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World Maritime University

Shanghai, China

Analysis on Jingtang Container Terminal Port Competition Strategy

Ву

DU XIAOJIAO

CHINA

A research paper submitted to the World Maritime University in partial Fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

2011

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DECLARATION

I hereby certify that all the material in this dissertation that is not my own work have all been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and not necessarily endorsed by the University.

(Signature):	
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(Date):_____

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Shi xin

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I extremely want to show my indebtedness to my beloved parents, who offered me full support and encourage during whole my life.

Last but not least, I offer my regards and blessings to all of those who supported me in any respect during the completion of the project.



Abstract

As the further development of economy globalization, container transportation, which nowadays becomes primary world marine mode, has increasingly expanded in marketing share. Therefore, it inspires harbor industry to actively adapt to this development orientation with industry structure and policy adjustment and lead to more and more intensive competition among container terminals.

Bohai Rim locate in northern China coast, the region has the largest inland sea - the Bohai Sea. The Liaodong Peninsula, Shandong Peninsula and the North China Plain encircle this 77,000 square kilometers sea. Alongside the Bohai Rim's 5700 kilometers "C-shaped" coastline, which is nearly one-third of the total coastline, there are more than 40 bays and more than 20 cities. The ports density and distribution of sizes formed a unique group of modern ports. Bohai Rim ports' economic hinterland covered almost half of China. They are the most important outgoing sea ports for northeast, north, northwest and east of China.

Jingtang Seaport is the state's first class opening port. In the history of Chinese seaport construction, Jingtang seaport creates a surprising speed. The construction work commerced on Angust 10, 1989. It was in 2003 that No.1 and No.2 port areas had been completed, which own 16 deep-water berths of 15000-ton-class to 50000-ton-class with coal, ore, shipping container, petrol liquefied gas, bulk cement and so on. The biggest one is 70000-ton class cargo loading and unloading. The cargo through put of the port is only 79000 tons when simple constructed navigation in 1992, and 5000000 tons to 20830000 tons since 1998, stepping into the top 20 coastal seaports in china. Jingtang Seaport awarded May 1.Prize in 2003 becomes a well-known champion port.

The construction and operation of Jingtang Seaport open up wide space for the





development of its hinterland benefiting from the advantage of seaport, a number of enterprises make full use of both the domestic and the oversea markets. The seaport offers high-quality, high-effective, perfect and service for clients, besides, continuously expanding the scale of company and improve economic benefit. With 70000-ton-class berth in Wangtan Port Area and 250000-ton-class berth in Caofeidian Port Area completed by the end of 2005, Jingtang Seaport will definitely contribute to the economic development of its hinterland. (Retrieved from http://www.jtct.cn)

The management of Jingtang Stevedore will face not only the competitions of large harbors around the area likes Dalian, Tianjin and Qingdao but also the competitions of numerous subordinate container terminals of Hebei Port group inevitably. Thereby it is necessary to do further analysis on inner and outer surroundings, make research and consolidate competitive advantages and submit competitive strategies respectively.

Thus all of these will be significance to both overall developments of Hebei container transportation and promotion of integrated competitive ability of Tangshan city.

In response to major changes in the international shipping industry, a strategy of domestic competition and cooperation between ports is a trend and should be adopted. However, some large ports in Bohai Sea region, effective cooperation between these ports has not yet formed. Many ports adhere to the "recent attack, far together" principle. Competition is fierce. It is difficult to fully utilize resources, complement to each other and the overall regional advantage does not play well. This in-depth study and analysis of the Bohai Sea ports of internal competition and cooperation issues, on the Bohai Sea port development prospects group.

This article tries to clarify the basic competitive orientation for Jingtang Seaport in such industry. These clarifications refer to research results on container transportation development of experts and scholars worldwide and research of inner and outer





surroundings aroused with Jingtang container stevedore development. It also introduces PEST and 5F models to systematically analyze integrated and industrial surroundings as well as competitive opponents. Under the research of resource, capabilities and core competitive ability, it clearly defines the competitive ability of this terminal. Furthermore, with application of SWOT and STP models, and port competitive ability evaluation analysis form, this article also make comprehensive analysis between outer surroundings and inner capabilities to recognize the target market orientation of this terminal. In addition, taking advantage of competitive strategy alternative analysis forms and domestic container throughput generative evaluation, this article propose low price and high quality policy, co-operative strategy, resource integrated strategy, port logistic development strategy and all risks of these strategies respectively. Base on above analysis, from the point of outer surroundings and capabilities improvement, this article bring forward four protective measurements for the terminal management measurement, sea route expeditious construction measurement and Jingtang supportive construction measurement. Although competitive strategies and competitive advantages are no longer new concepts, they be increasingly important in guidance of enterprise appear to management. Competitive advantages are the core of enterprise performance in marketing. As economy is becoming globalize, from the aspects of strategy management research, it should pay more attentions on feasible competitive advantages of the enterprise. The analysis and propose of competitive strategies in this article will provide some useful reference for the formulation of development strategies for Jingtang container stevedore.

Key words: Jingtang harbor; Container terminal, Competitive ability evaluation analysis form



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Chapter 1 Introduction

1.1 Background Information

With the advantages of large volume of marine transport, great through capacity, less restrictions from roads and rail, low freight and so on, ocean transport has become the most important mode of transport in international trade. Ocean transport accounted for 70% of the total international transport volume. From the sixties last century, container shipping started to rise in international shipping, and gradually became one of the world's main modes of transport. Its growing market share prompted port industries continue to take the initiative to apply to direction which should be developed to actively adjust the industrial structure and industrial policies. This lead that the degree of competitive process between container terminal operators becoming increasingly fierce.

Bohai Rim locate in northern China coast, the region has the largest inland sea - the Bohai Sea. The Liaodong Peninsula, Shandong Peninsula and the North China Plain encircle this 77,000 square kilometers sea. Alongside the Bohai Rim's 5700 kilometers "C-shaped" coastline, which is nearly one-third of the total coastline, there are more than 40 bays and more than 20 cities. The ports density and distribution of sizes formed a unique group of modern ports. Bohai Rim ports' economic hinterland covered almost half of China. They are the most important outgoing sea ports for northeast, north, northwest and east of China.

Jingtang Seaport is the state's first class opening port. In the history of Chinese seaport construction, Jingtang seaport creates a surprising speed. The construction work commerced on Angust 10,1989. It was in 2003 that No.1 and No.2 port areas had been completed, which own 16 deep-water berths of 15000-ton-class to 50000-ton-class with coal, ore, shipping container, petrol liquefied gas, bulk cement

1





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The construction and operation of Jingtang Seaport open up wide space for the development of its hinterland benefiting from the advantage of seaport, a number of enterprises make full use of both the domestic and the oversea markets. The seaport offers high-quality, high-effective, perfect and service for clients, besides, continuously expanding the scale of company and improve economic benefit. With 70000-ton-class berth in Wangtan Port Area and 250000-ton-class berth in Caofeidian Port Area completed by the end of 2005, Jingtang Seaport will definitely contribute to the economic development of its hinterland.

Jingtang Port is located in northern Bohai Bay. It is the nearest point from Beijing and Tianjin export ports of the Bohai Bay. It is 80 kilometers southeast from Tangshan City, 64 sea miles east away of Qinhuangdao Port and west 30 miles from Caofeidian port. In Dr. Sun Yat-sen's "The International Development of China", Jingtang port was submitted the proposed "largest northern port" port site. It is also the throat connection of North China and Northeast China. Beijing-Shenyang, Beijing-Qinhuangdao, Datong-Qinhuangdao railways running through the whole territory. Tangshan-Tianjin, Beijing-Shenyang and the coastal highways also running across the entire territory. It has interwoven into a network of the railway roads, the traffic is highly developed. (Retrieved from http://www.jtct.cn)

The management of Jingtang Stevedore will face not only the competitions of large harbors around the area likes Dalian, Tianjin and Qingdao but also the competitions of numerous subordinate container terminals of Hebei Port group inevitably. Thereby it





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This article tries to clarify the basic competitive orientation for Jingtang Seaport in such industry. These clarifications refer to research results on container transportation development of experts and scholars worldwide and research of inner and outer surroundings aroused with Jingtang container stevedore development. It also introduces PEST and 5F models to systematically analyze integrated and industrial surroundings as well as competitive opponents. Under the research of resource, capabilities and core competitive ability, it clearly defines the competitive ability of this terminal. Furthermore, with application of SWOT and STP models, and port competitive ability evaluation analysis form, this article also make comprehensive analysis between outer surroundings and inner capabilities to recognize the target market orientation of this terminal. In addition, taking advantage of competitive strategy alternative analysis forms and domestic container throughput generative evaluation, this article propose low price and high quality policy, co-operative strategy, resource integrated strategy, port logistic development strategy and all risks of these strategies respectively. Base on above analysis, from the point of outer surroundings and capabilities improvement, this article bring forward 4 protective measurements for the terminal management measurement, sea route expeditious construction measurement and Jingtang supportive construction measurement. Although competitive strategies and competitive advantages are no longer new concepts, they be increasingly guidance enterprise appear to important of management. Competitive advantages are the core of enterprise performance in marketing. As economy is becoming globalize, from the aspects of strategy management research, it should pay more attentions on feasible competitive advantages of the enterprise. The analysis and propose of competitive strategies in





this article will provide some useful reference for the formulation of development strategies for Jingtang container stevedore.

