The Countermeasure of Cultivating and Expanding New Real Economy

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Keywords: New Real Economy, Countermeasure, Intelligent Manufacturing, Credit Support.

Abstract. The new entity economy should be a high integration of the Internet, virtual economy and real economy. In order to develop new entity economy, the government should innovate production service model, strengthen intelligent manufacturing, optimize the network support system, strengthen corporate credit support. Innovating production service model includes accelerating the development of OTO, R&D and design, carrying out large-scale personalized customization, and strengthening the information control. Strengthening intelligent manufacturing includes realizing machine substitutions, promoting co-manufacturing, developing service-oriented manufacturing, promoting equipment intelligentization. Optimizing the network support system includes upgrading and improving the internet infrastructure, strengthening the management of internet information security, and cultivating the public platform based on voice technology. Strengthening corporate credit support includes optimizing the total credit volume and structure, innovating financial services, and developing a new type of financial industry.

Introduction

Real economy refers to such economic activities as the production and sale of physical products and spiritual products, including such production activities in agricultural, manufacturing, energy, transportation, post and telecommunications and building materials, but also includes commerce, culture, art and sports [1][2]. It includes not only the primary and secondary industries, but also other industries in the tertiary industry, with the exception of the financial sector [3]. Chairman of alibaba group, Ma put forward an economic concept of new real economy. Ma argues that the new real economy refers to the integration of Internet and traditional economy, together to create future economic forms through technological innovation, model innovation. Obviously, the current concept of the new real economy is far from a unified definition [4]. We argue that the new entity economy should be a high integration of the Internet, virtual economy and real economy.

Innovating Production Service Model

Accelerating the development of OTO R&D and design

The government should implement innovative design projects, encourage industrial pilot units to create strong industrial design base [5]. The government should establish a number of regional, industry innovation and design engineering centers or laboratories, improve the competitiveness of innovative design and evaluation system, to carry out research and development of innovative design, research and development of key technologies, research and development of key technologies to promote innovation and design industry. The government should conduct innovation design competition contest, select a number of outstanding innovative design every year, and support the backbone of industrial enterprises to set up internet-based industrial design agencies, support the development of industrial design resources online sharing, collaborative design, 3D online printing and other new technologies and new models.
Carrying out large-scale personalized customization

The government should encourage enterprises to use the internet to collect and dock users’ personalized needs to promote the traditional mode transition of production from large-scale production to large-scale personalized custom changes, develop personalized products in clothing, footwear, luggage, household appliances, furniture and other industries, targeting consumer demand as the import point, pining production, and achieving seamless production and marketing. Through personalized design, the firms can enhance product and customer matching, improve inventory management efficiency, and then conduct efficient supply chain organization, promote production and supply chain management and other key aspects of the flexible transformation.

Strengthening the information control

The government should support enterprises to use the Internet to promote organizational structure optimization and business process reengineering, in order to establish learning, agile, service-oriented enterprises, and finally enhance market competitiveness. The government should encourage firms to adopt enterprise resource planning management (ERP), product lifecycle management (PLM), customer relationship management (CRM), supply chain relationship system (SCM), manufacturing execution management (MES) and other systems, encourage the backbone enterprises, group companies to strengthen R & D design, manufacturing, quality management, product traceability, marketing services, storage management and other key aspects of the system integration and integration capabilities to achieve the whole process of cross-regional intelligent control.

Strengthening Intelligent Manufacturing

Realizing machine substitutions

In the important working part with high labor intensity, high security risk, serious environmental pollution, the firms should use machine to achieve replacement. The government should encourage the firms to implement machine networking projects, build unmanned workshop, apply things networking technology in the production process, energy consumption emissions, supply chain tracking, remote services and other aspects to form a continuous production, networking collaboration, intelligent control of the manufacturing model. The government should promote the application of factory networking, encourage enterprises to improve ERP (enterprise resource planning management), MES (manufacturing execution system) and machinery and equipment network interoperability integration capabilities, to achieve the comprehensive digital, network and intelligent control for some of the key enterprises.

Promoting co-manufacturing

The government should encourage manufacturing enterprises to cooperate with the backbone of the industry chain through the Internet, so as to promote the production, quality control and operational management system fully interconnected. The government should encourage powerful Internet companies to build a network of collaborative manufacturing public service platform, provide cloud manufacturing services for the sub-sectors to promote the gathering and docking of innovation resources, production capacity, market demand, so as to enhance the service capacity for small and medium enterprises, speed up the effective collaboration of diversified manufacturing resources of a whole society, improve the ability of industry chain resource integration.

Developing service-oriented manufacturing

The government should guide industrial enterprises to use the Internet to carry out remote consultation, call center, remote monitoring, fault diagnosis, online stores, location services, remote maintenance, life-cycle management and other information services, improve product value-added, realize transition from manufacturing products to provide engineering contracting and remote O & M
services \textsuperscript{[9]}. The government should support large-scale equipment enterprises to master system integration capabilities, to carry out the total integrated general contracting services, and guide enterprises to change from providing equipment to providing integrated services such as design, undertaking projects, implementing projects, project control, facility maintenance and management operation.

