

The Policy to Promote the Innovative Development of Knowledge Intensive Business Services

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Abstract

The Knowledge Intensive Business Services as an important part of the national economy and the national innovation system of the second knowledge base, is beginning to attach great importance to the country. At present, Knowledge Intensive Business Services have become the most active group of innovation. The article first elaborates the meaning of Knowledge Intensive Business Services. Then analysis the role of KIBS in innovation system and the development trend of KIBS. On this basis, it comments on the policy to promote the innovative development of KIBS advices for government.

Keywords: Knowledge, Service, Innovation, Policy, Development

Innovation is the fundamental source to maintain competitive advantage for an enterprise, an industry and a country. Facing the explosive growth of information technology, network technology and scientific knowledge, Knowledge Intensive Business Services showing unprecedented innovation feature, which reflected in the updating of production type, the accelerating pace of innovation and the emergence of new services. Innovation has become the important means to obtain sustainable competitive advantage and important premise to participate in global competition for Knowledge Intensive Business Services.

1. The meaning of Knowledge Intensive Business Services (KIBS)

KIBS refers to the service industry which has the knowledge for main input elements, and of high innovation investment and performance. KIBS providers include government, enterprises and public institutions.

KIBS has the characteristics of "four high" (1) High degree of knowledge. The nature of KIBS products is "knowledge intensive". These products attend to customer's knowledge creation and integration process as the elements. From the view of personnel professional and knowledge, as a specific knowledge provider, KIBS employees have high proportion of person of higher education or training. (2) High degree of technology. KIBS connected technology and industrial development as a link. On the one hand, it actively using new technology to serve enterprises. On the other hand, it create and diffuse new technology. (3) High degree of interaction. Strong interactivity and customers correlation is one of the main feature of KIBS. The reason of frequent interaction is that the customer has a lot of knowledge and ability itself, and can help KIBS deliver the best solution. (4) High degree of innovation. In the process of providing the service to customer, KIBS itself must innovate continuous, absorb new knowledge, learn new technology, and create the new knowledge model suitable for the technology and production development's requirement, then promote the innovation of customer development.

According to the China's economic industrial classification and the international standard industrial classification, weijiang divided KIBS into 4 groups of 14 sub-categories.

- Financial services. including banking, securities, insurance and other financial activities
- Information and Communication services. including telecommunications and other information transmission services, computer services, software services
- Technology services. including research and experimental development, professional and technical services,

engineering and planning management, technology exchange and promotion services

- Business services, including legal services, consulting and investigations, other business services

2. The role of KIBS in innovation system

2.1 The innovation promoter

If KIBS support customer's innovation activities, and the innovation isn't from KIBS itself, then it can be considered the KIBS as innovation promoter. For example, a management consultant help customer to introduce a new accounting management system or develop a new service marketing channel; A technical engineering consultant cooperate a innovative solution with technical engineers of client company. In the process of promoting the innovation, the KIBS plays a dual role. First, they contribute to the creation of new thought, then they are in favor of innovation process management. In the process of creation of new thought, custom raise a new question first, then KIBS use their own professional knowledge to provide a direct solution, or put forward a solution after analysis and conclude the problem. The original impetus of innovation come from KIBS, which let customers realize the changing business environment, and let them to consider the problem from more wider social and economic perspective.

2.2 The dissemination of innovation

The KIBS as the dissemination of innovation, refers that the KIBS disseminate exist innovation from one enterprise to other client enterprise. In other words, KIBS plays a role of deliver in the innovation system. It set up a deliver bridge in different client enterprises, deliver innovation from one enterprise or industry to another enterprise or industry as the role of carrier or intermediary. KIBS will introduce appropriate innovation into client enterprise and help it to implement the innovation, but the KIBS and client enterprise are not the source of innovation either. For example, an IT enterprise introduce a high-level innovative ERP software into a client and help it to implement it, customary the software according the client's requirement, but KIBS itself doesn't develop those software packages.

2.3 The source of innovation

KIBS play a role of the source of innovation in innovation system, which refers that they play the role of source of innovation conception and project in the process of client innovation. Namely KIBS provide innovative thought and implement them for client. In this case, KIBS with its strong scientific research strength and high research investment, innovate independently, and develop new knowledge system according to enterprise requirement, then apply them to client enterprise. For example, an advertising agent develop a new business activity based on the network for client and implement it.

3. The development trend of KIBS

3.1 Internationalization

Due to the development of network, economic globalization, and service industry its own characteristic, KIBS right from the start, show the characteristics of high degree of internationalization. In fact, the mankind from industrial economy into a service economy era, the economic environment and the rules have been fundamental changed. The competition between enterprises, has evolved into the competition between the whole industry chain include sales, production, supply. And with the wide use of information technology, the knowledge-based service industry competition has evolved into the global market competition, which mainly reflected in that the international industry shift become more and more outstanding. Service of international transfer performance in the three aspects. (1) The enterprise outsourcing. The auxiliary types of non-core business were entrusted to other countries. (2) The business offshore of multinational company. Namely some part of services to multinational companies would be transferred to lower-cost countries. (3) Some service enterprises such as logistics services, consulting, information services, which have partnership with multinational companys will do the international transfer in order to provide supporting services for the multinational companys in emerging international market, or for service enterprise itself to exploit new market and develop international trade service.

