

Analysis of Factors Affecting the Integration and Development of Digital Economy and Real Economy in Primary, Secondary, and Tertiary Industries

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Abstract: In today's era, the integration of digital economy and real economy has become the key to promoting high-quality economic development. The primary, secondary, and tertiary industries, as the foundation of economic development, are undergoing digital transformation that not only affects the industry's own upgrading but also has profound significance for the optimization of the entire economic system. The following will explore the influencing factors in the integrated development of the digital economy and real economy in the primary, secondary, and tertiary industries.

Keywords: primary, secondary, and tertiary industries; digital economy and real economy; integrated development factors

1. Introduction

In today's era, the integrated development of the digital economy and the real economy has become a key force in promoting high-quality economic development. With the continuous advancement of information technology, especially the widespread application of new generations of information technology such as big data, cloud computing, and artificial intelligence, all primary, secondary, and tertiary industries are undergoing profound transformations. This paper aims to analyze the key factors affecting the integrated development of the digital economy and the real economy, with the hope of providing a reference for policymakers and corporate decision-makers.

2. Overview of Primary, Secondary, and Tertiary Industries

In the modern economic system, industries are categorized into three main sectors: the primary sector, the secondary sector, and the tertiary sector. This classification aids in better understanding the economic structure and the interrelationships among various industries.

The primary sector mainly includes traditional foundational industries such as agriculture, forestry, animal husbandry, and fishing. These industries are directly dependent on natural resources and provide basic food and raw materials for humanity. With the advancement of technology and the promotion of sustainable development concepts, the primary sector has made significant progress in improving production efficiency and protecting the ecological environment.

The secondary sector encompasses manufacturing, construction, and mining industries. These industries process and transform raw materials to produce various industrial and construction products. With the development of industrial automation and intelligence, the secondary sector is gradually achieving more efficient and refined production processes. It is also actively promoting green manufacturing and a circular economy[1].

The tertiary sector, also known as the service industry, includes various fields such as finance, education, healthcare, tourism, information, and culture. The tertiary sector occupies an increasingly important position in the modern economy, not only meeting the diversified needs of society but also providing support and services for the primary and secondary industries. With the rapid development of information technology, the tertiary sector is undergoing profound changes, giving rise to a multitude of emerging business forms and models.

In the future, the boundaries between the primary, secondary, and tertiary industries will become more blurred, and industrial integration will become a new trend in development. Through cross-industry collaboration and technological innovation, various industries will gain more efficient resource allocation and broader market expansion.

3. Influencing Factors of the Integrated Development of Digital and Real Economy in Primary, Secondary, and Tertiary Industries

3.1 Policy Support and Regulatory Environment

Government policy support and the regulatory environment play a crucial role in promoting the digital transformation

of the primary, secondary, and tertiary industries. To foster the robust development of the digital economy, the government has implemented a series of proactive measures. These include the formulation of targeted industry policies, the provision of tax incentives, and the implementation of financial support. These policies and measures provide strong safeguards and support for the development of the digital economy.

At the same time, a comprehensive and robust legal and regulatory framework is equally indispensable for ensuring the healthy and orderly development of the digital economy. This system can effectively protect intellectual property rights, prevent the occurrence of infringement, thereby stimulating innovation and vitality. In addition, laws and regulations can also combat cybercrime and maintain network security, providing a safe and reliable environment for participants in the digital economy. Through these legal means, the government has provided a solid legal foundation for the integration between different industries, further promoting the digital transformation of the industries[2].

3.2 Technological Advancement Factors

Technological progress plays an essential role as the core driving force in promoting the deep integration of the digital economy with the real economy. With the rapid development of new generations of information technology, the collection, storage, processing, and analysis of data have become more efficient and accurate, greatly enhancing the value of data utilization. By introducing these advanced information technologies, companies can significantly optimize production processes, improve production efficiency, and product quality. At the same time, the application of information technology can also promote innovation in products and services, enabling companies to better meet market demands and provide more personalized and high-quality services. Furthermore, information technology can drive changes in business models, helping companies to expand into new market channels, optimize customer experiences, and improve operational efficiency. Through these means, companies can comprehensively enhance their overall competitiveness and achieve sustainable development.

3.3 Market Demand Factors

As the market environment continues to evolve, the transformation of market demand significantly influences the direction and depth of the integration between the digital economy and the real economy. Nowadays, consumers increasingly prefer to seek personalized and diverse products and services. This growing demand compels businesses to utilize advanced digital technologies for market analysis, precision marketing, and the provision of customized services. Through these means, businesses can better meet consumer needs, thereby standing out in the fiercely competitive market.

