The Study of Port Everglades Business Model and the Enlightenment to Shanghai Port

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Abstract
This paper introduces the construction, operating status of Port Everglades and analysis its strategic business model, such as “three-legged stool” model, the landlord port management model, “green port” model, technologic operating model and multi-ports cooperation model. Combined with the situation of Wusongkou international cruise port in Shanghai, put forwards some suggestions, for example, constructing the “ladder” development model, improving infrastructure and facilities construction, specifying landlord port management model, creating “green port”, using information technology to improve operational efficiency and strengthening port cooperation.

Keywords: Port Everglades; Wusongkou international cruise port in Shanghai; Business model

1 Introduction
Located in the heart of Greater Fort Lauderdale and the City of Hollywood, FL, Port Everglades is one of the busiest cruise ports in the world. Exotic cruise vacations and international trade are what makes Port Everglades an economic powerhouse for Broward County and one of the most diverse seaports in the United States.

The Port Everglades Department is a self-supporting Enterprise Fund of Broward County government. It does not rely on local tax dollars for operations or capital improvements.

As a powerhouse for international trade, travel and investment, Port Everglades leverages its world-recognized South Florida facilities and innovative leadership to drive the region's economic vitality and provide the highest levels of service, safety, environmental stewardship and community accountability.

It is the Winner of Business Facilities 2013 Economic Development Excellence Award (Population greater than 500K) and Business Facilities 2012 Inaugural Economic Development Achievement Award in the Public/Private Partnership Category. So Port Everglades is with great potential one in the world.

North America has occupied the largest market share in the cruise industry, the construction and operation characteristics of North American cruise port is also concerned by scholars, but mainly concentrated in port of Miami, New York, New Jersey, Los Angeles and other cruise ports, Port Everglades are rarely studied.

This paper collects information from Port Everglades official website and analyzes the business model of the Port Everglades, which studies a set of business model to suit the Wusongkou international cruise port in Shanghai, and puts forward some suggestions.
2. Literature Review

2.1 The Business Model of the Port

Li Nan, Li Wenxing (2007) argue that landlord port mode is in line with the requirements of economic theory in the role of positioning port industry to the government and the private sector. This model helps to integrate both advantages, and is consistent with port privatization, so it has become the mainstream of the international port operation mode.

Mei Guanqun (2012) thinks that the port is an important foundation for the economic development of a country and a leading industry. Chinese ports occupy a vital position in the world, but they are big instead of strong. How to realize our country ports transmit from the world big-class ports to the world strong-class ports has become an significant topic in research. The development of world ports experienced four generations of evolution, the ports of intergenerational evolution process jumped sharply instead of stepping. Our country should learn from the development experience of ports in the world, from the aspects of the management system, operation mode, investment and financing mode, opening mode and integration way to promote the construction and development of Chinese ports.

2.2 Construction of “Green Port”

Fan Libin (2009) argues that under the new situation of energy crisis and environmental pollution, “green port” is the necessary way for the port development. Compared with the foreign “green port”, the construction of Chinese “green port” started late and the progress was very slow. We should learn from the experience and methods of foreign “green port”, and find a suitable method for Chinese green port development to narrow the gap with foreign countries. Ling Qiang (2007) considers that the establishment of green port evaluation index system for guiding and regulating green port construction is of great significance to create a fair competition environment. He presents the definition of “green port”, and makes the Shanghai port as an example, introduces the guiding ideology, principles, indexes and application method of establishing evaluation index system, which is a certain reference value to the peers.

2.3 Construction of Information Network

Sun Jinming (2011) argues that with the coming of the information age, information technology has become the most potential productivity, information resource has become the strategic resource of national economic and social development, the port informatization level has become an important symbol of the transportation and logistics modernization degree for a region and city. As a main part of the society informatization, the informatization construction should further accelerate the pace of work to improve the service quality and service level for the port. Sui Ling, Xu Ping, Dong Chaohui (2011) argue that the port information construction has important implications in many aspects, such as improving port management level, promoting the modernization management, reducing costs, accelerating the pace of technological progress, enhancing market competitiveness and improving economic efficiency. Constructing information work is the breakthrough of driving innovation of the port work and function upgrading. Learning advanced ideas and drawing lessons from successful experience of foreign ports, can promote the domestic ports to speed up the development, improve the international competitiveness and the ability of sustainable development.

