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Development Target and Realization Path of Big Data Industry in Jiangxi Province

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Abstract: With the integration of information technology and economic society, big data has become a strategic resource in the information age. Therefore, the transformation and application results of the key technology of big data not only stimulate a new round of revolution of information technology but also evoke people to re-examine the social life style. It is the key to integration with regional economic development that how to discover, process and apply appropriately the valuable information in big data as there is some useless data and available data in mass big data. This paper analyzed the development target and realization path of big data industry in Jiangxi province.

Key words: big data; development target; realization path

JEL codes: C

1. Introduction

Big data is a frontier technology in the field of information technology. It is the urgent task for Jiangxi to promote the development of big data industry how to speed up the data of new industry cultivation, inject new vitality into the economic development, reveal the basic rules of the development of big data and integrate the important achievement transformation of big data applications, data sharing and data accurate analysis.

2. Concepts Description

2.1 Big Data

Generally, the big data constituted by a large amount of data, multi-source data and complex data, is a new field of information science research focus and has the new mode of its acquisition, storage, analysis and application of data processing; therefore, it is also known as mass data. The scientific planning of the big data industry is helpful to lead the rapid development of the social economy, improve the utilization efficiency of big data as a strategic resource, realize the smooth transformation of traditional industries, evoke excitation and release of the innovation of the enterprise vitality and endogenous power and lift the economy of Jiangxi in the central of China ultimately.

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2.2 Big Data Industry Classification

The big data industry which generates a large amount of data is a collection of enterprise economic activities that support large data organization, management and value discovery. At present, there is no unified annotation for big data industry classification; Delia believes that it can be divided into big data industry and its derivative industries according to the big data industry form. However, the big data derivative industry mainly refers to the large data industry to provide infrastructure, policy support, security systems and technical support services and other related industries.

3. Status and Significance of the Big Data Industry in Jiangxi Province

3.1 Status of the Big Data Industry in Jiangxi Province

January 2016, Jiangxi government issued the “Development Promotion Plan of big data in Jiangxi” (No. 5, 2016, Jiangxi Government Issue) and began to accumulate in precipitation mass government data and execute big data storage in part of the government service system under the impetus of information technology reform. However, because of understanding and local interests, partial institutions and some companies block up rather than share their data and business with other departments. In addition, there is still a big gap compared to Guizhou and Chongqing provinces because the lack of dominant leading enterprise in big data layout system of Jiangxi province and leadership and autonomy in the aspects of big data technology products.

3.2 Challenges of the Big Data Industry Development in Jiangxi Province

(1) Blank of targeted industrial planning for big data.

(2) Absence of leading enterprises in big data industry planning system.

(3) Lack of technical means of deep screening data value.

3.3 Significance of the Big Data Industry in Jiangxi Province

(1) Strategic opportunities for Jiangxi's economic development.

(2) Big data industry possesses considerable prospects of the ecological value and creates a harmonious development environment for traditional and emerging industries.

(3) Big data industry to inject new power to economic development in Jiangxi.

4. Problems in the Big Data Industry in Jiangxi

4.1 An Imperfect Industrial Ecosystem

Under the efforts of various Jiangxi government departments, the big data industry just begins with no development experience and complete industrial chain. The development of large data industry has not formed the scale effect, no pattern, no research institution and laboratory not mention to the ecological circle.

4.2 Information Isolated Island with Low Sharing Efficiency

Companying with the development of computer communication technology, Jiangxi daily generates a large amount of data in the financial, public security, education, social services, communications, transportation, medical and other fields which formed information isolated islands because these data could not flow and exchange among government departments.

4.3 Insufficient Budget Support

Although the Jiangxi provincial authorities have issued relevant policies and conveyed to task documents the development of electronic information industry, but the lack of long-term strategic planning and practical

activities in budget makes against to the development of big data industry.

5. Acceleration in the Development Goal and Realization Path of Big Data Industry

5.1 Industry Positioning

According to the economic and social “Thirteen Five” development plan of Jiangxi and “Development Promotion Plan of big data in Jiangxi”, principal line described as “gather innovative resources, break through key technologies, promote innovative applications and promote radiation driven” which means that adhere to the application of innovation as the main line, focus on industrial innovation resources, conquer key generic technology, leading industrial development through innovation and application demonstration and radiates relevant industries.

5.2 Development Goal

In the next 10 years, based on the needs of Jiangxi province and the reality, it will achieve the “1221” development objectives by promotion the development and application of big data by 2025, which include 100 big data enterprises assembly, introduction of 20 information center and data center projects, implementation of the 20 typical application demonstration projects, formation of the 10 core technology products. Meanwhile, the scale of big data relevant industries will reach 500 billion yuan, accounting for about 35% of the province's total information industry output value, which will be an important growth point of economic development. In addition, 5000 qualified professionals of big data research and application will be introduced to make contribution to the big industry system construction. Thus, a market layout will be established in the central to radiate across the country and affect southeast of Asian, and big data industry base and data resources collection service area with international competitiveness will be set up.

