

Research on the Development Path of Enterprise Innovation Empowered by New Quality Productivity

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Abstract: *New quality productivity is characterized by the development of revolutionary breakthroughs in science and technology, innovative allocation of production factors, and deep transformation and upgrading of industries. As a fundamental result of the cross-fusion breakthroughs in science and technology innovation, it emphasizes the value of innovation and creation, and is of great significance to the high-quality development of economy and the implementation of the innovation-driven strategy. Therefore, the article starts from the development connotation of the new quality productivity, analyzes the internal mechanism of the new quality productivity empowering enterprise innovation, and explores the practice path of the new quality productivity empowering enterprise innovation, with a view to providing useful insights for realizing the high-quality development of economy and accelerating the innovation and development of strategic emerging industries.*

Keywords: *New quality productivity, business innovation, political economy*

1. Introduction

Promoting the development of emerging industries in recent years is the practical guidance of high-quality development strategy. At the present stage, in order to face the major challenges of the new round of scientific and technological revolution and industrial change, as well as the complicated economic environment of intensified competition among big countries, China has to actively cultivate the strategic emerging industries, accelerate the formation of new quality productive forces, and strengthen the new dynamic energy of development. As the concrete embodiment of advanced productive forces, the new quality productivity is characterized by high technology, high efficiency and high quality, and it is the fundamental result of scientific and technological innovation cross-fertilization breakthroughs. In order to realize the high-quality development of economy and to break through the current dilemmas and challenges, it is necessary to promote enterprise innovation with scientific and technological innovation in order to construct a new advantage in competitiveness, accelerate the formation of the new quality productivity, and empower the enterprise innovation and development with the new quality productivity (Zhou Wen and Xu Lingyun, 2023)^[1]. In this regard, this paper analyses the internal mechanism of the new quality productivity empowering enterprise innovation from the connotation of the development of new quality productivity, and explores the practical path of the new quality productivity empowering enterprise innovation, with a view to providing useful inspiration for realizing the high-quality development of economy, and accelerating the innovation and development of strategic emerging industries.

2. Connotation of the development of new quality productive forces

2.1 Basic connotation of the new quality of productive forces

The concept of new-quality productive forces focuses deeply on the development and progress of productive forces and their constituent elements, and its reality is reflected in the powerful ability of human beings to adapt, utilize and transform the natural world. From the macroscopic perspective of Marx's theory, productivity and factors of production have always evolved along with the leap of the scientific and technological era and the change of social needs. In the context of the current digital economy, data, as a factor of production with a high level of national economic development strategy, is driving the "qualitative" leap of productivity with unprecedented power (Zhang Lin and Pu Qingping,

2023)^[2]. This change is not only reflected in the rise of data as a new type of production factor, but also in how it complements the integration of scientific and technological innovation resources and strategic emerging industries, together giving rise to a new form of productivity - new quality productivity. The birth of the new quality of productivity is not only the innovation of production factors, but also a profound leap in the development concept and way of thinking. It abandons the disadvantages of over-reliance on resource consumption in the traditional mode of production, and instead relies on digitalized and intelligent data production factors to achieve high-performance and high-quality development requirements. This shift not only marks the iterative upgrading of the productivity development model, but also signals a qualitative breakthrough in the development stage of the whole society. From a sociological point of view, the new quality of productive forces further represents a “qualitative” breakthrough in the stage of social development. As a fundamental result of breakthroughs in the cross-fertilization of scientific and technological innovations, the value of innovation and creativity is emphasized even more, stimulating the spirit of innovation in social groups, and forming a social trend of leading development with “innovation” at its core.

