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Multinational Corporation Technology Innovation Globalization Tendency and China's Countermeasure

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Abstract

This article analyzed the motive of multinational corporation technological innovation globalization, the characteristic and the present situation ,thought strives for the cost advantages and the market advantages, contention and reserve human resources, which are the strategic goal of multinational corporation implements technological innovation in China. Therefore, Chinese enterprise's strategy tactics should include: (1) Imitates innovation strategy (2) Cooperates innovation strategy (3) train innovation strategy (4) Promotes innovation ability strategy.

Keywords: Multinational corporation, Technology innovation, Globalization, Strategy goal, Countermeasure

1. The main motive of Multinational corporation technology innovation globalization main motive

The multinational corporation technology innovation globalization is the effective way which the enterprise pursues to innovation development and to continue competitive ability. Their main motives are:

1.1 In order to meet the host country consumer's demand, simultaneously causes the research development information channel internationalization, can quickly make the response for the global customer's demand

As a result of multinational corporation's management scale and scoop is more and more bigger, the overseas turnover accounts occupy on the total turnover proportion to be more and more bigger, a multinational corporation management condition in the overseas, already was not only how many profit, but is relates the enterprise life and death. Therefore, the multinational corporation originally established "the engineering department" in the overseas,(namely the department of responsible technical advisor),which unsuitably provides the technical service for the overseas customer. Along with the international market scale expansion and development, this kind of overseas engineering department gradually turns the technical experiment department, and adjustment product and development new product according to the local consumer's request. Moreover, the host country government also formulates the correlation policy and ask foreign enterprise to observe, hope their subsidiary company to establish research development department in host country, simultaneously, create working opportunity and leaves the technology when is selling product. Because the overseas subsidiary company not only is the product sales department, but also it has the research development ability, therefore, it is easy to obtain the competitive advantage. At the same time, overseas subsidiary companies and its research development organization will gather host country's various research development information to the partner company, make the information channel internationalization.

1.2 Quickly keep track of host country's advanced technology development, make its company technical level to maintain the advanced level

This is the basic motive of the multinational corporation technology innovation research and development globalization. In recent years, American, Japanese, European's multinational corporation more and more realized that the company technology strategy should not emphasis in "self-sufficient", should implement "surpassing type", "surmounting type". Because of the economical globalization, the product and the market expanded to request enterprise's research development should have a stronger technology base, particularly at present, the technology unceasingly alternate development, obtains the new technology cost unceasingly rise. American, Japanese, European's multinational corporation all have their advantages in the area of technology had. Therefore, the various countries' enterprise all modestly studies, in order to keep track of the newest technical development.

1.3 Hire the higher level scientists and technicians in host country, cooperation with their research and development laboratory

The multinational corporation establish research development department in host country and may hire the higher level scientists and technicians, simultaneously, also has created the opportunity and the place for technicians of partner country and the overseas partner that mutually study and research. This can cause the technicians of partner enterprise and the local technicians to work together, and may contact the new product, the new mentality, and the new craft.

2. Multinational corporation technology innovation globalization characteristic and development tendency

2.1 Characteristic

First, multinational corporation technology innovation key point in applied research. At present, the multinational corporation concentrates in the comparatively large-scale basic research in the overseas, including medicine and biological technology and so on. This means the technical innovation globalization mainly concentrate in the innovation of business. **Next**, the multinational corporation research and development function is shifting to manage an expanded cooperation network, this network including competitors, university and several of research development organization. Third, the multinational corporation research and development strength to be attenuate, and the center laboratory to be more little tendency, the parent company research and development organization's duty is that charging with formulate globalization technological development strategy and goals, simultaneously, assignment works to the branch in overseas.

The research and development concentrates in the areas of the high-tech and the key industry, mainly including medicine and biological technology; the chemical industry and the rubber industry; automobile, computer software, semiconductor, precision machinery and so on.

2.2 Present situation

First, the technical innovation globalization core in the developed country, which mainly is US, Japan, England, Germany, France and so on, it is not balanced between the profession situation, US and Europe are main receiver of the technical innovation. Enters in 1990s, American, Europen's transnational enterprise also gradually enlivens of research development operation in Japan; In the developing nation, research development operation also gradually emerges in China, for example, there are "China Microsoft Research Institute", "China Ericson Academy of Science", and so on research development organization in China. Second, the developing nation already realized to positive efficiency of the technical innovation globalization, all join to this domain according to own characteristic. For example, some developing nations give the preferential policy to the developed country enterprise research technology fund in own country, encourages the multinational corporation to set up the research and development organization, promotion technology innovation localization and so on, positive efficiency Moreover, some multinational corporation of developing nation start to explore mutually studies and development feasibility. Third, the multinational corporation overseas technology innovation research branch office's patent increases day and day. UNCTAD (1999) information demonstrated that, from 1991 to 1995, 11 percent of registration patent of the largest multinational corporation in American which obtained from outside of parent company's country. There are many differences between countries patent quantities: England, Oland, Belgium, surpasses 50% registration patent to belong the overseas research development organization, but Japan's foreign research and development organization's parent only occupies 1.1percent.

3. Multinational corporation implementation technology innovation strategy goal in China

3.1 The cost superiority

From human resources cost analysis, the highly industrial structure of developed country which causes to lose the comparison superiority of labor force cost, transferred the partly research development operation to the developing nation, and was helpful to reduce the enterprise wages payment. It is well known, Chinese domestic staff wages level is more lower than the foreign staff, multinational corporation establishes the research and development organization in China which carry on the technical innovation, hires the domestic technologist, may reduce the research expense, therefore, establishes it's cost superiority in market competition, maintain enterprise's competitive advantage.

