Research on the Transformation of Guangdong Retail Development Model under Big Data Technology

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Abstract: Under the current social development environment, China's traditional retail industry is also in the critical period of development and transformation, coincided with the fifth wave of information technology. In the context of the era of big data, how can the retail industry transform business models, this article will interpret the "big data + retail industry" in the context of the era, and analyze the obstacles to the development of Guangdong retail under the big data technology, and propose the big data technology in Guangdong retail industry. The opportunity to develop and transform and the path of realization.

1. Introduction

With the rise and application of information technology such as cloud computing and Internet of Things in big data, the traditional business model and commercial value of retail enterprises have been greatly impacted, mainly reflected in the optimization of organizational operation mode of retail enterprises and the change of consumer preferences[1]. aspect. From the perspective of the commercial value realization of offline traditional retail enterprises, the traditional business model that provides consumers with the value of goods and services is driven by big data, and continues to intelligent operation of enterprises, intelligent supply chain optimization and commodity management, and consumers. The transformation of the smart shopping experience. This paper will study the transformation of Guangdong retail development model under big data technology and promote the transformation of smart retail model.

2. Interpretation of the status quo of "Big Data + Retail Industry"

2.1. Shopping experience is intelligent

Through “Big Data + Retail”, we can enhance customer experience in an all-round way, and finally form intelligent data systems, intelligent data mining, intelligent payment experience, intelligent parking system, intelligent consumption analysis, intelligent marketing analysis, and intelligent Location analysis, intelligent channel experience[2].

2.2. Intelligent product management

Through “Big Data + Retail Industry”, we can realize the intelligent management of commodities, including optimizing consumer product classification and classification, optimizing product channelization classification, optimizing product localization classification, and realizing intelligent product management. Dynamic pricing, dynamic promotion, price budgeting and price forecasting of commodities, thus intelligently arranging the structure of goods, facilitating the selection of goods and the layout of space design.

2.3. Supply chain upgrade intelligence

Through the "big data + retail industry", the supply chain management theory, methods and technologies of modern retail enterprises can be constructed in retail enterprises or between retail enterprises to realize the networking[3], automation and informationization of the retail enterprise supply chain. It mainly involves out-of-stock alarms, inventory forecasting, inventory expense management, etc. of commodity inventory. By optimizing storage space, it realizes the selection

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analysis of commodity inventory, and realizes procurement management, supplier management, storage management, and delivery management through intelligent logistics. After-sales management and return visit management.

2.4. Intelligent logistics distribution

Through "Big Data + Retail Industry", we can realize smart logistics. Through the refined, dynamic and scientific management mode, we will link the main body, object, space and object of retail industry according to certain identification, transmission, identification and application. To achieve automation, visualization, controllability[4], and networking of logistics and distribution, and then form a collaborative operation of intelligent systems to improve resource utilization in distribution transactions, online payments, fast logistics, consumer experience, resource regeneration, etc. And the level of productivity, creating a richer flow of intelligent activities throughout the proces

3. “Big Data + Retail Industry” Development Opportunities

3.1. Need to reposition the target market

“Big Data + Retail” urgently needs traditional retail industry to use big data to achieve cross-selling, thus repositioning the marketing market and segmenting the customer base to enhance customer experience. On the one hand, traditional retailing can accurately capture consumers' shopping preferences, shopping history and real-time location by mining marketing big data. Through in-store tracking, the consumer's purchase rules are accurately grasped, and the average number of purchases of goods is improved through the route simulation of consumer behavior. For example, in the cross-selling process[5], Wal-Mart focuses on tapping consumers' shopping trends and measuring the correlation and similarity between products, including the relationship between products, people, and events. As a result, Wal-Mart has increased its sales by 15% through the Big Data Engine, indicating that it is making a qualitative leap with big data. At the same time, “Big Data + Retail” can also achieve effective promotions and cross-marketing pricing to attract potential consumers and create unique marketing advertising positions. On the other hand, the traditional retail industry has to differentiate its customer base and enhance its customer experience by mining big data. With the concept of big data and new tools, customers can be divided into more detailed segments, whether they are consumer groups or consumer individuals, whether online or offline, mobile terminals or physical shopping behaviors, they should provide different versions for consumers. Product information or promotional information of different grades, different content and different needs to meet the different preferences and different consumer behaviors of different consumers. At the same time, retail companies should rely on big data to fully analyze historical consumption data, study consumer behavior data, and use multi-channel experience, customer satisfaction, and customer loyalty as the ultimate driving force to enhance sales behavior.

