The Impact of the Network Economy on the Traditional Industry Market

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Abstract: With the rapid advancement of science and technology and the widespread adoption of the Internet, the network economy, emerging as a novel economic paradigm, has exerted a profound influence on the traditional industry market. This paper seeks to investigate the effects of the network economy on the competitive landscape of the traditional industry market structure, the transformation of the internal industrial architecture, and the evolution of policy. By employing case analysis, the paper elucidates the constructive contributions of the network economy in expanding market share, fostering market competition, and driving industrial upgrading. Conversely, it also highlights the adverse consequences, including increased market concentration, unfair competition, and the disruption of traditional industries. Building on these insights, the paper proposes targeted solutions, aiming to offer guidance for the transformation and development of traditional industries within the context of the network economy. The study reveals that the network economy presents both unprecedented opportunities and challenges to traditional industries, necessitating their proactive adaptation to the network economic environment, reinforcement of technological innovation, and pursuit of industrial upgrading to achieve sustainable development.

Keywords: network economy, traditional industries, competitive landscape, policy changes

1. Introduction

The network economy, as the result of the deep integration of modern information technology and traditional economy, is changing the global economic structure at an astonishing speed. Centered around computers, it leverages advanced technologies such as the Internet, big data, and cloud computing to drive the digital transformation and intelligent upgrading of diverse industries. The emergence of the network economy not only furnishes a new momentum for economic growth but also exerts a profound influence on the traditional industry market. For instance, prior research has examined the role and status of the real economy amidst the transformation and upgrading of traditional industries. These studies have identified policy guidance, scientific and technological innovation, market adjustment, talent acquisition, and capital infusion as pivotal factors in fostering the transformation and upgrading of traditional industries, as well as the development of the real economy. Several economists and industry analysts comprehensively analyzed the status and role of the real industry in the national economy. The real sector is an important engine for providing jobs, creating material wealth, driving technological innovation and economic growth. The development level of the real industry directly influences a country's GDP, tax revenue, foreign trade, and

investment, serving as a crucial indicator of the nation's economic strength [1]. This paper will thoroughly examine the impact of the network economy on the traditional industry market from three perspectives: shifts in market competition patterns, alterations in internal industrial structures, and policy transformations, supported by an analysis of specific case studies.

2. Influence of market structure and competition pattern

2.1. Positive impact

2.1.1. Break geographical restrictions

The popularity of Internet technology and the rise of e-commerce platforms have provided unprecedented access to global markets for enterprises in traditional industries. In the past, companies were limited by geography, distribution channels and logistics costs, which made it difficult to sell products to distant markets. However, now through e-commerce platforms, businesses can easily display and sell their products, attracting consumers from all over the world. This not only greatly expands the potential customer base of the enterprise, but also helps the enterprise to break the geographical restrictions and achieve a significant increase in market share. For example, Alibaba, Amazon and other e-commerce platforms, through the construction of a global transaction network, help small and medium-sized enterprises to expand overseas markets, greatly expanding market share and sales channels. The dissolution of such geographical restrictions has not only facilitated the growth of international trade but also fostered the integration of the global market.

2.1.2. Promote market competition

The emergence of the network economy has intensified market competition. On the Internet, consumers can readily access a diverse array of product information, conduct price comparisons, and review user feedback, enabling them to make more informed purchasing decisions. This trend of information transparency forces companies to constantly innovate and improve the quality of their services to attract consumers. For example, Internet companies such as Didi Chuxing and Meituan Takeout continue to improve user experience through technological innovation and service optimization, thus standing out in the fierce market competition. This competitive pressure has promoted the progress and development of the entire industry.

2.1.3. Personalized service

In the era of the network economy, consumers can easily obtain a lot of information through the Internet to compare and evaluate products and services. This development has prompted enterprises to focus more on enhancing service quality to cater to the diverse and personalized needs of consumers. Companies are compelled to optimize their pre-sale, sale, and after-sales service processes, thereby improving response times and problem-solving capabilities to enhance user satisfaction and loyalty. This enhancement in service quality not only aids enterprises in gaining market share but also contributes to the elevation of service standards across the entire industry. For example, Netflix uses big data to analyze users' viewing habits and preferences to recommend personalized movies and TV series to users. Taobao uses artificial intelligence to push products that users are interested in. This personalized service not only enhances customer loyalty and brand influence, but also promotes the development of enterprises in a more intelligent and personalized direction.

2.2. Negative impact

2.2.1. Increased market concentration

The rise of the network economy has made some large Internet companies occupy a dominant position in the market by virtue of their scale advantages and technical strength. These enterprises continue to expand their market share through mergers and acquisitions, investment and other means, resulting in increased market concentration. For instance, Google dominates the search engine market, while Tencent holds a similarly commanding position in the social media market. This rise in market concentration exerts greater competitive pressure on small and medium-sized enterprises, thereby constricting their operational space.

