



Analysis of the Strategy of “Going Out” of China’s High-speed Rail Industry

Jingyuan Su*, Jinsun Lee

Woosong University, Daejeon, South Korea.

How to cite this paper: Jingyuan Su, Jinsun Lee. (2023) Analysis of the Strategy of “Going Out” of China’s High-speed Rail Industry. *Journal of Humanities, Arts and Social Science*, 7(10), 2063-2066.
DOI: 10.26855/jhass.2023.10.028

Received: September 30, 2023

Accepted: October 29, 2023

Published: November 27, 2023

***Corresponding author:** Jingyuan Su, Woosong University, Daejeon, South Korea.

Abstract

In recent years, China has made significant advancements in high-speed rail technology. Its research and development capabilities have become increasingly robust, and its high-speed rail network now boasts the largest mileage in the world. While China's high-speed rail market is expanding rapidly, the country's high-speed rail industry is also actively seeking to expand into the international market. Although cooperation intentions have been established with many countries, there are not many tangible cooperation projects. This highlights several drawbacks of China's high-speed rail industry, including limitations in technology research and development capabilities, management experience, and talent pool. Therefore, it is of great significance to study the development of China's high-speed rail industry, especially the implementation of its "going out" strategy. This paper discusses the opportunities faced by China's high-speed rail industry in "going global" under the background of the "Belt and Road" initiative. Secondly, it analyzes the advantages, challenges, and difficulties that China's high-speed rail faces in expanding its presence in the international market. Finally, scientific and reasonable suggestions are being put forward to address the challenges faced by China's high-speed rail industry as it seeks to expand into the international market.

Keywords

High-speed rail industry, "going out", strategic communication

1. Opportunities for China's high-speed rail industry to "go global"

With the development of the global economy, high-speed rail has won wide acclaim from consumers around the world for its advantages of low carbon, energy saving, convenience, and sustainable development. Many countries have made it clear that they will develop high-speed rail on a large scale by introducing foreign technology, which brings huge market opportunities for China's high-speed rail industry. Especially in the context of the “Belt and Road” initiative, China’s high-speed rail industry is facing unprecedented development opportunities, and China already has the world’s largest high-speed rail network. The improvement and extension of this network can create greater network externalities. The huge foreign market demand and the support of China's foreign investment policy have provided strong support for the international expansion of China's high-speed rail industry. China has strong high-speed rail production capacity and rich operating experience, so it has the competitive advantage of "going out" in the international market.

The “One Belt, One Road” initiative launched by China in 2015 has accelerated the process of China’s high-speed rail industry entering the international market and promoted China’s high-speed rail technology to be widely promoted in countries along Central Asia, West Asia, and Europe. At the same time, with the continuous increase in the operating mileage of China's high-speed rail, the technology of China's high-speed rail industry is becoming more and more mature, and the level of safety and quality is also continuously improving, which further promotes the pace

of China's high-speed rail industry going abroad. The "Made in China 2025" policy issued by the State Council on May 8, 2015, provides a good environment for technological innovation and industrial upgrading for the internationalization of China's high-speed rail industry. The introduction of this policy has created favorable conditions for the success of China's high-speed rail in the international arena.

2. Advantages of China's high-speed rail industry "going out"

After years of development, China's high-speed rail industry has made remarkable technological progress. At present, China has become one of the few countries that has mastered advanced high-speed rail technology in the field of high-speed rail technology and has accumulated rich experience in operation and management. China's railway network has covered various railway projects, and the safe and smooth transportation of a large number of passengers every year also proves the operation quality of China's high-speed rail. Facing the opportunities and fierce competition challenges brought by the international market, China's high-speed rail should speed up the pace of "going out". Compared with other countries, it has advantages in technology, capital, and cost performance in the process of "going out" (Lan Yawen, 2018).

2.1 Cost advantage

Although China's high-speed rail development started relatively late compared to some developed countries, it has experienced rapid growth since the opening of the Beijing-Tianjin Railway in 2008. China's high-speed rail has successfully caught up with and surpassed other countries in this field. Compared to other countries, China's high-speed rail has made remarkable technological progress. Through the introduction, absorption, and integration of international technology, it has already gained significant technological advantages. Since China's first high-speed railway started operating in 2004, there has been only one accident, which demonstrates the high safety performance of China's high-speed railway (Lu Yuewei, Sun Jingjing, & Li Gang, 2018). In addition, China's high-speed rail fares rank among the lowest in the world, at only 7 cents per kilometer, demonstrating a significant cost advantage.

