

## **RESEARCH ON THE REALIZATION MECHANISM OF THE KEY CORE TECHNOLOGY CAPABILITIES OF SPECIALIZED AND SPECIAL NEW ENTERPRISES**

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### **ABSTRACT**

As China is currently facing technology bottlenecks, the transformation and development of key technologies are imminent. As a typical organization of breakthroughs in key core technologies and an important carrier of the national innovation-driven development strategy, how to achieve breakthroughs in key core technologies and the study of its intrinsic mechanism have become indispensable links. Our investigation and study revealed that the internal development mechanism of breakthroughs in the key core technologies of specialized and special new enterprises is often limited by the depth and breadth of policies, the weakness of the overall industrial chain, and backward enterprise management models. Based on the above problems, mechanism exploration from the macro, meso, and micro perspectives will help enrich the theoretical system of key core technologies and provide new development perspectives for the transformation and upgrading of specialized and new enterprises in this new situation.

**Keywords:** specialized and special new enterprise; key core technologies; mechanism exploration

### **1. Introduction**

Currently, the world is facing the enormous challenge of reverse economic globalization, the global industrial chain is facing a crisis of remodeling, and the instability and uncertainty of economic development have accelerated the evolution of a new round of technological revolution and industrial transformation. As a late-developing country in technological innovation, China's comprehensive innovation capability has significantly improved in recent years, with breakthroughs in key core technology areas such as the Beidou satellite navigation system, high-speed train traction system and 5G mobile communication technology. However, China's pattern of being controlled by others in key core technology fields has not fundamentally changed. For example, the mass production technology of the EUV lithography machine, as an

important tool for loading chips, is mastered by the Dutch company ASML, and the United States has accelerated chip restrictions on China, which have all become constraints. The risk challenges of China's technological development. This is mainly because China's innovation model of key core technologies is still focused on secondary innovation and integrated innovation, with few independent innovations, no opportunity to expand into new industrial formats in breakthroughs in key technology areas, and a lack of external guidance. Forecast and planning of the development trend of technology flow in the market. Compared with general technologies with strong substitutability, key core technologies have stronger social attributes and national public security attributes. According to relevant data, enterprises that have achieved development breakthroughs in key core technologies in recent years have not only increased their position in the economic wave but also increased their role in the economic wave. Therefore, it is imperative to accelerate the exploration of the development path of high-level technological independence and the self-reliance of specialized and special new enterprises, thus building bridges for more specialized and special new enterprises to take root in economic development. Based on the current status, many studies on the upgrading of key core technologies of specialized and special-new enterprises have emerged in an endless stream, mainly focusing on the innovation of technologies and the extension of existing breakthrough technologies, in an effort to comprehensively stimulate the vitality of multiagent value cocreation. In their research, scholars such as Shuwen Li [1] proposed single breakthrough to integrated design, interactive value cocreation, and triggering the enterprise to achieve breakthroughs by establishing organizational identity and orchestrating technical resources, but most of them focused only on the value results of key core technologies. In addition to focusing on the technology level, the tax system, innovation policy path, industrial chain, enterprise management model and other factors also play indispensable roles in the promotion of key core technologies of specialized and special new enterprises. The path to achieving breakthroughs in the overall key core technologies of specialized, special and new enterprises is inseparable from the support of important factors such as the macroscopic background conditions of policy incentives, the mesoscopic conditions for the strengthening and improvement of the industrial chain by enterprises, and the microscopic conditions for the innovation of internal management models in enterprises.

