

Language Service and Regional Economic Development Strategy Based on the “Internet +”

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Abstract: This article expounds the connotation and characteristics of language service, elaborates the relationship between language service and regional economic development based on the “Internet +”, and discusses the implementation strategy of regional economic development in the mode of “Internet + language services”. This mode has an important impact on regional economic development, and effectively deepens the Internet, language services and economy. It has promoted the development of language service industry and regional economy, greatly reduced the marginal cost of language service, and formed diversified service modes.

Keywords: Language service, Internet +, Regional economic, Service modes.

1. Introduction

In March 2015, Premier Li Keqiang of the people's Republic of China proposed to formulate the national strategy of "Internet +" in the government work report. In July 2015, the guiding opinions on actively promoting the "Internet +" action issued by the State Council pointed out that the integrated development of the Internet and various fields has broad prospects and unlimited potential. It has a strategic impact on the economic and social development of all countries [1]. In December 2015, President Xi Jinping emphasized that the strategies of "Internet +" and big data technology should be vigorously developed during the 13th Five Year Plan period, accelerate the application of the Internet in the various industries, enhance the innovation of "Internet +" with other industries, and promote the transformation and development of the national economy [2]. "Internet +" has brought opportunities and challenges to language services. Li Weihong of the Ministry of education pointed out that it is necessary to vigorously strengthen the language service, build the language service into a comprehensive platform combining "production, study, research and application", make the language service achievements serve the government's decision-making, and apply the language service to economic and social development [3]. The combination of "Internet + language service" will contribute to the formation of the national language service system, the improvement of the language service ability, the construction of the thinking mode of "Internet +" and the development of the service regional economy.

2. The Connotation and Characteristics of Language Service

2.1. The connotation of language service

Language service is an infrastructure to promote Chinese culture and enterprises to "go abroad" [4], which has received more attention in the practice of Applied Linguistics. In the influence of the "language turn" theory in the philosophy field, the linguistics, economics and information have been integrated, which has been realized the cross development of

many fields. Language service is an emerging service field, and domestic and foreign researches have not formed a clear and unified definition [5]. The 2012 China language service industry development report discusses language services from two aspects: the broad language service industry includes all relevant institutions in the language service industry chain. The narrow sense language service only includes enterprises and institutions that provide inter language information conversion services, technology development, training or consulting services [6]. The language and text information management department of the Ministry of education believes that language service is an act of providing paid or free services [7]. The China Translation Association defines the language service as a modern service industry that focuses on language competence and aims to promote cross-cultural and cross-cultural exchanges, providing language information transformation services, as well as specialized services such as related research and consulting, technology research and development, tool application, asset management, education and training. The development of new technologies (such as big data and artificial intelligence) has promoted the leap of language service industry in quantity, quality and efficiency [8]. Guo Xiaoyong, executive vice president of China Translation Association, published the statistical information of language services of government departments in the opportunities and challenges of China's language service industry report. In this report, he pointed out that the language service industry conforms to the characteristics of modern service industry (such as high intelligence factor density, high output added value, low resource consumption and low environmental pollution) is a basic industry for economic globalization and cultural diversification [9]. Language service provides a service of knowledge transfer and knowledge realization, which uses different means and tools to solve the problems of language knowledge and language communication for the service objects.

2.2. The characteristics of language services

In China, language service sprouted in the early stage of reform and opening up, had the embryonic form in the late 1990s, and entered the fast lane of development after entering