3.2. Need to continuously innovate product design

“Big data + retail industry” urgently needs to innovate goods, improve product services, update product design, and should form different promotion programs and different promotion pages according to different regions of consumers. For example, Jingdong, Suning, etc. are all innovating product design according to local conditions, and relying on big data for page interaction according to local consumption concepts, shopping patterns and population, speeding up website information adjustment and product allocation in different regions, prompting “big data” + Retailing divides different categories of customers into different price ranges, improving sales evaluation and facilitating sales activities.

3.3. Need to accelerate the reshaping business model

Big data + retail industry urgently needs to create a new business model, because the traditional retail business rigid business model has not adapted to the actual needs of consumers, so there must be new, vital, full of vitality On the one hand[6], “big data + retail industry” must change from price

competition to service competition. Under the general trend of “online and offline + logistics”, only the value-added service level of the retail industry can be upgraded to specialization. The transformation and upgrading of modern, networked modern retail service providers is the transformation trend and development direction of the new round of retail business model. Therefore, improving the value-added rate and derivative functions of retail services is to reshape the retail business model. On the other hand, “Big Data + Retail” must shift from the upstream to the downstream to the downstream, and the traditional retail ecosystem is dominated by upstream manufacturers, while in the big data. Under the omni-channel concept, downstream consumers are countering upstream manufacturers, and even downstream consumers are involved in commodities. Production, design and R & D session. Therefore, only the consumer recognition of the business model, is amenable, the most appropriate business model to market needs.

4. The big data technology

4.1. Development direction of Guangdong retail industry under big data technology

Big data technology plays a key role in changing the consumption structure and creating consumer demand. It is the inevitable trend of the transformation and upgrading of retail enterprises in the future, and also the core factor to enhance the level of market competition. Big data analysis carries out multi-attribute function screening and personalized demand customization for the consumption of retail goods[7]. It plays a significant role in commodity management optimization and supply chain improvement. Therefore, the big data operation of retail enterprises is a development direction. The most critical aspect of big data operation is how to use data analysis to form a precise operation plan for target customers. In the ever-reduced market consumption structure, from the perspectives of consumers' impulse consumption, conspicuous consumption, personalized consumption and real-time consumption, Digging deep-seated market demand, calculating the optimal production cycle, inventory cycle and logistics distribution cycle in line with market rules by calculating the sales expectations and cycles of retail commodities, and using the results of big data analysis to support leadership decision-making. On the big data platform, retail enterprises build an enterprise data ecological platform, integrate and process a large amount of information on retail commodities, and provide big data products to enterprises within the interest alliance, and guide consumption of homogenized property products of different enterprises. Information sharing is realized on information data to realize the common prosperity and development of retail enterprises on the big data platform. For example, Alibaba, which is currently in the leading position in big data analysis, has provided retail companies with many big data products such as “Taobao Index”, “Golden Policy” and “Taobao Time Machine” through the creation of an ecosystem platform for big data. With the rapid development of the retail industry, big data analysis has become Alibaba's most important core competitiveness.

4.2. Realization of commercial value under the big data technology of retail industry

The smart operation of the enterprise. Big data enables the intelligent operation of retail enterprises, mainly through systematic financial management, scientific human resource management and minimizing resource loss[8].

First, in the systematic financial management, through the cloud computing to achieve the collection and classification of retail enterprise commodity prices, sales and other data information, through the forecast of commodity sales cycle and circulation cycle, to judge the return of funds, analyze financial Potential risks, improve the financial risk resistance of enterprises. At the same time, big data can effectively realize detailed information such as corporate performance disclosure and asset maintenance in financial management, and provide objective financial information basis for long-term development planning of business operators.

Second, in the scientific human resource management, big data technology can carry out scientific job assignment according to the matching of human resource job requirements and employee skills, and identify the skill proficiency and learning growth of employees in different

positions. Form a labor report with data support, optimize the human resource allocation of the enterprise, and improve production efficiency. Third, in terms of minimizing resource consumption, big data statistics are performed on resources or abnormal behaviors that are often depleted, and the causes of loss are analyzed, which can effectively predict and alert against frauds that may be encountered in business operations or affect production safety behaviors. Reduce the loss of corporate resources.

