Research on the Development Strategy of China's Electric Power Enterprises under the Background of Innovation Drive

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Abstract. The report of the 20th National Congress of the Communist Party of China pointed out that improving the scientific and technological innovation system, stimulating innovation vitality, accelerating the implementation of innovation-driven development strategies, promoting the deep integration of the innovation chain, industry chain, capital chain, and talent chain, opening up new fields and new tracks for development, and constantly shaping development New kinetic energy and new advantages. This paper studies and sorts out the new opportunities and existing problems of electric power enterprises, and analyze the necessity of adopting a diversified strategic development. The study believes that under the situation of continuous advancement of power reform, whether the development strategy adapts to the situation of the times will have a direct impact on the economic and social benefits of power companies.

1. Introduction

The General Secretary Xi Jinping emphasized in the report of the 20th National Congress of the Communist Party of China, "We must insist that science and technology are the primary productive forces, talents are the primary resource, and innovation is the primary driving force, and we must implement the strategy of rejuvenating the country through science and education, the strategy of strengthening the country with talents, and the strategy of innovation-driven development. The majority of power companies can only insist on only when innovation is placed at the key core can we continuously expand new space for development, shape new advantages for development, cultivate new kinetic energy for development, and grasp the winning way in realizing the transformation of energy and power and the goal of "dual carbon".

2. Fully understand the significance of technological innovation

Technological innovation is the core driver of high-quality development. The report of the 20th National Congress of the Communist Party of China pointed out that high-quality development is the primary task of comprehensively building a modern socialist country. To promote the realization of high-quality development, we must unswervingly implement the new development concept, firmly grasp the initiative of technological innovation, constantly solve development problems, strengthen development advantages, and inject strong endogenous power into promoting high-quality development.

Scientific and technological innovation is the fundamental way to realize the energy revolution. The proposal of the "double carbon" goal has endowed the energy revolution with a new mission and connotation. If we want to promote the low-carbon transformation of energy, and then effectively promote the energy revolution [1], we must rely on the core driving force of technological innovation. From the perspective of the enterprise itself, it is necessary to make precise efforts in the development, transformation, application and promotion of cutting-edge core technologies; The industry-university-research alliance is used as a carrier to promote the application and development of a number of disruptive technologies, key core technologies, and common technologies.

3. Definition of Core Concepts and Theoretical Basis

3.1 Core Competence Theory

In the 1990s, management scientists Prahalad and Hammer proposed the concept of core competence: core competence refers to the ability of various elements within a comprehensive enterprise to adapt to different forms of production methods and production levels. Core capabilities come from unique corporate assets, human resources and structures, which are difficult for competitors to imitate. While product development and service improvement are in progress, core competencies are also undergoing dynamic changes. Especially in

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today’s society where the domestic business marketization is deepening and the international market is deeply integrated. The boundary blurring and homogenization of core competencies are increasingly demanding the content of core competencies. Only by actively innovating the theory of core competence can we formulate an enterprise development strategy that matches the core competence with changes in market demand.

3.2 Value Chain Theory

Michael Porter mentioned in his book "Competitive Advantage" in 1986 that the integration of all the behaviors of any enterprise in the business link is the value chain. According to the division of enterprise activities by the value chain theory, the basic activities of the enterprise include production, post-production and sales, and the auxiliary activities of the enterprise include enterprise implementation, manpower, and technology. The former can directly create economic benefits for the enterprise, and the latter indirectly affects economic benefits through the former. According to the latest research conclusions, the value chain has already extended to a series of external related links such as cooperation and competition among enterprises, relevant policies of government organizations, and customer needs.

4. Analysis of current power industry environment

4.1 Development status of China’s power industry

Since the reform and opening up, although the electric power industry has continued to grow and develop, it has always had extremely high monopoly barriers and low market activity, which is not conducive to the healthy development of the electric power industry. In 2015, the government introduced a new round of electricity reform plan, intending to gradually break down monopoly barriers and activate the entire electricity market. However, by analyzing the current situation of the electric power market, the situation faced by electric power enterprises has become more and more severe. In recent years, due to the impact of supply-side reforms in the power industry, the growth trend of the national power generation installed capacity has shown signs of slowing down, but it still maintains a relatively rapid growth rate higher than the growth rate of electricity consumption.