2.4 Strengthen Port Cooperation

Morgan (1993) makes Geelong port in Australia as an example to a comparatively analysis the advantages and disadvantages of the port based on cost pricing strategy and goods pricing strategy for showing the former superiority. Frankel (1996) analyzes the advantage and importance of port cooperation under the competition environment, and quantitatively evaluates the port cooperation competing interests of our lower reaches of the Yangtze River. Zhou Xuan (2009) thinks that Chinese ports should learn the models and experiences of port cooperation in the aspects of competition and collaboration of the ports, such as jointly set up the port authority. The domestic ports should abandon the malignant competition practices, and seek cooperation and common development in competition. Port group scan share resources and form dislocation development, so as to enhance the overall competitive strength.
3. The construction of port Everglades

3.1 Superior Condition of the Cruise Port

Table 1: The construction of Port Everglades

<table>
<thead>
<tr>
<th>Target location</th>
<th>Possess the advanced level of the port facility and provide the excellent service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service object</td>
<td>Cruise passengers, non cruise passengers and local residents</td>
</tr>
<tr>
<td>Water depth</td>
<td>49.21feet</td>
</tr>
<tr>
<td>Berth</td>
<td>32</td>
</tr>
<tr>
<td>Linear</td>
<td>25feet</td>
</tr>
<tr>
<td>Cruise port</td>
<td>11cruise ports located in North port, Middle port and South port</td>
</tr>
<tr>
<td>Visitor throughput capacity</td>
<td>400million</td>
</tr>
</tbody>
</table>

As we can see from the table, the cruise port is a large and deep water one, and its service object is not only confined to cruise passengers, but also non-cruise passengers and local residents, which demonstrates that the Port Everglades is an international and comprehensive one. Port Everglades with its superior conditions, humanized service and modern facilities awarded for 2013 "Cruise port of the year" honor, which laid a good foundation for the future development of the port.

2.2 Spacious and Comfortable Cruise Terminal

Port Everglades is one of the top three cruise ports in the world because of its modern, guest-friendly facilities, and paying attention to customer service. There are nine spacious and comfortable cruise terminals which feature all free Wi-Fi in all terminals, conventional parking, curb-to-ship porter service for baggage, Florida-inspired artwork, easy access to international airports and highways.

2.3 Conventional Traffic

Conveniently located in the heart of Broward County, Port Everglades is easily accessible by car, taxi, bus, rail and ship. It is the only port in the nation located adjacent to an airport, making it easy to fly and cruise in the same day. The main airport serving Port Everglades is Fort Lauderdale-Hollywood International Airport, which is located less than two miles from the Port. Other airports serving the Port Everglades include Miami International Airport (27 miles south) and Palm Beach International Airport (50 miles north). Besides, many area hotels provide transportation between Port Everglades and the hotel for pre-booked reservations.

Port Everglades has a convenient transportation network with flight, railway, highway and other transportation ways which has formed a seamless docking with cruise. The transportation network can evacuate passengers and cargo to improve operational efficiency.

The Port will begin renovating its Cruise Terminal 4 facilities in North port in FY 2014. This project consists of relocating the existing entrance/exit point of the terminal from the east side to the west side of the building. In addition, the project will encompass the construction of an intermodal area, including surface parking and passenger/baggage drop-off and pick-up areas. A separate-but-related project will also lengthen berth 4 to the west by approximately 250 feet in order to accommodate a larger cruise vessel.