1.2 Literature Review

Strategic management as the core of enterprise management, its theory continued to be thorough as economic globalization expands. Contemporary strategy research has not simply cruising in the management of a single category, but also learn and absorb the philosophy, religion, economics, psychology, sociology, political science, law, ethics, history, anthropology and other disciplines of study research results, current research has entered a strategic development stage of the jungle. Internationally, from the eighties of last century, Prof. Michael E. Porter, from Harvard Business School the United States, has focused the world's major strategic research results into the application of industrial economics ideas, putting forward competitive strategy and competitive advantage ideas of the system. In recent years, written by Michael Porter "Competitive Strategy Techniques for Analyzing Industries and Competitors" (Porter, 1998a), "Competitive Advantage" (Porter, 1998b) and "the Competitive Advantage of Nations "(Porter, 1990), which greatly attract and inspire our country's strategic management theory and practice of those.

In the port industry, since the 90s of last century, with the rapid growth of the domestic container transport and competition intensified, focused on enhancing advantages of the port area to speed up the development strategy for Port Container Transport, container transport strategy research and other fields, industry experts and academics, and port operators have been active and productive thinking examination and practice. In the domestic journals "Containerization" and "China Ports", "China Water Transport" and other industry-related publications designed the insights of experts at home is not uncommon. Michael Porter's "five forces model" is applied by a lot of researches and practitioners. In recent years, several major domestic ports are





put forward a set of packing transport development strategy for the core business or strategy. Board chairman of Tangshan port Investment Company Mr. Liu wei min's article "Development Target & Strategy of Jingtang Harbour District, Jingtang Port" (Liu, 2005), states deep and detailed thinking of competitive strategies of container transport issues, which gives some inspiration on the topic of this research to carried out. Since 2002, China has been carried out the national implementation of the port management system reform. To 2004, full completion of devolution of major ports along the China eastern coast has completed and the separation between government and enterprises has also finished. The wishes of the local government to develop the port are unprecedented arose, and coastal port infrastructure started thriving. Competition between port enterprises, especially container transport competition has entered a new stage. Facing the global and domestic competition, port operators and industry experts and scholars gave a much more clearly acknowledgement and understandings are further enhanced on the topic of the port competitive advantage and strategic importance. I believe the future operation strategy of the port areas will further broaden and deep-going. The focus of the study will also shift from a wide range of competitive strategy to how to obtain sustainable competitive advantage.

1.3 Main Research Method

The study is based on the subject of the container shipping industry of the Bohai sea rimland ports analysis, with the use of PEST model to study the external environment of Jingtang Container Terminal in general; apply the "five forces model" to study the main factors which are affecting the industrial structure and have a clear image of the basic industry environment; through the SWOT method to analyze the opportunities, threats, strengths and weaknesses that Jingtang container terminal is facing; the use of STP model is for target market segments; the use of port competitiveness evaluation form is to quantify the competitiveness of the Jingtang container terminal from the customer point of view to submit their development





orientation. Based on the above analysis, this article will bring out competitive strategy and guarantee measures. The research project's main characteristics are as the following:

- 1. Focus on a systems analysis. Use systematic scientific thinking as a guide to do the analysis of the industrial structure. With the study of internal relations between macroeconomic factors and micro factors which are affecting industrial structure to determine the importance of each factor and to explore the quantitative and laws of these factors. Besides, this essay will also have a discussion of interactions between various factors and the law of changes correlation analysis and description.
- 2. Combination of qualitative analysis and quantitative analysis. In the research, the author strives to detailed data analysis to infer the basic environment industry, forecast the direction of industrial development and establish a port competitiveness evaluation system. The main aim is to quantify competitiveness of Jingtang container terminal and, with the theoretical basis of qualitative analysis, this paper tries to fully validate and support issues this study concluded.
- Combination of theory and practice. The essay tries to combine industry analysis, competitive strategy, competitive advantage, marketing theory, practice and the specific port management to achieve scientific and practical results with application of theory as a research tool.
- 4. Emphasis on case studies. The paper studies container port operation decisions both at home and abroad, strategy formulation and implementation of relevant cases in particular, to identify problems and analyze problems. With comparisons between different ports' actual situation, we may draw conclusions for reference and analysis.
- 5. Focus on the application of interview. The research aim of this subject focus both





on the literature research and analysis and also on the specific content of the subject. With the help of industry experts and port operators and other responsible persons, the author is able to conduct special interviews to enrich research ideas and also enable the subject of increased availability.

6. Field-oriented research. This topic needs more research to grasp the situation of container port operations at the scene, which spends a certain amount of time and energy to study the process of container terminal operations analysis.

1.4 Main Research Content

This essay based on the external environment and internal environment analysis of Jingtang container terminal, makes clear understandings of opportunities and challenges of Jingtang container terminal. With the use of target market segments of Jingtang Container Terminal, the article is specifically targeting the development position of Jingtang Container Terminal. According to the principle of maintaining competitive advantage, this paper also gives advice on what competitive strategy Jingtang Container Terminal is proposed to be taken of and further proposed the implementation of competition policy guarantee measures.

Main Structure and Content:

Chapter 1 Abstract

This chapter mainly introduced the background information and the meaning of choosing this topic, as well as domestic and international literature review and researches related to the main content.

Chapter 2 Development of the external environment of Jingtang container terminal and container transport

By using PEST model, this chapter analyzed the overall external environment of





Jingtang container terminal; through the application of the "five forces model", this research analyzed the industry environment. Furthermore, the paper also studied the main competitors' four diagnostic elements: main future objectives, the existing strategies, planning ideas and ability to carry out.

Chapter 3 Analysis of the internal environment of Jingtang container terminal

This chapter mainly studied three aspects of Jingtang container terminal's internal development environment: current enterprise resource, capability and core competitiveness. Based on this analysis, this chapter brought up three core competitiveness of Jingtang container terminal: geographical advantage, water collection and distribution advantages and cost advantages.

Chapter 4 Development orientation of Jingtang container terminal

Using strengths, weaknesses, opportunities and threats analysis, this chapter further clarified the overall development situation of Jingtang container terminal. By segmentations of target market, this chapter defined the target market; through the perspective of customer needs analysis, evaluation of port competitiveness system can be built up and the competitiveness of the Jingtang container terminal were able to be evaluated. Besides, based upon the above analysis, the developing orientation of Jingtang container terminal is proposed.

Chapter 5 Adoption of competitive strategy of Jingtang container terminal

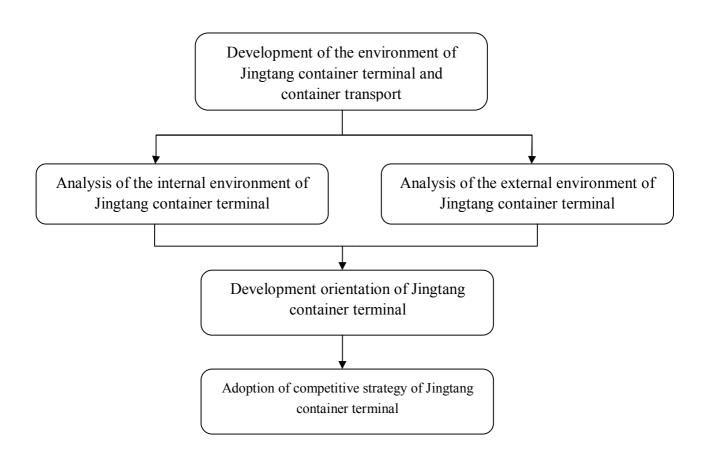
With the use of port competitive strategies selection table method, this chapter proposed that Jingtang container terminal should clearly focused on enhancing the overall competitiveness of ports in the implementation of low-cost operation strategy, the joint venture strategy, the port resource integration strategy and port logistics development strategy. Related strategies are also described and analyzed in this chapter.