## **2. Problems encountered in the promotion of key cores of specialized and special-new enterprises**

### ***2.1 Limitations in the depth and breadth of policies***

Upgrading the key core technologies of specialized and special new enterprises involves long-term and complex systems engineering. From the perspective of the tax system, to ensure the survival and development of specialized and special new enterprises, the State Taxation Bureau

issued the “Announcement on Relevant Income Tax Policies for Supporting the Development of Specialized and Special New Enterprises” in 2020. The CITRs for special and new industries will enable relevant specialized and special new enterprises to enjoy preferential tax policies such as consumption taxes and real estate taxes, thereby escorting the investment of enterprises and creating a better tax environment. Based on the differences in taxation and development prospects, all enterprises are divided in more detail. If the same tax support is provided to all enterprises, it is easy for some enterprises to use specialized, special and new enterprises to seek corporate interests, and some enterprises can pay taxes. Specialized and special new enterprises have not enjoyed the preferential policies they should have, or the policies are quite different from their actual needs, and the corporate environment is prone to be numerous but not proficient and a mixed bag of fish and dragons. From the perspective of an innovation system, the development level of key core technologies is an important factor that constrains the overall and partial effects in the innovation chain and determines its performance. Moreover, the level of innovation capability is also one of the decisive factors in the promotion of key core technologies. Previously, the State Intellectual Property Office and the Ministry of Industry and Information Technology jointly issued "Several Measures for Intellectual Property Rights to Facilitate the Innovation and Development of Small and Medium-sized Enterprises of Specialized and Special New Enterprises". Measures to assist in the innovation of patented products. Through the strengthening of the integration of policies, support and convenience will be provided for the innovation and development of specialized and special new enterprises, but there is a lack of a new exchange mode that allows enterprises in the R&D of similar technology fields to carry out talent exchange and technical cooperation to achieve innovation leaps. In addition, China's specialized and new enterprises are uncertain about specializing in core technologies and are susceptible to changes in market directions, talent flow, etc. The "market for technology" strategy has achieved certain results in some technologies, but the acquisition of core and key technologies through purchase and exchange is not enough to support the subsequent development and operation of the enterprise. A survey showed that China's specialized and special new enterprises are mostly private enterprises. They imitate first and then perform slight differentiation and improvement to win a short-term market opportunity. The circulation and applicability of innovative technology products are relatively limited, and the duration generally does not exceed 15 days. In 2014, due to the lack of coverage and implementation of policy support, most policies contained only rough and general development plans for enterprises and failed to formulate sustainable, highly stable development plans suitable for the development of specialized, special and new enterprises from an overall perspective. As a result, uncertainty has been created about the future development of key core technologies of specialized and special new enterprises. In addition, the policy support provided by different departments at different levels and in different regions varies, causing practical problems such as

the duplication of work or a lack of resources. Weak policy implementability and coherence will easily make implementation difficult and costly. Therefore, it is urgent to improve policies such as the tax system and the innovation system and to create a macro environment suitable for the development of specialized, special and new enterprises with high-quality policies.

### ***2.2 The overall development of the industrial chain is uncoordinated***

The improvement of the industrial chain is an important part of helping the high-quality development of specialized and special new enterprises and ensuring the upgrading of key core technologies. At the same time, the safety and stability of the industrial chain are also key for a smooth economic cycle. The report of the 20th National Congress of the Communist Party of China (CPC) also proposed supporting the development of specialized, special and new enterprises and focusing on improving the resilience and safety level of the industrial chain, which shows the importance and necessity of developing the industrial chain. The industrial chain is a chain-like association between various production departments that is objectively formed based on certain technical and economic connections and time-space layout relationships. From the overall perspective of the industrial chain in the context of the general environment, the development of specialized and special new enterprises should comprehensively consider whether to meet the long-term needs of industrial chain development in light of the local resource endowment and supporting facility conditions. Some enterprises lack the actual needs when building the chain. Therefore, imitating trends among enterprises has resulted in serious homogeneous competition among enterprises. In addition, from the perspective of enterprises' own industrial chain development, the development of most specialized and special new enterprises in China has gradually realized the key technologies that should be vigorously developed in each industry. However, due to the lack of establishment of the concept of a global industrial chain, the key technologies that need upgrading have been analyzed. The research did not adequately cover all the upstream, midstream and downstream links of the industrial chain, the overall trend of industrial development was not grasped, the allocation of R&D resources was uncoordinated, and some enterprises mainly focused on the part of the production chain that earned a relatively large proportion of profits. As a result, the further dispersal of limited manpower, material and financial resources has led to a situation in which the industrial chain appears to be complete on the outside but is actually short on the inside. The lack of support for core products and key technologies further exacerbates the weakening of the industrial chain. Therefore, it is important to coordinate and plan the overall development of the industrial chain.

