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Analysis of Regional Economic Changes in the Current Network Economic Revolution

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Abstract—With the development and improvement of Chinese Internet information technology level, network technology has been promoted to make new systems. It has not only played a very active role in various economic fields, but also led China into the door of the era of network economy. In the context of the network economic revolution, Chinese society has suffered shocks in terms of production methods, lifestyles, and exchange methods, and has also caused great changes. The original traditional regional theory can no longer adapt to the current network economy and regional economic development environment. Therefore, if China wants to ensure the stable growth of the overall economic level in each region, it will be a must to fully grasp the core characteristics of the network economic revolution, and then connect with the actual background of the times to formulate effective regional economic reform measures and explore new directions for regional economic reform. Based on this, this article first outlines what is regional economics, then analyzes the impact of the development of network technology on regional economic activities, details the impact of the network economic revolution on regional economics, and finally explores the trend of regional economic reform in the context of the current network economic revolution to give relevant researchers a reference.

Keywords: network economic revolution, network technology development, regional economic reform

I. INTRODUCTION

The main research content of regional economics is the law of the development movement of social and economic activities and productive forces within a certain area. Based on the research results of regional and space issues by many scholars such as Thünen, Krugman, and Porter, regional economics has been fully developed and enriched. It can also be seen that regional economics has strong practical application ability, and major changes in social economic conditions will promote the innovation and reform of regional economic theory. Therefore, this article specifically studies the regional economic changes in the context of the current network economic revolution.

II. OVERVIEW OF REGIONAL ECONOMICS

One of the main branches of economics is regional economics, which is also a very active area of economics research. Regional economics mainly studies the relationship

between the self-organization of regional economic activities and the regional economy, and the science of regional decision-making related to it. Regarding the research objects of regional economics, there are several traditional viewpoints. The first is to define regional economics from the geographical distribution and spatial organization of human economic activities. The starting point of this view is to emphasize the spatial dimension that economists turn a blind eye to. The second is the listing of regional economics research content. The third is to define the research object of regional economics as the study of inter-regional interrelationships. The fourth is that regional economics is "a decision-making science that studies the economic development of different regions in the country and their relationships from a macro perspective".

III. IMPACT OF NETWORK TECHNOLOGY DEVELOPMENT ON REGIONAL ECONOMIC ACTIVITIES

The network economic revolution has opened the curtain of the new reform era and also promoted the innovation of regional economic activities. The important support and support of the network economic revolution is the development of network technology. Therefore, the impact of the development of network technology on regional economic activities can be summarized as the following points:

A. Shortening the physical space distance

According to the analysis of Reilly's retail gravity model, it can be found that the transportation cost has an important impact on the development of the traditional economic system, that is, the further the distance is, the lower the efficiency of information transmission. Based on the development of network technology, the transmission of information is no longer constrained by space, and resources can be shared worldwide. This change in the way of information transmission can significantly improve the efficiency of information transmission and create a new business model, namely the e-commerce model. With the rapid development of the e-commerce model, consumers have become the main body of the market. The market competition faced by various manufacturers has become increasingly fierce, and the market development speed has also accelerated.



B. Reforming the economic growth pattern

In the industrial era, economic growth methods need to be accompanied by a large number of cost inputs. However, it is easy to cause serious waste of resources, damage the environment, and increase investment risks when relying on cost increase methods to drive economic growth. Based on the development of network technology, the economic environment has also undergone tremendous changes. Economic growth requires a series of ideas, technologies and innovations. It can also be seen that the original extensive economic growth mode is changing to a refined growth mode. And with the support of the development of network technology, many new industries and projects have been born, the market area is broader, and the country's GDP increases significantly [1].

C. Diversified business operation models

In the past, a single business operation model was also the main reason hindering the development of China's traditional economy. In the traditional market environment, many emerging business models had difficulty obtaining a good environment for survival and development. However, the development of network technology has broken this deadlock, which has provided an opportunity for the full development of emerging business models. Now there are many free service models and merchant subsidy models, subverting traditional economic activity forms, and fully integrating real services and virtual worlds. For example, the Baidu search engine provides people with convenient information search channels and also increases people's dependence on Baidu. Baidu and many other websites can collect users' data footprints, analyze users' behaviors to grasp users' preferences, and recommend services and goods to users, promoting the development and progress of many parties.