the WTO. With large-scale foreign businessmen entering China, language services have developed rapidly. It has formed regional clusters, mainly concentrated in economically developed areas such as the Yangtze River Delta and the Pearl River Delta, and constituted a local language service market and initially established exchanges between foreign languages and Chinese. Based on the "the Belt and Road" strategy, Chinese capital has begun to spread to the world, and make language a fusion agent for exchanges between countries. The economic development has driven the language service market of countries along the "the Belt and Road", broadened the development platform of language services, accelerated the integration of Chinese and foreign languages, improved the spread of national culture and language, promoted the development of language service technology, and formed a number of excellent language service industries. Driven by "Internet +", language services have completed industrial upgrading by using artificial intelligence, big data, cloud computing and other information technologies. With the support of machine translation, speech recognition and deep learning, those technologies drive the innovation of language service mode, and break through the traditional cognition. Language services can be included in emerging industries such as language rehabilitation, language consulting, language and text information exchange services, and help economic, cultural and other fields obtain development opportunities. With the help of "Internet +", language service will promote the development of economic mutual assistance and political mutual trust between countries along the "the Belt and Road" and China, and build a community with a shared future for mankind.

President Xi Jinping pointed out that the cultural charm of a country and the cohesion of a nation are mainly expressed and transmitted through language. Mastering a language means finding the way to a country [10]. The essence of language is the communication tool between people, society and countries. Language services add service attributes on the basis of language, emphasize the premise of taking language as the means of production, and realize different language service needs. The service content can be divided into three levels: political service, economic service and cultural service. Political service can improve the thinking level of language services and promote national participation. For example, the "the Belt and Road" strategy has made China put forward the great mission of a community with a shared future for mankind. Economic service is the direct embodiment of the value of language service and the mutual promotion. Economy promotes the reform of language service, which is the assistant of economic development. Language service is an important carrier of cultural service and a bridge of cultural communication.

3. The Relationship Between Language Service and Regional Economic Development

3.1. The connotation of "Internet +" and its contribution to language service

The guiding opinions of the State Council on actively promoting the action of "Internet +" issued by the Ministry of industry and information technology pointed out that "Internet +" is a new form of economic and social development. It integrates the innovation achievements of the

Internet with the economic and social fields, promotes technological progress and efficiency improvement, improves the innovation and productivity of the real economy, and forms the Internet as infrastructure and innovation elements [11]. The concept of "Internet +" was promoted to the national action plan in 2015, which has evolved from a "practical tool" to an "innovative element" to drive deep changes and industrial innovation in various fields. The "Internet, informatization and industrialization" of the whole industry will become a new service model in the future.

The characteristics of the "Internet + language service" model are innovation, which deeply binds language services and the Internet, and opens up new thinking of language services by using the Internet. It can overcome the limitations of physical space, poor information and insufficient resources in the traditional language services, and solve the problems of long subcontracting and subcontracting chain in the past service process. By establishing a flat service chain, we can improve the ability of language service, extend the depth of language service, apply its basic and leading role to the regional economy, and promote the harmonious development of the regional economy. "Internet + language service" provides a new service platform, makes the Internet a new carrier of language services, changes the traditional social form based on physical space, and overcomes the problems of long service chain, asymmetric information, low efficiency and high economic cost. "Internet + language service" integrates e-commerce, completes online services through virtualization and networking, and improves service efficiency and service scope. By integrating talents, technologies and other resources through the network, we can improve the shortcomings in regional language services, and realize a full network and intelligent language service mode. With the support of artificial intelligence, big data, cloud computing and other information technologies, "Internet + language service" has changed the previous channels of information exchange. Through the data processing of information resources, we can provide new methods for natural language processing technology in language services, improve the process management of translation memory, establish a characteristic language database, and create a service cloud platform. Meanwhile, we can expand language service resources, innovate language service methods, improve the efficiency of the language service industry, and drive the cross innovation and development of language services in multiple disciplines and fields. "Internet + language service" can use the cloud platform to provide network tools for collaborative division of labor, decompose decentralized language service production activities into multiple tasks in the network collaboration, build a group collaboration mechanism, deal with fragmented service content, and realize real-time cooperation, sharing, crowdsourcing. "Internet + language service" will be open and shared in the future development. It will provide free and open information technology platforms and software to users for resource development and application, break through the obstacles of traditional economy and intellectual property rights, and give open community translation to network freelancers to complete translation work.