2.2 Characterization of the development of new quality productive forces

In the ideological paradigm of Marx's historical materialism, the development and evolution of the productive forces reveal the basic laws of social development (Ren Baoping and Wang Ziyue, 2023)^[3]. The starting point of new quality productivity is “new” and the key is “quality”. “New concepts and new technologies” lead to ‘high quality and new quality’. New quality productivity focuses on the cultivation and development of strategic emerging industries, and its core lies in considering innovation drive as the key element to promote economic and social progress. Under the guidance of the new development concept, social productive forces, with the power of new technologies, have transformed various production factors into new qualities of high-quality industries, showing unprecedented vitality. Specifically, this process not only emphasizes the breakthrough of key and disruptive technologies, but also makes full use of digital technology and the deep integration of production factors to drive the transformation and upgrading of industrialization and the prosperous development of high-end industries, thus realizing the “leap” of productivity and driving the overall “qualitative change” of the economic industry and social development. “Qualitative change”. Therefore, the development of new quality productivity must have the following three significant features: first, science and technology need to achieve revolutionary breakthroughs, as a powerful driving force to promote the level of productivity development jumped to a new height, giving birth to new quality productivity, completely free from the traditional economic growth mode and the shackles of the path of productivity development; second, the innovative allocation of factors of production has become the key to the optimization of the combination of the formation of new economic structure and economic form, to ensure that the results of technology and technology, and to ensure that the new quality of production. Secondly, innovative allocation of factors of production becomes the key, forming new economic structure and economic form through optimal combination, ensuring that technical achievements are effectively transformed into economic benefits, and accelerating the construction of a modernized industrial system and the process of high-quality development; thirdly, in-depth transformation and upgrading of industries is of vital importance, aiming to equip industrial chains with high-technology, high-efficiency and high-quality characteristics of new quality productivity, and accelerate the construction of a modernized industrial system that is high-end, intelligent, and green, so as to inject a strong impetus to economic and social development.

3. The internal mechanism of new quality productivity empowering enterprise innovation

With innovation-driven development as the core leadership, the new quality productivity has comprehensively and deeply improved the total factor productivity, and injected a strong impetus for realizing the high-quality development of economy and society. As the main body of innovation, the innovative development of enterprises not only provides strong support for innovation-driven development strategy, but also further accelerates the construction of a modernized industrial system and pushes the economy towards the stage of high-quality development. Based on the development characteristics of the new quality productivity, the internal mechanism that empowers enterprise innovation can be divided into the following three dimensions.

3.1 Industrial high-endization

New quality productivity plays an important role in accelerating the transformation of integrated

innovation in the process of promoting industrial high-endization. The key to the “leap” of its qualitative dimension lies in the qualitative change of production factors driven by new technological innovation, a process that profoundly affects the innovation and development path of enterprises (Liu Yang, 2023)^[4]. Specifically, it can be divided into three aspects. First, the new qualitative productivity provides strong support for enterprises to build innovative technology systems. The sharing characteristics of data elements not only change the traditional labor model, but also promote the formation of new innovative technology models by integrating knowledge, technology and information and other basic elements. Relying on the intelligent information platform, enterprises are able to construct the innovation technology system more effectively, which not only enhances the match between market supply and demand, but also improves the technological absorption capacity of enterprises, thus avoiding excessive or ineffective production and significantly reducing the innovation cost of enterprises (Cai Xiangjie and He Zhengchu, 2024)^[5]. Secondly, new quality productivity plays an equally important role in promoting enterprises to absorb external technological resources. With the continuous development of the new quality productivity, the innovation system gradually releases the sharing effect, which enables the sharing and interoperability of enterprise technology resources and information resources. This change not only enhances the information linkage of the enterprise industry chain, but also promotes the dissemination of knowledge and technology diffusion, providing more abundant resources and support for enterprise technological innovation (Zhang Peng, 2024)^[6]. Third, new quality productivity also helps enterprises optimize internal resource allocation. By generating technological spillover effects, new quality productivity promotes the synergistic cooperation of cross-regional innovation groups and forms a resource endowment advantage. This advantage not only improves the efficiency of enterprise resource allocation, but also provides a more solid resource guarantee for enterprise innovation and development (Liu Zhenghui and Xiao Yanxiang, 2023)^[7]. The new quality productivity plays a vital role in promoting industrial high-end, accelerating the transformation of integrated innovation, and injecting new vitality and power for enterprise innovation and development.