Chapter 6 Conclusion

This chapter summarizes research work.





Chapter 2 Development of the External Environment of Jingtang Container Terminal and Container Transport

2.1 Overview of the Port External Environment

Ports as one of the most important parts of the basis industry in national economy, is the link hub between inland transportation and marine transport. Ports are recognized as the country's economic throat by those coast states. With the acceleration of global economic integration, many ports put increasing efforts into construction and development to meet the needs of international trade. The role of modern ports is becoming to be the controller of three-dimensional transport and the center of the integrated transport system. Container transport, as one of the most important parts of port transportation system, presents interactively in such a system.

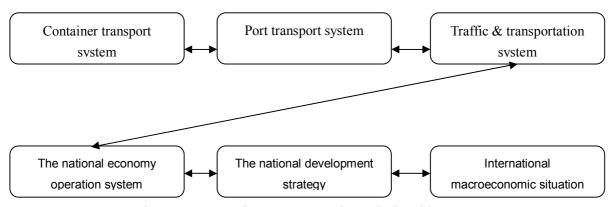


Figure 2.1 Container transportation relationship system

Therefore, the relevant external environment has important implications on the port development.

External environment of port can be divided into three main levels: the general environment, industrial (industry) environment and competitive environment.

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The overall environment analysis focuses on the future. The overall environment includes those factors that affect an industry and business in the broader social environment. It can be divided into six areas: population, economy, law and policy, social cultural, technology and global environment. Analysis of the overall environment, its main purpose is to follow changes in external factors and trends to help companies identify opportunities and threats.

Analysis of the industry focuses on environmental impact of corporate profits ability to understand the conditions and factors. Industry environment analysis mainly studies the threat of new entrants, the bargaining power of suppliers, bargaining power of buyers, threat of substitutes and competitors' situations. Compared with the general environment, industry environment has more direct impact the impact on competitive advantage.

Analysis of the major competitors is aimed to track and predict actions, reaction and purpose of competitors. Through the analysis of competitors, one can understand the future purpose, the current strategy, ideas and ability of competitors. This can help a company to understand, comprehend and predict the actions and motives of competitors in order to take initiatives in competitions. Here are three aspects where Jingtang container terminal were described and analyzed from the external environment.

2.2 General Environment

In general, enterprises are faced with the overall environment including six major aspects: population, economy, law and policy, social cultural, technology and global environment. Specifically to the port industry, the focuses are economic, legal, policy, technology and the global environment. The global environment as the most macro factor has been much discussed so in this paper we do not describe it in details. The



above factors can be displayed for visual awareness through the PEST model. (Reviewed from http://en.wikipedia.org/wiki/PEST analysis)

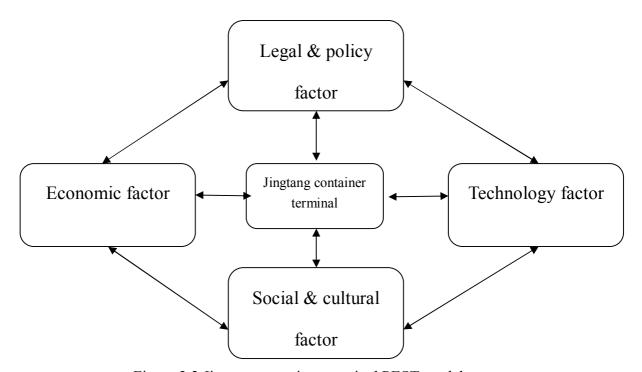


Figure 2.2 Jingtang container terminal PEST model

2.2.1 Legal & Policy Factor

Macro policy and legal environment including a series of heterogeneous content such as country's economic, political and legal. This essay only studied a number of policy and law factors which have direct relationship with and impact on the development of Jingtang container terminal. These factors are: the government port policy, port management system reform and the influence of Law of Port.

1 Influence of the government port policy

(1) National port policy

According to the 12th Five-Year Plan (2011-15), further improvement of the layout of coastal ports will be carried out and ports' services will significantly expand. The formation of a rational layout, logistical support, effective service, safety and environmental protection, advanced management system for the modernization of





ports will be developed. Port structure will be further optimized and the number of deep-water berths will reach to 2214. The adaptive ability degree (port capacity / throughput actually completed) will reach to 1.1.

Besides, issues like orderly advance the coastal port infrastructures, optimize the structure and layout of coastal ports, make efforts to expand the port functions, enhance the protection of the port capacity and service levels are also mentioned. Improve the level of optimization of port layout, develop transport systems of major cargo port layout such as coal, imported crude oil, imported iron ore and container to enhance the modernization level of coastal ports. Advance to promote the construction of container transport system: to grasp the construction of the rhythm, give full play to existing facilities capacity, take steady progress in the construction of route container port and corresponding development of regional port, feeding Port Container Terminal. Accelerate the formation of domestic container transport system. According to planning, by newly built and tapping the potential, the new container terminal ofcapacity will be 58 million TEU. (Reviewed from http://finance.people.com.cn/GB/14747341.html)

(2) Local port policy

From a macro point of view, according to China's strategic goal of national economic and social development, based on Hebei Province's "first one, two main" strategic requirements, Jingtang Port must take development as the theme, structural adjustment as the main line, deep reform and technological progress as the driving force, and constantly improve the functionality and expand production scale and improve the port services standards to achieve sustainable development of Jingtang Port. From the point of transport demand, northern China will import 61.57 million tons of ore. Import of crude oil has also exceeded 1 billion tons, which is also need large-tonnage berths. With the international container and the gradual development of large-scale ship trends, we also need large-scale container terminal.





2 Influence of port management system reform

Management is an eternal theme for enterprises. The port management innovation is to make the port development keeping pace with the times, constantly adapt to environmental change, adjust and improve themselves and continue to maintain a competitive advantage and achieve sustainable development. What's more, as central government announced documents of the introduction of deepening the reform of port management system, in accordance with the socialist market economic system, further mobilize and bring into play the port construction and management of all aspects of the initiative, give full play to the market's basic role in allocating resources to promote the comprehensive competitiveness of the port to adapt to the national economy and foreign trade development needs. Directly under the dual leadership of the central and decentralized local port management, separate administration from business, further mobilize local government to have enthusiasm of port construction, make clear the port enterprises independent market players and promote the establishment of modern port system.

3 Influence of Law of Port

Port Law of The People's Republic of China regulates legal obligations and responsibilities at the level of the legal norms of port planning, port construction, port operation, port management. It not only gives constraints of operation activities of the port enterprises, but also protects the legal rights of the port enterprises, which effectively promoted the healthy development of the port industry.

2.2.2 Economic Factor

To some extent, the economic environment and policy environment are closely related. Specifically to the port industry, the analysis of economic factors mainly focused on the macroeconomic environment and hinterland economic environment.



1 Macroeconomic environment

China will still be in its golden period of development. The fast trend for industrialization, urbanization, knowledge informationization, infrastructure modernization and economic globalization going on now are all inter-linked. They support and strengthen each other and are the five major forces driving China's development. The Chinese economy will continue to maintain relatively fast growth with a potential annual growth rate hitting 8-9 percent. The financial crisis has not swayed Chinese economic progress too much, although it has caused temporary difficulties. But this won't affect China's long-term economic growth trend. The crisis has in effect become strong evidence that China's ability to cope with external strikes has greatly improved over the years.

2 Hinterland economic environment

Jingtang port international container terminal has vast hinterland of resources located in the heart of the Bohai economic circle. It is also an important part of the "big Beijing strategy". Depend on the back of Beijing-Tianjin-Tangshan, Beijing-Chengde-Zhangjiakou Delta Economic Zones, the port is the key development area of Hebei Province's "one line, two sides " development strategy. The port has vast hinterland and sufficient sources of goods. Direct economic hinterland of Tangshan is an important energy, raw materials base and an area which is rich of variety of agricultural products. Tangshan city has formed the coal, steel, electricity, building materials, machinery, chemicals, ceramics, textiles, papers and food ten pillar industries. And it is also communication and transportation hub and goods distribution center between Northeast and North China, which means that there are plenty supply of export goods. Indirect Jingtang Port hinterland may cover north, northeast and northwest areas, especially with the Strategy of the Western Development, more attention will be put on communication and cooperation with the western provinces like Shanxi, Shaanxi, Inner Mongolia and other places to establish closer relationship and expand the service radius. With the Bohai Sea region's rapid





economic take-off, Jingtang Port as an important part of the area will play an increasingly important role.

2.2.3 Technology Factor

Technology factors described in this article mainly refers to the new technology which has impact on production and operation of the port and its operations.