3.2. The development trend of language service based on the "Internet +"

In the "Internet +" environment, language services have shown a growing trend, and the output value of language

service companies has been continuously improved. According to the report on the development of China's language service industry in 2020, the global language service output value was close to US \$50 billion in 2019, and the number of Chinese language service enterprises in operation reached 400,000, with a total output value of ¥38.4 billion [12]. In the influence of "Internet +", language services have different innovation trends in the service concept, service content, service mode and service field. "Internet + language service" takes Internet sharing as its service concept. Many institutions and enterprises have developed a free sharing platform for big data language resources, and make Internet share the new normal of language services. This mode facilitates the communication and knowledge transfer between the consumers and providers, breaks through the limitation of time and space, accelerates the speed of traditional language services, and enhances the service quality of interconnection. "Internet + language service" aims to integrate multiple services, greatly reduces the market proportion of interpretation and translation services, increases the market proportion of software translation, creative translation and web page translation, integrates diversified service contents (such as online language education and language consulting) into the new service system, and expands the integrated language service into the whole service chain. "Internet + language service" takes collaborative crowdsourcing as the service mode, emerges a new mode of crowdsourcing service and community service, and enhances the enthusiasm of public participation. The free sharing platform of big data language resources is used to absorb translation talents of regional languages, and social networking sites are used to connect global translators and service providers. This way enhances the linkage and enables crowdsourcing services to be distributed to every link of the whole service chain, and forms a crowdsourcing mode with a socialized selection mechanism. "Internet + language service" takes subdivision and customization as the service trend. The fragmented demand, digital scene and specialized field make the language service continuously innovate and refine.

3.3. The dilemma of language service based on the "Internet +"

"Internet +" makes language services gradually shift from the primary stage of workshop to the development stage of process, which promotes the reform of language services and brings development opportunities. However, there are many problems, such as lack of effective guidance and management, lack of mature large-scale enterprise operation mode, lack of innovation driving force and lack of new language talents. Local governments and industry associations need to pay attention to the development of language services, guide the development of enterprises from the perspective of industrial policies, strengthen the professional guidance and management of them, and formulate standard and normative guidance documents for industrial development. The process based business model of language service enterprises is not mature enough, and the workshop is still the main business model. Insufficient scale and strength of enterprises are the problems of this model, which will make enterprises lack of innovation driving force. This makes it impossible to continuously invest in basic technology research, and results in the failure to fully display the core technology and language resource advantages of the enterprise. The innovation ability of language service enterprises is not

enough, and the thinking of subdividing and customizing services is not formed. The mode and content of online services are relatively simple and cannot meet the needs of multiple users and types of services. Language service is a knowledge intensive service, which needs structured and diversified language talents. However, language service enterprises are limited by their own talent training mode, such as the lack of professional and compound language service talents. They should strengthen cooperation with language research structures and universities to jointly build a talent training mechanism.

3.4. Analysis on the demand of regional economic development for language service

In recent years, China's economic growth mode has changed from the previous extensive mode to the intensive mode. The mode of regional economic construction has begun to shift from the government led market type to the free market type, and local colleges and universities are also in the transition stage. In 2013, the Ministry of education began to guide local universities to take engineering or applied technology universities as an alliance, which has promoted the integration of Industry-university Research with regional enterprises. Local universities can meet the needs of social development, apply knowledge to enterprises, walk out of the "ivory tower" and serve regional economic development. The language service of local universities has always played an important role in the development of regional economy. This service is advocated by higher education and required by the state and local governments. Its essence is to set the development of regional economy as the fundamental goal, takes the needs of enterprises and industrial upgrading as the guide, promotes the two-way development of the language service of local universities and the regional economy, and builds a sustainable language service strategic framework. The concept of language service is a new definition of the language learning concept, which was put forward by the linguistic scholars. It emphasizes the relationship between language and society. Language is a tool of social operation, and serving society is the essential attribute of its existence. The social development extends the value of language.

