

Development Mechanics and Paths of High-quality Economic Driven by “Specialized, Fined, Peculiar and Innovative” Small and Medium-sized Enterprises in Ningbo

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Abstract: As an important force in Ningbo's scientific and technological innovation, “specialized, fined, peculiar and innovative” small and medium-sized enterprises are of great significance for promoting industrial upgrading and driving high-quality economic development. However, there are still many difficulties in promoting high-quality economic development. This article is based on the characteristics and overall situation of small and medium-sized enterprises in Ningbo city that are specialized, refined, distinctive, and innovative. It accurately analyzes the main problems that enterprises face and solves economic development problems according to the principle of problem orientation. Lastly, it puts forward some countermeasures and suggestions for their development trends.

Keywords: Specialized, Fined, Peculiar and Innovative; Small and Medium-sized Enterprises; High-quality Economic Development

1. Introduction

Ningbo is located in the east of China and belongs to Zhejiang Province, with a unique geographical location. The people of Ningbo have the courage to innovate and challenge, the private economy is developed, and the manufacturing industry has always been its traditional industry. When the new quality productivity has become a strong and new wave in China's economic sea, many individual champions, “specialized, fined, peculiar and innovative” small and medium-sized enterprises in Ningbo are also actively embracing this new wave to show surging vitality and vigorous momentum.

2. Review

2.1 Strong Policy Support

In 2017, Ningbo issued several relevant policies such as the Three-year Action Plan for the Cultivation Project of the “Single Champion of the Manufacturing Industry, conscientiously implemented the special action of the Single Champion enterprise cultivation project in the manufacturing industry and strived to create a Single Champion cultivation atmosphere in the manufacturing industry. The 14th Five-Year Plan for the High-Quality Development of Ningbo's Manufacturing Industry released in September 2021 further clearly stated that by 2025, there will be 100 national-level manufacturing Single Champion enterprises and 600 specialized and new Little Giant enterprises in Ningbo. It is necessary to initially build Three Cities (a city of Single Champions in the manufacturing industry, a leading city of the Industrial Internet, and a city of advanced manufacturing clusters) and Three Highlands (a new highland for global industrial governance, a new highland for international intelligent manufacturing, and a new highland for the integrated development of industrial ecology). In September 2023, the Ningbo Municipal Government issued the Action Plan for Accelerating the Construction of “361” Trillion-level Industrial Clusters in Ningbo (2023-2027). In October 2023, Ningbo issued the Ningbo Action Plan for Accelerating the Cultivation and Development of Future Industries. Policy support is increasing year by year.

Apart from policy support, financial support is also very strong. Enterprises that have successfully created a single champion of the national manufacturing industry and a “Specialized, Fined, Peculiar and Innovative” will be given a subsidy of 3 million yuan, “Little Giant” enterprises will be given a subsidy of 1 million yuan, and a special reward

of 2 million yuan and 1 million yuan will be given respectively after successful listing. Priority support will be given in terms of technological transformation and factor guarantee.

Ningbo has issued a series of policies and documents from the six dimensions of “capital, innovation, talent, digitalization, law, and publicity”. They have carefully selected 10 public service demonstration platforms for “specialized, fined, peculiar and innovative” “little giant” enterprises to carry out all-round services such as improving enterprise innovation ability, providing listing and financing counseling, transforming innovation achievements, empowering digitalization, cultivating high-end talent, providing legal consultation, offering policy guidance, and facilitating resource docking for Ningbo's specialized and special new “little giant” enterprises.

2.2 Thick Foundation

In 2018, the Ministry of Industry and Information Technology launched the cultivation of Specialized, Fined, Peculiar and Innovative “Little Giant” enterprises, and proposed to guide enterprises to transform to specialized, refined, special and new. In 2021, Ningbo launched the identification of municipal-level “specialized, fined, peculiar and innovative” small and medium-sized enterprises for the first time, and 302 enterprises were shortlisted that year; Since then, the number of shortlisted enterprises has shown an upward trend every year, with 413 identified in 2022, 1,143 in 2023, and 257 in 2024 in Ningbo's first batch of municipal-level “specialized, fined, peculiar and innovative” “small and medium-sized enterprises. At present, the total number of “specialized, special and new “small and medium-sized enterprises in Ningbo has reached 2,115. The growing team of “specialized, special and new “small and medium-sized enterprises is gradually becoming the hard-core power of Ningbo from a large manufacturing city to a strong manufacturing city.