1 Scaling-up of containerized vessels

To improve transport efficiency and reduce transportation costs, the current trend of large-scale container ships has been very clear. From 1968 the first generation of container ships to 1997 the sixth generation container ships, the loading capacity grew rapidly from less than 1000TEU to over 8000TEU. Now the even larger 10000TEU container ship also put into use. Large-scale container ships require higher level of port's natural conditions and greatly improved handling equipment. Take loading and unloading equipment for example, the sixth generation container ships are more than 45 meters wide, 18 rows of containers are arranged on deck. This requires the terminal must has quay cranes of 60 meters extended from above the loading bridge to obtain berthing capacity with the sixth generation container ships. This requires that the port must have the appropriate equipment and facilities.

2 Channel depth condition

Under conditions of large-scale container vessel development requirements, to meet the requirements of all-weather navigation of fifth and sixth generation container ships, port's channel depth must be over 15 meters and channel width should be no less than 250 meters to meet the two-way navigation requirements. Jingtang Container Terminal's channel depth is 12 meters and channel bottom width is 160 meters. The channel conditions cannot meet the development needs.



3 Port automation and control system

Container terminal port operations mainly depend on the Intelligent Information System Technology. Handling, storage and device control are achieved through the computer system automation management. Particularly for those high degree of automation equipped containers, promoting the port machinery and equipment of condition monitoring and fault diagnosis technology plays an important role to improve the container in good condition and availability of equipment.

2.2.4 Social and Cultural Factors

In the port industry, social and cultural factors mainly reflected in the employment concept of value orientation and other aspects of life concept. Jingtang container terminal is facing the problems of lacking water, exotic biological invasion and threats of marine biological resources. Environmental protection is also a considerable extent affecting the construction, production and management of container terminal. Thus, this field covers a wide range of complex factors.

2.3 Industry Environment

Industrial environment is the key of an enterprise's external environment. It directly affects the competitive advantage and access to excess profits. Michael Porter's five basic decision factors of industrial environment or the five forces are: the threat of the entry of new competitors, the bargaining power of customers (buyers), the bargaining power of suppliers and the intensity of competitive rivalry (Porter, 1998a).



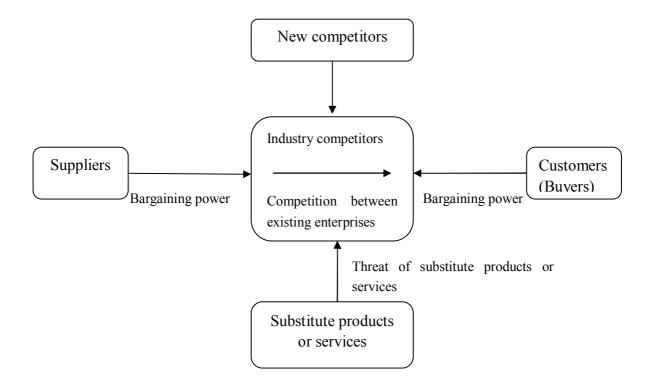


Figure 2.3 Driving forces of industry competition

2.3.1 Threat of the Entry of New Competitors

Two factors are mainly considered for potential entrants enter into a particular industry: The first is entry barriers and the second is revenge prediction from current businesses of the industry. On one hand, due to a scarcity of deep water port coastline, the deep water coastline resources have been planned completely (Porter, 1998a). Moreover, coupled with huge investment in building a modern major port and the project must receive government support and other factors, the barriers to entry are much higher. This means that the number of potential entrants is limited, but their strength is strong. On the other hand, the whole port container traffic industry is still in its infancy, competitors have not yet taken strong countermeasures. This issue will be further discussed in later chapters. According to the actual situation, Jingtang container terminal's main potential competitor is Caofeidian port.





Caofeidian located on the west bank of Tanghai County coast of Bohai Bay, right in Tangshan Luannan Caofeidian Island. It is adjacent to Beijing-Tianjin cities group, 60 kilometers south of Tangshan, 210 kilometers east of Beijing, 110 kilometers of Tianjin, 150 kilometers east of Qinhuangdao. Caofeidian has excellent conditions and regards as "the rare diamond port site" by media. 600 meters away from the southwest and the south side of the island is the site of Bohai Bay's main tidal channel of deep waters. 500 meters in front of the island, the water depth has reached 20m ~ 30 m, and -25 meters deep waters go right through the Bohai Strait. Tianjin Port's international waterway passes through the front of the island. Caifeidian port is the only natural harbour in Bohai Bay which doesn't need excavation of waterways and basin. Furthermore, the port can be constructed to large deep water port without dredging maintenance. Caofeidian port is in the forefront of the Economic Rim.Its development and construction will help to improve the layout of the Bohai Sea deep water ports and conducive to advancing to the coastal industrial layout of Beijing, Tianjin and Hebei.

Caofeidian port and Jingtang have many similarities such like they both have vast hinterland, the construction land doesn't need demolition, their construction costs are low, the water depth of the two are deep and they both have steep shore, the two ports are ice-free and silt and so on. Therefore, both ports look like twins. Neither of them can be ignored. In order to develop their own characteristics, the right strategy has to be found. The two ports' features are very clear. 30 million tons level ships can be stopped at Caofeidian port while only 10 million tons level ships can be stopped at Jingtang port. The ideal direction of development is that Caofeidian port focus on the development of economy with local characteristics-major ports, large industry and large circulation. Meanwhile Jingtang port can do relatively small. (Reviewed from http://www.scfdport.com)



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2.3.2 Threat of Substitute Products or Services

Compared with shipping transport, its main substitute transportation services are highway, railway, aviation and pipeline.

Highway: Due to the distance of cargo transportation which should go through ports is relatively long, highway does not have a substitution effect. But for the transport between ports around the area, highway transport has a substitute effect.

Railway: Railway primarily regarded as part of collection and distribution system, the substitution effect is not obvious.

Aviation: Because of the high cost of air transport and traffic volume is very small, only small volume of time-demanding and high-valued cargo generated substitution. Pipeline: As the pipeline and container transport different types of goods, pipeline transportation does not have the substitution effect.

2.3.3 Bargaining Power of Customers

Ports' customers are mainly shippers and shipping companies. Generally speaking, the stronger customer bargaining power is, the more disadvantages a port will take.

1 Shipper

The port density of round Bohai area is very high so port and transport services show a buyer's market. Shippers always choose ports of high service efficiency and low cost. Moreover, as the investment system of terminal integrated, part of shippers get involved in port operations by acquisitions and other ways. Thus the shippers not only take the initiative in the port market, but also might become potential market entrants.





2 Shipping company

Big shipping company has not only strong transport capacity but also has strong group of cargo network. At present, competition between ports mainly lies in two aspects: one is to constantly meet the needs of scaling-up of container ships by improving port handling capacity; the other is to attract large container liner companies to call at the port, or directly affiliate with major shipping companies to jointly operate port services. Meanwhile, some large international liner companies are getting to the direction of full logistics services such as COSCO and China Shipping. They also actively involved in base port construction.

2.3.4 Bargaining Power of Suppliers

For port companies, the suppliers are mainly engaged in port equipment, port facilities, port information systems development and port energy supply companies and so on. Due to the current port suppliers are numerous, the port suppliers' market shows a characteristic of buyer's market, so the bargaining power is not strong.

2.3.5 Existing Competitors

Jingtang port's existing competitors are Tianjin and Qinhuangdao ports.

1 Tianjin port

Tianjin Port, which locates near to Beijing, is China's largest artificial port. The harbor area is nearly 200 square kilometers. In 2008 the throughput reached to 0.354 billion tons and container throughput was 8,500,000 TEUs. Now Tianjin ranks the 5th of world top ten ports. Tianjin Port is about to invest 7.0 billion this year to speed up port construction. During the first ten months of last year, Tianjin Port cargo throughput totaled 334 million tons. As Tianjin Binhai New Area was included as part of the country's overall strategic layout, Tianjin Port is facing a good opportunity for future





development. According to the blueprint for Binhai New Area, Tianjin Port will be built as an international container hub towards the north-east Asia and radiates west Asia, the largest bulk cargo trunk port in northern China and international logistics hub and resource allocation.

