Research on Marketing Strategy Simulation Model under Big Data

Yan Wang*
Shandong Vocational and Technical University of International Studies, China, 276826

*Corresponding author e-mail: Yanwang@163.com

Abstract. With the rapid development of science and technology, computer technology has become an indispensable resource in people's daily life, which has changed people's work and life style. With the advent of the era of big data, the traditional marketing has been unable to meet the needs of market development, which requires enterprises to adapt to the development of the times. Under big data Beijing, enterprises can obtain accurate market economy information and operation information, which will provide important data analysis. Therefore, through big data analysis, enterprises can change their marketing strategies, which will improve the quality and efficiency of marketing. First of all, this paper analyzes the necessity of marketing strategy transformation. Then, this paper analyzes the marketing strategy simulation model under big data.

Keywords: Big Data, Marketing, Simulation Model

1. Introduction
"Big data" is put forward by McKinsey consulting company of the United States. It is a way to generate accurate information by calculating and analyzing massive data of various channels, types and formats [1]. Through big data technology, we can provide market information and development reports for enterprises, which is a comprehensive, intuitive and accurate consulting system. Big data is an analysis of different needs of massive information, which is based on data analysis of information technology [2]. The era of big data is an era of rapid development of information, which creates more opportunities for enterprises. Through big data, enterprises can collect consumption habits and demand information of different groups, which can promote precise products[3]. Through the classification and accurate positioning of consumers, enterprises or merchants can show different customer needs, which will improve the volume of commodity transactions[4]. At the same time, through the feedback and evaluation of customers, enterprises can change marketing plans, marketing methods and implementation strategies[5]. Through the Internet, enterprises can understand the real-time interaction, transaction, feedback and product evaluation of commodities, which will make commodities more transparent.

2. The necessity of marketing strategy transformation under the background of big data
2.1. Changed the traditional marketing strategy
In the era of economic information, big data has changed the traditional market economy system and marketing methods, which leads to the change of marketing strategies for enterprises and customers. Through the network economy, enterprises can greatly reduce the cost of production and operation, which can also provide customers with perfect and high-quality services[6]. Through big data, enterprises have created more marketing opportunities, which has greatly shortened the marketing period, inventory and so on. Therefore, the era of big data has changed the traditional marketing environment, which puts forward new demands for us.

2.2. Effectively expand market demand and scope
Big data is a virtual market economy based on the network economy, which has the openness and inclusiveness of the network economy. Through the network, enterprises can expand their business hours, which have broken the limitations of traditional stores. By extending business hours, enterprises can increase the appreciation space of business profits, which will produce a lot of marketing data. Through big data, enterprises can improve their marketing strategies, which can also accurately analyze the needs of customers. By improving their marketing channels, enterprises can effectively reduce the cost of publicity, which will make the way of publicity more diversified. In the era of big data, marketing has broken the shackles of time and space, which effectively expand market demand and scope.

2.3. Diversification of transaction payment channels
In the era of big data, there are more and more ways to pay for marketing transactions, which has changed the traditional way of payment. In the network economy, credit card institutions, banks, software manufacturers have launched online shopping payment, which is an electronic based online shopping payment way. Through online payment, we will form data, which can more accurately analyze the consumer demand of customers.

2.4. Change of life and consumption mode
In the context of big data, people's production and life and consumption patterns have changed dramatically. Big data thinking is gradually influencing the marketing mode, thinking and concept of enterprises, which makes the needs of consumers diversified. Therefore, the enterprise must carry on the diversification competition, which will be more suitable for the change of people's life and consumption mode. In the upsurge of network economy, enterprises should innovate the concept of marketing. Through the reform of marketing strategy, enterprises can expand marketing channels, which will more accurately find marketing needs.

3. Marketing strategy model under big data

3.1. Big data processing system and technical framework
The Ministry of industry and information technology released a white paper on big data. Among them, the technical framework of big data is mainly data preparation, data storage, calculation and processing, data analysis, etc. The processing system and technical framework of big data are shown in Figure 1.
3.2. Accurate customer mining process
In the era of big data, consumers' browsing, clicking, leaving messages, comments, consumption and other information will be remembered, which also constitutes consumers' digital activity map. Through big data, we can analyze consumers' living habits, social data, consumption records, consumption characteristics, etc., which is a comprehensive record. Through big data, we can accurately obtain the potential consumer demand, as shown in Figure 2.

3.3. Consumer segmentation process

Figure 1. Big data processing system and technical framework

Figure 2. Accurate customer mining process

Figure 3. Consumer segmentation process
According to the huge amount of fragmented information, we can segment consumers, which can accurately identify potential customers. According to the history of customers and marketing records, we can find many characteristics. Therefore, we subdivide consumers with big data information, as shown in Figure 3.

3.4. Selection process of marketing means
Through accurate customer mining technology, consumers can determine the potential mother and child product customer base. Each potential customer has unique consumption and social habits, which can develop marketing strategies. Through the analysis of consumption and social characteristics of customer groups, enterprises can choose effective marketing and promotion strategies, which will be better for promotion and publicity. Therefore, the selection process of marketing means is shown in Figure 4.

![Diagram](image)

**Figure 4.** Marketing strategy selection process

4. Conclusions
In the era of big data, enterprise marketing is not limited to the traditional market questionnaire. We must understand consumers' consumption habits and preferences, which can directly establish our own market analysis department through data analysis. By borrowing the analysis system of big data, we can sort out useful information from massive data, which will help enterprises adjust their marketing strategies.

References
[1] Fu Yi, Wang Tian, Zhang Lu. Research on marketing strategy simulation model under big data [J]. Modern business, 2018 (07): 27-28
[2] Lian Jiao, Kuang Min. Research on marketing strategy simulation model under big data [J]. Operation and management, March 2018, (25): 200
[3] Li Xiaohong. Research on marketing strategy simulation model under big data [J]. Market modernization, 2017 (14): 109-110
[4] Wang Chunyan. Research on marketing strategy simulation model in the era of big data [J]. Marketing rate strategy, 2017 (16): 103-104
[5] Zhu Zhihua. Research on the Optimization of marketing strategy simulation model under big data marketing mode [J]. Modern industrial economy, 2018 (01): 142-145.
[6] Lin Xiaorui. Analysis of new marketing mode under big data marketing mode [J]. China's strategic emerging industry, 2018 (03): 110-111.