2.2.2. Unfair competition

Some Internet companies may disrupt the market order through false propaganda, malicious competition and other means. For instance, certain e-commerce platforms engage in practices such as order brushing and offering rebates to inflate sales and evaluations, thereby misleading consumers. Some social media platforms obtain user information through data leakage, privacy violation and other means to engage in unfair competition. These actions not only damage the rights and interests of consumers and the image of the industry, but also destroy the fair competition environment of the market.

3. Influence of changes in internal industrial structure

3.1. Positive impact

3.1.1. Foster new industries

The rise of the network economy has spawned many new industries, such as e-commerce, cloud computing, big data and so on. These emerging industries not only provide new impetus for economic growth, but also promote the transformation and upgrading of traditional industries. For example, the popularity of cloud computing technology enables enterprises to obtain computing resources and storage space on demand, reducing IT costs. The application of big data technology helps enterprises tap the value of data and optimize the decision-making process [2]. The development of these emerging industries has brought unprecedented opportunities and challenges to traditional industries.

3.1.2. Promote industrial upgrading

The development of Internet technology has promoted the digital transformation and intelligent upgrading of traditional industries. The network economy encourages traditional industries to accelerate the pace of digital transformation, such as cloud computing, big data, artificial intelligence and other advanced technologies mentioned above to optimize production processes, supply chain management, marketing and other links. Digital transformation not only improves the operational efficiency of enterprises and reduces costs, but also provides enterprises with more accurate market insight and decision support. This transformation not only enhances the competitiveness of enterprises, but also sets an example for the digital transformation of the entire industry and promotes the upgrading and progress of the entire industry. For example, the manufacturing industry has achieved automation and intelligence in its production processes through the adoption of intelligent manufacturing systems and Internet of Things technology. Similarly, the retail industry has enhanced the shopping experience and operational efficiency by

constructing a new retail model that seamlessly integrates online and offline channels. These industrial upgrades have not only elevated production efficiency and product quality but also bolstered the competitiveness and profitability of enterprises.

3.2. Negative impact

3.2.1. Traditional industries have been hit

Some traditional industries are facing the risk of recession because they cannot adapt to the development of the network economy. For example, the traditional retail industry has been hit by e-commerce, and sales and profits have been declining; The traditional publishing industry has been impacted by e-books and its market share has gradually shrunk. The decline of these traditional industries has not only led to increased employment pressure and social problems, but also intensified the adjustment and transformation of industrial structure.

3.2.2. Rapid technological change

The rapid development of Internet technology makes traditional industries need to continuously invest funds for technological updating and upgrading. However, for many small and medium-sized enterprises, high technology investment and research and development costs become unbearable. These enterprises are often difficult to keep up with the pace of technological updates due to the lack of financial and technical support, resulting in a disadvantaged position in the market competition [3].

4. Impact of policy changes

4.1. Positive impact

4.1.1. Policy support

In order to foster the growth of the network economy, the government has implemented a range of supportive policies. These include offering tax incentives and financial subsidies to Internet enterprises; facilitating the development of infrastructure such as data centers and cloud computing facilities; and enhancing the protection of intellectual property rights. Such policy measures assist enterprises in reducing costs, expanding their scale, and bolstering their competitiveness.

4.1.2. Perfection of laws and regulations

With the continuous development of the network economy, relevant laws and regulations are also constantly improving. For example, the introduction of laws and regulations such as the Cybersecurity Law and the E-commerce Law has provided a fairer and more transparent market environment for the Internet economy. The improvement of these regulations will help maintain market order, protect consumers' rights and interests, and promote fair competition.

4.2. Negative impact

4.2.1. Policy uncertainty

The network economy is a new field, and related policies and regulations are still being improved. This policy uncertainty makes enterprises face greater risks in the process of investment and development. For example, some companies may face compliance issues as a result of policy changes; Some emerging businesses may suffer from a lack of clear policy guidance.

4.2.2. Supervision lag

Regulation in some areas may lag behind market developments. For example, in the field of Internet finance, some P2P platforms have problems such as illegal operations and capital pools, but due to lagging supervision, these problems cannot be timely and effective cracked down on. This regulatory lag not only damages the rights and interests of consumers and the image of the industry, but also increases the instability and risk of the market.

5. Case study

Taking the retail industry as an example, the traditional retail sector has been predominantly characterized by physical stores, which rely on factors such as geographical location, product variety, and pricing to attract consumers. However, the emergence of e-commerce has posed significant challenges to this traditional model. The State Council's report, 'Online Retail as a Consumption Transformation Accelerator,' highlights the rapid growth of China's online retail market, noting that the contribution of physical goods sold online to the total retail sales of social consumer goods exceeds 37%. This growth has not only acted as a strong driver for consumption but also played a pivotal role in leading and accelerating the transformation and upgrading of consumption patterns in China. Leveraging e-commerce, the country has emerged as a pioneer in the global retail transformation.

A case in point is Suning Electrical Appliances, which experienced a sharp decline in sales and profits due to the rise of e-commerce. In response to this challenge, Suning embarked on an active transformation journey, developing a new retail model that seamlessly integrates online and offline channels. The company has enhanced operational efficiency through the adoption of intelligent warehousing and logistics technologies; utilized big data analytics to understand consumer needs and offer personalized services; and bolstered brand influence through interactive online and offline marketing strategies. As a result of these efforts, Suning has successfully transitioned from a traditional retail model to a new retail paradigm, thereby regaining vitality and market relevance.