By 2020, Tianjin Port's cargo throughput will reach to 400 million tons and container throughput 20 million TEUs, its grade level of waterway will be up to 30 tons. Currently, TCT (Tianjin port Container Terminal) has opened more than 20 international routes to more than 300 ports in more than 160 countries and regions, such as Japan, Korea, Europe, the United States, the Mediterranean, the Persian Gulf, Taiwan, Australia, Hong Kong, Singapore and so on. TCT also opened the ring regional within the Bohai Sea and domestic trade coastal transport. (Reviewed from http://www.tianjin-port.com)

2 Qinhuangdao port

Qinhuangdao New Port Container Terminal is engaged in Qinhuangdao Port and the sole subsidiary of the container business Qinghuangdao port. It was co-founded by Qinhuangdao port, China Shipping and Dalian Port Group. It has three container berths and the designed annual capacity is 650,000 TEUs. The port can provide loading and unloading services for the fifth-generation container ships. The yard area is 360,000 square meters and the dedicated container packing and unpacking space is 40,000 square meters. The dedicated railway warehouse (MDA Class Warehouse standards, cotton can be stored) and road warehouse (D warehouse standards) occupy 1.3 million square meters. The storage conditions are in line with national export food inspection and quarantine requirements, port environment has achieved national standards. Port side warehouse has special railway line connected with the national railway network and has the capacity of loading and unloading train. The packing point is adjacent to the pier, which means the procession does not need second transition of goods costs can be saved. The port's business scope has covered the





radiation of Xinjiang, Inner Mongolia, Liaoning and other places. Cooperated with a number of shipping companies, the port has opened nine container liner routes and become main trade port of domestic transport routes. (Reviewed from http://www.portqhd.com)

2.4 Competitive Environment

Understanding and analysis of competitors are central tasks to clarify and maintain the competitive advantage of Jingtang Container Terminal's. Competitor analysis is for the purpose of understanding the actions competitors may take in real terms. The analysis could help us to predict what competitors will do in future? What competitive advantages do we have? How it will change the relationship between us and competitors? Elaboration of these issues constitutes an important part of this article. According to "12th five-year plan", Tianjin Port will continue to transform the economic development pattern, enhance the level of scale and comprehensively promote the four major industries. Estimate shows that to 2015, Tianjin Port cargo throughput will reach to 550 million tons, container throughput will increase to 17 million TEUs, the port land area will expand to 130 square kilometers, level of waterway will be 30-ton channel. Until then, the port's industrial cluster will begin to take shape and its international shipping and logistics center functions will be further enhanced.

Chapter 3 Analysis of the Internal Environment of Jingtang Container Terminal

3.1 The Overview of the Enterprise Internal Environment

Looking for the enterprise's advantages in business, it is not only necessary to be





aware of the enterprise's external environment and what the enterprise will do in this specific external environment, but also necessary to study the enterprise's internal environment to analyse the various resources, capabilities and competences that the enterprise owns, to find and verify the core competence.

3.2 The resources of the Jingtang Container Terminal

3.2.1 Tangible Resources

Tangible resources are referred to be the visible and quantizing properties.

1 Natural Resources Jingtang Port is located in northern Bohai Bay. It is the nearest point from Beijing and Tianjin export ports of the Bohai Bay. It is 80 kilometers southeast from Tangshan City, 64 sea miles east away of Qinhuangdao Port and west 30 miles from Caofeidian port. In Dr. Sun Yat-sen's "The International Development of China", Jingtang port was submitted the proposed "largest northern port" port site. It is also the throat connection of North China and Northeast China. Beijing-Shenyang, Beijing-Qinhuangdao, Datong-Qinhuangdao railways running through the whole territory. Tangshan-Tianjin, Beijing-Shenyang and the coastal highways also running across the entire territory. It has interwoven into a network of the railway roads, the traffic is highly developed. Jingtang Port has #10, #11, and #22 three berths. #10, #11 berths' quay length is 557 and water depth meters is 12.5 meters. #22 berth quay length is 350 meters and water depth is 16 meters. The three berths approved through capacity is 60 million TEU, the port land area is about 310,000 square meters.

2. Tangible Resources The tangible resources of the port mainly presents in quay berth and mechanical equipments, especially for the professional equipments, such as loading bridge, rubber tyred gantry crane and stacker driving etc, that the container terminal mainly depends on.





Table 3.1 Jingtang Container Terminal's Primary Berths

Projects	Scale
Berth	3 (60 million TEU)
Frontage	907m
Land area	310,000m ²
Harbour basin width/depth of water	600m/-12.5m
Channel width/depth of water	160m/-16m

Material source: http://www.jtct.cn

Table 3.2 Jingtang Container Terminal's Primary Corollary Equipments

Equipment Facility	Mar. 2011
Loading & unloading	8
bridge	
Gantry crane	6
Stacking machine	2
Container truck	150+
Front handling crane	9
Fork lift truck	24

Material source: http://www.jtct.cn

3 Organizational Resources

The analysis of organizational resources in this text is divided into entity organization and process organization. Entity organization is mainly related to level and span, differentiation and integration, line and function, centralization and decentralization, responsibility and limitation, rigidity and elasticity. Process organization includes decision and execution, coordination and control, restriction and stimulation, maintenance and innovation.





Seeing from the organizational structure of Jingtang Port, this company adopts the line structure, which mainly shows in the single line command, concentration of power, the appointed limits of power relationship between superior and subordinate and the general manager is request to be all-powerful manager. This is related to the port field operation management which the Jingtang Port is mainly engaged.

3.2.2 Intangible Assets

- 1. Human Resources. The human resources are presented in the member's knowledge structure, internal cohesive force, management capability and internal organization mechanism etc. Because Jingtang Container Terminal is the key to the container transportation development in the whole Jingtang Port, the Jingtang Port Group chooses top members in the operation management of Jingtang Container Terminal. The whole team has been optimized in knowledge structure and youth. If they are excellent in the human resources development and stimulation mechanism, then the company's human resources will have more advantages.
- 2. Innovation capability. The port's innovation mainly shows in the timely generalization of the application of new technology, standard and equipments etc. The modern port has the obvious advantage.
- 3. Reputation Because the Jingtang Container Terminal is harbour district, the brand effect in market is obvious. It has good reputation resources.

3.3 The Core Competence of Jingtang Container Terminal

The core competence is what produces the resource and capability of competitive advantage for enterprise compares to competitor. As the source of competitive advantage of enterprise, the core competence makes the enterprise oversteps the





competitor in the competition. The above article has been put a systematic general explain to the resource and capability of Jingtang container terminal. But not all the resource and capability can be the core competence of enterprise. To judge if the resource and capability of an enterprise can be the core competence or not must be accord with four conditions, such as: Whether has the capability of value or not? Whether the scarcity capability or not? Whether it is hard to be imitated by the competitor? Whether is irreplaceable or not?

3.3.1 Location Advantage

Bohai Rim locate in northern China coast, the region has the largest inland sea - the Bohai Sea. The Liaodong Peninsula, Shandong Peninsula and the North China Plain encircle this 77,000 square kilometers sea. Alongside the Bohai Rim's 5700 kilometers "C-shaped" coastline, which is nearly one-third of the total coastline, there are more than 40 bays and more than 20 cities. The ports density and distribution of sizes formed a unique group of modern ports. Bohai Rim ports' economic hinterland covered almost half of China. They are the most important outgoing sea ports for northeast, north, northwest and east of China.

In recent years, ports in the Bohai Sea region have been rapidly developed. Bohai Sea region now has built a port transport system which regards Dalian, Tianjin and Qingdao as the main hubs, including ports like Yingkou, Qinhuangdao, Jingtang, Yantai, Rizhao, Dandong, Jinzhou, Weihai, Lushun, etc.

3.3.2 Cost Advantage

Due to Jingtang container terminal has the location advantage which makes Jingtang container terminal has occupied the very favorable position in comprehensive cost of port. Jingtang port is very near to various main economic regions compares to the



other ones.

Chapter 4 Development orientation of Jingtang container terminal

The second chapter studies the analysis of the external environment of the development of Jingtang Container Terminal and container transport, propose competitors which the Jingtang Container Terminal are faced with, such as Tianjin and Qinghuangdao. The third chapter analyzes the internal environment of the Jingtang Container Terminal, which clarifies the inner resources, capabilities and core competitiveness (regional advantages, collection and distribution advantages, cost advantage) of the Jingtang Container Terminal. On the basis of the foregoing analysis, this chapter will mainly use SWOT analysis, to further clear its potential, weaknesses, opportunities, threats, and in accordance with the Subdivision of the market, to meet customers' needs, proposes the development orientation of the Jingtang Container Terminals.

4.1 The SWOT Analysis of the Jingtang Container Terminals.

On the basis of the foregoing analysis of Jingtang Container Terminals' internal and external environment, this chapter will mainly use SWOT analysis, to intergrate its strengths, weaknesses, opportunities and threats.