3.2 Industrial Intelligence

New quality productivity plays a crucial role in the wave of industrial intelligence, and its in-depth application of intelligent technology has injected powerful kinetic energy into the transformation and upgrading of industries.

Specifically, the new quality productivity not only realizes the comprehensive reengineering and intelligent upgrading of enterprise business processes with the help of intelligent technology, but also greatly promotes the construction and deep linkage of knowledge networks among enterprise subjects on this basis. This process not only optimizes the internal operation structure of the enterprise, but also further promotes the optimization and upgrading of the enterprise industrial structure, prompting the differentiation and restructuring of the industry, which has given rise to a series of new industries, new services, new modes and new business forms (Sun Jiowen and Shi Wenjie, 2023)^[8]. The development of these new industries not only enriches the market supply, but also meets the increasingly diversified and personalized needs of consumers. On the other hand, the intelligent technology on which the new quality productivity is based, with its significant competitive advantages, has become a key force to promote the efficient allocation of innovation factors, close collaboration of innovation subjects, seamless connection of innovation links as well as the accurate matching of market demand. The application of smart technology makes the innovation process more efficient and flexible, and can quickly capture and respond to innovation opportunities in the market. At the same time, the market mechanism has also pushed enterprises to continuously increase their investment in innovation and improve the quality and efficiency of innovation activities. In this process, a vibrant innovation ecosystem is gradually formed, which wins a sustainable innovation competitive advantage for enterprises (Huang Hualing, 2022)^[9]. The construction of this ecosystem not only accelerates the process of industrial intelligence, but also promotes the overall improvement of enterprise innovation ability, injecting new vitality and kinetic energy for the high-quality development of the economy. The new quality productivity plays a crucial role in the process of industrial intelligence, and its deep application of intelligent technology not only promotes the transformation and upgrading of industry, but also promotes the construction of the innovation ecosystem, which provides a strong support for the sustained and healthy development of the economy.

3.3 Greening of industries

The new quality productivity has shown great potential in promoting the greening of industries, and is gradually becoming an important force leading the transformation and upgrading of Chinese industries.

The core concept is to plant green innovation concepts in every aspect of industrial development, aiming to build a new pattern of industrial system in which economic development and environmental protection coexist harmoniously. This process not only provides an inevitable path to achieve a win-win situation for economic development and environmental protection, but also complements the development trend of high-end and intelligentization, jointly promoting the reshaping of industrial system and competitive pattern (Shi Dan, 2018)^[10]. From the viewpoint of the upstream link of enterprises, the strict requirements of the new quality productivity on green and low-carbon and the strategic positioning of data production factors provide a new innovative path to break through the resource bottleneck and realize the green production mode. By optimizing resource allocation and promoting the wide application of clean production technology, new quality productivity not only effectively promotes the in-depth integration and efficient use of eco-efficiency in all types of industries, but also provides strong technical support and guarantee for enterprises to achieve green transformation (Qin Shusheng and Hu Nan, 2017)^[11]. This change not only helps enterprises reduce production costs and improve economic efficiency, but also promotes resource conservation and environmental protection in the long run. At the downstream level of enterprises, the practice of the green innovation concept promotes the establishment of a sound green market, laying a solid foundation for the formation of a new pattern of coordinated development of the economy and the environment. In this process, enterprises not only actively develop green products and build green brands, but also promote the formation of a green consumer culture by publicizing and promoting the concept of green consumption. In the new market environment, green products have gradually won the favor of consumers and market recognition by virtue of their unique environmental attributes and quality advantages, thus promoting the sustainable development of the economy and the environment (Ren Jiamin and Ma Yanji, 2018)^[12]. It not only helps to enhance the market competitiveness of enterprises, but also establishes a good trend of green development in the whole society.

4. The Practice Path of New Quality Productivity-Enabled Enterprise Innovation

Based on the intrinsic mechanism that new quality productivity empowers enterprise innovation through industrial high-end, industrial intelligence and industrial greening, this paper believes that new quality productivity empowers enterprise innovation can be divided into the following three practice paths.