**Promoting equipment intelligentization**

The government should implement intelligent development projects, organize chips, sensors, software and other information enterprises to dock with traditional manufacturing enterprises, focus on the implementation “Hundred Million” intelligent new product development plan of the province, and strive to develop thousands of new intelligent products 100 new intelligent machines, 10 sets of intelligent sets of new equipment each year \textsuperscript{[10]}.

We will carry out the equipment optimization project and increase the application of information technology and numerical control technology. We will focus on the development of smart manufacturing equipment and technology, such as intelligent special equipment, industrial robots and automated flexible assembly lines, and enhance the automation, digitization and intelligence of traditional manufacturing methods.

**Optimizing the Network Support System**

**Upgrading and improving the Internet infrastructure**

The government should push the implementation of the “broadband Jinhua” project which puts fiber-optic broadband and broadband wireless mobile communications as the focus to promote urban FTTH and administrative village broadband universal service. The government should improve the network infrastructure such as optical fiber network, mobile communication network and wireless local area network, promote the upgrading and reforming of the next generation Internet, change and strengthen the ubiquitous, diversified Internet basic service, offer the strong foundation for enterprise application \textsuperscript{[9]}. The government should promote industrial clusters, industrial parks and incubation base to carry out intelligent network construction, and promote such infrastructure construction as private cloud of backbone enterprises, industrial cloud and large data platform applications.

**Strengthening the management of Internet information security**

The government should establish network and information security coordination group to accelerate the construction of network information security and emergency command platform. The government should promote self-controllable, safe and reliable development of core hardware and software and information systems application, strengthen the testing and evaluation of critical hardware and software and important information systems network security \textsuperscript{[10]}. The government should strengthen the network and information security emergency response, establish a sound disaster recovery system and disaster recovery mechanism, improve the contingency plans and risk hidden danger detection, and handling capacity of early warning and emergency. The government should establish and improve the local network and information security standard system, increase the network and information management efforts to ensure the Internet information security.

**Cultivating the public platform based on voice technology**

We will make full use of the existing conditions of Jinhua economic development zone, Jinhua hi-tech industrial development zone, Jinyi new urban area, Jinhua mountain tourism economic zone, characteristic township and youth creative worker factory to build a platform for innovation and business based on voice cloud. It provides services such as speech synthesis, speech recognition, voiceprint recognition, and natural language understanding to enterprise users in the form of “cloud + end”, and provides services for third-party developers and start-up companies. The government should construct voice cloud training center, and actively explore new Internet-based incubation model, support innovative incubator platform based on voice cloud such as coffee business, promote
online and offline new incubation model for entrepreneurs, and provide voice functions and technical services training.

**Strengthening Corporate Credit Support**

**Optimizing the total credit volume and structure**

The banking financial institutions should maintain a moderate and stable growth of credit, increase financial support for SMEs. Credit for small and micro-enterprise should be devoted to the high-tech, high-growth enterprises. We should encourage the financial institutions to determine the level of interest rates and loan terms, to innovate repayment methods and give priority to meet the financing needs of some special developing firms. The municipal development and reform commission, the municipal economic and trade commission, the municipal finance office and other departments should further clarify the policy orientation of financial resources and guide financial institutions to increase their financial support for key industries \(^5\). The government should encourage financial institutions to actively dock the key projects of “five water governance”, “four break rectification”, “four changes for three famous”, boosting regional environmental remediation, effective use of resources and industrial transformation and upgrading.

**Innovating financial services**

The banking financial institutions should fully support enterprises to resolve the difficulties and transform development model, optimize the lending process, shorten the time to transfer loans, not exert unreasonable additional loan requirements, not add mortgage security more than the compensation risk needs, do not follow the trend of prosecution. The banking financial institutions should reasonably set assessment indicators, appropriately reduce the credit threshold, as much as possible to reduce the cost of compensation fees and small micro-enterprise loan interest rate pricing \(^10\). The banking financial institutions should vigorously promote the annual system of loans, revolving loans, sub-period repayment, and optimize continued loan process of small and micro enterprises to reduce the cost of transferring money. We should standardize the development of financing guarantee institutions, accelerate the construction of small and micro enterprise financial service platform, carry out policy financing guarantee work, reduce the loan guarantee costs of small and medium micro enterprise, and strive to crack enterprise financing and guarantee problems.

**Developing a new type of financial industry**

We should smoothly and orderly develop financial derivatives, use modern financial leasing, private equity funds, insurance investment funds, patent pledge, trademark right pledge, export tax rebate special pledge, sewage pledge, government capital and social capital cooperation and so on, and expand the use of financing channels such as trust, finance leasing, guarantee, venture capital and venture capital \(^7\). The banking financial institutions should vigorously develop the Internet financial business, standardize the development of public financing, P2P network credit, large data finance, push micro-enterprise network business loans, provide micro-business self-service micro-credit withdrawals and repayment and other service functions for third-party e-commerce platform. We will further implement the Pratt & Whitney financial project, improve the efficiency of micro-credit lending, and actively promote the credit products with the characteristics of small and micro enterprises, such as “simple loan”, self-circulation loan, factory loan and overdraft.

**Conclusion**

The new entity economy should be a high integration of the Internet, virtual economy and real economy. In order to develop the new entity economy, the government should innovate production service model, strengthen intelligent manufacturing, optimize the network support system, strengthen corporate credit support. Innovating production service model includes accelerating the development
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Acknowledgement
This research was financially supported by the National Natural Science Foundation of China (71502064).

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