

An Analysis on the International Competitiveness of China's Traditional Medicine Industry Based on the SWOT Model

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Abstract

Traditional Chinese medicine is a rarity contributed by Chinese people to the whole human world as well as a crystallization of Chinese people's wisdom accumulated over thousands of years. Since the seventh five-year plan, China's traditional medicine industry has kept fast development, forming its special industrial system and groups. Based on the SWOT model, this paper analyzes the international competitiveness of China's traditional medicine industry in the aspects of strengths, weaknesses, opportunities and threats.

Keywords: Chinese traditional medicine, SWOT, Competitiveness

As a common analysis tool for corporate strategy research, the SWOT model combines enterprises' strengths, weaknesses, opportunities and threats formed in their internal and external environments to have relevant analysis in order to establish operation strategies conforming to their reality. Nowadays, this model has been widely employed in corporate strategic management, market research and analysis on competitiveness. This paper plans to introduce the SWOT model into the analysis on industrial competitiveness and to have empirical analysis on China's traditional medicine industry. The analysis on strengths and weaknesses are mainly focused on the strength of China's traditional medicine industry and a comparison with other rivals, while that on opportunities and threats is devoted to the changes in the external environment and their potential impact on this industry as well as the establishment of proper industrial strategies based on it (Zou, 2005).

1. The SWOT Model

SWOT analysis means analyzing the factors closely related to the subject investigated and setting out them in matrix form in a certain order, then matching these factors with the systematic analysis method for analysis and drawing a series of corresponding conclusions finally.

Actually, SWOT analysis is a method to sum up all the internal and external conditions of the object investigated and then to analyze corresponding strengths, weaknesses, opportunities and threats. With the analysis on strengths and weaknesses focused on enterprises' power when compared with their rivals, that on opportunities and threats is contributed to the changes in the external environment and their possible impact on enterprises. However, the same change may bring about totally different opportunities and threats to enterprises with different resources and abilities. Therefore, they have close relations (Song, 2007).

2. Strengths in China's Traditional Medicine Industry

2.1 Strengths in Production Factors

As the basis for the development of the traditional Chinese medicine industry, production factors have direct effect on its strengths in industrial competition. Actually, China has greater strengths than any other nation in the

major aspects of production factors.

First of all, China's vast territory and various natural conditions have given birth to a variety of traditional medicine resources. According to the latest statistics on China's traditional medicine resources, there are altogether 12807 types of traditional Chinese medicines, among which 11146 are medical plants and 1581 are medical animals, 80 are medical mineral resources (shown in Table 1). Merely 320 types of common medical plants account for a total reserve of 8,500,000 tons. Over 700 production bases all over China produce 400,000 tons of traditional medicine every year. China's high-quality medicine due to its special geographical climate has helped to form unique strengths incomparable for any other nation (Zhang, 2007).

In the competition at international market, China's traditional medicine industry has formed its potential strengths in independent intellectual property rights. Up to now, a complete set of research and production systems has been set up including an array of traditional Chinese medicine colleges, traditional Chinese medicine hospitals, traditional Chinese medicine institutes as well as traditional Chinese medicine enterprises, forming larger professional staff.

2.2 Strengths in Market Demands

Demands for traditional Chinese medicine surely lead to supplies and constantly mature demands will promote the perfection and improvement of traditional Chinese medicine varieties, hence promoting it to be more mature and fostering more obvious competitive strengths.

Due to the large Chinese population, there is an increase in the demands for traditional medicine. In addition, with China's entry into "the aging era", such a huge group has provided a solid basis for the development of the traditional medicine market. Meanwhile, traditional Chinese medicine is widely accepted among Chinese consumers. With the improvement of people's living standard and the enhancement of their self-care sense, China's consumption market of traditional medicine will welcome another wave of development (Shi, 2002).

Expanded demands at the international market have also offered a broad stage and space for the development of China's traditional medicine industry. It has become a recent tendency in international medicine development to find an effective alternative among natural medicine for chemicals, with the medicine composed of natural elements taking up 30% of the global medicine market. China has maintained a steady increase in the export of traditional Chinese medicine. The record of \$1,180,000,000 for China's import and export of traditional medicine products in 2007 achieved the highest record in history.

2.3 Industrial Strengths

It has to rely on relevant enterprises to finally form the traditional Chinese medicine's international competitive strengths, so their international competitiveness will have decisive influences on that of the whole industry. To be more specific, traditional Chinese medicine enterprises' scale, development strategies, organizational structure, targets, operation strategies and corporate brands will all play particularly significant roles in the formation of competitive strengths.

Seen from the whole picture of industry, China has an array of large-scale traditional Chinese medicine enterprises endowed with certain strength. Especially in the recent years, China has made remarkable achievements in the development of traditional Chinese medicine industry. By the end of 2004, 871 enterprises had gone through the GMP reform. Only by implementing innovations based on inheriting traditional cream with modern scientific methods and means, conducting the strategy of modernizing traditional medicine and reforming traditional types of medicine will it really be possible to improve the competitiveness of China's traditional medicine industry and to satisfy the demands at the international market (Wang, 2002).