4.1 Innovation Driving Effect

Dynamic capability theory focuses on how enterprises can maintain and enhance their competitive advantages in the fast-changing business environment through the reintegration and optimal allocation of internal and external resources in a highly open organizational environment. This theory points out that enterprises need to rely on three core dynamics, namely, innovation capability, absorption capability and adaptive capability, to promote their innovation and development. Among them, innovation capability enables enterprises to continuously explore new technologies and methods and develop new business fields; absorption capability enables enterprises to rapidly absorb external knowledge and technologies and realize the internalization and integration of technological resources; and adaptive capability enables enterprises to flexibly respond to market changes and timely adjust their strategic directions to ensure sustained and steady development. Meanwhile, the theory of enterprise behavior focuses on the descriptive behavioral analysis of the enterprise, which deeply analyzes how the enterprise is affected by the interaction between external and internal structures in the process of achieving specific business goals, and makes corresponding realistic responses accordingly. This theory provides an important perspective for us to understand the behavioral patterns of enterprises in complex and changing environments.

Driven by the new quality of productivity, the ability of enterprises to absorb external technological resources has increased significantly, and the sharing of technological resources and the interoperability of information resources have become an important support for enterprise innovation and development. By virtue of their keen market insight, enterprises with high dynamic capabilities are more likely to perceive potential opportunities for enterprise innovation and capture the latest changes in market demand in a timely manner. On this basis, enterprises are able to quickly update and upgrade their technologies and product lines according to market demand, ensuring that their products and services always meet market demand, so as to maintain a leading position in the fierce market competition (Wang Xianglu, 2024)^[13]. According to the innovation-driven effect of new quality productivity, enterprises need to promote structural adjustment through the reform approach, optimize the supply structure, reduce the ineffective and low-end supply, and expand the effective and medium- and high-end supply, in order to

enhance the adaptability and flexibility of the supply structure to changes in demand. On this basis, enterprises also need to promote the high degree of processing and knowledge intensification of the industrial structure based on the construction of social capital by enhancing the speed of knowledge exchange and communication among various innovation subjects (Wang Changlin and Pu Yongjian, 2005)^[14]. This process not only helps enterprises realize technological innovation and industrial upgrading, but also effectively improves the core competitiveness of enterprises and promotes them to realize higher quality and more sustainable development.

4.2 Technological innovation effect

The theory of technological innovation has always attached great importance to the core position of technological innovation in enterprise innovation and development, and considered technological innovation as the key driving force to promote the sustainable progress and transformation and upgrading of enterprises. At the same time, the social capital theory of technological innovation further points out that in the process of pursuing technological innovation, the creation and acquisition of knowledge and the effective integration of internal and external resources are the core of enhancing the technological innovation capability of enterprises (Peng Jingli and Cheng Chen, 2006)^[15]. This theory emphasizes that in the process of technological innovation, enterprises should not only focus on the accumulation and creation of internal knowledge, but also actively draw new knowledge from the external environment to achieve the optimal allocation and efficient use of resources. Core competition theory is more in-depth discussion of how enterprises through the coordination of a variety of production skills and the integration of knowledge and skills of different technologies to build and maintain their competitive advantage, further emphasizing the strategic orientation of enterprises in the process of technological innovation and resource integration capabilities, only in the technological innovation of continuous breakthroughs in the integration of resources unique advantages of enterprises, in order to be invincible in the fierce competition in the market. "In today's world, the role of science and technology as the first productive force is more and more prominent." Further reveals the important position of science and technology in modern society, but also points out the direction for the development of new quality productivity. On the basis of emphasizing technological innovation, the new quality productivity pays more attention to the transformation of technological innovation, and seeks to transform innovation into real industrial activities and promote the comprehensive development of the economy and society.

