

Analysis on the Path of Electric Power Marketing Service Using Big Data in Electric Power Enterprise

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Abstract: Under the background of big data, it is a necessary development trend to innovate the marketing management of electric power enterprises. This is not only in line with the pace of social development, but also an important way to realize the sustainable development of electric power enterprises. In practical application, electric power enterprises need to recognize the impact of big data on the marketing work of electric power enterprises, and constantly optimize marketing management methods, so as to provide better services for users and promote the development of electric power enterprises. Compared with the previous work, the current work of power marketing management has changed a lot. Traditional strategies and methods can no longer meet the needs of practical work in many cases, especially in the current context of big data, which shows many disadvantages. In order to further improve the quality of marketing service of power supply enterprises, based on the current situation and mining of big data of power supply enterprises, the application analysis of marketing business scenarios is carried out, which provides a reference for the specific implementation work of power supply enterprises.

1. Introduction

With the continuous advancement of network information technology, big data marketing has gradually entered all walks of life, showing greater advantages in the process of data collection, processing and analysis than traditional methods, for example, in power marketing management. In the process, a large amount of data can be used to control the specific needs characteristics of customers, so as to develop more targeted strategies to enhance the quality and efficiency of the entire management work [1]. At present, the basic business of marketing of power supply enterprises has become mature, and a complete system has been established in business processes, operational specifications, system support, etc. [2]. However, under the situation of continuous deepening and accelerating power market reform, continuous strengthening of power supervision, and higher requirements for power users' reliability and marketing service level, the current marketing service still cannot meet the requirements [3]. Because the electric power industry is a long-term monopoly industry of state-owned enterprises in China, it is not sensitive to the impact of the changes of the times on its own work, coupled with the lack of internal driving force for development. In the process of marketing management, the management philosophy of many power enterprises has been seriously inconsistent with the current actual management. The fundamental reason is that it does not realize the importance of self-innovation and development in the era of big data, which leads to the slow development of marketing management innovation and reduces the actual effect of innovation [4]. Therefore, it is of great significance to analyze the innovation path of power marketing management under the background of big data era.

Under the background of big data era, the management and operation of power supply enterprises in China are constantly improving and innovating [5]. The application of big data in power marketing management can effectively clarify the management objectives of power supply enterprises, improve their competitive advantages, improve their internal management efficiency, and constantly improve the level of power marketing. Therefore, the innovation of power marketing management is an important measure to ensure the sustainable development of power supply enterprises [6]. With the continuous improvement of the power system, the competition of power supply enterprises turns into the competition of service and quality. In order to remain invincible in

the fierce competition, it is necessary to constantly improve the service quality of users and make the price of power products have a competitive advantage [7]. With the rapid development of power grid and the change of data diversification, power enterprises must have a certain understanding of big data processing methods, so as to change the processing methods of power enterprises under the background of the times [8]. With the wide application of all kinds of information, the data collected by power enterprises need not only storage, but also quantitative statistics and research [9]. Therefore, the marketing management of power enterprises should try to reduce the dependence on traditional management ideas and rely more on data analysis and processing, so as to improve the innovative management of power enterprises [10]. By innovating the marketing management of electric power enterprises, the complex electric power management activities can become convenient and simple, and at the same time promote the pattern of marketing management innovation of electric power enterprises.

2. Materials and Methods

Among the many power jobs, high-quality power marketing management is one of the most critical tasks. Many domestic power companies have also realized the importance of making full use of big data to realize their own management path innovation in their own work. At the same time, they have adopted certain strategies to enhance the application effect, as can be seen from Table 1. However, from the specific application situation, the lack of systematic application of big data is very serious. For example, some departments have completed the marketing management work only through a few simple data processing software, and some enterprises still use manual meter reading when they are conducting power meter reading. This method is not only not conducive to improving the efficiency of the whole work, but also very prone to various types of errors, which is seriously inconsistent with the specific requirements of the current large data background.

Table 1 Improvement of electricity marketing payment methods

Serial number	Payment method	Proportion
1	Self-owned business network payment	18.3%
2	Third party collection fee	20.4%
3	Network platform payment	61.3%

In the context of the continuous development of the Internet, enterprise costs need to be considered on the basis of improving customer satisfaction (Figure 1). Combining with the customer's electricity consumption behavior, it carries out application analysis of different channels, optimizes service channel planning, puts forward channel function optimization suggestions, formulates targeted and personalized marketing service scheme, improves customer perception and reduces service cost.