2.2 Technical advantages

Many cities in China have completed high-speed rail construction projects, and their technology research and development are relatively mature. China has made remarkable achievements by relying on technology imported from other countries to achieve independent innovation. Not only has strong strength in construction technology and ability but also cultivated a large number of professional and technical personnel. In addition, China's high-speed rail industry has achieved innovative research results in key technical fields such as engineering production, system integration, platform construction, EMUs, and traction power supply, and has corresponding independent intellectual property rights.

2.3 Energy saving and environmental protection

Another significant advantage of China's high-speed rail is its performance in terms of energy conservation and environmental protection. China attaches great importance to environmental protection and has proposed a sustainable development strategy to benefit future generations. In the development process of China's high-speed rail industry, the concept of environmental protection is required to be fully followed to ensure that it meets the requirements of sustainable development. Through related experiments, it is found that if the energy consumption per person per kilometer of ordinary trains is 1, that of high-speed rail is 1.42, that of cars is 8.5, and that of airplanes is 7.44 (Lu Qi, 2016). At the same time, China is one of the few countries that has mastered high-speed rail permanent magnet technology (Luan Shenzhou, 2017). The permanent magnet traction system technology meets the current urgent demand for low-carbon transportation and the concept of green environmental protection.

3. Difficulties faced by China's high-speed rail industry in "going global"

3.1 Technology research and development

After Chinese high-speed rail companies have achieved some success in overseas markets, they have broken the monopoly of a few countries such as Japan, France, and Germany in the global high-speed rail market. However, this has also caused the high-speed rail companies in these countries to block high-end technologies, making technical

exchanges and cooperation more difficult. In addition, disputes over intellectual property rights have also become a means to curb competition, creating barriers for China's high-speed rail to enter some countries. In addition, since some projects need to comply with European standards, each component and monitoring equipment of the high-speed rail must pass the certification of European laboratories. However, most of China's high-speed rail companies lack such certification, so they are forced to buy the required components and equipment in Europe. This increases the operating costs and risks of Chinese high-speed rail enterprises.

3.2 Social factors

Although the economic ties between countries around the world are becoming closer and the process of regional economic integration is constantly advancing, eliminating these differences remains a challenge due to the existence of cultural disparities. In the process of implementing China's high-speed rail projects overseas, some countries have also faced social issues such as boycotts of foreign products or obstacles to employment resulting from the introduction of these projects. These factors have had a significant impact on the development of Chinese high-speed rail companies in international markets. When the U.S. government negotiated cooperation with China on the high-speed rail project, it expressed the intention that 80% of the components of the high-speed rail project should be manufactured in the United States, and 80% of the newly hired employees should be Americans (Cui Feng, 2016).

3.3 Talent shortage

Due to the diversified national conditions and complex situation of the countries along the "Belt and Road", China's high-speed rail industry needs a large number of excellent compound talents to meet the international needs in the process of "going out". This includes all kinds of professional talents, technical talents, business talents, prospecting talents, design talents, and other talents with various comprehensive abilities. Especially in international trade and negotiation, the demand for excellent talent is more urgent. However, at present, my country's talent pool in this area is relatively insufficient, so many opportunities for international R&D and cooperation have been missed.

4. Suggestions for "going out" of China's high-speed rail industry

China's high-speed rail-related policies and major news events are usually widely disseminated through mass media, which enables the information to reach a wide audience and be authoritative. This method of communication helped to shape the Chinese public's identification with high-speed rail. At the same time, the agenda-setting function of the mass media also has a certain impact on foreign audiences, because foreign media will pay attention to the reports of China's mainstream media on the high-speed rail and quote their content. In this way, the image and development of China's high-speed rail can also get attention and recognition on the international stage. In addition, the official website of the high-speed rail company has set up multiple language versions to facilitate the browsing and reading of high-speed rail professionals and customers from all over the world. It is an important channel for Chinese and foreign audiences to understand the company and obtain high-speed rail information (Zhang Lingxiao, 2021).