At the same time, consumers' pursuit of intelligent and convenient services is also continuously escalating. To cater to this trend, businesses must accelerate the process of digital transformation. Digital transformation not only improves operational efficiency but also enhances customer experience, giving businesses an advantageous position in the intense market competition. By adopting cutting-edge technologies such as artificial intelligence, big data analysis, and cloud computing, businesses can achieve automation and intelligence in their business processes, thus providing more efficient and convenient services. In summary, changes in market demand are profoundly affecting the integration path of the digital economy and the real economy. Businesses must keep up with market trends, continuously explore and apply new digital technologies to achieve deep integration with the market and meet consumers' increasingly diverse and personalized needs. Only in this way can businesses maintain competitiveness in the ever-changing market environment and achieve sustainable development.

3.4 Capital Investment Factors

Capital investment plays an essential role in promoting the deep integration of the digital economy with the real economy. Whether it is technological research and development, infrastructure construction, or talent cultivation, the development of these key areas is inseparable from substantial financial support. To ensure the smooth integration of the digital economy with the real economy, governments and businesses should increase their investment in this field and take proactive measures to ensure an adequate supply of funds.

Specifically, the government can support the development of the digital economy by establishing special funds, which can be used to finance the research and development of key technologies, the construction of infrastructure, and the cultivation of talent. Moreover, the government can also use policy guidance to attract social capital investment, encouraging more businesses and investors to participate in the development of the digital economy. In this way, a positive situation where the government and the market jointly promote industry integration can be formed, ensuring that the deep integration of the digital economy and the real economy has ample financial support.

3.5 Cross-industry Collaboration and Ecosystem Construction

Cross-industry collaboration and ecosystem construction play a crucial role in promoting the digital transformation of

primary, secondary, and tertiary industries. To achieve this goal, these industries must break down traditional sector barriers and actively seek cooperation with technology companies, financial institutions, higher education institutions, and other related fields. Through such cross-industry collaboration, an open, collaborative, and sharing industrial ecosystem can be built, providing strong support for the digital transformation of industries.

Specifically, cross-industry collaboration can promote the complementarity of resources and the superposition of advantages. Cooperation between different industries and fields can bring a variety of resources and knowledge, allowing all parties to learn from and draw on each other in the cooperation, thereby enhancing overall innovation capabilities and competitiveness. For example, traditional manufacturing industries can introduce advanced information technology and intelligent equipment through cooperation with technology companies to improve production efficiency and product quality. At the same time, financial institutions can provide financial support and financial services for digital transformation, helping enterprises solve funding issues during the transformation process. In addition, higher education institutions and research organizations also play an important role in cross-industry collaboration. They can provide the latest scientific research results and technical support to help enterprises solve technical problems and promote in-depth development of industrial digital transformation. At the same time, higher education institutions can also cultivate and supply high-quality talent for enterprises, providing a human resource guarantee for the digital transformation of industries.

In summary, cross-industry collaboration and ecosystem construction are important avenues for promoting the digital transformation of primary, secondary, and tertiary industries. By breaking down traditional industry barriers and strengthening cooperation with technology companies, financial institutions, higher education institutions, and others, an open, collaborative, and sharing industrial ecosystem can be established. This allows primary, secondary, and tertiary industries to achieve resource complementarity and the stacking of advantages, promoting in-depth development of industrial digital transformation, thereby enhancing overall competitiveness and innovation capabilities[3].

4. Conclusion

In summary, the integrated development of the digital economy and the real economy is a complex and systematic process, influenced by a variety of factors including the policy environment, technological progress, and market demand. Only through the synergistic effect of multiple factors can the deep integration of primary, secondary, and tertiary industries be effectively promoted to achieve high-quality economic development. In the future, we should continue to pay attention to the changes in these key factors, continuously optimize the development environment, and provide strong support for the integrated development of the digital economy and the real economy.

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References

- [1] Liu Shijin. Promoting Effective Integration of Digital Economy and Real Economy [N]. Beijing Daily, 2022-01-10(013).
- [2] Zhang Xiaodong. Learning from the Integration of Digital Economy and Real Economy at Home and Abroad [J]. Contemporary Economy, 2022, 39(01): 3-9.
- [3] Xu Guoteng. Research on the Integrated Development of Digital Economy and Real Economy [D]. Beijing University of Posts and Telecommunications, 2021.
- [4] HUANG Yinglai, HUANG Xuhao. The growth rate of primary, secondary and tertiary industries all showed an upward trend [N]. Nanfang Daily, 2025-04-23(A02).
- [5] Liang Zizhi. Exploration of the integration of digital economy and real economy [J]. Cooperative Economy and Science and Technology, 2025, (14): 32-35.