3.2 Informatization

A feature of knowledge-based service industry is the relative density of knowledge and technology, which based on information technology and modern management concept development. Both the traditional services upgrading through technology, and new service emerging with the rapid development of information technology and network, have the characteristics of information. The information technology has great support function in the formation and development of modern service industry. First, some products of service itself are information, so the income lifeline of some service industry is to accelerate information resources integration and to research

consumer behaviour for the customer relationship management. Secondly, the informatization makes service content more widely, and form more detailed emerging industries and more employment opportunities. Third, informatization improves service enterprises' knowledge and technical content, strengthen their competitive strength, and shift the extensive service management to precision pattern.

3.3 Cluster development

Knowledge-based service industry cluster is service aggregation of intensive information technology and modern management concept that developed in the stage of industrialization. In the aggregate, there are many basic services, manufacturing and marketing service, personal consumption service, public service associated with their relevant supporting institutions established in a particular area. The competitive advantage of Knowledge-based service industry agglomeration includes three aspects. (1) The market adaptiveness. In the present age of individual consumption, a single product can not occupy whole market. The tangible and the intangible products provided by KIBS centralizing zone have stronger ability to adapt to the market for their rich varieties and centralization in geographic location. (2) The cost advantage. KIBS agglomeration breeds of mass customization mode of production, improve the supply chain, and promote professional level. In the cluster area, KIBS can effectively control and reduce transaction cost due to their close network cooperation mode.

3.4 Integration development

From the point of the development of manufacturing and services, both accelerate integrating, and enterprise production tends to having no boundary. Outstanding performance is the rapid development of creative industry which integrated with technical, economic and cultural. This industry integration can produce innovative optimization effect. The integration promote the traditional industry innovation, and promote industrial structure optimization. Because the industry integration occurred between the high technology industry and other industries, the new technology, new products, new services emerge in the process of industry integration increase consumer demand hierarchy, and replaced the traditional technology, products and services, that make their industrial market gradually atrophic, and the position of traditional industry in the industrial structure decline. At the same time, the new technology emerge from industry integration change the production and service mode of traditional industry, and upgrade its products and services structure. And also, the industry integration can promote wider range of competition through establish relationship between the industrial enterprises and organizations.

4. The policy to promote the innovative development of KIBS

4.1 Raise awareness, strengthen organizational leadership and overall coordination

The government should have a profound understanding to the principal position of KIBS in knowledge innovation system. To ensure that the regional KIBS system be established and improved continuously. Ensure the government has good communication and interaction with innovation source. Promote the efficiency of resource integration between innovative resources. Thus enhance the operation efficiency of whole regional innovation system. The government may establish KIBS industry development center. Make unified planning and coordination to the development of KIBS. Strengthen exchanges between industrial enterprise, research institutions and KIBS. Listen to their advice and requirement and coordinate their thoughts and pace. Quantitative long term goal of KIBS development year after year and clear every year's specific goal. Implement the task, distinguish responsibility and evaluate the result. The government should transform function further, and strengthen the macro-economic control to the development of KIBS. Draw up technology policy of industry, encourage innovation measures, and create a good external environment.

4.2 Construct information infrastructure, build innovation platform

Infrastructure construction of Communication facility, network environment and information platform, not only helps build an environment to promote knowledge flowing and diffusing, but also greatly reduce KIBS' start-up cost, marketing cost, and scale cost, thereby create more larger room development space. The specific practice of government include: (1) Establish and perfect the information management database of government. Make full use of the resources of government, provide special service information, statistics and technical support to KIBS. (2) Construct public knowledge service platform of government. Solve the problem of information channel blocked and information shortage as soon as possible. (3) Carry out the track management to the infrastructure construction. Adopt the incentive method of "selecting the superior and eliminating the inferior", and appraise once a year. Increase investment to good execute enterprise, and discipline or disqualified the low perform enterprise.

4.3 Accelerate the cultivation and introduction of talent

The development of KIBS demands for higher level of science and technology, and the development of science and technology demands for high quality human resources quality. So the competition of KIBS in the final is the talent competition. Government should speed up the cultivation of talent from the strategic height, Establish and improve the personnel training and introduction mechanism. Particularly accelerate the cultivation of talent that social need urgent, such as the talent of information service, financial, insurance, etc. Increase shortage service profession in universities and secondary vocational schools. Reform teaching contents and methods, increasing recruitment scale of shortage profession. Promote vocational qualification certificate system comprehensively. Establish standard for vocational qualification system of service industry. Vigorously introduce senior management personnel who have rich experience at home or abroad. Establish comprehensive incentive, competition, safeguard employment mechanism in market criterion.