With the rapid development of new media technology, social media platforms including Weibo, WeChat, and Douyin have become important tools for high-speed rail companies to interact and communicate with audiences. Through these platforms, high-speed rail companies can release and disseminate the latest major events and information in a timely manner. In the process of spreading the high-speed rail "going out" strategy, high-speed rail companies attach importance to cooperation with foreign mainstream media and use the influence of international media to enhance the image and popularity of China's high-speed rail. In order to further expand communication channels, high-speed rail companies actively participate in high-end exhibitions and exhibitions in the international high-speed rail industry to showcase the achievements of China's high-speed rail. At the same time, they also regularly invite international media and experts to visit their enterprises and let them experience the high-speed rail in person, so as to strengthen exchanges and promote the brand of high-speed rail. All these public relations methods have played an important role in the "going out" of the high-speed rail brand.

High-speed rail, as an important transportation infrastructure, is different from ordinary products. Its construction not only involves a country's political and economic security but also holds significant national defense strategic importance. The current complex international environment has brought many uncertainties to China's high-speed rail expansion. Projects such as the Mexican high-speed rail, the American West Express high-speed rail, and the Singapore-Malaysia high-speed rail were successively suspended due to unilateral breaches of contract by foreign

governments, which sounded the alarm for us. This shows that for China's high-speed rail to successfully enter a target country, it must first gain the trust of the government and people of that country. To achieve this goal, we must engage in strategic communication to address the doubts and concerns of the international community regarding China's high-speed rail. This will help to strengthen political and strategic mutual trust among nations. Only in this way can a good atmosphere and conditions be created for the "going out" of high-speed rail.

5. Conclusion

China's high-speed rail has numerous strong advantages, including its high speed, environmental friendliness, compatibility, cost-effectiveness, convenience, safety, and reliability. The emergence of high-speed rail has changed the isolated situation where trade between countries can only be realized through navigation. The high-speed rail network is jointly managed by multiple countries, allowing for the sharing of economic benefits generated by the system and strengthening economic ties between nations. This has weakened the grip that certain countries, especially those with maritime hegemony, have over their trade flows. This promotes economic globalization and establishes a new type of international political and economic order. High-speed rail, as the primary mode of land transportation, is on par with ocean transportation and holds the same level of significance. In an increasingly connected world, high-speed rail will play an increasingly important role. It promotes exchanges and cooperation between different countries and strengthens economic ties among nations. The development of high-speed rail not only drives the prosperity of the transportation industry but also promotes the growth of related industries and creates more job opportunities. This will further drive economic growth and prosperity.

In conclusion, China's high-speed rail has numerous advantages and is playing an increasingly significant role globally. It provides more options for trade exchanges between countries, strengthens economic ties, and promotes the process of economic globalization. The development of high-speed rail is of great significance not only to China but also to the world. It will make positive contributions to the establishment of a new international political and economic order.

References

- Cui Feng. Research on the International Competitiveness Evaluation of China's High-speed Rail Industry [D]. Southeast University, 2016.
- Lan Yawen. Research on China's high-speed rail industry's "going out" competition strategy under the background of "One Belt One Road" [D]. Shandong University, 2018.
- Lu Qi. Research on the Strategy of Promoting China's High-speed Rail Industry "Going Global"—Based on the Perspective Analysis of the "Belt and Road" Strategy [D]. Anhui University, 2016.
- Lu Yuewei, Sun Jingjing, Li Gang. Research on the strategy of "going out" of China's high-speed rail industry—Analysis based on the perspective of the "Belt and Road" initiative [J]. *Journal of Modern Commerce and Industry*, 2018 (10): 59-60.
- Luan Shenzhou. Opportunities and Challenges of "Going Global" of my country's High-speed Railway under the Background of "One Belt and One Road" [J]. *Journal of Zhengzhou Institute of Aeronautical Industry Management*, 2017(5):31-38.
- Zhang Lingxiao. Research on the communication strategy of China's high-speed rail industry from the perspective of strategic communication [J]. *Industrial Economics*, 2021 (1): 89-91.