1. Strengths

- (1) the advantage of location
- (2) advanced port facilities and equipment, efficient terminal operation
- (3) close to the supply generates, the low overall costs
- (4) obvious advantage of water transport

2. Weaknesses





- (1)It has not effectively established reputation in the market; the attraction for shippers and shipping companies is not strong enough.
- (2)It has not found effective means in supply organization yet.
- (3) The ability of marketing management is not strong.
- (4) Waterway navigation conditions need to be improved.

3. Opportunities

- (1) The overall economic environment continues to improve, and the demand of the container transport economic hinterland is vigorous.
- (2) The market port operations are gradually regulated.

4. Threats

- (1) The first mover advantage of Tianjin Harbor is obvious, and it has large market share. The competitive pressure of Jingtang is very heavy.
- (2) Diversity cargo in small terminal makes the gathering functions of the Jingtang difficult to show.
- (3) There is need for improvement in the efficiency of customs clearance.

Table 4.1 SWOT matrix

	Strengths	Weakness			
Internal Environment	(1)the advantage of location	(1)It has not effectively			
	(2)advanced port facilities and	established reputation in the			
	equipment, efficient terminal	market; the attraction for shippers			
	operation	and shipping companies is not			
	(3) close to the supply generates,	strong enough.			
	the low overall costs	(2)It has not found effective			
	(4)obvious advantage of water	means in supply organization yet.			
	transport	(3)The ability of marketing			
		management is not strong.			





	Opportunities (1) The overall economic environment continues to improve, and the demand of the container transport economic hinterland is vigorous. (2) The market port operations are gradually regulated.	(4) Waterway navigation conditions need to be improved Threats (1)The first mover advantage of Tianjin Harbor is obvious, and it has large market share. The		
External Environment		competitive pressure of Jingtang is very heavy. (2) Diversity cargo in small terminal makes the gathering functions of the Jingtang difficult to show. (3) There is need for improvement in the efficiency of customs clearance.		

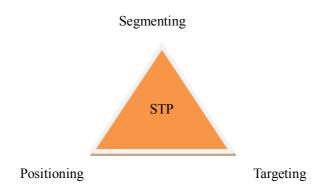
4.2 Target Market Segmentation

A company cannot operate in each market to meet various needs, or even impossible to perform perfectly in a large competitive market. Therefore, the Jingtang Container Terminal in the PRD market, must find their own target market, and through a clear target market, find the market position of the Jingtang Container Terminal.

In terms of Jingtang Container Terminal, through the target market subdivision, on the one hand, it can make full use of enterprise resources and capabilities to provide customers with services and to seek development under a clear target market; on the other hand, in the stage of development to minimize conflicts with the strong competition for the initial development of Jingtang Container Terminal to create a relatively good external environment.







Market is composed by the customers. So customers are different in many ways, which determines a variety of methods can be used to segment the market. According to marketing theory, market Subdivision according to different variables, can be divided into geographic Subdivision, demographic Subdivision, mental breakdown, behavior subdivision. Jingtang Container Terminal mainly provide customers for the economic hinterland container transport services they need, which means they faced a specific customer groups, so this paper uses geographic Subdivision to segment the market of Jingtang Container Terminal.

The second chapter has mentioned the economic hinterland of the Jingtang Container Terminal. In general, the direct economic hinterland of Jingtang Container Terminal is Tangshan city. However, Tianjin, Beijing and Hebei have basically formed a relatively stable pattern of market share, especially Tianjin Port has occupied the eastern region, and by virtue of geographical advantages, forming the eastern region strong and solid attraction. The attractiveness of Jingtang Container Terminal to this region is weak.

If the Jingtang Container Terminal treats this region as a target market, it is not only difficult but will lead to cut-throat competition between ports, which is not conducive to the Jingtang Container Terminal's operation. Moreover, seeing from the current layout, the existing container terminals are the mainly large-scale along the east coast, while in the western region have not formed a large-scale container terminal.





4.3 Development Position of Jingtang Container Terminal

According to the basic information of Jingtang Container Terminal, the external environment analysis, evaluation of the target market and customer perspective of Jingtang container terminal capacity on the basis of comprehensive analysis, the following points are tips that Jingtang port might take:

- 1. Jingtang Container Terminal has emerged competition force with strong development potential;
- 2. In the round Bohai port group, the relationship between Jingtang and Tianjin container terminals is just as the relationship between follower and industry leaders;
- 3. In the the round Bohai port group, Jingtang Container Terminal plays a strategic role of the attacker among small container terminal;
- 4. Jingtang Container Terminal should increase the sale amount in target market, and take advantage of the abundant container supply from hinterland and actively introduce liner route to make the formation of scale in order to improve the entry barriers to potential competitors;
- 5. The current role of Jingtang Container Terminal is regional market, and it should accelerate the development, change to the trunk port, and ultimately become a regional hub.

4.3.1 Evaluation of the Government

Tangshan is accelerating the construction of modern city, starting to optimize the layout of urban space and adjust urban functions to realise the city's transform into a





modern coastal city along the coast. However, there is a big gap between the current lack of port capacity and the requirements of urban development. The lack of conformity with the status of the central city port functions will inevitably lead to the significant defects in overall function of the central city. Therefore, the construction of deep-water port of Jingtang District has become an urgent need to optimize the industrial layout and adjust the function. Jingtang Container Terminal will be able to get the completion of the gathering as a modern urban center with more powerful radiation. At the same time, relying on the development of Jingtang modern container terminal port to develop coastline industrial zone, will help to add the economic development potential capability, and is also a keypoint to recreate a new Tangshan Port. The local government's force on the development of Jingtang Container Terminal operations should be recognized.

At present, Tangshan is taking a new development strategy to realize industrilization. The transfer of industrial layout has taken shape. Many key industries are located in Jingtang port industrial zone.

The local government's development position of Jingtang Container Terminal is: support implementation strategy to complete the functional and industrial layout adjustment, to enhance radiation and the drive function of Jingtang container terminal.

4.3.2 Enterprise Self-evaluation

Jingtang Container Terminal is the stress of the development of the Jingtang port and an important measure to enhance Jingtang port's competitive power. Facing with fierce market competition, the market position of Jingtang Container Terminal is: using advantages of location and scale, enhancing the attractiveness of hinterland container transport, striving to achieve the feeder port to the trunk port changes, and eventually becoming a regional hub. It will service for the modern container transport



and logistics industry development in the region.

Chapter 5 Adoption of Competitive Strategy of Jingtang Container Terminal

Last chapter analyzes the positioning of container delivery development in Jingtang container terminal with the view to selecting the competition strategy that is suitable to the external and internal environment so as to consolidate the advantages and grasp opportunities. By applying competition strategy selection method, this chapter compares the Jingtang terminal with Tianjin and Qinhuangdao ports, initiates corresponding strategies, describes and analyzes the selected strategies.

5.1. Analytical Statement of Competition Strategy

By combining the analyses made in the previous chapters about the Jingtang container terminal and the opponents, the chapter selects the factors such as technologies, cost, scale, efficiency, service, ship route, capital, logistics and market reputation, etc., applies selective analyses of the competition strategy and ascertains the competition strategy for Jingtang container terminal.

Procedures of analyses: at first, we set the scores for each factor among the divisions of 1 to 10. If the target company and the opponent company get the same score in an analytical factor, for example, the two parts all get 8 points in technology, it means the two parts are both excellent at technology. If the strategies of technology update are further implemented, it will be a waste of funds without the possibility of getting much of benefit. The essence of the theory is short board effect. Therefore, under certain background, selection of the key factor that affecting the corporate competitiveness and making improvements are of great importance for the





improvement of the general corporate competiveness.

Table 5.1 Analytical statement for competition strategy selection

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Evaluated	Jingtan	Tianjin	Qinhuangda	Necessit	Capabilit	Capabilit	Coping
Factor	g	Termin	o Terminal	y in	y and	y of	Strategy
	Termin	al		Improvin	Speed	Opponen	
	al			g the	(High –	ts (High	
				Status	Medium	_	
				Quo	- Low)	Medium	
				(High –		- Low)	
				Medium			
				- Low)			
Technolog	8	8	6	Low	High	Medium	Maintai
у							n
Cost	8	6	6	High	High	Low	Improve
Scale	8	10	4	Medium	High	Medium	Maintai
							n
Efficiency	8	9	6	Medium	Medium	Medium	Maintai
							n
Service	7	9	7	High	Medium	High	Catch-U
							p
Ship	6	10	8	High	Low	High	Catch-U
Route							p
Capital	8	9	6	Low	Medium	Medium	Maintai
							n
Logistics	6	9	8	High	Medium	High	Catch-U
							p
Reputatio	7	10	6	High	Medium	High	Catch-U
n							p





Analyzed from the results got from above table, cost is the core competition advantage of Jingtang container terminal, ship route is the main competition disadvantage of Jingtang container terminal, port comprehensive service level, port logistics and market reputation are in need of further improvement. Market reputation and port comprehensive service level are largely depending on the shipping frequency and security guarantee. The major international lines will consider the container capacity and the cost of port operation. The port operation cost will not only have to meet the demand of the owners of the cargos, but also have to meet the demand of shipping companies. Therefore, the various factors are independent yet interconnected. By the comprehensive assessment of the above factors, this author of the article believes that Jingtang container terminal should make the selections as follows for the concrete competition strategy: strategies operation in low costs, joint capital cooperation, port resource integration and port logistics development.