IV. THE IMPACT OF THE NETWORK ECONOMIC REVOLUTION ON REGIONAL ECONOMICS

A. Impacts on the basic theory of economics

First, the network economy has created a more ideal market environment. Many economic theories have complex and abstract traits, and they do not sufficiently reflect the actual application process. Economic theories such as herd effects that are applicable to traditional economic markets, have been difficult to clearly explain the current market economic environment. A series of classic theories such as Marx's labor value theory are no longer applicable in the field of cyberspace, and it is difficult to reflect the actual economic development condition. The development of network technology has brought the global market environment to a new and better level, and it has also made the management of the market economic environment more scientific and convenient and made the previous economic theories be closer to actual economic life, which intensifies and deepens the study of competition forms and access to market information [2].

Second, the network economy has established a more rigorous new economics theoretical framework. The development of network technology has promoted the transformation of the world economy, and the economic phenomena presented by the market have also changed to a certain degree, showing new development characteristics. To this end, it is necessary to use a new economic theoretical framework to understand and guide the practical application of the economy. It is also based on the impetus of the network economic revolution. Economic theory has won the opportunity for innovation and creation. It has also strengthened and systemized the original theory, and built a more rigorous new economic theory framework.

Third, some classic theories have changed in cyberspace. For example, in Marx's labor theory of value, simple labor is used as a benchmark to measure the amount of value, but at present, unifying knowledge and information-based labor into simple labor to measure the value of its creation is difficult to reflect the actual situation. Or, the theory of scale economy has been widely used as a guide to production practice in the past, but the scope of the theory has been narrowed because of the possibility of small batches, differentiated products, and time-effect economy. In addition, the theory of diminishing marginal returns, the theory of property rights, and the theory of business cycles have all been diversified under the impact of the network economic revolution.

B. Impacts on regional economic theory

First, it makes the market competition pattern fair and just. In the process of the gradual advancement of the network economic revolution, the past market information asymmetry problem has been solved to a certain extent, and the channels for information transmission have been widened, which means that there are more branches, and the coverage of information has also expanded. This change will not only provide opportunities for development in a market economy subject to a single area of information transmission, but also help strengthen the capabilities of market players in the regional economy, enabling them to discover their needs in a massive network world Information to promote regional economic development.

Second, it reverses the traditional development path of reform and opens up a new development path. The development of network technology has had a profound impact on the traditional development path, causing it to undergo huge changes, and it has also allowed various regions to obtain a wider development space. At the same time, backward regions can also realize the leapfrog development of their economies through the new economic growth advantages of the network economic revolution. In addition, in the context of the network economic revolution, economic information has promoted exchanges and interactions among market players in the regional economy with its advantages of high transmission speed, high convenience, and high quality [3].



Third, it highlights the regional characteristics of economic development and provides personalized services. Under the impact of the network economic revolution, in order to provide consumers with personalized services to meet their needs, the enterprises' production and operation actively promote the transformation of their industrial production products to diversification. In addition, knowledge and information have also become very important factors of production in economic development, and higher requirements have been placed on regional productivity and technological thresholds. The development of network information technology supports the revolution of the network economy, effectively reducing the "path-dependent costs" of enterprises, and further strengthening the regional embeddedness.

V. THE TREND OF REGIONAL ECONOMIC REFORM IN THE CURRENT NETWORK ECONOMY REVOLUTION

A. Relying on network technology to optimize the economic system

In the context of the network economic revolution, China's regional market economic system has undergone significant changes, gradually transforming from the original real economy to a virtual economy. From a macro perspective, at the current stage, the development and innovation of Internet technology has made many new Internet technologies widely appear in the public's vision and been widely used by the public. As a result, industries derived from the Internet have sprung up one after another, and the proportion of these industries in regional economic markets has also increased over time.

According to traditional regional economics, traditional regional economics emphasizes the "big market" assumption, and with the advent of the era of the network economy, this assumption has also begun to be put into practice. The regional enterprises are moving towards the information and globalization step by step in their development. Because of the borderless nature of the network, it has a high degree of freedom. Even if the two companies are not in the same area or are far away, they can also use the network as a channel to achieve cooperation and communication [4].

Fundamentally speaking, network technology has closely linked the economic entities in this global scope, and has largely avoided the restrictive effects of space and time on economic market development. Especially in the same industry, dealers, distributors, suppliers, and manufacturers are all closely connected by the network. The network economy revolution has gradually transformed the real economy into a virtual economy. The market in which enterprises are located is no longer a single regional economic market, but a worldwide economic market.

