

Value Creation and Model Innovation of Smart Retail in the Context of Big Data

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Abstract: With the advent of the era of big data, the new retail model concept of “smart retail” proposed by Suning Appliance has come into people's attention. As a form of terminal business flow, the smart retail model compares with the traditional retail model. Its main advantages and differences are reflected in the word “smart”. That is, the former uses the Internet and Internet of Things technology to perceive consumer consumption habits and predict consumption. Trends, guide manufacturing, provide consumers with diversified and personalized products and services, and then create value for production enterprises to optimize production capacity structure under the reverse transmission of industry chain information, and realize big data traction retail.

1. Introduction

With modern information technologies such as cloud computing, mobile Internet, and the Internet of Things being used in various fields of economy and society in recent years, world data is gradually showing an unprecedented growth trend. In the context of big data, the retail model based on e-commerce has gradually replaced the single offline physical retail model. At the same time, with the proposal of the concept of smart retail, the e-commerce retail model has been continuously reformed, using data resources reasonably, optimizing the retail model, constantly changing the organizational ecological environment in the retail field, taking advantage of the e-commerce platform, and realizing the value creation and Model innovation.

2. Development Status of My Country's Retail Model

2.1 Difficulties in the Development of the Physical Retail Model

At present, the physical retail model still exists in the form of supermarkets, large stores, and community shops. From the perspective of development trends, the physical retail model is more difficult to develop under the suppression of the e-commerce retail model. There are several reasons: first, the physical Retailers have high expenditures on renting housing equipment and labor. Compared with e-commerce retailing, the cost and cost will be higher. Second, the physical retail model is constrained by its time and space, and the consumer group it faces is relatively single. If the group is fixed, the sales volume will naturally be relatively small. Third, from the production to the physical sales, the product will go through very cumbersome procedures, and it will consume a lot of manpower and material resources in the distribution and supply, and the distribution cost will increase, resulting in the increase in the price of the product. , Cannot meet the needs of most consumers, and the relatively centralized supply will invisibly enhance the competitiveness of various shops. In summary, the current development of physical stores will be more difficult [1].

2.2 The Rapid Development of e-Commerce Retail Model

The major e-commerce platforms represented by Taobao, Tmall and JD.com have gradually become the main market areas for people's consumption through continuous development. Moreover, the online shopping carnivals such as “Double Eleven”, “Double Twelve” and “618” proposed by the e-commerce platform have further penetrated the e-commerce retail model into consumer groups of all ages in my country. Judging from the continuously refreshing transaction

volume of the “Double Eleven” shopping carnival every year, the current development momentum of the e-commerce model is very rapid. And because the entry threshold of e-commerce platforms is low, more and more people will choose e-commerce retail, so the future e-commerce retail model will become the mainstream trend of retail business models [2].

2.3 E-Commerce Retail Model and Physical Retail Model Gradually Integrated

Nowadays, the “new retail” model that combines the e-commerce retail model with the physical retail model is gradually emerging, mainly because the traditional e-commerce has obvious shortcomings, and the online shopping experience is always inferior to offline shopping. The offline stores provide customers with the intuitive attributes of visibility, touchability, audibility, sensibility, usability, etc., and online e-commerce platforms cannot always provide consumers with real scenes and good shopping. Experience, cannot meet people's demand for high-quality, experiential consumption will become the “hard wound” of the continuous development of traditional e-commerce [3]. In particular, the per capita disposable income of residents in my country continues to increase, and people's focus on shopping is no longer limited to low commodity prices, but more and more focused on the experience and feelings of the consumption process. Therefore, the “new retail” model came into being in this context.

3. Problems in the Retail Model in the Context of Big Data

3.1 The Traditional Retail Model Cannot Gain Insight into Consumer Demand in Advance

The traditional retail model is the “offline physical retail model.” This model is difficult to gain insight into consumer demand. There are several reasons for this: First, the physical retail model targets limited consumer groups, limited regional market development, and consumer group's Consumption preferences are more complex and not universal, and it is difficult for merchants to collect data for unified analysis; second, physical retailing uses a pay-as-you-go transaction form, and the demand structure of commodities can only be learned from later consumption data, which is difficult to convert into Consumers' subjective demand trends, leading the consumer market; third, the physical retail model is an independent individual, and the consumer data carried are basically closed management, that is, the data is exclusively shared between various businesses, and it is difficult to achieve the sharing of data resources. It also results in scattered consumption data of the physical merchants and a small data base, making it difficult to analyze consumer consumption trends and thus gain insight into consumer demand in advance [4].