4.4 Opening up and upgrade the international competitiveness of KIBS

In recent years, there are many variables in the development of global economy. Multinational companies have started a new round of global industrial layout adjustment in this context. So the international transfer of service to become important trends. On the one hand, the international transfer of the manufacturing sector is still the focus of the global industrial structure adjustment. on the other hand the trend of service transferring to emerging market countries has become increasingly obvious, and become a hot spot. For a period of time, the government should hold the opportunity of the further service opening up, introduce the high-end KIBS that we scarce in strategy, such as logistics of high degree informatization, the international famous intermediary consultancy, creativity design company of high level and famous foreign financial institutions etc. Avoid excessive foreign capital into real estate and business industry. Government should also encourage local enterprises enter foreign markets depending on their own advantages. Cover wider regional market, expand service development space and improve service function and external radiation ability of China's services by setting up chain operation or branch forms etc.

4.5 Stimulate the demand for knowledge-based services

The government should encourage social consume of knowledge based service. On the one hand, it can promote the production of the knowledge intensive service products, on the other hand, it can also improve its competitive ability through the use of the knowledge intensive service products. In order to increase the demanding for the knowledge intensive service, government can proceed it from three aspects. (1)Stimulate to buy an external knowledge-based service. The Government should guide, analysis, and reveal what type of knowledge-based services is particularly important for various industry sectors' innovative capacity development, and what type of knowledge-based service is particularly important in different stages of their development.(2)Stimulate demand and use of knowledge-based services. Government should encourage enterprises to use knowledge-based service in deeper level, so as to stimulate enterprise's demanding for knowledge intensive services. For example, tax cut, special fund or project fund, and the new rules of the system, these all can stimulate the demand for the knowledge intensive service.(3) Actively promote the government and public administration department purchase knowledge service. The government and the public administration field, especially large infrastructure, public investment projects and major public management decisions, which has the complex relationship with wide interests, and has enormous influence on economic and social development, need use a variety of technical expertise to conduct research and analysis. So the government and public administration department should vigorously purchase knowledge service to promote democratization decision and scientific management.

4.6 Promote the cluster development of KIBS

Centralization economic refers that economic activities become more efficient and economical due to the relatively concentrated in space. Knowledge-based service industry cluster, gather the dispersed enterprise in a space, so expand the scale of the transaction. Cluster like population ecology. The larger, the more able to attract more companies joined. In order to improve technical capabilities and promote the continual growth of the cluster, the government should make the KIBS cluster development into economic planning. Formulate KIBS cluster development planning and development goals according to the economic structure, make the enterprises as the main body, the innovation system as guarantee. Knowledge-based services cluster is the result of the market competition and market allocation of resources. At the same time, its formation and development also involves a lot of social, cultural and institutional factors. So in this process, the good balance of government role is significant.

4.7 Increase financial support to KIBS

The innovation of Service enterprise faces more financing difficulties than that of manufacture enterprise. Because the value of a new service concept or the new business model, is more difficult to assess than that of patent technology. In addition, the funds required to service business usually less, correspondingly, investors that have interest is some small venture capital institutions. They do not want to spend too much of the cost to evaluate a business project and dismissed the financing request. In order to solve the problem of finance in service business, first, the government should guide for establishing evaluation standards of service concept and business model. Secondly, the government should give subsidy to the venture capital institutions for costs of undertaking project evaluation and selection, so avoid some potential projects be skipped. Also government can do the first selection and classification on the project, and then recommend them according to different venture capital organization interests. In addition, we also can establish credit guarantee agencies. Either from the government budget, financial institutions and enterprises establish loan guarantee fund of KIBS. Still we can encourage guarantee agencies composed by different enterprises playing the role of coinsurance. Government funds into the service industry must focus on investment in public services, or quasi-public service areas such as education, culture, public health and transportation area, and must follow the requirement of the public finance and the market economy and the principle of "Dos and Don'ts"

4.8 Perfect regulation construction

The rapid development of KIBS relies on perfect external environment. Besides the modern information infrastructure, the soft environment such as laws and regulations, policies and measures, mechanism system are important means to promote the development of KIBS for government also. In order to improve the service enterprise development policies and systems, the government should establish the public service management system of coordination, efficiency and classification management. Establish and perfect the laws and regulations of public service. Specify the role, function and behaviour of the government and social forces in the social public service. Develop and publish public services categorization standards, the industry standards of service, public service facilities construction and operation standards. Service innovation can be replicated easily, only effective protection mechanism can fundamentally enhance the driving force of innovation. Stimulate innovative activities of the enterprise. Therefore, government needs to further strengthen protection of intellectual property.

4.9 Establish the credit system

The government should pay attention to the supporting function of credit environment for economic development. Strengthen the concept of credit from the aspects of school education, and regional culture etc. Make people build up a good sense of credit gradually. Cultivate social culture atmosphere of "honor for honesty, shame for dishonest". Government may organize intermediary institutions. Make use of the enterprise data in government department such as custom, tax department to evaluate the enterprise credit. Enterprise credit inquiry should take paid way. Using of intermediation to establish a credit system is in line with market economy rules, and enterprise credit is verified by the State. Due to the public enterprise credit, enterprise reduce the speculative psychology. By establish a social atmosphere of honesty and trustworthiness gradually, we can facilitate customers to use KIBS to provide their core knowledge, and play the role in the knowledge system.

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