

Original Research Article

## **Practical analysis of precision marketing strategies reshaping consumer behavior driven by big data**

**Jiani Zhang**

*East China University of Political Science and Law, Shanghai, 201620, China*

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**Abstract:** Against the backdrop of the digital economy, the in-depth application of big data technology is driving profound changes in the marketing field. Precision marketing strategies based on multi-dimensional consumer data break through the homogeneous limitations of traditional marketing and influence consumer behavior in various aspects. Based on the practical application of big data technology, this paper sorts out the core implementation strategies of precision marketing from the technical paths and data processing logic of consumer behavior analysis, explores the reshaping mechanism of these strategies on consumers' decision-making, selection, interaction and other behaviors in the process of implementation, and at the same time analyzes the practical problems and optimization directions in practice. Big data-driven precision marketing realizes the efficient allocation of marketing resources, and its two-way interaction with consumer behavior has become an important feature of the development of the consumer market in the digital age. Grasping the boundary of technological application and the balance of value is the key to the sustainable development of this model.

**Keywords:** big data; precision marketing; consumer behavior; behavior reshaping; marketing practice

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### **1. Introduction**

The popularization of digital technology has brought the consumer market into a data-intensive development stage. Consumers' online and offline behaviors can be transformed into collectible and analyzable data resources, laying a foundation for the refined development of marketing activities. The traditional marketing model is oriented to group needs and relies on empirical judgment for market positioning, which is prone to marketing reach deviations and resource waste, and is difficult to adapt to the current personalized and diversified consumption needs of consumers<sup>[1]</sup>. Relying on big data technology, precision marketing conducts in-depth analysis of consumer behavior, breaks the marketing barriers caused by information asymmetry, and has become an important choice for enterprises to enhance their market competitiveness. The core feature of the current consumer market is the dynamic and fragmented nature of consumer behavior, with increasingly diverse factors influencing consumption decisions. A single marketing method can no longer effectively reach the target group<sup>[2]</sup>. Big data technology enables the quantitative analysis of consumer behavior. Through the integration and modeling of consumption data, it is possible to explore the demand logic and decision-making rules behind consumer behavior<sup>[3]</sup>. In this context, exploring the practical paths of big data-driven precision marketing strategies and analyzing their reshaping effect on consumer behavior can not only provide practical references for enterprise marketing practice, but also further clarify the interactive relationship between marketing models and consumer behavior in the digital age, which is of practical significance for promoting the high-quality development of the consumer market.

### **2. Building consumer behavior models based on big data**

The collection of consumer data is the foundation of behavior analysis, and the breadth and depth of data collection directly affect the accuracy of analysis results. Its collection channels revolve around the entire consumer journey, divided into online and offline dimensions. Building consumer behavior models based on big data is the core link of converting massive data into the basis for marketing decisions<sup>[4]</sup>. Its essence is to explore

the internal correlation between consumer behavior variables through quantitative analysis methods and build an analysis model that can reflect the laws of consumption behavior and decision-making logic. The construction of the model should be oriented to clear analysis objectives, and select core behavioral indicators such as consumption frequency, consumption amount, browsing duration, preferred categories and interaction methods as the key variables of the model.

The model construction process follows the scientific process of data modeling. First, conduct exploratory analysis on the integrated standardized data to identify the correlation and change rules between variables; Second, combine technical means such as machine learning and statistical analysis, select suitable modeling methods, and build a consumer behavior analysis model to realize functions such as consumer segmentation, demand prediction and decision path analysis; Finally, verify and optimize the model with actual data, adjust model parameters, and improve the fitting degree and prediction accuracy of the model.

### **3. Practice of core strategies of big data-driven precision marketing**

#### **3.1. Predicting demand and intervening in consumption decisions in advance**

Demand prediction is the core starting point of precision marketing. Relying on the consumer behavior model built with big data, it is possible to accurately predict consumers' potential and explicit demands, break the passive mode of traditional marketing, and shift to an active mode of marketing after demand identification. By intervening in advance, it affects the consumer decision-making process. The core of demand prediction lies in the in-depth mining of consumer behavior data, the analysis of historical consumption records, browsing trajectories, preference changes and other contents, combined with market trends and industry characteristics, to identify consumers' demand tendencies and purchase timing, and judge potential purchase demands.

Based on the results of demand prediction, enterprises can take pre-emptive marketing intervention measures. Before consumers have a clear purchase intention, they can intervene in the decision-making cognitive stage through personalized product recommendations, preferential information push, category popularization and other methods<sup>[5]</sup>. After analyzing consumers' browsing and collection behaviors, E-commerce platforms accurately push relevant product discounts and evaluation content when they log in again to strengthen purchase intention; FMCG enterprises push repurchase discounts when products are about to be used up according to consumption frequency and usage cycle to guide timely orders.

#### **3.2. Scene embedding to create immediate consumption opportunities**

Scene embedding is an important link for precision marketing to achieve reach and conversion. The core is to deeply integrate marketing behaviors with consumers' daily life and consumption scenes, so that product and service information can reach consumers in appropriate scenes and create immediate consumption opportunities. Big data technology can deeply mine consumers' scene behavior data, analyze behavioral characteristics, demand preferences and emotional states in different scenes, identify scene nodes suitable for marketing embedding, and provide a basis for the implementation of scenario-based marketing.