3.2 The Traditional Retail Model Cannot Obtain Consumer Feedback in a Timely Manner

Due to the transaction characteristics of the traditional retail model, traditional retail pays more attention to the pre-sale and mid-sale links of commodities. Traditional retail companies often work hard in the first two links to provide consumers with the most comprehensive products and services. In the after-sales phase of commodities, the services provided by traditional retail enterprises are often only the return or maintenance of commodities. The way to obtain consumer feedback in the past was also in the form of questionnaires or telephone return visits. However, there are also a lot of human resources and high survey costs. Defects such as a limited number of samples and a long period of time. The collected consumer opinions on goods and services are very limited, and they have a limited role in guiding retail enterprises or product manufacturers to improve products and services. The process from collecting consumer feedback to the improvement of goods and services is relatively long, which will eventually lead to improvement lagging behind demand, resulting in a significant reduction in the effectiveness of commodity marketing and the loss of consumer groups [5].

3.3 The e-Commerce Retail Model Lacks Online and Offline Integrated Marketing

Most of the e-commerce retailers in my country are virtual economic organizations, that is, they do not have offline physical stores, but only through the establishment of virtual stores on e-commerce platforms to conduct online commodity transactions. For enterprises adopting the

electronic retail business model, it is more convenient to obtain online data of consumers. When consumers connect to the Internet to browse web pages, purchase goods or other operations, e-commerce companies can record consumer operations and related data in the background, thereby using online data to obtain consumer consumption information. But because e-commerce companies often do not have physical stores, not all consumer groups are used to buying goods through the Internet. On the contrary, China's physical retail mainly focuses on regional online sales, consumers can have a better consumer experience, and some people who pay attention to the consumer experience will choose physical stores, which leads to the lack of online and offline data integration in the e-commerce retail model, The consumer database is not comprehensive.

4. Value Creation and Model Innovation of Smart Retail in the Context of Big Data

4.1 Use Big Data to Perceive Consumption Habits and Predict Consumption Trends

A typical feature of the retail model in the era of big data is to identify the individual needs of consumers and create real-time and differentiated products and services to meet the needs of different consumers. The on-demand customization mode is to design, develop, produce, and distribute personalized products centered on consumer needs, and consumers actively participate in all aspects. However, most of the retail models at this stage are B2C models, that is, commercial retail models that directly sell products and services to consumers. The main disadvantage of this model is the lack of personalized services, and the lagging data and information that cannot lead the consumer market. To realize smart retailing in the context of big data, we must first transform from the traditional B2C model to the C2B model. In the C2B model, consumers first put forward demand, and then production enterprises organize production according to demand. Usually, consumers customize products and prices according to their own needs, or actively participate in product design, production, and pricing to show consumers' personalized needs. Production enterprises conduct customized production, perceive consumption trends in advance, and realize big data traction retail. For example, women have always been the main body of consumption, from cosmetics, skin care products, clothing, to electrical appliances, kitchen utensils, etc., most of which are purchased by women, and continuous consumption will produce consumer popularity, that is, consumers exhibit similar or same behavior A consumption phenomenon [6]. The specific manifestation is that most consumers have an interest in a certain product or fashion at the same time, and this product or fashion has become the target of many consumers in a short time. At this time, this kind of commodity becomes a popular commodity, and this consumption trend becomes a popular consumer. Use big data to monitor consumers' shopping habits. If the search volume, topic volume, and purchase volume of a type of product or a brand show a continuous growth trend in a short period of time, manufacturers can use these data to predict consumption trends and gain insight into consumers demand.

4.2 Use Big Data for Deep Integration of Online and Offline, Interact in Time, and Obtain Feedback

If businesses want to meet consumers' needs and desires, they must seize the changes in consumer psychology and use the characteristics and advantages of the Internet to better serve consumers. The online e-commerce retail is not limited by region and time, and you can buy goods according to your preferences at any time and any place. However, e-commerce retail exists in the form of digital sales. Consumers can only choose from some data published online. Merchants cannot obtain consumer feedback in a timely manner, and can only analyze some data such as telephone follow-up visits, questionnaire surveys, or consumer messages at a later stage, but the data update is relatively lagging, and they cannot feedback consumer opinions in a timely manner. Although the offline physical retail model can get timely feedback on consumer experience, it has little data and cannot analyze consumer psychology well. Based on the advantages and disadvantages of online and offline retail, big data can be used to conduct in-depth online and offline integration, timely interaction, and obtain consumer feedback. For example, most cosmetics