According to the technological innovation effect of the new quality of productivity, technological innovation must be closely centered on the goal of creating new growth points, and transforming innovation results into a powerful driving force for industrial upgrading and economic development. From scientific research, experimental development to popularization and application, these three levels constitute the whole process of enterprise technological innovation, and each link is indispensable, and only by realizing progressive innovation can we ensure that technological innovation is truly landed and effectively implemented (Cheng Chen, 2017)^[16]. The labor force is the basic element of productivity and the fundamental force that promotes social progress. Therefore, in the process of technological innovation, the input of innovative talents is equally crucial. Enterprises should realize the "overall leap" of productivity through more detailed division of labor, more comprehensive application of technology and frequent machine improvement, so as to solidly promote the innovative development of enterprises. This process not only requires enterprises to have strong technological innovation capabilities, but also requires enterprises to make great efforts in talent cultivation and team building, so as to provide solid talent support for technological innovation.

4.3 Green governance effects

As an important concept guiding global economic and social development, the theory of sustainable development, whose core features include fairness, continuity and commonality, aims to realize the harmonious unity of economic development, social progress and environmental protection. In enterprise management practice, the specific embodiment of this theory often emphasizes the use of recyclable processes, through the optimization of production processes and resource allocation, to achieve efficient production while reducing the impact on the environment. This production method not only helps enterprises to reduce production costs and improve economic efficiency, but also promotes the dual goals of resource conservation and environmental protection in the long run. The theory of environmental economics further explores in depth the complex relationship between economic reproduction, population reproduction and natural reproduction, emphasizing that the carrying capacity of natural resources must be fully considered in the process of economic development to avoid excessive development and consumption. The theory argues that green development is closely linked to economic

vitality, innovation and competitiveness, and that only by focusing on resource conservation and environmental protection in economic development can the potential for technological innovation and industrial upgrading be stimulated, thus promoting a virtuous cycle of corporate innovation and sustainable development.

In the context of high-quality economic development, promoting enterprise innovation and sustainable development has become an inevitable path to realize economic transformation and upgrading (Zhang Si-Han, 2022)^[17]. According to the green governance effect of the new quality productivity, enterprises should actively implement the concept of promoting green development, and take the good ecological environment as one of the important indicators of development. This requires that in the management process, enterprises should not only pursue the maximization of economic benefits, but also pay more attention to environmental protection, so that the concept of protecting the environment is carried through the whole process of production, operation and management. Specifically, enterprises can realize the goal of economic transformation and improve the quality of development by carrying out management innovation and technological innovation aimed at protecting the environment. For example, enterprises can increase investment in green technological innovation, research and development and promotion of green technology with independent intellectual property rights, environmental management and restoration, and promote green transformation and development. At the same time, continuous technological innovation is also an important guarantee for the innovative development of enterprises, which can not only enhance the core competitiveness of enterprises, but also bring long-term economic and social benefits for enterprises (Liu Jinke and Xiao Yiyang, 2022)^[18]. Enterprises should attach great importance to the key role of technological innovation in the promotion of green development, and continuously improve their own green technology level and innovation ability, in order to contribute to the realization of the high-quality development of economy.

5. Conclusion and Inspiration

This paper discusses in depth the connotation and characteristics of the development of new quality productivity and its internal mechanism and practical path of empowering enterprise innovation. In the face of the major challenges of a new round of scientific and technological revolution and industrial change, as well as the complex economic environment of intensified competition among major countries, has put forward the strategic policy of accelerating the formation of new quality productive forces and enhancing the new impetus for development. As the concrete embodiment of advanced productive forces, new productive forces provide a powerful source of power for the high-quality development of economy. From the connotation of the development of new quality productivity, this paper argues that new quality productivity can empower enterprise innovation through industrial high-end, industrial intelligence, and industrial greening. Based on the relevant theories of dynamic capability, technological innovation, and sustainable development, new quality productivity should empower enterprise innovation and development through three practical paths, namely, innovation-driven effect, technological innovation effect, and green governance effect.

Based on the above analysis, this paper puts forward the following suggestions: enterprises should actively embrace the change of new quality productivity, and accelerate the realization of their transformation and upgrading through the paths of innovation drive, technological innovation and green governance. Firstly, enterprises should enhance their sensitivity to new technologies and new modes, increase R&D investment, and promote continuous innovation of products and services. Second, enterprises should build an open and cooperative innovation ecosystem, strengthen the integration and sharing of internal and external resources, and enhance the efficiency and conversion rate of technological innovation. At the same time, enterprises should also pay attention to the application and promotion of green technology, and carry out environmental protection throughout the whole process of production and operation, so as to realize a win-win situation for both economic and ecological benefits. In addition, the government and all sectors of society should also give more support and guidance to enterprises, and jointly promote the development of new quality productivity, provide impetus for the innovative development of enterprises, and inject new vitality into the high-quality development of economy.