### ***2.3 Backward enterprise management model***

The enterprise management model is the enterprise culture development and management operation model. In focusing on the changes in market segments and identifying the development

direction of key core technology enhancements, specialized and special new enterprises need to establish a matching enterprise management model. First, the cognitive ability and management strategy of enterprise managers are critical. Misjudgment by enterprise managers is prone to cause a mismatch between the expected operation and development model and the current status of enterprise development. For example, Nokia, a mobile phone company that once occupied an absolute advantage of 40% in the national mobile phone market, was facing the impact of a series of innovative system products derived from the smart age. It is believed that the Symbian system can withstand any competition and support the development of newcomers. "''''''''''''''''s contempt for the smartphone system, the passive attitude of maintaining the step-by-step approach, and the neglect of the promotion of the importance of key core technologies, which eventually led to the company's elimination in the smartphone market. This typical case shows the cognitive ability and the importance of enterprise managers and technology R&D personnel." Judgment of the market prospects of product development is a stabilizer of the long-term development of an enterprise, which further confirms that the continuous innovation and upgrading of key core technologies are the foundation for specialized and special new enterprises to enhance their market competitiveness and maintain their vitality. In addition, under the comprehensive influence of the development scale, capital operation, corporate culture and other factors, the plans of "specialized, special and new" enterprises are mostly formalistic without implementation, and the development model of closed-loop management is prone to occur, which hinders the development expectations of enterprises. The actual situation is inconsistent, or large deviations affect the overall development of the enterprise, which is mainly reflected in the poor interaction between the higher-level responsible department and the subordinate executive departments, the execution departments each performing their own duties, and the lack of collective awareness in the work, which makes the implementation ability low. This resulted in a large deviation between the plan and the actual situation and the failure to form a benevolent management and operation system. The reason is that some "specialized, special and new" enterprises lack the mechanism to strictly implement the expected planning and assessment. In addition, today's most specialized and special new enterprises find it difficult to achieve breakthroughs in key core technologies. The reason is that they often neglect the support of the basic research system and the importance of formulating long-term plans, while technology R&D and outcome innovation still emphasize short-term economic benefits and play a critical role in the overall situation. At present, the long-term layout and construction of a complete basic scientific research system have not been carried out. In summary, the cognitive ability of enterprise managers, the lack of assessment mechanisms, and the lack of long-term planning have caused the backwardness of enterprise management models, making it difficult for most specialized and special new enterprises to upgrade their key core technologies.

#### ***2.4 Intrinsic mechanism of the upgrading of key core technologies of specialized and special***

*new enterprises*

The purpose of national policy is to look at problems from an overall perspective, formulate plans from a holistic perspective, and promote development with a new positioning. This is an accelerator that stimulates the development of enterprises and realizes the development of key core technologies of specialized, special and new enterprises. The overall development of key core technologies of specialized and special new enterprises is inseparable from the strong support of the state government. The implementation of policies closely aligned with the development of enterprises is a systematic, long-term and complex project. Improvement has greatly promoted the progress of specialized, special and new enterprises and further guided enterprises to find breakthroughs in key core technologies. Therefore, all regions should actively implement national policies and, at the same time, further improve according to local conditions.