4.2 Current power enterprises are facing various challenges

On the one hand, there are multiple challenges in the external environment of the enterprise. Taking Henan Province in China as an example, on the one hand, affected by multiple factors such as the epidemic and the deepening of electricity reform, the power market situation is changing, the supply structure is changing profoundly and rapidly, electricity prices and power generation hours continue to decline, and coal prices continue to soar. The pressure continues to increase, and the operating and development environment for power generation companies is becoming increasingly severe. On the other hand, with the proposal of the "3060" goal, a new energy revolution has been set off again. Coordinating the development and security of new energy sources poses an important challenge to the work on the energy consumption side. On the one hand, both centralized and distributed are required to develop distributed new energy at the terminal and increase the proportion of new energy generation; On the other hand, demand-side resources should be developed and utilized actively to promote the interaction between source and network, and to promote the efficiency of energy utilization to ensure system security.

5. The Necessity of Diversified Development of Electric Power Enterprises

The diversity of the market requires the diversified development of electric power enterprises. The implementation of China’s "dual carbon" strategy will provide an important driving force for the new growth of the domestic economy in the post-epidemic era, and will carry out a large-scale upgrade of the existing industrial structure, energy structure, and transportation structure, which will give birth to construction investment, transportation, Construction of new energy infrastructure supporting facilities such as photovoltaics, biochemistry, and emissions. Electric power companies must seize opportunities and get involved in the "dual carbon" strategy and diversified business under the premise of focusing on the main business of electric power.

Realistic constraints require the diversified development of electric power enterprises. The central position of the power industry in the national economy will always generate related emerging businesses, such as new energy, energy-saving services, electric energy replacement, energy storage, client equipment maintenance, electric vehicle industry services, etc. Electric power companies have already been more or less involved in Among them, a certain degree of diversified operation has been formed. In this case, power companies should continue to adhere to diversified development.
6. The implementation path of diversified development of electric power enterprises under the background of innovation-driven development

6.1 Accelerate the drive of innovation and complete the transfer of core competencies to new business areas

Increase investment in scientific and technological innovation, and stimulate the development momentum of enterprises through technological innovation. The first is to strengthen organizational leadership and resource allocation for scientific and technological innovation, establish the strategy of revitalizing the enterprise from the institutional level, formulate scientific and technological innovation project plans from the height of strategic planning, strictly distinguish technological innovation and technological transformation, and effectively improve the company's scientific and technological innovation management level; The second is to vigorously increase the investment in special research and development funds, and increase the proportion of capital investment in scientific and technological innovation; the third is to establish a reward mechanism for scientific and technological innovation and a salary tilt mechanism for high-tech and high-skilled talents, so as to stimulate the enthusiasm of front-line technical personnel to actively carry out technological innovation and patent innovation; The fourth is to give full play to the platform role of the Energy Technology Research Institute, accelerate the process and depth of industry-university-research integration, increase scientific research cooperation with external institutions[4]. The fifth is to establish and improve the protection and transformation mechanism of scientific and technological achievements, incubate scientific and technological enterprises in a timely manner, and strive to realize the transformation of achievements. Strengthen business model innovation, and accelerate the pace of enterprise transformation and development with a novel development and cooperation model. Apply Internet means and thinking, innovate the "power sales +" power service combination marketing model, and seize the province's electricity sales market share. The sixth is to establish enterprise informatization construction. There must be a planned and organized business information system covering all major business areas of the company, and gradually realize "smart filing", "smart operation and maintenance" and "smart office", gradually Build "smart construction sites", "smart power plants", and "comprehensive smart energy service cloud platform" to optimize management efficiency and refinement level with informatization, drive innovation and upgrading of various management tasks, and provide support for the company's operation and management.