Economic globalization and the "the Belt and Road" strategy have driven the development of foreign trade economy and expanded the demand market for language services. However, the development pace of language services still lags behind the speed of economic "go out". The internationalization of Chinese enterprises is becoming more and more mature, which puts forward new requirements for the standard and quality of language services. Language services need to match the development of the strategic height and breadth of the regional economy, as well as the industrial scale, benefits and talent development of the regional economy. The language talent training plan should connect with the language talent pool, carry out research on the culture and talent reserve of regional enterprises and foreign trade countries based on linguistics, and build a comprehensive and international language resource pool. Meanwhile, language services need to follow the development of regional economy in the guidance of local government policies, laws and regulations. This can maintain the stability of the operation, preferential policies to encourage the development. It needs relevant preferential policies to encourage the development, and local think tanks to provide advice and suggestions.

3.5. Regional characteristics of language service and its relationship with regional economic development

Language service has been accompanied by the development of regional economy. From the ancient Silk Road to the modern "the Belt and Road" strategy, the internal relationship between language service and economy has been reflected. The transnational economic trade will generate the demand for language services, and drive the development of regional economy. The rapid economic development of Beijing Tianjin Hebei integration, port economic special zone, Shantou Special Economic Zone, Hainan Special Economic Zone, Shenzhen Special Economic Zone highlights the regional nature of economic development, and intensifies the industrial division of labor among regions. The economic development of these special zones can not be separated from language services, which has a mutually reinforcing relationship. Local governments can provide help for the construction of language services from the technological innovation, economic support, standardization construction, and personnel training. In the terms of technological innovation, local governments integrate regional technological resources, use information technology based on the "Internet +" to provide natural language processing technology (such as speech recognition, machine translation) for language services, improve innovation ability and economic structure, promote internal reform. In the terms of economic support, local governments can provide continuous economic support for language services in the guidance of policies, ensure the orderly investment of talent capital, and improve the stability of internal structure. Continuous investment in language service economy can enable language services to help regional economic growth. In the terms of standardization construction, the local governments, according to the needs of regional economic development, formulate the language service standardization policy. The language service and the standardization policy can promote and perfect each other, and form a scientific, standardized and reasonable service system. In the terms of talent training, the local governments, according to the needs of regional enterprises for language talents, allow language enterprises and universities to formulate talent training plans to give play to their advantages in resources and technology. The construction of language service can improve the quality of human capital. The regional economy has experienced a high-quality take-off stage, and the language will be improved to show the language service ability at different levels. In this process, "Internet +" will elevate the economic role of language from a recessive state to a dominant state. On the contrary, in the high-quality development of regional economy, the economy of language needs to be reflected. This can build a language service system among individuals, groups, integrate the economy of language into the system, measure the role of language from the perspective of economics, and evaluate the value of language services in the economic market. The regional characteristics of language are inseparable from the regional economy. In the different regional economies, the level of language competence and language service will be significantly different.

4. Regional Economic Development Strategy of "Internet + Language Service"

"Internet + language service" has an important impact on regional economic development, which effectively integrates the Internet, language service and economy, and promotes the development of language service industry and regional economy. It greatly reduces the marginal cost of language services, changes the mode of payment, and generates diversified service modes in the demand of language services.

4.1. Build language service policy and focus on the top-level design of the government

The construction of language service is a necessary condition to promote the development of regional economy, and regional economy can promote the development of language service. Their relationship is closely linked. The development direction and capacity improvement of language services need the guidance and support of regional policies. Building a language service policy that combines regional economic development is an important work of local governments. This can improve the standardization of regional language services, and promote the integration of language services and regional economy. The policies of local governments can effectively guide the development of language services. The language service industry is classified into the regional economic industry category, and relevant preferential policies are issued in combination with "Internet +" to formulate detailed methods for policy implementation. The policies can provide preferential loans for small and medium-sized language service companies, encourage the independent innovation of large and medium-sized language service companies, and introduce scientific research resources of universities to promote technology and transform achievements.