2.4 Policy Strengths

The government factor is of significant influences. Even if in the condition of market economy, government's policies, plans as well as management systems will have undeniable effects on the formation of strengths in international competition.

Chinese government has been attaching great importance to the development of the traditional Chinese medicine industry, hence a powerful supporter for relevant enterprises. On December 1, 2002, General Office of the State Council transmitted *The Development Outline for the Modernization Development of Traditional Chinese Medicine* established by 8 ministries and commissions, proposing the guidelines, basic principles, strategic targets, key tasks and major measures of China's modernization of traditional medicine, which has had tremendous impact on China's modernization of traditional medicine.

Meanwhile, China's efforts in GAP, GCP, GSP, GLP and GMP identification have also provided support for

China's traditional medicine enterprises in improving international competitiveness and achieving enterprises' internationalization.

3. Weaknesses in China's Traditional Medicine Industry

3.1 Incomplete Standards and Norms on Traditional Chinese Medicine's Quality

The competition in standards belongs to the highest level in industrial competition. Over their many years' management practice, European and American developed nations have established a complete set of strict and standardized medicine quality control standards. Comparatively, there have been no internationally recognized standards for traditional Chinese medicine up to now.

As the cradle for traditional Chinese medicine, China has inescapable responsibilities and undeniable strengths in establishing international standards for traditional Chinese medicine. Currently, the standardization of traditional medicine in China still lies in the preliminary period: for example, the norms for the plantation of traditional Chinese medicine haven't been imposed throughout China; due to the short implementation of GCP and GLP, some experiment data on the evaluation of pharmacology, medical properties and toxicology haven't been accepted by the world. Only by combining the specialties and advantages of traditional Chinese medicine, establishing internationally-accepted standards and producing modern Chinese medicine will traditional Chinese medicine really step into the world (State Administration of Traditional Chinese Medicine of the People's Republic of China, 1998).

3.2 Differences in Cultural Backgrounds

Traditional Chinese medicine is the natural medicine used with the instructions from herbalist doctors. In order to promote traditional Chinese medicine to step into the world, Chinese culture and theories on traditional Chinese medicine should set out first. Due to different historical and cultural backgrounds, there are obvious differences in the principles and thoughts of western medicine and traditional Chinese medicine. The latter emphasizes yin-yang and five elements, possession with symptoms, bloods and channels, deficiency and excess, cold and heat as well as dialectic treatment. With its complex ingredients, traditional Chinese medicine emphasizes nature, flavor and meridian tropism as well as the respective roles of principal, assistant, adjuvant and dispatcher herbs. Differently, western medicine focuses more on applying medicine according to indications and local treatment. Therefore, it is quite difficult for western people accustomed to analyzing matters with micro thoughts to understand traditional Chinese medicine, so is it to find precise equivalents for traditional Chinese medicine concepts in western science and theory. As a result, there is a long way for traditional Chinese medicine to go in order to gain international understanding, recognition and acceptance due to the cultural barriers caused by the differences between eastern and western culture.

3.3 Poor Technological Innovation Ability

At the present stage of international economy, great changes have taken place in the severity and means of competition among enterprises, due to which it is impossible to win the market competition by merely expanding production scales and reducing costs for products. Their survival and development depend more on their abilities of grasping core technologies since the competition among enterprises has been changed from the former one in quantity to a new one in quality. Technological innovation abilities have to be improved in order to achieve success in the current competition.

Medicine industry is a technological innovation-oriented one. In the recent years, some developed nations and areas such as Europe, U.S. Japan and Korea have strengthened their development and input in traditional medicine and their relevant scientific research and production have stepped into the orbit of modernization. However, there is insufficient input in traditional Chinese medicine's development by domestic enterprises and research institutes. As a result, we haven't done well enough in new products' introduction and there is no constant growth in the market share of traditional Chinese medicine due to the impact of pharmaceutical chemicals and biologicals home and abroad.

3.4 Inactive Protection for Intellectual Property Rights

For a long term, China hasn't attached sufficient importance to the intellectual property rights of traditional medicine, causing the loss of relevant knowledge wealth. In addition, intended to protect the intellectual property rights of pharmaceutical chemicals, current patent system fails to protect many areas of traditional Chinese medicine, such as acupuncture, qigong and the four ways of diagnoses employed by doctors of traditional Chinese medicine. On one hand, developed nations make use of their rich relevant experiences to gain the intellectual property rights of traditional Chinese medicine in the name of cooperation; on the other hand, they try to have them all to themselves with intellectual property rights as a weapon. Besides, due to some medicine

manufacturers' poor sense of intellectual property rights' protection as well as their loose management system, some state and industrial secrets have been revealed, hence causing severe damages to China's traditional Chinese medicine industry.