6.2 Carry out digital operations based on the "Internet + marketing" model

First, while continuing to improve the traditional offline service mechanism of the electric power business hall, relying on the Internet, vigorously promote the online business model, enrich and intelligentize customer service methods and content, and build an all-weather three-dimensional business service network. For example, using online payment methods such as WeChat and Alipay or scanning the QR code of the electricity bill for electricity bill payment can make the payment of electricity bills more convenient for the majority of electricity customers, and at the same time effectively reduce customer service costs. Second, through combing and analyzing the basic data of electricity customers such as electricity consumption, electricity consumption behaviour, warranty status, and complaints, a customer portrait of each electricity customer is generated, and customer characteristics are intuitively described, so as to accurately grasp customer needs. At the same time, through data mining technology, different power marketing strategies are configured for different types of customers to improve power marketing and service levels. Thirdly, in accordance with the working concept of "using data to speak, using data to manage, using data to make decisions, innovatively build an operational data monitoring platform and adopt advanced data processing technology, focusing on online intelligent management of data collection, business analysis, index monitoring, transaction screening, problem supervision, benchmarking analysis, etc., through daily transaction supervision to realize core business process monitoring, in-depth analysis of business detailed data, and professional management Standards, discover business weaknesses in a timely manner, effectively guide and assist professional departments to focus on management improvement based on business changes, and ensure that the digital operation of the "Internet + marketing" model achieves the ultimate goal.

6.3 Use capital operation to strengthen main business advantages and expand asset scale

Strengthen the concept of market value management and enhance the ability to return capital. Optimize and improve the company's credit rating, achieve AAA rating, use capital to attach technological innovation attributes to the company's assets, look for investment opportunities in technology innovation enterprises related to the power industry, moderately participate in equity investment in upstream and downstream businesses of the industrial chain, and actively explore national policies. Under the new requirements, the financing cooperation model with professional financial institutions will give full play to the platform role of the Energy Technology Research Institute to cultivate and incubate new technology-innovative enterprises, so as to broaden financing channels, innovate financing methods, and strive for greater return on investment and market value enhancement. Continue to improve the scientific and technological research and development system,
deepen the reform of scientific and technological evaluation, increase investment in scientific and technological innovation, and scientifically and systematically target scientific and technological innovation through the establishment of a correct evaluation mechanism. R&D projects, R&D investment intensity, scientific research results, transformation degree and other indicators are quantitatively evaluated to stimulate the entrepreneurial vitality of scientific research personnel and improve the transformation and industrialization level of scientific and technological achievements [5]; adhere to the goal orientation, focus on strengthening scientific and technological exchanges and cooperation, establish and an open cooperation mechanism for power generation companies, key universities and scientific research institutes to share scientific and technological resources, concentrate all forces, gather the best resources, continuously improve the core competitiveness of enterprises, and seize the new track of future industrial development.

6.4 Focusing on Talents Leading and Leading to Consolidate the Core Foundation of Innovation and Development

In the new era, innovative talents play a key role in the development of enterprises and the improvement of core competitiveness. Therefore, electric power enterprises should improve the talent training program in line with the new era. First, keep the enthusiasm for innovation in the workplace. With the increasingly fierce competition among enterprises in the market, especially the employees of electric power enterprises, in order to be able to stand out in the jobs full of talents. To take advantage of the advantages, the human resource management department of electric power enterprises should pay attention to the cultivation and use of innovative talents, and formulate a scientific and perfect learning and training system for post employees. Formulate career plans for employees that are compatible with the company's development goals according to the company's development strategic planning goals and development directions. At the same time, it is necessary to formulate a sound learning and training system based on the employees' own working ability. A scientific and reasonable learning and training system needs to incorporate innovative training concepts, and continuously improve employees' active innovation awareness during training, so as to subtly cultivate employees' innovative awareness and ability, as well as the concept of lifelong learning. Power companies should adopt methods such as training assessment and learning evaluation to ensure the effective implementation of the training system, and carry out targeted training work according to the job training needs and ability levels of employees, strictly implement the training feedback mechanism, and improve power companies.

7. Summary

The sound development of electric power enterprises can provide reliable power resource support for economic development, and play a key role in the development of enterprises in various fields. With the continuous implementation of the concept of innovation-driven development and the formulation of the national "double carbon" goal, the reform of the power industry will increase, and the profit pressure faced by power companies will gradually increase. Under the trend of new energy, new technology, and new industry development, at present, the profit and operation mode of the power industry are undergoing profound changes, and the integration of industrial chain resources is the general trend. According to the actual situation of the company, innovate the business model and enter the new market. It is believed that with the conversion of new and old kinetic energy and the continuous increase in power reform, under the guidance of the correct development strategy of power companies, the optimal allocation of resources in power companies will be realized, the service capabilities of existing resources will be effectively enhanced, and the overall operating level of power companies will be effectively improved. Promote the management level, customer service ability, brand name and technological innovation ability of power enterprises, support the implementation of diversified strategies and provide better security for social power supply[6].

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