A well-established tax system has a positive guiding effect on the upgrading of key core technologies of specialized and special new enterprises. The level of enterprise development and the scale of capital flow are uneven; as a result, various enterprises do not receive actual support from tax and welfare policies. Specifically, tax refunds can be used [2]. Given that different types of specialized and new enterprises have different innovation needs and capital scales based on their key core technologies, reserve tax rebates can better protect the needs of enterprises with a diversified economic structure, and the cash flow generated by this measure can be used more for R&D and innovation and to coordinate most of their development needs. To address nonuniform classification standards and unbalanced development, it is necessary to carry out more stringent classification on the standards of special-novel enterprises. The classification can be carried out according to the development fields and the markets to which they belong, and then the special-new enterprises can be classified based on the method of extracting common factors. The specialization, specialization, specialization and innovation ability of the enterprise should be further divided so that certain policy support can be given based on the specific needs of different enterprises for the development of key core technologies and the existing funding scale. After adhering to strict classification standards, the intensity of policy support is more targeted and scientific than that of most diversified, specialized and new enterprises.

In terms of innovation systems, enterprises can be encouraged to adopt the single-point breakthrough method to achieve efficient breakthroughs through planning, implementation, summary, evaluation and replanning. The plan is mainly focused on the realization of single technological breakthroughs from multiple ports, such as the R&D end and the application market end, and then from individual breakthroughs to integrated design and original innovation based on a summary of integrated innovation experience. At present, when China's key core innovation technologies in most fields are controlled by other countries, we can escape the narrow thinking space of imitating the technologies of other countries, absorb the common

attributes of the advanced technologies of various countries, expand the scope of their extension, and achieve the goal of a technology with a vertical depth and a vertical width. Comprehensive mining and development are needed to achieve innovative application from one field to multiple fields. On the other hand, the exchange of technology and innovation talent among specialized and innovative enterprises with similar or the same R&D direction can be encouraged to reduce the homogeneous competition among enterprises and the loss of technology-oriented enterprises due to brain drain and lack of capital resources for most SMEs. To address the issue of R&D interruption in the middle, against the background of a scarcity of innovative talent, we must not only vigorously cultivate and tap innovative talent but also realize the transition from series to parallel connections of innovative talent, precisely grasp the market orientation and cultivate innovative talent. In addition, a reward mechanism can be introduced. Some extra rewards can be given to companies that have multiple breakthroughs in key core technologies and have a good development trend. Similarly, support is appropriately reduced for companies that only enjoy policy preferences but have no actual development and only seek the gimmick of specialization and new technology. This can better motivate enterprises to pay attention to the upgrading of key core technologies and improve their own innovation capability to enhance their core competitiveness.

### **3. Policies enable technology transformation and upgrading**

After the government has adjusted and improved relevant policies, it is critical to further implement the policies so that all types of enterprises can truly enjoy the policy benefits. In response to the development problems of low policy coverage and low implementability in some areas, the government should actively pay attention to the dynamic development of specialized and special new enterprises in the region and urge the relevant responsible departments to make layout adjustment policies based on the development status of the R&D capabilities of local specialized and special new enterprises. For example, some small and medium-sized enterprises lack resources but are unable to perform research and development on key core technologies. The direction of the enterprise is a breakthrough concept, while some large enterprises consume too many resources but are complacent and insufficient in their development. Therefore, the government should formulate strategic objectives suitable for the development of local enterprises and rationally coordinate them according to short-term development indicators and the overall layout for long-term development. The allocation of resources such as funds, talent, and technology of enterprises should try to bridge the large differences among enterprises and enable enterprises to better complete the transformation and upgrading of key core technologies after enjoying the due policy benefits.

### **4. Focus on the core issues of the industrial chain**

For the development of specialized and special new enterprises, it is necessary to pay attention to the issue of resource allocation among other enterprises from the perspective of the overall industrial chain and to focus on improving the internal industrial chain of specialized and special new enterprises and establishing overall planning objectives.