2.3 Optimal Mechanism

In 2022, the Implementation Rules for the Management of the Cultivation of High-quality Small and Medium-sized Enterprises in Ningbo (Provisional) was issued. To

coordinate fiscal, tax, financial and other policy tools, and continue to empower key enterprises in technological innovation and digital transformation. Based on a series of policies and documents, public service demonstration platforms was selected carefully. Ningbo provides a full range of services such as enterprise innovation ability improvement, digital empowerment, high-end talent cultivation, legal consultation, and policy guidance for the city's specialized, fined, peculiar and innovative “little giant” enterprises. This practice enhances the coordination and systematization of service enterprises, build a full life cycle echelon cultivation system, realize “reserve a batch, cultivate a batch, and upgrade a batch”, and create a specialized and new “little giant” enterprise group and reserve army with cluster development, industrial chain coordination, and good echelon structure. At the same time, establish a demand resolution mechanism with all-round analysis, project-based management, and closed-loop response to escort the development of enterprises. Ningbo businessmen are proficient in the spirit of craftsmanship, keen insight, and good at capturing business opportunities; In the face of difficulties, be able to innovate. There is not only the craftsman spirit of 20 years only to do a good job of a turbocharger, but also the innovative spirit of tackling the “no man's land” and taking a new path of industry development, which is also the reason why Ningbo's single champion enterprise ranks first in the country. These specialized, fined, peculiar and innovative individual champions have worked intensively and practiced their internal skills in their respective industries, becoming a new force to supplement the chain, strengthen the chain and extend the chain, and become an important force in the future of the manufacturing power.

3. Issues

High-quality development requires enterprises to reach a higher level of innovation, efficiency, sustainability, etc., to improve core competitiveness, increase market share, and create more value for society.

3.1 Unbalanced Regional Development

At present, Ningbo has entered a stage of high-quality development with the main goal of

“quality catch-up, innovation-driven, structural upgrading, green development and common prosperity”. However, the digital transformation of “specialized, fined, peculiar and innovative” small and medium-sized enterprises has diversified and personalized characteristics, and the supply of products and services to meet this demand is insufficient, and the multi-level and differentiated public services to adapt to this situation also need to be improved. At present, most of the dimensions of high-quality development of regional economy for these enterprises focus on the understanding of the improvement of people's livelihood indicators, but do not consider the multi-dimensional attributes of common prosperity and the flow and optimal allocation of various factors.

3.2 Lack of Sustainability for Digital Transformation

Affected by factors such as the uneven development of the digital level of various industries and regions, the insufficient degree of digital application, and the incomplete digital capabilities, the digital transformation of Ningbo's “specialized, fined, peculiar and innovative” small and medium-sized enterprises has the basic cognition and willingness of digital transformation, but the vast majority of enterprises are still in the initial stage of digital exploration, and the willingness and level of digital investment are also low as a whole. However, the number of third-party service providers engaged in digital transformation services is small, the service capabilities are limited, and the shortage of enterprise digital transformation talents, especially the extreme shortage of solution design, R&D, integration, and operation personnel for enterprise digital transformation, is difficult to support the digital transformation needs of enterprises, resulting in insufficient overall digital transformation capabilities.

3.3 Insufficient Ecosystem Synergy

Enterprises must be integrated into the industrial chain division of labor and cooperation system to form a strong industrial chain ecosystem synergy to play the greatest value in promoting the construction of Ningbo's manufacturing industry. At present, there are problems in the industrial chain, such as the lack of organic connection between

upstream and downstream enterprises, the weak technical supporting ability, and the low level of division of labor and cooperation, and the ecological cycle of the industrial chain is not smooth enough, which has an adverse impact on the rebuilding of the industrial chain and the reshaping of the industrial system by these enterprises.

3.4 High Barriers of Entry

At present, there is still a certain industry monopoly in the real economy, and the access conditions for some industries are high, which affects the development and growth of small and medium-sized enterprises to a certain extent. On the one hand, in key national industries and development projects (such as transportation, energy, communications, ecology, agricultural infrastructure and other industries), due to the coexistence of policy restrictions and economic constraints, there are certain entry barriers for small and medium-sized enterprises, and it is difficult for them to survive and develop in the industry. On the other hand, in natural monopoly industries (such as electric power, finance, etc.), due to the limitations of technology, capital, scale, etc., small and medium-sized enterprises naturally have entry restrictions, and it is difficult for them to develop and grow in this field.

4. Methodology

Guided by the new development concept, creating a new development pattern that considers both ecological and economic benefits is an important way to solve the main contradictions in the current society. (See Figure 1 below).

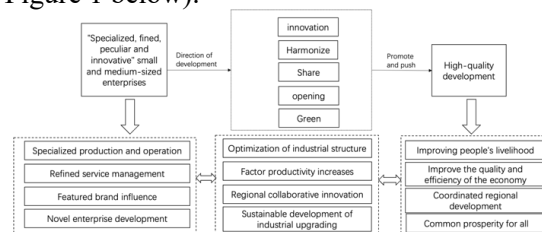


Figure 1. The Basic Logic.

4.1 Policy-driven

The policy drive of Ningbo's “specialized, fined, peculiar and innovative” small and medium-sized enterprises for the high-quality development of the industry involves many factors, including the support policies issued

by the government, innovation incentives, and industrial synergy mechanisms [1-3].

In terms of financial support policies, the government can provide financial support for “specialized, fined, peculiar and innovative” enterprises through the establishment of R&D funds, science and technology innovation funds and other projects to encourage technological innovation and product research and development [4]. For “specialized, fined, peculiar and innovative” enterprises, a series of preferential tax policies have been introduced, and the government may implement tax exemptions, preferential policies, and other policies to reduce the burden on enterprises and promote them to invest more resources in industrial upgrading and technological innovation.