4.2.1. Guangdong retail industry smart operation

The intelligent operation system of retail enterprises provides consumers with a full range of consumer technology services through the combination of big data analysis and mobile terminals and social media, and intelligently operates multiple nodes from production to distribution to marketing in the intelligent operation system. Under the analysis and management, retail enterprises can effectively integrate the enterprise production and logistics system structure, and achieve standardized and efficient operation in production monitoring, operation management, distribution management and precision marketing. For example[9], the smart operation system of Tmall Supermarket realizes the real-time interaction between consumers and retail enterprises. Through the collection and processing of merchandise sales information, supermarket operation information, consumer browsing and shopping information, the Tmall supermarket online line is realized. The value of the retail market is rising. Smart supply chain optimization and merchandise management.

4.2.2. Retail Enterprise Supply Chain Optimization and Commodity Management

Through big data analysis, you can monitor the production status of goods, screen the quality of goods, forecast the sales orders of goods, information management, storage and distribution, and determine the location of storage and distribution centers. Optimized commodity inventory is mainly reflected in analysis and early warning storage, forecasting inventory demand and managing inventory cost. Optimizing logistics and distribution is mainly reflected in the analysis of product sales data and management procurement, scientific arrangement of delivery, etc. Management storage space is mainly reflected in The big data of consumer consumption preferences and consumption habits analyzes the customer's purchase pattern and conducts scientific shipment processing accordingly. In the aspect of smart commodity management, big data through the analysis of transaction information and interactive information in consumer consumption behavior, to optimize the matching of online and offline counterparts, and to deeply explore potential consumers in the market, mainly in optimization. Product mix, optimize price and optimize product layout. Among them, the optimization of commodity combination is mainly based on the complementation of consumer spending habits and commodity attributes, classifying consumer demand, and classifying regions and channels according to different preferences of consumers in different regions; commodity price optimization is mainly based on sales of commodities. Cycle, dynamic pricing, price forecasting through sales forecast, and choose the right time for product promotion; product layout optimization is mainly based on consumer spending habits to carry out space layout management, for sales of goods with larger sales Make a conspicuous position layout and match the goods and space reasonably[10].

4.3. Consumer wisdom shopping

With the help of big data analysis, retail enterprises can establish a commodity consumption database, and carry out multi-dimensional detailed analysis of consumer groups from commodity attributes, consumption preferences, price preferences and functional preferences, and target different consumers. Commodity information push and marketing, together with convenient shopping channels and payment methods, together create a smart shopping experience. In creating a smart shopping experience, the role of big data is mainly reflected in intelligent analytics consumers and omni-channel marketing. From the intelligent analysis of big data to consumers, by statistically related data such as consumption habits and shopping records, retail enterprises can be identified and differentiated into different categories of consumers, and the consumption levels are subdivided from multiple dimensions such as price and function. Consumers buy the same product cycle,

analyze the customer's consumption life cycle, and establish a periodic precision marketing plan. By analyzing the consumer's shopping behavior, Big Data can grasp the circulation and sales channels of goods, and compare the sales data of different channels of the same kind of goods online and offline, analyze the shopping psychology and cross-shopping trends of consumers, and create consumers' diversified products. Smart shopping experience.In terms of precision marketing, big data fully exploits the market consumption potential, and promotes consumer value concepts according to the trend of mass consumption. By matching the matching products with the customer groups with similar needs, grasping the consumer's herd mentality and marketing In the omni-channel experience of consumer shopping, with the development of e-commerce in retail enterprises such as O20 and C2B, big data and Internet of Things technologies have become more and more obvious to consumers' shopping channels. Analysis, can create personalized shopping experience services for different levels of consumers, to achieve intelligent shopping process.

5. Conclusion

Big data mainly realizes the commercial value of retail enterprises by changing the consumption structure and creating consumer demand, and realizes the development and transformation of Guangdong retail in terms of precision marketing, comprehensive customer insight, commodity optimization and supply chain improvement. We should support the constraints of the transformation of the retail industry under the big data technology and promote the good development of the retail industry in Guangdong.

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