4. Opportunities for China's Traditional Medicine industry

4.1 Economic Globalization

With economic globalization being a necessary tendency in current development, China's entry into WTO marks China's spontaneous efforts to be fused into the process of economic globalization. The traditional medicine industry is a special advantageous field in China's medicine industry and traditional medicine is a traditional export. The entry into WTO helps to take advantage of China's rich traditional medicine resources, to absorb foreign capital, technologies and management experiences as well as to improve the traditional medicine industry.

4.2 Back-to-Nature Tendency and New Health Care Demands

With the change of human survival environment and the improvement of people's living standards, there have been some changes in the spectrum of human diseases, leading to some unsolvable difficulties. For example, the increase of mental and physical diseases and the appearance of some modern ones have converted modern medical pattern from pure treatment to a new one combining prevention, health care and recovery (Liu, 2001). Influenced by the current back-to-earth trend, people begin to switch their attention to natural medicine for the sake of prevention, treatment and health-care needs, hence to traditional Chinese medicine with long clinical history.

4.3 The Development of Modern Science

In the recent two decades, due to the appearance of molecular biology, bio-engineering technology, micro-electronic technology, information processing technology and a series of new chemical separation analysis and identification technology, new-born combined chemical technology and a variety of new-type selections, research and development abilities in pharmaceutical medicine have been largely enhanced, bringing about revolutionary changes to the research in this field.

5. Threats to China's Traditional Medicine Industry

5.1 Serious Restrictions in Technological Trade

On one hand, some western nations open their market to trade for the permission to enter other nations through trading contracts; on the other hand, they strengthen their supervision on imported medicine, establish or improve relevant technological requirements through some measures in the safety and protection of medicine use, such as standards for the examination of microorganisms and antisepsis, including standards for product quality, standardized techniques and requirements of environmental protection for plant extractives including heavy metal, pesticide residue and aflatoxins in order to elevate the threshold of technological trade barriers and green trade barriers (Yao, 2003).

5.2 Japan and Korea's Comparative Advantages in World Natural Medicine Market

Attracted by the prospect of the traditional Chinese medicine industry, many nations, especially Korea and Japan, compete to research traditional Chinese medicine with modern technology in order to grab the international market. At present, the production volume of traditional Chinese medicine in Japan has exceeded ¥100,000,000,000, among which some medicine has succeeded in opening up and occupying the international market. In addition, Japan has established traditional Chinese medicine bases on a large scale and laid down ambitious development plans.

Obviously, Japan and Korea's perfect market operation system, marketing strategies, management experiences and advanced technologies will form great threats to China's enterprises.

5.3 A Large Amount of Foreign Traditional Chinese Medicine Impacting China's Domestic Market

In the recent years, with China's medicine market open to the world, a lot of foreign medicine enterprises have poured into it. Due to its high purity, advanced preparation, steady quality and obvious effect, foreign medicine has comparative advantages compared with traditional one, hence displaying strong competitiveness at China's medicine market (Sun, 2003).

On the contrary, due to their poor basis, China's manufacturing bases of traditional Chinese medicine suffer from a large gap with transnational companies in capital scale, research strengths, production technologies and marketing, hence faced with huge pressure under the impact of exported traditional Chinese medicine and herbal

medicine.

5.4 Prominent Issue on the Sustainable Use of Traditional Medicine Resources

In spite of China's rich traditional medicine resources, there will be increased demands for traditional Chinese medicine with the industrialized development and foreign enterprises' spoliation at low prices, especially wild medicine taking up 80% of the total types of purchased medicine and 60% of the total purchased amount.

In the latest years, due to unplanned gathering of herbal medicine, some medicine resources have been in shortage and some are even faced with exhaustion. In addition, the deteriorated eco-environment has caused rapid reduction of medicine types, degenerate quality and reduced reserves as well. As for those cultivated species, their production and quality have declined due to repeated cultivation (Zhu, 2000). The danger signals have been sent out about the shortage and exhaustion of wild traditional Chinese medicine resources, facing the development of the whole industry with severe challenges.

6. Conclusion

To sum up, a lot of complex factors may influence the international competitiveness of China's traditional medicine industry. However, it is certain that traditional Chinese medicine will go to the world and share equal status with western medicine. After thousands of years' clinical practice and verification, its effects have been fully proved. Now it is the most important issue for the traditional Chinese medicine industry to make use of opportunities and deal with threats during the process of its development.

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Table 1. Statistics on China's Traditional Medicine

Classification	Type	Quantity
Source-oriented classification	Plants	11145 types
	Animals	1586 types
	Mineral resources	80 types
Use-oriented classification	Traditional Chinese medicine	Over 1200 types
	Ethnic medicine	Over 4000 types
	Folk medicine	Over 7000 types