In terms of talent training and introduction policies, in terms of talent subsidy policies, we provide talent introduction subsidies, scientific research personnel incentives and other policies to join “specialized, fined, peculiar and innovative” enterprises. The government encourages enterprises to cooperate with local universities and scientific research institutions to promote the combination of production, education and research. The cross-domain flow of talents is no longer difficult, the key is how to retain talents, Ningbo innovates the system and mechanism, and strives to build a first-class innovation ecology [5]. Ningbo has tried to give key scientific research platforms the right to recommend and identify talents. For example, the talents independently identified by Yongjiang Laboratory can directly enjoy the municipal talent policy, and the talent projects recommended by the best can be directly selected into the municipal key talent project, and they can also implement independent evaluation and recruitment of professional titles, independent management of projects, and independent determination of salaries. With the continuous optimization of scientific research services and the increasingly strong academic atmosphere, talents can be “introduced” and “stayed”. This will be the source of continuous input for Ningbo's industrial development [6].

4.2 Market-driven

Corresponding author should have an asterisk. The development of Ningbo's “specialized, fined, peculiar and innovative” small and

medium-sized enterprises has a role in promoting industrial development, which can promote the vitality of the market, enhance the competitiveness of the industry, and promote the development of the entire industry to a higher level. The agglomeration of enterprises helps to form industrial clusters, strengthen the coordination and cooperation and resource sharing between enterprises. Specialized and special new enterprises are usually characterized by technological innovation and product differentiation and increase market competitiveness by continuously improving the uniqueness of products or services. The development of the enterprise promotes the upgrading of the entire industry, and through the introduction of new technologies and advanced manufacturing processes, the entire industrial structure is promoted to develop in the direction of higher added value and improves the overall level of the industry [7]. As an important part of Ningbo's local economy, their development not only creates employment opportunities, but also promotes the growth of the local economy. By providing more innovative and high value-added products or services, specialized and special new enterprises can meet consumers at different levels and with different needs, and promote the upgrading of the consumer market to a more high-end and intelligent direction.

4.3 Scale-driven

Ningbo's “specialized, fined, peculiar and innovative” small and medium-sized enterprises have a moderate scale, high innovation, and flexibility, which has brought many positive impacts on the scale of industrial development and promoted the diversification and upgrading of the industry. Through the competition of several small and medium-sized enterprises, a healthier market ecology will be formed to prevent the adverse impact of market monopoly on the entire industry. Development is usually more flexible and can quickly adapt to market demand, so it can promote the diversification of the industry, reduce the over-reliance on a single industry, and reduce the risk of the entire industry. Through its flexibility and innovation, it helps to cultivate and promote the development of emerging industries, and pays more attention to innovation, promotes the continuous innovation of the industry in technology,

products, management, etc., improves the overall level of innovation, and increases the competitive advantage of the industry. [8-9] Through the formation of a close cooperation network, improve the overall supporting capacity of the industry, enhance the cohesion of the entire industrial chain, and jointly promote the upgrading of the entire regional industry.

4.4 Technology-driven

Ningbo's "specialized, fined, peculiar and innovative" small and medium-sized enterprises often pay attention to relatively new digital technologies and dare to be the first, so they have made outstanding contributions to promoting the improvement of industrial digitalization level, strengthening information management and intelligent production. Through the introduction of an intelligent production monitoring system, real-time monitoring of data in the production process, improve the real-time control of production status, to adjust and optimize the production plan in a timely manner, by improving the standardization level of products, reduce the variability in the production process, and improve the stability and consistency of production. To improve competitiveness, adapt to market changes, and achieve sustainable development. In terms of industry-university-research cooperation, we actively cooperate closely with universities and research institutions to form a synergy in jointly promoting industry-university-research cooperation, promoting the transformation of scientific research achievements, and improving the level of industrial technology. By continuously participating in international technical exchanges and cooperation in technological innovation, attracting the introduction of international leading technologies, and enhancing the competitiveness of the industry in the global market [10].

5. Suggestions

Through multi-regional synergy and linkage, we will continue to optimize the business environment, support chain owners to play a leading role, improve the independent and controllable ability of the industrial chain and supply chain, and improve the level of integrated development. Accelerate the

formation of the deep integration and development of industrial chains, innovation chains, capital chains, and policy chains, promote the upgrading of innovation chains and industrial chains to the commanding heights, and further build a full-factor, multi-field, and high-efficiency integrated innovation in-depth development pattern.

"Specialized, fined, peculiar and innovative" small and medium-sized enterprises are divided into multiple echelons, and "national single champion enterprises", the cultivation of different echelons from the quantity, quality, volume and energy of enterprises is consolidated, and the reserve army is cultivated and supplemented for enterprises such as "hidden champions" and "little giants".

6. Conclusion

Considering the characteristics of the overall situation of SMEs in Ningbo, it's an effective strategy to promote the high-quality development of Ningbo's economy by "specialized, fined, peculiar and innovative" small and medium-sized enterprises. It is necessary to continue the cultivation of technologically advanced "specialized, fined, peculiar and innovative" small and medium-sized enterprises, guide SMEs through promoting their digitization, and integrate SMEs into the development of industrial clusters.

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