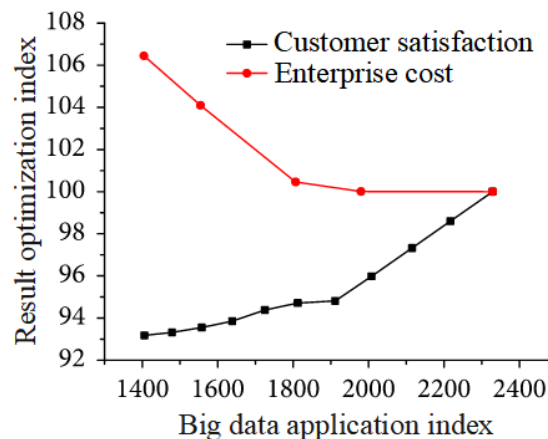


Figure 1 Enterprise cost optimization

With the popularity of smart meters, users' real-time data are transmitted to terminals through the Internet, forming a large number of databases, which provides data support for optimizing customers' electricity information schemes. By using the on-line remote collection and reading user intelligent meters, we can timely understand the customer's power quality status, monitor the fault information, and deal with it in time to ensure the customer's power security. By sorting out and analyzing the large data of electric power, we can not only provide technical reference for big customers according to the characteristics of electric power industry in various industries, but also analyze the energy consumption according to the relationship between supply and demand, existing resources and development planning, analyze the cost of electricity consumption, optimize the space, make optimal planning for big customers and improve their energy utilization efficiency. Based on the electricity consumption of customers in various industries and the application situation, the social and economic situation is analyzed and forecasted to provide decision-making support for the government on industrial adjustment and economic regulation. This is of great help to the electric power marketing of electric power enterprises (Figure 2).

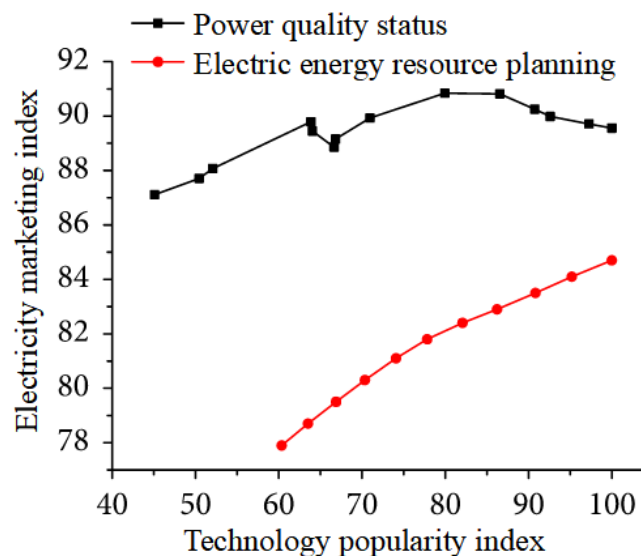


Figure 2 Power marketing development of power companies

3. Results

From the perspective of big data, the most significant feature is the need to accurately analyze the way of information transmission from a large number of information information data. In the market competition, power enterprises need to timely and accurately obtain relevant information. First of all, an accurate positioning can be given to the market and the potential requirements of customers, and a comprehensive analysis can be carried out according to the needs of customers. Secondly, power enterprises should build a complete marketing method according to the overall situation of market development, starting from the overall needs of customers. Finally, the enterprise must stand in the customer's standpoint looks at the question, like this can cause the marketing management pattern development to obtain the fundamental change. Let their management mode change fundamentally, so as to improve the service quality of enterprises, so that the power enterprises in the market to get a greater improvement.

Service plays an important role in power marketing management, so everyone should uphold the principle of service supremacy, whether it is high-level leaders or power practitioners. We should know that the electric power enterprise is not only to provide electricity to customers, but also to collect fees according to the corresponding quota. It is clear that its work content is to provide intelligent services of data and informatization, to connect the electric power enterprise and customers closely, and to establish a good corporate image.

In the current era of big data, traditional power marketing management strategies have been

unable to adapt to the needs of the times in many aspects, and it is very important to carry out innovation. In the process of implementation, the leadership and management of power companies should change their own cognitive concepts, abandon traditional backward ideas and ideas, and truly recognize the importance of using big data in the process of marketing management. At the same time, within the unit, according to their own circumstances, a special research department can be set up and special funds can be invested to better realize the development of “quality improvement and efficiency improvement”. The management level of the power marketing management team directly affects the power sales of the power supply enterprises, which will have a certain impact on the economic benefits of the enterprise. Therefore, we should establish a high-quality and perfect power marketing management team. In order to effectively guarantee the management level of electric power marketing, it is necessary to strengthen the training and guidance of relevant personnel in electric power marketing management and constantly improve the practical ability and theoretical level of electric power marketing staff. Marketing staff should ensure good attitude and enthusiasm in their work, so as to improve their working ability and ensure the healthy development of power supply enterprises and the improvement of economic benefits.

At present, all kinds of marketing activities are closely related to the Internet. Therefore, electric power enterprises should fully realize the importance of the Internet for their own innovative marketing management. Make full use of big data to carry out relevant management activities. In the specific implementation process, it is necessary to start from the perspective of customers. For example, through big data analysis of users' electricity consumption habits and other aspects, more constructive Suggestions can be provided for users to better save electricity. In addition, in this process, through the construction of the power system database, the power marketing management of the business to conduct a comprehensive analysis, find out the crux of the power marketing management work to achieve more diversified development.

4. Conclusion

Because electric power enterprises need to provide a regional power supply in their daily operation, and some accidents often occur in their long-term use. Electric power enterprises can conduct data analysis through the power consumption situation and operation failure in each region in history, and then strengthen the power grid investigation in each region in the period of similar situation, to ensure the power supply situation in the region, and summarize the carrying capacity of different regional power grids, laying the foundation for the later persistent service marketing. In short, in the process of grid operation continuously satisfying customers' needs, a large amount of customer usage data is generated. By using modern technology to analyze huge data volume, we can provide more accurate services for different customers to meet the needs of different customers. And by understanding the customer's consumption habits and then analyzing the customer's attributes, paving the way for other marketing activities in the later stage. Therefore, the analysis of grid marketing management based on big data is of great significance.

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