5.2. Strategy of Low Cost Operation

Obtaining of maximum profits or minimum operation cost are the objectives of almost every business owner and consumer. For the port and related companies, it mainly indicated in the low cost service demand by the cargo owners and the shipping companies for the port. The low cost strategy is the commonest and most effective strategy in market competition. Port cost accounts for about 40% of the entire transportation cost of the containers so the port cost will affect the port influential power directly. Because of the special regional advantage, the Jingtang container terminal has obviously low cost for comprehensive services. Therefore, in the initial business start of Jingtang container port, insisting on low cost service is of great importance in attracting the shipping companies to start ship lines and attracting the central region container cargos.



5.2.1. Low Cost Operation Strategy based on Cargo Owners

The essence of low cost operation strategy based on cargo owners is to design low cost operation for the cargo owners. In port transportation, the cost for cargo owners is mainly indicated in the cost for the cargo transportation from the production place (destination) to the port, storage charge in the port, operation charge in the port, long distance transportation in large ships and the relevant national port charges (port construction charge and cargo dues), etc. Analyzed from the change of costs, regulated national port charges, long distance freight in large ships cannot be given in favorable prices by the port companies. Therefore, Jingtang container terminal can only give favorable prices to the cargo owners in port storage charge and port operation charge. In the two aspects, the port can provide low cost and high quality service by specific service policies. In concrete operation, the first is to make full use of the storage space advantage of Jingtang container port and provide free storage period for the container owners; the second is to implement period charge for the port operation to encourage the cargo owner to increase the amount of containers so as to reduce the unit transportation cost. For the cargo owners, in the aspect of transportation, mainly give the subsidy for the rapid land transportation in Jingtang terminal. There are two kinds of subsidies; the first is to refer to the methods taken by Ningbo and Qingdao governments in encouraging the central land containers by reducing or exempting the high way pass charges, actively get the government support, reduce the cost for the container trailer in Jingtang port high ways. The second is that the Jingtang port company can provide certain amount of subsidy for the transportation of container trailer in Jingtang high way by Jingtang Port Company.

5.2.2. Low Cost Operation Strategy based on Shipping Company

The essence of the low cost operation strategy based on shipping companies is to provide low comprehensive cost for the shipping companies, which is mainly



indicated in the two aspects as follows:

1. Reduce the port cost reasonably. The most feasible solution for the Jingtang container port in exploring major lines is to attract the ocean liners starting to dock in Jingtang container terminal. Consider from the prospective of liner shipping companies, the company must consider the saving and added costs of docking in Jingtang container terminal to ascertain the minimum container amount.

The port should give the most favorable price to the ocean liner companies docked in Jingtang container terminal. Besides the cargo handling costs, other port costs such as towboat costs and piloting charges also account for large proportion in the port costs. Therefore, in order to attract the shipping companies to initial ship routes, the port can reduce the other port charges appropriately, or give certain favorable prices or discount to the ocean shipping companies.

At the same time of providing favorable price, the port should also guarantee the service quality and service efficiency in various aspects, such as to equip with cargo handling equipment to meet the demand for operations in large ships, provide single ship operation line and increase the operation amount per hour. In addition, the container transportation is not only involved in cargo owners, ship owners and port, but also road transportation, ocean transportation, loading and unloading storage, clearance and inspection. Port should play the role as a platform, combine the customs, commodity inspection, shipping companies, cargo owners, ship agents and cargo agents, coordinate the relations of various steps, improve port environment, construct unimpeded transportation channel and establish optimized supportive storage and equipment by port information.

It is noticeable that the port charges should be kept in a stable level without the frequent changes of prices or increase the price for large proportions. If the price is





too low, the port investment return period will be too long, imposing negative impacts on the equipment update and enlargement of scales of the port. Therefore, although low cost strategy is the most effective competition strategy, the port should not depend on the strategy excessively. The port charge cannot be kept in the low level forever, which can be adjusted when the ship line capacity has reached to the expected profitability. For instance, the port can make agreement to collect different levels of charges in accordance with different levels so as to protect the profit of the port companies and realize mutual benefit. It should be alerted that the port should avoid the situation that the ship company regards the profit surrender as the way of earning extra money and finally result in the ineffectiveness in reducing cargo transportation costs.

2. Purchase or guarantee shipping space. In order to encourage the shipping companies to explore shipping routes, Jingtang container terminal can purchase or guarantee the shipping space. Purchasing shipping space means that the port companies buy the part of the shipping space for the container liners docked in the port and pay the freight for part of the shipping space. Guaranteeing shipping space means that port companies promise to the container liners docked in the port to provide a stable loading and unloading amount for each line and give subsidy for the shortage if the amount is not achieved. The essence of the above method is that the port companies take the burden of shipping companies actively and assume part of the business operation risk for the shipping companies. In doing so, the port companies should not just wait for the resources, but also to collect the resources in the market actively. Although guaranteeing of shipping space hides risks, it also ushers in challenges. It can overcome the disadvantage for the ineffective response to the market and more importantly, control their destinies so as to be active and priority in market promptly.

Purchase or guarantee of shipping space can ensure the profit of the shipping





companies. The same with the low cost strategy, the strategy of purchase or guarantee of shipping space is to provide the capacity for the companies to explore liners. Compared to the low cost strategy, however, the purchase or guarantee of shipping space will have greater effect, indicating the determination and honesty of the port to the shipping companies. It means to give the promise to the shipping companies, which will not reduce the worries and risk of the shipping companies, but also establish the good reputation of the port. But in the same time, the risks of this strategy cannot be ignored (for example, the shipping companies may be too depend instead of collecting cargo sources actively). In adopting this strategy, the port should seize up the situation and know the background of the shipping companies. At first, it should be clear about the minimum container amount of the shipping companies, the amount of container collection in the preliminary stage by the shipping companies, the own cargo collection capability and the related subsidies, etc.

5.2.3. Low Cost Operation Strategy based on Shipping Agents

In port operation practices, the shipping agents are playing very important roles among cargo owners, ports and shipping companies. By being agent of the cargo transportation business for the cargo owners, the agents do business with ports and shipping companies. Therefore, to some extent, the shipping agents master the cargo sources directly so as to achieve the objective and method of transportation. The knowledge of the low cost operation strategy of the shipping companies includes: the shipping agents are entrusted by the cargo owners in being agent for the cargo transportation. In the premise of meeting the demands of the cargo owners, the agents will select the venue for loading and unloading in ports with larger difference in freight transportation contract and port comprehensive costs for their own benefits. Therefore, whether they can achieve relatively high difference price, i.e. increase the benefit of the agents, is of great importance in attracting container cargo sources. But in the port transportation service market, shipping agents are in large amount in small





and scattered scales. Compared to part business owners, the single shipping agents have weaker capability in negotiation, which will be ignored by the port business owners. In this unclear background, Jingtang container terminal should adopt certain measures to actively improve the attraction and instruction of the shipping agents. The concrete measures include:

- 1. In accordance with the amount of containers in Jingtang container terminal controlled by the shipping agents, establish the way of charges by period, provide favorable prices for the main shipping agents to encourage the shipping agents to give priority to the Jingtang container terminal.
- 2. Sign the rebate agreement with the main shipping agents for regular container amount. The main contents are to determine a certain period of time (mostly one year), determine a certain amount by the negotiations of the port companies and shipping agents. Based on the agreed amount, if the container amount is higher than the expected amount, the port company will provide a certain amount of rebate.

The aforementioned low cost operation measures have their own focuses. They are interconnected, which can be combined to achieve the maximum effect.