References

[1] ZHOU Wen, XU Lingyun. *On New Quality Productivity: Connotation, Characteristics and Important Focus Points*[J]. *Reform*, 2023(10):1-13.

- [2] Zhang Lin, Pu Qingping. *Connotation characteristics, theoretical innovation and value implication of new quality productivity*[J]. *Journal of Chongqing University (Social Science Edition)*, 2023, 29(06):137-148.
- [3] Ren Baoping, Wang Ziyue. *The Logic and Path of Digital New Quality Productivity to Promote High-Quality Economic Development*[J]. *Journal of Xiangtan University (Philosophy and Social Science Edition)*, 2023, 47(06):23-30.
- [4] Liu Yang. *Deeply Understanding and Grasping the Connotation of Developing New Productivity* [J]. *Red Flag Manuscripts*, 2023(24):20-22
- [5] Cai Xiangjie, He Zhengchu. *How new quality productivity affects total factor productivity: the mechanism and test of science and technology innovation effect*[J/OL]. *Contemporary Economic Management*, 1-15[2024-05-11].
- [6] Zhang Peng. *Digital New Quality Productivity and Global Value Chain Embedding: Theoretical Mechanisms and Empirical Tests*[J]. *Contemporary Economic Research*, 2024(05):75-86.
- [7] LIU Zhenghui, XIAO Yanxiang. *Digital economy empowers China's modernization: logical mechanism, realistic opportunities and power mechanism*[J]. *China Business Review*, 2023, (15):21-25.
- [8] SUN Juewen, SHI Wenjie. *Research on promoting Chinese-style modernization process with regional coordinated development*[J]. *Regional Economic Review*, 2023, (02):5-11.
- [9] Huang Hualing. *Enterprise Digital Transformation and Global Value Chain Position Enhancement-Based on Resource Allocation Perspective*[J]. *Business and Economics Research*, 2022(07):122-125.
- [10] Shi Dan. *Green development and the new stage of global industrialization: China's progress and comparison*[J]. *China industrial economy*, 2018(10):5-18.
- [11] QIN Shusheng, HU Nan. *The theoretical implications and practical path of China's green development concept*[J]. *Journal of Northeastern University (Social Science Edition)*, 2017, 19(06):631-636.
- [12] Ren Jiamin, Ma Yanji. *Evaluation of green development and analysis of obstacle factors in northeast old industrial base*[J]. *Geoscience*, 2018, 38(07):1042-1050.
- [13] WANG Xianglu, LUO Jinlian, GENG Xin. *Can enterprise digitalization promote innovation "quality and quantity"? --Based on the dynamic capability perspective*[J/OL]. *Science and Management of Science and Technology*, 2024(03):1-18.
- [14] WANG Changlin, PU Yongjian. *Corporate governance, technological innovation path and industrial specialization*[J]. *Journal of Management Engineering*, 2005(03):10-14.
- [15] PENG Jingli, DENG Yi, LI Jianping. *Progress and development trend of domestic and international research on technological innovation theory*[J]. *Science and Economy*, 2006(04):13-16.
- [16] Cheng Chen. *Technological Innovation Spillover and Corporate Total Factor Productivity-An Empirical Study Based on Listed Companies*[J]. *Economic Science*, 2017, (06):72-86.
- [17] ZHANG Sihan, ZHANG Mingang, WANG Yukun. *Service-oriented government construction and high-quality development of enterprises*[J]. *Financial Research*, 2022, 48(09) :109-123.
- [18] LIU Jinke, XIAO Yiyang. *Environmental protection tax and green innovation in China: leverage effect or crowding out effect?* [J]. *Economic Research*, 2022, 57(01) :72-88.