4 The Operation of the Port Everglades

4.1 Cruise Tourism Brings the Maximum Economic Benefits for Port Operation

The robust upward trend in the Port’s two largest business sectors, those are cargo and cruise, of which the largest share is cruise. The port business distribution is below:
The source from Official Port Everglades Site

As can be seen from the figure 1, the cruise business accounts for 42%, which is the largest share, followed by the container cargo, accounted for 22%. Annually, the Port accounts for nearly $26 billion in business activity, supports 11,700 jobs locally and more than 200,000 statewide, and is responsible for generating $729 million in state and local taxes. Cruise passengers annually, Port Everglades is one of the busiest cruise ports in the world, supporting more than 12,000 cruise related jobs — making it a powerhouse cruise port. \(^2\)

### 4.2 The Cruise Passenger Volume has increased Year by Year

The figure 2 below is the historical cruise passenger activity from FY2004 to FY2013:

The source from Official Port Everglades
As we can see from the picture, the number of multi-day cruise passengers grew slightly with 3,689,022 cruise guests sailing to and from the South Florida seaport during FY2012, up from 3,664,103 the prior fiscal year. The multi-day passengers activity decreased slightly in 2013, but still reached 3.6 million. The total number of passengers, however, dropped about 5 percent from 3,952,843 in FY2011 to 3,757,320 in FY2012 as daily cruise ship operator, and now the daily cruise line has ceased operations.  

5. The Research of the Development Model in Port Everglades

5.1 “Three-Legged Stool” Model

The business organization of Port Everglades can be described as a “three-legged stool” model of Economics, Environment, and Community. This Plan demonstrates the balance required between these elements to achieve this sustainable business environment at the Port. The picture below is the model:

![Figure 3: “Three-legged stool” model of Port Everglades](image)

The source from Official Port Everglades

From the figure 3 we can see that the economics include master plan, financial plan, performance, and benchmarking data; Environment includes air, water, habitat and conservation of resources; Community includes education, security, jobs, traffic impacts, no taxes, tourism, airport and commodity costs. The modern port is an enterprise with multiple functions, multiple departments and multiple areas as a whole, so the port development should has a feasible strategic planning, and adjusts the planning goal and content in a timely according to the development situation. Port Everglades adjusts the master plan every two or three years, and they have professional consultant team, only in this way can the port creates a sustainable business environment.

5.2 The Landlord Port Management Model

The landlord port management refers to the port planning, financing, infrastructure construction which is in charged by the port authority including the berth, waterway, road, and so on. The port authority leases the port to private operators, who are responsible for the port operation. The port authority collects the rent which is not paid to the state taxes, but again to invest in the construction of port infrastructure, forming the rolling investment.
Total port operating revenue, which includes revenue from waterborne commerce, real estate leases, parking, domestic and international trade, tourism, cargo, gasoline and other port services can only be accomplished with new investments in infrastructure development. At present, the landlord port management model is the mainstream of the world management model, the advantage of this management model defines the government and enterprises and their respective functions, both the interests of government and enterprises are considered, separating the property and rights. The government charges for the financing to ensure the fixed financing channels and avoid duplication investment. The government leases the port operation right to the private enterprise with the characteristics of high level and strong ability. So on the one hand this model mobilizes the private operators enthusiasm, carrying out orderly competition, on the other hand, improves the efficiency of port operations, opening up broad prospects for the development of the port.

5.3 The Green Ecological Port Development Model
"Green port" is a trend of international port development and the fundamental guarantee for the sustainable development. The development trend of green port is the green idea to construct the environmental health, ecological protection, rational use of resources, low energy consumption, and low pollution port; Scientific layout and reasonable use the port resources , put the port development, utilization of resources and environmental protection organically together. Take the road of low resource consumption, less environmental pollution, growth pattern and scale effect which is of sustainable development, eventually make a coordinated development of population, port and environment.

The annual tourist number in Port Everglades is next to Miami port. In fiscal year 2010, the number is close to 4,000,000 people. This is mainly because the large subtropical wilderness in USA -- Everglades National Park, provides important habitat for many rare and endangered species such as cattle, alligator and the Florida panthers. The Everglades National Park is an important international wetland and world heritage. It is also the special protection area according to the Treaty of Cartagena (Cartagena Treaty). The one and only tourism resources attracts many tourists. So the Port Everglades pays attention to protect the environment and supports environmental programs that protect our wetlands, plants and animals.