However, not all retail sectors can easily capitalize on the dividends of the network economy, as seen in the colored gem market [4]. According to 'China's Luxury Market in 2024: VICs, Omnichannel & CRM Strategies,' online platforms are pivotal in the current luxury market [5]. Most brands, particularly on WeChat, redirect traffic from other social platforms to WeChat, using it to provide personalized customer service and enhance the customer experience, effectively guiding customers to shop on the platform.

Nevertheless, the jewelry market, especially for high-quality and expensive items, differs significantly from the luxury market. Jewelry transactions require a foundation of mutual trust, honest dealing, and extensive information. While the network economy is growing, many jewelry brands are experimenting with online sales, such as live streaming. However, these transactions are largely confined to low-priced products with average quality and craftsmanship. The absence of physical inspection can lead to discrepancies between the product and its description, and customers may not fully appreciate the cultural and philanthropic aspects of the jewelry. Additionally, the risks of damage during transportation pose significant challenges to online sales, making it impractical for all aspects of the market.

The most effective sales approach remains introducing customers to products in person, either in-store or through online platforms that facilitate direct interaction. This method better protects the interests of both customers and sellers. For mid-market brands, which lack the prominence of major brands and do not have access to the highest quality goods, live streaming can serve as a medium to increase visibility but may also bring some negative effects.

Despite these challenges, the network economy offers benefits to the colored jewelry market by reducing information gaps and providing more channels for jewelers. In 2022, many suppliers had a fruitful year despite rising prices for colored gemstones and pearls. By 2023, the price of high-quality colored gemstones continued to rise, exacerbating the shortage of supply and intensifying concerns about price increases [6]. The supply chain for colored gemstones has been transformed, moving away from the traditional linear model. Companies seeking to innovate or lacking competitiveness are increasingly connecting directly with gem sources and customers, a trend particularly evident in China. Local wholesalers, once a crucial link in the supply chain, are being squeezed out, while those with global market knowledge and the ability to add value are thriving. Annually, in markets like Beluwara and Tsimchaburi, foreign wholesalers inquire about the location of quality gems, not because these stones are unavailable, but because demand significantly outstrips supply, driving prices upward. As a result, brands and companies are now more inclined to purchase directly from the source, bypassing traditional intermediaries. This shift marks a new era of direct connection to the source of gems.

6. Conclusion

The network economy, as a new economic form, has a profound impact on the traditional industry market. From the perspective of market competition pattern, network economy breaks the regional restriction, promotes market competition and provides personalized service. But at the same time, it also leads to the increase of market concentration, unfair competition and other problems. From the perspective of internal industrial structure changes, the network economy has promoted industrial upgrading and spawned new industries. But at the same time, it has also caused an impact on traditional industries and increased the pressure of technological upgrading. From the perspective of policy changes, the government has issued a series of supporting policies and improved relevant laws and regulations; But there are also issues of policy uncertainty and lagging regulation.

In light of the aforementioned issues, this paper proposes the following solutions: First, strengthen market supervision to combat unfair competition; second, promote the transformation and upgrading of traditional industries, enhancing their technological capabilities and innovation capacity; third, refine relevant policies and regulations to foster a fairer and more transparent market environment for enterprises; and fourth, bolster international cooperation and exchanges to collectively navigate the challenges and opportunities presented by the digital economy.

However, there are still some shortcomings in this paper. For example, the specific impact mechanism of the network economy on the traditional industry market needs to be further studied. The impact of different industries and different regions also need to be more detailed analysis. With the continuous development of the network economy, we need to continue to pay attention to understand the problems and development of various traditional industries, solve and continue to make progress.

References

- [1] Prospective Industry Research Institute (2017). Hindered development of jewelry industry, business model needs to be transformed and innovated [J]. Journal of Business Economics, (10), 34-37.
- [2] Xia Wei. (2020). Research on Inventory Management of YY Jewelry Company (Master's Thesis, Northwest University). Master's Degree. https://link.cnki.net/doi/10.27405/d.cnki.gxbdu.2020.000699
- [3] Cai Zhiquan. (2019). Research on Luxury Consumption Behavior in China from the Perspective of Behavior al Economics (Doctoral Dissertation, Wuhan University). Doctoral Degree. https://link.cnki.net/doi/10.27379/d.cnki.gwhdu.2019.000847
- [4] Xu Yanlai. (2020). Research on the Marketing Strategy of KML Mining Ruby (Master's Thesis, Guangxi Normal University). Master's Degree. https://link.cnki.net/doi/10.27036/d.cnki.ggxsu.2020.001283

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- [5] Hu H Y. (2015). The influence of network economy development on traditional economic model. Information and Communication (06),149-150.
- [6] Wu Jianhui & Duan Rui. (2020). Research on the Substitution Effect of Digital Technology on the Transformation and Upgrading of Traditional Industries in China. Contemporary Economy (08), 14-18.