#### ***4.1 Coordinating industrial layout***

The establishment of an industrial development research and analysis framework from the perspective of the overall industrial technology chain, the selection of an appropriate geographic environment, and the consideration of local resources are decisive factors for the development of specialized and new enterprises. In addition, a high-quality innovation environment, natural resource endowments and perfect public infrastructure create a good development environment for the specialized, special new small giant industry. According to Lu Xin [3], scholars such as et al. have shown that a well-developed transportation road network can reduce the transportation operation costs of specialized and new enterprises, improve production efficiency and promote technology research and development. Second, the distribution of surrounding colleges and universities brings knowledge and talent, and the positive knowledge spillover benefit promotes the upgrading of key technologies for some enterprises. The selection of an appropriate surrounding environment is of great benefit to the promotion of key core technologies of specialized and special new enterprises. In addition, regarding the uncoordinated layout of enterprise R&D resources, the overall development direction of specialized and special new enterprises can be grasped according to the development prospects and stability level of the supply and demand chain, value chain, enterprise chain and space chain in the industrial chain, and through layout adjustment. To improve this problem, the pole-core space structure can be adopted first, and industrial clusters with point-axis and network space structures can be formed through the polarization and diffusion effects of growth poles. From the perspective of industrial clusters, the development of vertical industrial clusters and horizontal industrial clusters [4] can be combined. Specialized, special and new enterprises should actively integrate into industrial clusters, establish close cooperative relations, and apply the principles of technological complementarity and similarity in R&D cooperation technology. Based on the principle of reciprocity, the advantages of the entire industry chain of technology can be created, complementarity and mutual benefits in resource supply can be realized, and cooperation and breakthroughs in key technologies among enterprises can be promoted. At the same time, the advantages of the industrial clustering effect are used to reduce the production input costs of enterprises, the sharing of local common infrastructure construction, the reduction of information asymmetry in the market and the passive situation in which some small- and medium-scale specialized and new enterprises have been at the low end of the industrial chain for a long time. This is conducive to the better application and development of technology invention patents that



rely on the industrial chain, which can form the growth poles of enterprise development, enhance the core competitiveness of enterprises in the overall industrial system, and reduce the unfavorable situation caused by homogeneous competition.

#### ***4.2 Rational allocation of industrial resources***

In response to the uneven coordination of the internal industrial chain of specialized, special and new enterprises, the comprehensive improvement of the industrial chain is not a matter achieved overnight but rather a long-term, systematic project. To this end, enterprises should formulate policies suitable for the consolidation and improvement of the industrial chain as soon as possible. To achieve a long-term plan for the steady development of the enterprise's key core technologies and to establish a global awareness of overall development. Instead of just focusing on the part with higher returns in the industrial chain, the government should coordinate resources in various fields and improve the collaboration and division of labor mechanisms. A platform layer with relatively complete infrastructure [5] can provide services such as calculations for the supply chain and product quality monitoring. At the enterprise application layer, it can improve and optimize the raw material procurement plan, supply chain management and technology and provide specific technical standards at the scenario layer. At the same time, all specialized and new enterprises are required to clearly understand the positioning of their own enterprise's technology R&D direction and strive to develop and extend product functions in different technical fields in the industrial chain so that each end of the industrial chain can have specific strategies and goals for its operation. At the same time, we must coordinate the allocation of corresponding production factors in each field to achieve more equal resource distribution and more efficient work operations in each department. Digital technology can also be introduced [6] to enable enterprises to make full use of digital technology during the digital strategy window period to realize the transformation of the industrial chain, build the digital industrial chain, and better realize R&D and the application of key core technologies in the system to improve overall competitiveness.