Port Everglades knows the eco-system is essential and has made important contributions to environmental awareness, protection and conservation. In terms of manatee protection, for decades, gentle, herbivorous manatees have made their winter homes in Florida Power & Light's warm discharge canal inside the Port. The Port participates in a variety of manatee protection programs to safeguard Florida's favorite defenseless marine mammal. In the aspect of oil spill prevention and recovery , in conjunction with the U.S. Coast Guard, the petroleum industry and a variety of emergency response contractors, the Port has developed a comprehensive, ongoing spill prevention and oil recovery program. Furthermore, the Port employs a full-time Environmental Coordinator to ensure compliance with all environmental regulations and requirements. In addition, the Port supports public awareness efforts and outreach by publishing regular updates on environmental issues and by presenting expert speakers to various community groups.

Foreign ports see the "green port" as the important index of port development, and has an environmental management system of port standard, put the concept of environmental protection truly into work , focusing on the balance of port environment and economic interests, improve the efficiency of port operations.

5.4 Network Port Management Model
Modern, scientific, information development mode has become the developing trend of world port. The official website of Port Everglades is one of the characteristics of its business model. Comprehensive, detailed content, accurate data, and 9 different browsing languages make the web site very useful. Each year the port development report and future business strategic planning are posted on the web sites with the form of 3D display. In addition, with the Internet more and more popular, visitors search information from relevant web site before the trip, such as arrival transportation to the port, neighboring commercial facilities of the port, whether there are hotels, shopping malls, parking locations, and the process of embarking and disembarking, and so on. These information can be found in Port Everglades web site.
5.5 Multi Ports Cooperation Model

Port Everglades launched an International Sister Seaports program in March 2007 and shortly thereafter signed on two seaports interested in becoming part of Broward County's international family. Today, Port Everglades has International Sister Seaport agreements with four seaports and a Memorandum of Understanding with the Panama Canal Authority to encourage new business and trade between organizations.

Multi ports cooperation model can increase the cruise service and the international trade between the ports. The ports can provide preferential policies for each other. In addition, "sister seaport" can promote the exchange and cooperation in the aspects of port planning and construction, management, personnel training, and information technology, forming the common development of mutual progress pattern.

6. The Enlightenment to Commercial Model of Wusongkou International Cruise Port in Shanghai

6.1 Construct "Ladder" Development Model

Using the model design the port strategic planning, including 5-year master plan, 10-year vision plan and 20-year vision plan, and adjust the plan in time according to the current situation of the development. Referencing "three-legged stool" model of Port Everglades, Wusongkou can focus on four aspects, those are economics, technology, environment and cooperation, to construct the “ladder” development model. As shown below:

![Figure 4:“Ladder” Development Model of Wusongkou International Cruise Port](image)

6.2 Improve the Construction of Infrastructure and Facilities

6.2.1 Construct Large-Scale and Deep water Cruise Terminal

At present, Wusongkou international cruise port is doing the two phase of the project construction, because more and more international cruise company cooperate with Wusongkou international cruise port, and the existing infrastructure of the cruise terminal obviously can not meet the development trend. Mediterranean cruise company is expected to cooperate with Wusongkou international cruise port in 2014.
Large cruise ship berthing has very high requirements to the terminal, so the port should construct the large-scale, deeper water cruise terminal to meet the needs of different capacity cruise docked, and transit to the international cruise port.

Dredging port is a big project of capital cost. To ensure the smooth progress of the project and sustainable development, the government should give financial support. In addition, cooperating with cruise companies to attract domestic and foreign investors to participate in investment and construction is the necessary way to cruise terminal construction.

6.2.2 Improve the Comfort of Passenger Terminal Building

Cruise passengers’ experience of waiting and resting in the passenger terminal building is very important to the whole cruise activities, so the design of the passenger terminal building should be flexible, comfortable and humanized. Such as setting the VIP lounge, children activities area, smoking area, library reading room, bar, Coffee bar, snack bar, game rooms, and the Wi-Fi network should cover the entire passenger terminal building. Decoration should be simple and generous, not only give the convenience to tourists but also pay attention to aesthetics. Wusongkou international cruise port can add some comfortable sofa for passengers resting instead of chair, and the sofa should be placed as far as possible to save space.

Restroom design in Wusongkou international cruise port is very simple, providing free hand cream, wash supplies and hot towel can be considered. Cosmetics and other supplies for women can also be placed in female restroom, which can provide considerate service for tourists, enhancing tourists the sense of belonging.