5.3. Strategy of Joint Venture Cooperation

5.3.1. Strategy of Cooperating with Shipping Companies

By attracting the shipping companies to join the company, the port can connect the profits of shipping companies with that of the port and form the stable strategic partnership. As partners, the port company should understand the difficulties of the shipping companies in the beginning of the ship route exploration and provide assistance, such as help the shipping companies to get cargos and help the shipping companies to prepare the network for cargo collection. Strategy of joint venture





cooperation is conducive to realizing the win-win strategy between port and the shipping companies. By profit connection, the pure buyer and seller relation turns into partnership relations that the two parties crave for the mutual benefit and assume mutual risks. The shipping companies will not only consider the management of ships, but also the management of ports because the port company has the mutual benefit with the shipping companies. In exploring ship routes, the shipping companies will prefer the port they invested and are more willing to assume the possible losses in the starting phase. But in selecting the shipping companies, the port should select the shipping companies with solid strength, avoid the narrowness in selecting and lead the fact that only few shipping companies choose to dock in the port.

5.3.2. Cooperate with the Port Companies with the Background as Shipping Companies

For the port, cooperation with port companies with the background as shipping companies is a kind of investment by introducing in strategic partners, which will be conducive to the sustainable development of the port. The newly established port should strengthen the cooperation with shipping companies, attract the shipping companies to locate in the same place and explore shipping routes. The investment of shipping companies can butter both sides of one's bread. In the first place, it can obtain benefit in port management, and in the other place, it can serve for their own ships. The shipping companies can obtain favorable prices by docking in the port invested by the companies so as to save some port charges. When the ships dock in the port invested by themselves, they can enjoy full independency without being controlled by others. The shipping companies can also accelerate the speed in transforming to the logistics by investing port. The combination of port and shipping companies is good for the integration of various steps of logistics. The port can provide customized service and value added service to the cargo owners, which will be useful for consolidating of cargo sources and enlargement of market shares. In





addition, in the same time of enlargement of containers, the situation that the transportation capability exceeds the demands is more severe so that that shipping companies are confronting with more severe risks. By involving in the port management, the shipping companies can disperse the operation risks. Therefore, large shipping companies in the world mainly choose to cooperate with ports.

A little supplement here: with the maturity of port management of shipping companies, the objective of investing in port experiences the changes of two periods. At first, the main objective for the shipping companies in investing port is to serve for the ships docked in the port. With the deepening of market extent and adjustment of business strategy, at present, most shipping companies have separated the shipping companies and the port management and establish two independent companies to be responsible for their own losses and profits. The two companies are interconnected and independent. The companies will pay more attention on the prospective and profit in the role of port management and consider the implementation of third party business.

5.4. Resource Integration Strategy

5.4.1. Strategy of Internal Resource Integration

The internal resources here refer to the resources for Hebei Port Group. Jingtang container terminal is the key port in Hebei Port. Therefore, further integration of internal resource allocation and optimization of the configuration of container terminal to make targeted adjustment are of great importance to the large scale development of Jingtang container terminal. Most of the cargo ports in the Group are located in the downtown area in small scales, which are limited by the depth of the water and have shortage in future development. Most of them do not have professional container berth and machinery equipment. The current equipment is so weary with shortage in development potentials. The disadvantages of the necessary





resource and scattered resource in the integration of internal resources are mainly expressed in the following aspects: The scattering of container terminal location leads the shortage of supervision strength of the port inspection units, reduce the efficiency of customer declaration, which will not be conducive to the scale development of container transportation.

The concrete integration measures are: to ensure the positive development of the container transportation in the region, make full play of the functions and roles of established container port in the Jingtang container terminal, adjust the distribution of internal container ports in accordance with scientific requirements. The advantage of internal resource integration is that: it is conducive to integrating scales and strengthening the general competitiveness of Jingtang Port, be conducive to the transformation of the old port city, the supervision of the port, improvement of port environment and the rapid development of the Jingtang container terminal. Therefore, the Jingtang Port should combines the development positioning of the Jingtang container terminal in the future and reposition the container operations in the port so that it can exert the own advantages and establish integrated container transportation strength.

5.5. Strategy of Port Logistics Development

5.5.1. Advantage of Logistics Development in the Port

In modern economy, logistic is regarded as the third profit source after the reduction of material consumption and labor consumption. It has become an important factor in affecting the social and economic development and enjoying the high attentions in various aspects. Analyzed from space transference from the starting point to the destination of the raw materials and products, the core functions and basic requirements of modern logistics and modern transportation still have close





connections. As the intersection and breaking point of water and land transportation and the portal and channel for the foreign and domestic markets, ports have become the connection for comprehensive transportation system and international shipping network with very important status in modern logistics as the important foundation for the development of modern logistics industry.

The main advantages for the port to develop logistics industry are that: as the connection of transportation, ports are the distributing center of materials and cargos, doing business with transportation and material department directly with the comprehensive functions of "gathering, distributing, storage and transportation", which can be convenient for the implementation of comprehensive services. The large scale port, freight yard, warehouse and machinery in the harbor have excellent material transferring capability. The ports have close connections with various kinds of transportation, with rich customer resources and centralized information. The employees in the ports have experiences in fundamental logistic operation, etc.

5.5.2. Advantages for the Jingtang Container Terminal in Developing Port Logistics

Except for the common advantages of the ports in developing port logistics, Jingtang container terminal has also got its own characteristics and advantages as follows:

1. Location advantage

Located in the geometric center of round Bohai area, it is close to the economic hinterland. The hinterland has enjoyed constant and rapid economic development.

2. Infrastructure advantage

The water depth in Jingtang container terminal is excellent. The machinery is advanced and the port storage yard is wide enough.





3. Regional industrial advantage

As the core economic hinterland of Jingtang container terminal, the central and eastern region of the area has diversified industries.

5.5.3. Plans for logistics development in Jingtang Container Terminal

- 1. Encourage and support the importer and exporter to establish their own warehouses in the logistics garden in the back of the port to do business of distribution, or establish warehouses jointly with the importer and exporter and conduct dispatching business by applying the existing facilities in the Jingtang container terminal or by expanding new facilities.
- 2. Establish joint venture with the importer and exporter, shipping merchants or other investors to provide the services of inland transportation, declaration, inspection, packaging, inventory management and order processing, etc.
- 3. Attract wholesalers, auto and electric manufacturers to establish commodity exchange center and factories in the logistics gardens in the port so that that exchange activities, factory dispatching and storage of the manufacturers can be realized in the port.
- 4. Get the government support actively with the plan of establishing shipping trading center in the back of the Jingtang container terminal.

Chapter 6 Conclusion

As the basis of corporate operation developing strategy, the corporate operation strategy study has practical meaning to guide companies' actual economic activities.





Operation development strategy, especially competition strategy has distinct features in different stages. This article has raised some points and measure on how Jingtang container terminal could have accurate orientation and carry out proper & feasible competition strategy in serious market competition in the angle of improving the whole competitiveness of round Bohai area. The purpose is to fully make use of the advantage of Jingtang container terminal and gain sustainable competitive advantage in the shortest time period. This article would get the following conclusion:

- 1. Even faced with serious port competition, Jingtang container terminal has outstanding location advantage for its superior geo-position, which would bring support for container capacity and for its future development and the advantage of comprehensive low transportation costs;
- 2. In order to achieve scale advantage in short time, Jingtang container terminal should have clear development orientation, give full play to its core competitiveness, take strategies of low price operation, joint investment cooperation, resource integration, logistic expansion to enhance its core competitiveness in the shortest time and promote its operating development.
- 3. Apply "multi-factor dynamic analysis" to predict the potential scale of the port container, and turn TEU prediction to production prediction. This action is based on the following conception: port capacity is determined by productive power (port facility) and input factors (operating cost) as well as user demands. As a significant factor, customer demand will be a variable for port capacity, which is not totally controlled by the port itself, therefore, it's not reasonable to used port capacity to assess the port output and location and do scale economy analysis to check port cost structure.
- 4. Set up port competitiveness evaluation system and specific index based on





customers' demand and apply them in relevant port evaluation practice, combine the qualitative & quantitative analysis of port competitiveness together. It's important to enrich the port competitiveness research.

Above all, the strategy rather than strategic research is not one-sided; on one hand, the strategic research is complex and broad, while the author still needs to learn how to control the whole situation, on the other hand, the author has the interest of practical problems and how to solve them, while the specific strategy research will provide a good foundation and platform for future's strategic research.

Personal ability is not enough for free control of the theory, and my own management work has consumed lots of energy, therefore, the research of this subject is inevitably influenced by previous research, and the theory application is not deep enough. Meanwhile, as the competition theory is growing, it's hard to absorb and learn from the latest theory research. Therefore, there's some defects, weak points and personal tendency in the article.



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