#### ***4.3 Improve the internal management model of the enterprise***

To adapt to rapid economic and social development and the upgrading of core technologies, the enterprise management model, as the basis for the overall core technology development of the enterprise, is also making adjustments and changes accordingly. In particular, senior managers, as the leaders of the organizational structure in the enterprise management model, play a critical role in their thinking. Knowledge level will have an important impact on the formation of enterprise capability. The capability cognition of top managers of specialized, special and new SMEs refers to the ability of top managers to mobilize skills, knowledge, values and attitudes, which is an important factor supporting the specialization, refinement, characteristics and novel

development of enterprises. Diagnostic ability, innovation ability that is not easy to imitate, and the ability to judge the prospects of special technologies [7]. Information on the market investment, enterprise management, and talent cultivation programs of other enterprises in the same field and related fields is collected and summarized so that learning and reference can be facilitated for enterprise managers to make decisions to enhance the development of specialized and special new enterprises after understanding the overall dynamic changes in the technology field. Strategic decision-making and competitive advantage can be expanded through dynamic innovation in response to complex economic environments. In addition, enterprise personnel also need to learn and improve their technological innovation absorptive capacity. In the theoretical analysis of the mechanism of innovation knowledge absorptive capacity, it is mentioned that [8] specialized and special new enterprises need to enhance the cognitive literacy of innovation, the ability to transform objective theoretical knowledge into internal practical operation, and create value through absorbing innovation knowledge to be more effective. To effectively maintain the dynamic ability of the core competitive advantage, as a member of the enterprise management model, one should actively improve one's innovation knowledge ability and master various abilities to stimulate the improvement of the overall technological level of the enterprise and better promote its long-term development. development.

#### ***4.4 Build a mechanism for the integration of internal and external resources***

Enterprises should integrate existing resources by precisely establishing management departments in different fields for small but comprehensive management. For example, setting up a scientific research financial management department in terms of finance can more comprehensively grasp the market direction and formulate directions for the improvement of key scientific research technologies. Specific matters such as the investment proportion of each R&D funding enable each department to have greater goal consciousness to achieve efficient execution. After focusing on each work area and long-term planning of the core technology, a strict assessment mechanism is formulated, which is stipulated in a certain work cycle. Finally, the progress of each department in fulfilling the work indicators is evaluated, and the reward and punishment mechanism is used to motivate the members of each department. At the same time, organizational structure and personnel reorganization must be improved. Management personnel alone cannot satisfy the overall requirements of a "specialized, special and new" enterprise. To meet the needs of technological development, enterprises must introduce and train a group of talent with more comprehensive abilities and more refined functions for management. They need to formulate corresponding and effective talent introduction mechanisms and talent introduction mechanisms. Enterprises can purchase innovative talent from third-party human resource service agencies or gather high-quality resources and information from society and universities. Sharing, interaction and synergy can generate the synergy of "1+1>2" [9]. Through cooperation and

coordination with universities and scientific research institutions, we will attract talent from multiple parties. After the introduction of talent, we will also regularly hold staff training classes or organize practical training for enterprises and comprehensively enhance the enterprise by organizing lectures on relevant core professional knowledge and opportunities for study and practice. Overall perception and application ability of technological innovation. At the same time, in today's rapid digital society, the introduction of a new generation of internet digital technology represented by the combination of internet big data and artificial intelligence as a new type of productivity will empower the digital transformation of key core technologies of specialized and special new enterprises and is also beneficial to enterprise organizations. The innovation and reconstruction of management models and business working mechanisms have alleviated the contradiction between talent and wages to a certain extent, prompting more funds to invest in the research and development of key core technologies. Therefore, the reform and adjustment of the management model of specialized, special and new industries is the cornerstone of the upgrading path of core technologies.