The practice of scene embedding covers various online and offline scenes, including social, entertainment, office and other scenes online, and shopping malls, commuting, leisure and other scenes offline. Relying on the combination of big data and technologies such as the Internet of Things and LBS, it is possible to accurately locate consumers' scene positions and push adaptive marketing information combined with scene characteristics. Catering platforms identify consumers' geographical locations through LBS technology and push surrounding restaurant discounts and recommended dishes in areas with concentrated catering demand such as business districts and office buildings; Travel platforms push preferential policies for travel services such as special cars and shared bikes according to commuting scenes and travel trajectories. The key of scene embedding is to realize the high adaptation of marketing information and scenes. Through big data analysis of the demand pain points in different scenes, the product functions and values are closely combined with scene needs.

#### **3.3. Personalized content to stimulate emotional and interactive resonance**

Personalized content is the core element for precision marketing to achieve in-depth connection with consumers. Personalized content analyzed based on big data can accurately match consumers' preferences,

aesthetics and emotional needs, stimulate emotional resonance and willingness to interact, and realize the marketing upgrade from information transmission to emotional connection. Through the analysis of multi-dimensional data such as consumer behavior, social interaction and preferences, big data technology can accurately outline user portraits, including characteristics such as age, gender, consumption capacity, hobbies and emotional tendencies, providing an accurate basis for the creation of personalized content<sup>[6]</sup>.

The creation of personalized content is carried out around user portraits, with customized design in terms of form, theme and expression style to adapt to the preferences and needs of different consumers. For the characteristic that young consumer groups prefer intuitive content such as short videos and live streams, the corresponding forms are adopted to present marketing content; For the characteristic that mature consumer groups pay attention to the depth of information, forms such as pictures and texts and special reports are used to transmit product information. Create content themes that fit consumers' hobbies, such as creating product use content in outdoor scenes for outdoor sports enthusiasts and creating tutorials and evaluation content for beauty lovers. Emotional resonance is the core value of personalized content. Big data technology mines consumers' emotional needs and value pursuits, making marketing content reach the emotional level and realize recognition and resonance. At the same time, create interactive content forms such as topic discussions, interesting challenges and content co-creation to guide consumers to participate in marketing activities, realize two-way interaction, enhance consumers' sense of participation and belonging, and lay an emotional foundation for subsequent consumption behaviors.

### **3.4. Closed-loop optimization and iterative strategies based on behavioral feedback**

Closed-loop optimization is the key to the sustainable development of big data-driven precision marketing. It takes consumer behavior feedback data as an important basis for the optimization of marketing strategies, and improves the effect and adaptability of precision marketing through continuous data analysis and strategy adjustment. Big data technology can collect and analyze consumer behavior feedback data in real time and in depth, capture consumers' reactions, attitudes and behavioral changes to marketing activities in a timely manner, and provide accurate data support for strategy iteration.

The construction of a marketing closed loop starts with the implementation of precision marketing strategies. Enterprises reach consumers with customized marketing information through multiple channels, and at the same time rely on big data to monitor behavioral feedback in real time, including indicators such as information open rate, browsing duration, interaction rate, purchase conversion rate and repurchase rate, as well as subjective feedback information such as comments, complaints and suggestions. These data can directly reflect the implementation effect of marketing strategies and identify problems in marketing activities such as insufficient content adaptability, inaccurate timing grasp and cumbersome consumption processes. Based on the feedback data, enterprises conduct in-depth analysis of the causes of problems through big data, explore the behavioral logic and demand changes behind the data, iteratively optimize existing strategies in a targeted manner, and adjust marketing content, channels, timing, preferential policies and other elements.

After the strategy iteration, it is put into market implementation again, and behavioral feedback data is continuously collected to enter the next round of analysis and optimization, forming a continuous cycle of marketing closed loop. The key of closed-loop optimization lies in the real-time collection of feedback data and the efficient implementation of strategy iteration. Relying on the velocity and real-time characteristics of big data, it can capture consumer behavior feedback in a timely manner, enabling enterprises to quickly respond to market changes and consumer needs. At the same time, establish a flexible marketing strategy adjustment mechanism to ensure the efficient implementation of strategy iteration, realize the dynamic optimization of precision marketing, make marketing strategies continuously adapt to the changes of consumer behavior and the upgrading of demand, and maintain the effectiveness and pertinence of marketing activities.

## **4. Conclusion**

The in-depth application of big data technology has promoted precision marketing to become the core development direction of the marketing field in the digital age. Based on consumer behavior analysis, through core strategies such as demand prediction, scene embedding, personalized content and closed-loop optimization,

it intervenes in the entire process of consumption behavior in an all-round way, realizing the efficient allocation of marketing resources and a significant improvement in marketing effects. At the same time, it has a profound impact on consumers' decision-making methods, selection preferences, interactive behaviors and so on, promoting the reshaping and transformation of consumer behavior. The practice of precision marketing has made the connection between enterprises and consumers closer, realized the accurate matching of marketing demand and consumption demand, and injected new vitality into the high-quality development of the consumer market.

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