or skin care products will have a trial stage, so that merchants can analyze the usage of the products and predict sales. Although there is less offline data, it is the most authentic experience for consumers to try the products in the store. These data are shared using Internet technology. In this way, the database is enriched, and later data collection can allow consumers to leave a message on a specific website so that merchants can track data and better analyze changes in consumer psychology. Use online and offline cross-in-depth and in-depth integration to interact in a timely manner, obtain consumer feedback, and promote smart retail model innovation.

4.3 Use Big Data for Online and Offline Integrated Marketing

With the rapid development of network information technology, human society has entered the era of big data. Under the new situation, e-commerce retailing has become the inevitable development direction of marketing in the era of big data. The traditional offline sales model can no longer take advantage of market competition in the era of big data. Integrated marketing is the only way for enterprises at this stage. Using Internet technology, e-commerce has a more convenient operation platform, and the potential customers covered by the Internet beyond the geographical restrictions have also laid the foundation for the development of the enterprise. Therefore, online and offline resources are integrated, and the network is used as a new customer experience entrance. The whole marketing model has greater market competitiveness. The advantages of online and offline integrated marketing are mainly reflected in the following aspects:

First, the integrated marketing of online and offline resources can maximize the use of corporate resources. The market resources available to companies have certain limitations. The integration of online and offline resources can simultaneously utilize online resources and offline resources. Reaching the maximum value, online resources are mainly for a large group of potential customers, providing a market for corporate marketing, while offline resources are more practical, mainly including high-quality and close-to-business supplier relationship advantages, corporate strategic partners improve the long-term high-quality supply for enterprises, and ensure the cost advantage. Offline retail physical stores also have irreplaceable experience advantages, and offline resources are more abundant and have strong logistics and distribution capabilities.

Second, online and offline integrated marketing can further enhance enterprises' participation in market competition, and can further promote economic development. The tightly integrated online and offline marketing helps business companies and consumers to interact well, and can achieve precise marketing through smart recommendation, increase consumer stickiness, and bring more substantial growth in consumption. It can also improve the development of the enterprise economy

Third, online and offline integrated marketing can further ensure the continued prosperity of traditional business circles, and can avoid the extreme impact of extreme e-commerce on social development. Online e-commerce has cultivated online consumption habits of online consumers, and integrated marketing is to allow consumers to extend this consumption habit to the form of offline experience, to form an online consumption, offline experience consumption model, and then to ensure offline The necessity of the existence of traditional business districts promotes the continued prosperity of business districts and reduces the economic impact of e-commerce on traditional business districts.

5. Conclusion

In the era of big data, the e-commerce retail model is an inevitable choice for the development of the market economy. However, the physical retail model also has an irreplaceable sales advantage. Therefore, only big data can be used to perceive consumer habits in advance, predict consumer trends, and online and offline depth. Integration and database integration can maximize the advantages of the e-commerce retail model and promote the formation of smart retail.

References

[1] Wang Shanan. Research on the new model of “smart retail” of cosmetics brands under the

- background of new retailing--Taking Misi Buddha as an example [J]. Modern Trade Industry, vol.40, no.09, pp.60-61, 2019.
- [2] Liao Xia, Shi Guicheng, Xu Guanglei. Transformation and evolution of the physical retail industry and the staged path from the perspective of smart retail [J]. Business Economics Research, no.05, pp.28-30, 2019.
- [3] Zhu Jun. Smart retail: Suning, overtaking in corners in a changing situation [J]. Chinese Brand, no.06, pp.54-55, 2019.
- [4] Li Xiaoqing, Shang Shushan. Research on the Development and Practice of Smart Retailing in my country--Taking Suning Smart Retailing as an Example [J]. Logistics Engineering and Management, vol.41, no.07, pp.11-13, 2019.
- [5] He Xiaoqing, Ling Jiaying, Meng Xiangwei, Ma Jintao, Xu Chong, Chen Xiao, Xu Siyan, Yang Silei. Building a complete picture of smart retail-2018 Smart Retail White Paper [J]. Technology China, no.07, pp.63-70, 2019.
- [6] He Yao. Smart retail: reshaping the industrial ecology [J]. China Public Safety, no.11, pp.126-130, 2019.