## **5. Research and prospects**

In summary, the influencing factors and emerging problems of the development of key core technologies of specialized, special and new enterprises are analyzed from macro, meso and micro perspectives, respectively. [10] The internal mechanism and paths for the upgrading of key core technologies of specialized and special new enterprises are proposed from three levels: first, the incentive effect of the tax system and the innovation system in the national policy should be used, and the overall efficiency of the industrial chain should be strengthened to achieve the intrinsic goal of strengthening the chain and supplementing the chain. The internal management model of the enterprise should be improved to provide a high-quality environment for the development of key core technologies. Reviewing the existing research results, this research has certain limitations. If the conclusions drawn lack the support of relevant examples and objective data and large-scale research on specialized and special new enterprises is too general, we can select the majority of specialized and special new enterprises in the future. Through in-depth analysis and research on relevant cases, while using the text analysis method to propose the internal paths of the enterprise's key core technologies is a feasible measurement method, the research dimension is relatively limited. In the future, research methods such as empirical research and spatial econometrics can be used to investigate the problem in a more comprehensive and multidimensional manner. The intrinsic mechanism needs to be further improved.

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## References

- [1] Li Shuwen, Luo Jinlian, Zhang Zhifei. From positioning double stars to laying out the universe: how can specialised and specialised new enterprises achieve value co-creation with the help of key core technology breakthroughs? [J/OL]. *Nankai Management Review*,2023 1-19
- [2] Hou Wanwei. Tax policy design and enterprise innovation incentives: the impact of VAT tax rebate on enterprise R&D investment[J]. *International Business (Journal of the University of International Business and Economics)*,2023(02):119-136
- [3] Lv Xin, Tang Chengli, Liu Yunlin et al. Characteristics of spatial distribution of national speciality, speciality and new "small giant" enterprises in the Yangtze River Economic Zone and their influencing factors[J/OL]. *Journal of Natural Science of Hunan Normal University*, 2024.1-15.
- [4] GUO Tongmei, LI Qianyun, ZHANG Yue et al. A study on the relationship between digital transformation and innovation performance of speciality new enterprises[J]. *Technological Economy*,2023,42(05):68-78.
- [5] Liu Shuchun,Jin Jie. Digital reshaping of value creativity of speciality and special new enterprises-Theory, mechanism, mode and path[J]. *Research on Financial Issues*,2023(11):3-14.
- [6] Zhang Yuanji, Han Cun. Digital Transformation, Technological Innovation and Market Value of Enterprises: Empirical Evidence from Listed Enterprises with Specialised Expertise[J]. *Statistics and Decision Making*,2023,39(14):163-167.
- [7] Hu Jugui. Exploration of financial management mode of "speciality, speciality and new" enterprises[J]. *China market*,2022,(35):161-163.
- [8] WU Feifei, LUAN Jingjing, HUANG Lucheng et al. Analysis of problems and countermeasures of China's power battery industry under the perspective of industrial technology chain[J]. *Science and technology progress and countermeasures*,2017,34(02):58-63.
- [9] ZHAO Jing, SUN Zejun, CHENG Qiyun et al. How Small and Medium-sized Enterprises Rely on the Development of "Speciality, Speciality and Newness" to Realise Industry Chain Complementary Chain and Strong Chain - A Longitudinal Case Study Based on Digital Generation[J]. *China Industrial Economy*,2023(07):180-200.
- [10] Zeng Xianju, Zeng Kai, Ren Hui et al. Research on the growth of specialised, specialised and new enterprises: overview and outlook[J]. *Foreign Economy and Management*,2024,46(01):62-76.

[11] Ge Pengfei,Huang Xiulu. Digital transformation, innovation knowledge and manufacturing enterprise integration and innovation[J/OL]. *Soft Science*, [2024-03-08]. 1-15

[12] CHEN Yan,GAO Cheng,DU Huilin. A study on the mechanism of the influence of top managers' cognition on Jingyi entrepreneurial ability in speciality and new SMEs[J]. *Science and Technology Progress and Countermeasures*,2023,40(21):151-160.

[13] Ru Xuwei, Zhang Xiaoyue, Zhang Lei, et al. Policy System, Opportunities, Challenges and Paths for Digital Transformation of "Speciality, Speciality and New" SMEs: A Study Based on Shandong Province[J]. *Science and Technology Management Research*,2023,43(23):113-120.