B. Reducing information asymmetry

In the traditional economic market in the past, because of its long-term influence and restraint by traditional regional economics, many economic entities in the region paid too much attention to the symmetry of market information during the actual market competition. Therefore, it is difficult to give full play to the fundamental role of the market in the allocation of resources when information asymmetry appears in the real economy. Information asymmetry, as the name implies, is that people in the market economy have different levels of understanding of relevant information, of which there are differences. In the process of market transactions, the party with more information has a favorable position, while the party with less information has a disadvantage. However, in the context of the current network economic reform, the problem of information asymmetry in the market economy has been largely solved and improved.

The rapid development of modern network information technology has also affected consumers and merchants' information acquisition methods and channels, which has effectively broadened them. At the same time, with the establishment of various information sharing platforms, people can search for the information they want through these platforms, so that people can more quickly and effectively obtain all kinds of information. In addition, in order to meet the diverse needs of people, the current information platforms are powerful. For example, people can use the information feedback function of the information platform to make relevant suggestions and communicate with the responsible person about a certain problem on the platform, and they can also freely make comments. As far as the reality is concerned, the improvement of the degree of network information sharing will not only reduce the asymmetry of information, but also promote faster development of regional economy.

Of course, because of the popularity of network information platforms, various economic fields need to face huge amounts of information, which easily breed problems that affect regional economic development, such as how to effectively screen information and how to solve information congestion. Regarding this phenomenon, regional economic entities need to work hard to improve their ability to identify various types of network information, and to develop innovative information screening methods to ensure that they can efficiently and quickly identify and screen out the information they need during economic activities, so that they can achieve the optimal development of regional economy against the background of the network economic revolution [5].

C. Breaking the shackles of traditional elements

The advent of the network economic revolution has freed regional economic development from the constraints of time and space and promoted the development of regional economy. According to the analysis of traditional regional economic theory, when selecting a location, regional economic subjects should comprehensively consider market demand and transportation costs. The regional economy in the context of the network economic revolution is no longer constrained by these aspects, and it only needs to consider



the spatial layout levels, without having to worry about the restrictions of geographical location and distance.

In the era of the network economy, if regional economic entities want better development, they must pay attention to the improvement of production capacity and innovation capacity. The reasons are as follows: First, with the improvement of Chinese information technology level and the development of new information technology, the spatial factors that originally restricted regional economic development have been effectively improved, and time has gradually become the main factor restricting regional economic development. If an enterprise can increase the sensitivity of the market response and reduce the time of product distribution, it can effectively reduce the cost of the enterprise, thereby enhancing its competitiveness in the market. Second, the development and wide application of network technology has made the offline consumption begin to transform into online consumption. At the same time, the needs of consumer groups have also evolved from simplification to diversified personalization. Therefore, the development of regional economic entities needs to closely in pace with the personalized development direction of consumer groups. Only by following the development trend of the network economy and continuously innovating to improve production efficiency and service quality, can it truly break through the traditional elements and promote better regional economic development.

D. Comprehensively developing and utilizing the network virtual and real resources

The virtual world of the Internet has abundant resources that can provide basic support for the network economic revolution. And because network resources have the characteristics of diversified innovation, fission-inducing, and self-replication, when developing resources, it will be necessary to focus on thinking about continuous creative development. The development and utilization of the advantages of information, knowledge resources, and highspeed transmission channels in the virtual world will allow future theoretical researchers and practitioners to give full play to their strengths, construct new principles, and explain the efficiency and mechanism of explosive growth. In the field of the network world, issues such as innovation and creativity, information identification, knowledge matching, and channel selection are all important links in the network economy, and together they contribute to the economic model of the new era. Of course, the current segmented precision services and big data strategies in the market are also measures for the development of network resources, which need theoretical research to follow up in real time.

VI. CONCLUSION

In a word, the regional economy plays an irreplaceable role in the development of China's national economy, and Chinese government has begun to pay more and more attention to the development of the regional economy and encourage relevant scholars and professionals to explore and analyze regional economic reform and innovation. From a

practical point of view, it is necessary to rely on the background of the network economic revolution, improve the regional economic development model, and formulate an effective regional economic development plan, which is integrated the regional economic theory according to the actual conditions of each region, to promote the sustainable development of China's regional economic market.

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