5.3 Main Task

(1) Use big data to achieve industrial transformation and upgrading

Data industrialization around the major goals and demands of rapid development in Jiangxi, the strategy practice line graph technology development, the basic areas and key technology breakthrough and safe and reliable technology and product system of big data should be realized as soon as possible one by one.

Data Digitization Around Internet plus, big data, it is very important in industrial transformation and upgrading to integrate cloud computing, 3D printing and others into a new industrial model, promote innovation and development of traditional industries, accelerate business models and service formats innovation.

(2) Accelerate opening and exploring big data resources

(3) Accelerate the improvement of the conditions and environment for the development of big data

Accelerate the construction of big data industrial park. In light of the specific conditions of Jiangxi, we formulated a differentiated development path, defined their respective division of labor and avoided homogenization competition. Promote data consumption through government procurement data. Make a number of big data demonstrations through project regular public bidding, the government procurement data to stimulate the production of social data, build a social data production, processing, marketing, consumption system.

(4) Accelerate the construction of provincial science and technology cloud platform

Integration all kinds of technology of data from enterprises, projects, institutes, incubators and other innovative carriers, assemble service elements set of science resources, accelerate the construction of the provincial science cloud services platform and make an implementation of technical data, system resources, “the

whole chain of fusion".

(5) Establish a new big data innovation incubator base

To jointly established big data innovation service platform and the model of innovation and entrepreneurship incubators through collection data, social capital knowledge, data, human resources in the forms of shareholders of investment funds, venture capital funds and data funds from big data research institutes and all kinds of venture capital institutions.

Supported by the big data business platform based on such as "Internet plus" and other new technology, carry out the whole industrial chain consisted with "open technology platform plus industry resources of large enterprises with small business incubators", "industry fund plus professional technology platform" and "community plus hatch open office" incubator model.

5.4 Realization Path

(1) Establish a government budget

We should conscientiously implement all policies and measures to support the development of information industry of the state and province, formulate a new policy according to the study of new problems in the new situation and increase the development of big data industry financial support by establishing a government budget.

(2) Build financial big data and big data industry fund

Encourage big data enterprises to enter the capital market financing, create a more relaxed financial policy environment for enterprise mergers and acquisitions, guide the venture capital fund to invest in large data industry and incite the establishment of a number of investments in the field of big data industry investment fund.

(3) Develop big industrial data

Promote the integration depth of information technology and industrialization by the advantage of big data, consider the application of big data in segments of management, research and design, marketing and manufacturing, construct big data application platform for different industries and aspects and drive the manufacturing network and intelligent positively.

(4) Develop big data of agriculture

Construct an integrated information service system for rural food security, provide comprehensive, efficient and convenient information services for farmers' production and life reduce the digital gap between urban and rural areas and promote the integration of urban and rural development.

(5) Cultivate big data leading enterprises

Improve the policy system, strive to create a good service environment of low factor cost and accelerate the cultivation of big data leading enterprises. Make full use of the leading role of leading enterprises, form a large data industry ecosystem supporting and cooperating with large and medium-sized enterprises. By 2025, 10 leading international data core enterprises will be cultivated and 90 big data applications, services and products manufacturing enterprises will be developed.

(6) Develop innovative applications of big data

Through the application of innovative development competition, service outsourcing, social crowdsourcing, boosting programs, subsidies, incentives, application training and other ways to encourage enterprises and the public to explore the use of open data resources, stimulate innovation and entrepreneurial vitality. Big data innovations services for the needs of economic and social development, research and development of a large number of public service products and achieves different industries, areas of integration of big data, expanding service areas and improve service capacity.

(7) Promote basic research and key technical problems

On the theoretical system of scientific data, data calculation and analysis system based on the significant theory, big data driven application of subversive model to explore forward-looking layout, research data science, guide and encourage research in big data theory, methods and key technology aspects.

(8) Form a big data product system

The data collection, sorting, excavation, analysis, display, application process, general support for large-scale mass data storage and management software, the development of large data analysis, data mining software visualization software and other software products and mass data storage devices, data integration and other hardware products, core products based information technology to drive chip operating system and the development of big data to create more perfect product system.

(9) Perfect the big data industry chain

Support enterprises to carry out third party data analysis, discovery services, technology outsourcing services and knowledge process outsourcing services based on big data. Enterprises are encouraged to actively develop new formats such as Internet banking and mobile finance on the basis of data resources and business characteristics. Promote big data and mobile Internet, Internet of things, cloud computing depth integration, and deepen the innovative application of big data in various industries, and actively explore innovation, collaboration, win-win application mode and business model.

(10) Strengthen the training of large data professionals

Establish and improve the multi-level and multi-type personnel training system for big data. Encourage universities to set up data science and data engineering related major, focusing on training professional data engineers and other big data professionals. Improve the overall social cognition and application level.

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