channels and make better use of resources. For enterprises whose target market focuses on instant consumption, the channel itself becomes the main factor to directly meet the needs of consumers. Therefore, the channel strategy must be very important and become a part of the marketing mix.

3.2 Tactical Layer Process Architecture

Tactical layer is the key link between strategic intention and implementation. Its core is to design a closed cycle process from beginning to end. This closed-loop process includes four main steps: demand perception, order processing, performance delivery and service feedback. In the demand perception stage, enterprises need to integrate data from social media, e-commerce platforms and Internet of Things devices to build a real-time demand forecasting system. In the order processing stage, micro-service architecture is needed to separate order modules and support dynamic routing to cope with different order request scenarios. In the delivery stage, intelligent system must be used to optimize the delivery route, improve the delivery efficiency and reduce the logistics cost. In the service feedback stage, we must establish an intelligent customer service system to better solve problems and continuously improve service quality. The tactical layer must also organize how different channels (channels) work together. We must follow the principles of value and efficiency. People put complex business on physical channels and send simple business with low risk and little contact to electronic channels. Therefore, we have reduced the channel pressure with people and made electronic channels more effective.

3.3 Execution Layer Support System

The executive layer is the technical and organizational guarantee for model implementation, and its core lies in building three support systems: data center, API governance framework and intelligent decision-making system. The data center should establish a "one-master multi-level" data architecture, establish a unified view of customers, products and channels, define key indicators, and realize cross-channel data aggregation. The API governance framework must implement a hierarchical control mechanism to ensure the standardization, security and scalability of the interface from the design, development and

operation stages. Intelligent decision-making system needs to integrate machine learning model to realize dynamic optimization, including intelligent decision-making in key business scenarios, such as channel recommendation, inventory allocation and pricing optimization. The executive layer must also deploy an automated process engine to use robot process automation technology to deal with repetitive tasks, such as channel adjustment, inventory synchronization and price monitoring, thus significantly improving operational efficiency.

4. Application Paths and Case Analysis of Cross-Channel Collaborative Management

4.1 Information Sharing and Data Integration

Information sharing is the basis of cross-channel collaborative management. Enterprises need to realize real-time information sharing between different channels in order to better understand customer needs and market dynamics. Specifically, they need to establish cross-channel data collection standards to ensure that the data formats on online, offline, mobile and PC platforms are the same, thus eliminating data islands. With the help of API and data integration tools, they can synchronize data from multiple sources in real time to ensure that information about inventory, orders, user behavior and so on can be obtained quickly and accurately. At the same time, algorithms must be used to identify and merge duplicate user data in order to improve the integrity of user files and the accuracy of marketing. Cross-channel collaborative management needs the deep integration of all marketing channels, including online and offline, public and private, to break down the barriers between data and activities and form an interconnected operation network. This kind of integration is not only having more channels, but also real-time information sharing and collaboration across channels.

4.2 Resource Complementation and Channel Integration

Complementary resources is the main way to improve the efficiency of cross-channel collaborative management. Cross-channel collaborative management emphasizes the complementarity of online and offline resources. It improves the operational efficiency of enterprises through the integration of online and offline resources. At the level of channel integration, enterprises can adopt a combination of horizontal integration and vertical integration. Horizontal integration means cooperating with channel members at the same level, sharing resources, gaining complementary advantages and expanding market coverage. Vertical integration combines online and offline advantages, realizes multi-channel and multi-level composite integration, and improves market adaptability and competitiveness. Hybrid integration combines the advantages of horizontal and vertical integration to build a more complete channel network. The company must also create personalized preferential policies for different channel partners, such as price reduction and payment arrangement. And provide necessary training and support to help channel partners improve their sales ability and service level.

Lenovo's global distribution network is a typical example of resource complementarity. Lenovo has established six distribution centers around the world, and achieved rapid response through regional warehousing and logistics systems, thus reducing transportation costs and improving delivery efficiency. In terms of channel integration, Lenovo combines the resources of platforms such as JD.COM and Amazon with physical stores, improves the contact points with users through the mode of "online order and in-store experience", and optimizes inventory management through big data analysis. In the enterprise B2B channel, Lenovo has established a special sales team for large customers, providing hardware customization, software pre-installation and IT operation services, and providing phased payment plans to lower the purchase threshold. In emerging markets, Lenovo uses mobile shops on trucks and community agency models to solve the shortage of retail stores in remote areas and accepts local payment methods such as cash payment. This multi-level and multi-mode channel integration enables Lenovo to allocate resources efficiently in a complex global market.