The government's top-level design of language services needs to start with the intellectualization of language technology, the digitization of language scenes, the digitization of language resources, overcome the obstacles in language processing technology, and use "Internet +" to further interconnect and share language resources. Firstly, it is necessary to promote the construction of linguistics and information science, and set up special scientific research projects of language service information processing technology. The government guides local universities and scientific research institutes to carry out scientific research activities, directs local universities to carry out cross teaching of these disciplines, and promotes the process of intelligent language services. Secondly, it is necessary to promote the construction of real-time language services, especially in regions with relatively developed cross-border e-commerce and overseas trade. The development of foreign trade economy has increased the demand and consumption of digitalization in the language service industry. The COVID-19 epidemic has rapidly increased the demand for digitalization of language services. It is a development trend for language service enterprises to combine 5g communication technology to carry out instant language services. Finally, it is necessary to promote the construction of data-based language service resources and build structured multi carrier language databases. This is the cornerstone of the development of language services, and needs to integrate domestic and foreign common language resources and

minority language resources in multiple countries and regions. The natural language processing technology is used to build a conversion platform between Chinese and multilingual. Through artificial intelligence, big data, deep learning and other information technologies, the visual analysis and processing of language data are carried out, and the intrinsic value of language data is mined to provide technical support for language service enterprises.

4.2. Explore the new mode of language service talent supply

Language talents are an important driver of the language service enterprises and an important helper of regional economic integration. Cultivating language talents has always been the task of Colleges and universities. However, driven by the industrial alliance, it is necessary to explore the supply mode of language talents based on the "Internet + education", and integrate market orientation and enterprise demand into the language training system of colleges and universities. We need to strengthen the training of the breadth and depth of language service ability, build multi-level and multi-directional professional courses of multi languages, develop multi-disciplinary talents integrating multi languages and information science, cultivate application-oriented talents with market orientation and enterprise needs, integrate language knowledge with market needs, and form personalized and collaborative teaching methods. This can jointly build a multi-disciplinary language talent.

At present, most of the language service enterprises in China are small and medium-sized, characterized by weak innovation ability. In the background of "Internet +", industry associations and industrial parks can organize enterprises inside and outside the region through online and offline ways to jointly carry out scientific and technological innovation. China Language Service Industry Technology Innovation Alliance came into being. Led by the Ministry of science and technology, Hubei provincial government and China Translators Association, it is an industrial institution focusing on technological innovation and information exchange to solve the technical problems of language enterprises in the alliance, and realize the technological innovation of universities and enterprises. This method can solve the difficulties faced by small and medium-sized language service enterprises, rely on the Internet to exchange information, form a community of complementary resources and shared risks, reduce the operating costs of enterprises, and enhance the collaborative innovation ability of enterprises. As the leader of language services, enterprises need to use "Internet +" to enable themselves to have innovative thinking in the industrial chain and crowdsourcing services. In the face of the diversified and integrated development of language service content, enterprises should ensure the stability of service quality and service process, and build a robust endogenous and external ecological industrial chain. "Internet +" enriches the language service industry, enables the language resources to be digitized, realizes the service process to be online, and improves the service technology. However, there will be problems with the immediacy and diversity of services, which requires the combination of service knowledge innovation and management ability. It needs to use the big data platform to collect the service demand, consumption demand of users, and build a customized language service terminal.

5. Conclusion

Language services have completed industrial upgrading by using artificial intelligence, big data, cloud computing. At the support of machine translation, speech recognition and deep learning, it drives the innovation of language service mode, uses the Internet to open up new thinking of language service, overcomes the limitations of traditional language service, and solves the problems of long subcontracting and subcontracting chain in the past service process. The establishment of a flat service chain can improve the ability of language service, apply the basic role and leading role to the regional economy, and promote the harmonious development of the regional economy.

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