From the transaction cost analysis, the multinational corporation carries on technical innovation in China, in order to service for own production enterprise in China, the distance between the research and development organization and production enterprise to be short, causes to reduce enterprise's transportation cost; collects the market information cost in China to be lower than collects Chinese market information cost in partner country.

The demonstration effect of reduce cost which a multinational corporation establishes the research and development organization in China, make more multinational corporation to establish the research and development organization in China, thus achieves new competitive equilibrium.

3.2 The market superiority

The data display, the life circle of product and technology reduces day and day, the enterprise all try to reduce this period of time that from the technology to the product transformation. There are difference areas, such as the region, the culture and the language, multinational corporation's technology may not suitable in other countries, for example, Microsoft's software must be transform Chinese to be able to use by most Chinese people. Production globalization tendency inevitably impels technical innovation globalization; the external performance of this kind of tendency is which establishes the research and development organization in China. As we know, the market demand changing more and more quickly, the multinational corporation which establishes the research and development organization in China can grasp the Chinese market changing, and promptly carries on the technical innovation in view of market, and supplies suitable market demand product by a shorter time, obtains competitive opportunity.

3.3 Recruits and reserve human resource

The knowledge economy time, the knowledge stores quantity and increase quantity are important symbol which weighs the enterprise strength. Enterprise's competition is talent's competition. Human resources easily flow in domestic compare with other resources, but quite difficulty flow between country and country. The multinational corporation globalization strategy implementation, merely depends upon its domestic human resources is insufficient, native strategy in the host country must depend upon host country human resources to complete. China has a giant market; nearly all multinational corporations make China as strategic point. Recruit the Chinese massive talented people is prerequisite which succeed in China. For example, China research institute's "Microsoft -- China Scholars Plan", Intel Company subsidies Chinese outstanding elementary and middle school students to go to US participated in "The Young Nobel Prize" and so on.

4. Countermeasure

4.1 Imitated innovation strategy

Chinese enterprise technology innovation system is historical development product. Chinese socialism construct of several dozens of years make Chinese state-owned enterprise's technical condition to have fundamental improvement, but along with the economic reform development, the technology advancement speed is slow which the traditional system created; the question exposed which technology and market came apart. In order to meet need for economy development, change unsuitable condition which the company technology innovation system with external economy environment, Chinese enterprise must essential formulate and implement advanced technology innovation strategy.

Chinese enterprise has many superiority conditions of implement technical innovation. The strategy of "the science education promote China" and the whole plan of develops high-tech industry; Chinese enterprise's 50 years management experience; Chinese human resources and material resources are relatively rich; Chinese coast opening area high-tech industry develops successful pattern and so on; During display superiority, another for much condition is model, study and imitate massive new high-tech science and technology achievements of overseas enterprise. As a developing nation, the most effective method of impels economy development is that promote the technical performance of economical system, introduction and absorption foreign advanced technology, obtains a greater income by a smaller price. Whether the technical innovation strategy fit and unfit quality are decided by choose strategy effective display own superiority. The leading strategy risk was bigger, moreover it needed enterprise to have very strong technical strength and economic potentiality, but at the present, Chinese majority enterprises do not have such strength. Looked from overall that, imitate strategy is Chinese majority enterprises optimal strategy of technology innovation.

4.2 Cooperation innovation strategy

China's innovation resources scale extremely limited the company technology innovation investment accounts for sales income proportion quietly low, and it is very difficult to be enhanced in the short-term. The cooperation innovation strategy is technical innovation way that taking innovation as a goal, taking cooperation as essential method, taking resources supplementary as content. This is also technical innovation main form of including Chinese enterprise and developing nation enterprise.

The corporation innovation strategy may fully use innovation resources, directly realizes technology and economy effective union, take the market system as the foundation, through concentrates kinds of innovation resources to carry on innovation, may realize innovation economies of scale, and reduces innovation cost, promotion economy growth. In the technical introduction, through guidance and organization cooperation of production and researching, centralism understood, unites efforts innovation, not only may reduce repetition introduction and invalid introduction, but also may depend upon multi-disciplinary cooperation, rapidly enhances the company ability of understood and innovation again for introduced technology.

4.3 Training the innovation talent strategy

The technical innovation talent is the technical innovation designer and the implement actioner. The innovation talented person's quantity and quality are deciding Chinese enterprise's innovation scale, innovation efficiency and innovation ability. At present, technology innovation talented person lacks, especially innovation enterpriser lacked already seriously restriction Chinese technology innovation development. Looked from the overseas practice experience, the technical innovation talent training should be put on the work important position. The technical innovation talent is important resources to enhance Chinese knowledge economy growth. The technical innovation talent has gaining knowledge ability, understanding knowledge ability and innovation ability will become the symbol for international competition strength in the knowledge economy time.

The technical innovation talent training which fundamentally decides Chinese economy industrialization, information and knowledge degree.

4.4 Promote technical innovation ability strategy

The technical innovation ability directly involves knowledge essential factor production, utilization and transformation; they are the knowledge innovation ability important constituent. In order to reduce disparity distance of Chinese enterprises technical level and developed country, acceleration Chinese industrialization advancement, urges the knowledge economy to grow, must through promote the technical innovation ability to realize. Through create technical innovation ability factors, enable the enterprises to have the primary high-tech ability, the leading industry and in correlation industry technology innovation ability foundation, realization technology innovation ability to a high level. On the basis of innovation which in the full cultivation of high-tech industry, leading industries and technology-related industries, enhances the whole level of the technological innovation capability. After raise the technological innovation capability level, there is a new round of development again, in order to achieve continue development of technological innovation capacity.

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