4.3 Service Integration and Experience Optimization

Service integration is the ultimate goal of cross-channel collaborative management. Cross-channel collaborative management requires enterprises to provide uninterrupted services to meet the consistent customer experience requirements in different scenarios. In terms of customer experience, enterprises need to develop recommendation systems based on historical behavior and user preference data, and provide personalized products or services through various channels to improve the conversion rate. At the same time, they need to develop cross-channel service functions such as online ordering and offline retrieval, online booking and offline experiments, so as to break down the barriers between channels and meet the flexible consumption needs of users. For the membership system, they need to integrate the membership points and levels of all channels in order to realize the common interests of online and offline, thus improving user loyalty. Intelligent customer service system must support cross-channel requests, quickly respond to user queries through natural language processing technology, reduce service costs and improve customer satisfaction. Starbucks reward cards can be updated in real time on mobile applications, websites, physical stores or applications. Any recharge, consumption or change in points will be synchronized across all channels within 30 seconds. Whether consumers make purchases through the mini-program, the official app or in physical stores, as long as their WeChat ID is bound, all consumption records will be accumulated and added to star points. Stars can be used as a voucher for promotion or to exchange for beverages, and free beverage vouchers will be given out on members' birthdays or anniversary of their membership level. This design of cross-channel membership rights interconnection enables

Starbucks' member visit rate and repeat purchase rate to maintain a leading position in the industry for a long time.

5. Channel Collaborative Management Implementation Guarantee

5.1 Organizational Transformation and Governance Mechanism

Implementing omni-channel collaborative management requires changes in the organization to support it. The company must set up a committee to manage the process between different channels. The committee is headed by the principal of the company. It helps to coordinate the working methods of all channels. We also need to form a team that can design processes, analyze data and understand business well. The team needs to meet complex omni-channel management needs. It is necessary to establish an index system to measure the health of channels. The effectiveness of process execution should be a part of performance evaluation. At the management level of channel members, it is necessary to establish a complete incentive system. Channel partners are rewarded according to their sales and how they develop the market. At the same time, we must determine how long the cooperation will last and the conditions for continued cooperation. This ensures that the cooperation between the two sides is stable and lasting. Conflicts and disputes arising in the course of cooperation must be resolved quickly and properly. This can prevent these problems from affecting the cooperative relationship.

5.2 Technology Empowerment and Digital Transformation

Technical empowerment is the main driving force for the smooth operation of omni-channel collaborative management. Enterprises need to rely on CRM system, cloud computing, Internet of Things and artificial intelligence technologies to support their efforts and promote the transformation from channel management to ecosystem operation. At the data level, it is necessary to build an omni-channel data center to achieve unified and comprehensive management of customers, products and channels. At the level of intelligent decision-making, it is necessary to use big data and artificial intelligence technology to deeply analyze market data, accurately predict market trends, and realize the automatic operation of distribution channels through intelligent systems. At the level of customer experience, digital means should be used to improve the customer experience, such as online customer service and personalized recommendation, in order to improve customer loyalty and loyalty to the channel. Every year, enterprises should digitalize a certain proportion of revenue input channels, and establish a continuous optimization cycle improvement mechanism.

5.3 Performance Evaluation and Continuous Optimization

A scientific performance evaluation system is the guarantee for the continuous optimization of channel collaborative management. Enterprises need to establish a performance assessment mechanism related to cost control, linking cost control effects with employee performance. In budget control, detailed channel budgets need to be formulated, including marketing expenses, personnel costs, etc., to ensure no overspending. In cost analysis, regular analysis of channel operation costs should be conducted to identify cost-intensive links and formulate improvement measures. In terms of break-even point analysis, the break-even point should be calculated to clearly define the minimum profit requirement of the channel to avoid loss-making operations. On this basis, enterprises need to continuously integrate and optimize existing channels, explore new channel models, such as online and offline integration, social media marketing, etc., to adapt to market changes. At the same time, communication and cooperation with customers should be strengthened, understanding customer demand changes, providing personalized services, and continuously optimizing the channel management system.

6. Conclusion

The advent of the all-channel marketing era has transformed the collaborative management of distribution channels from the traditional network construction to a comprehensive value creation system across all channels. This article has constructed a three-layer collaborative management model consisting of strategic, tactical, and executional levels, and elaborated on the application paths from three dimensions: information sharing, resource complementarity, and service integration. The research shows that effective collaborative management of distribution channels can shorten product circulation time, reduce circulation costs, and enhance channel efficiency. At the same time, through market information collection and risk sharing transfer, it provides support for enterprises to build sustainable competitive advantages. Looking to the future, with the deep integration of technologies such as artificial intelligence, big data, digital twins, and blockchain, all-channel collaborative management will continue to evolve towards intelligence, ecology, and agility. Channel centralization and ecological operation will become the mainstream trend. Enterprises need to upgrade their organizational form, management model, and technical capabilities simultaneously to build an unrepeatable channel advantage in the fierce market competition.

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