6.2.3 Achieve the Seamless Connection between the Various Modes of Transportation

In terms of transportation, due to Hongqiao and Pudong International Airport has a long distance with Wusongkou international cruise port, and there are no transportsations such as subway can directly access the port, so bus, taxi and shuttle can be arranged near the dock and set the free taxi zone as well.

Cruise port can cooperate with aviation and railway, arrange free shuttle in order to form the seamless connection between three traffic modes of sea, land and air. Wusongkou international cruise port can refer to the experience of Port Everglades to improve the multimodal transport construction and give convenience to visitors travel.

6.2.4 Perfect the Cruise Industrial Chain

Wusongkou international cruise port has a long distance with Shanghai city center, which is not convenient for shore tourism. Diversified development should be done near the port, putting the commercial, tourism, shopping, office, hotel and other commercial forms as a whole. Comprehensively integrate surrounding land and resources, large entertainment facilities, commercial buildings, and scenic spots can be constructed to attract tourists.

6.3 Specific the Landlord Port Management Model

The landlord port mode is the most potential developing management mode after years of developed countries demonstration, with the characteristics of internationalization and diversification. China has been practiced "one city , one harbor" policy in a long-term. The management entity of Wusongkou international cruise port is Wusongkou international cruise port Development Co. Ltd. in Shanghai which is jointly established by the Baoshan District government in Shanghai and Sinotrans CSC Changjiang Shipping Corporation in Shanghai. The company is responsible for the construction, operation and management of the port; Passenger travel and related tourism services; Yacht base and related services; Marine transport, RO transportation service; Anchoring; Shipping agency, cruise and other ship supply; ship repair and service delivery services. 13 Wusongkou international cruise port has achieved separation between government and enterprises through the reform of port system, and has developed gradually to the internationalization and privatization. The port can attract cooperation with large cruise company and shipping company because of it’s developed economic hinterland, which attributes to the capital support. Wusongkou international cruise port put into operation in 2009, which belongs to the new port area, involving rare business and management departments, and its internal relation is simple, all these favorable factors have laid a solid foundation for the development of the landlord port mode.

Wusongkou international cruise port should learn from international experience, combine with own conditions, regulate the landlord port management model, promote privatization development and form the "multi-channel financing, diversification operating" management pattern. 14
In addition, China should publish the “port management mode” and a series of related policies as soon as possible to define property rights clearly and reduce the management of Baoshan District government. Baoshan District government is only responsible for the planning, financing and infrastructure construction of the cruise port and grasps the macro development direction, puts the operation functions to the private companies such as cruise companies and shipping companies, keeps in line with international management mode, creates a business environment of operate independently and competes fairly for enterprises.

6.4 Build a “Green Port”
China pays little attention to the ecological protection of port environment. The 18th Chinese communist party congress proposed to build “the beautiful China”, we should pay more attention to the ecological environment protection. The state and the government should play the leading role to increase the green port construction funds, issue “green port construction” and a series of related policies, create the evaluation index system of “green port”, innovate the science and technology, maintain the ecological environment of port by modern information technology, fully integrate the port resources, avoid wasting port resources, increase the port green area and vegetation coverage rate, enhance the importance of land, shoreline, water resource utilization and protection, control the noise pollution and air pollution, attach importance to energy-saving emission reduction, vigorously promote the port workers and society the consciousness of environmental protection, put the concept of environmental protection to the port operations.

6.5 Improve Operational Efficiency by Using Information Technology
Wusongkou international cruise port can perfect web site context by learning from Port Everglades. For example, add cruise itinerary, nearby transportation, commercial facilities and other information, and design a variety of browsing languages. Use “We Chat” platform to provide cruise experience for visitors by modern information technology, then visitors can know about the latest port message whenever and wherever possible. Visitors can reduce the unnecessary query time after understanding of entire cruise process to shorten the customs clearance time and improve operational efficiency.

6.6 Strengthen Port Cooperation
6.6.1 Cooperate with International Ports
Carry out international ports cooperation with Southeast Asia, North America, Europe and other cruise ports, launch “Sister Seaport” program with Port Everglades. Introduce cruise line, learn advanced port planning, construction and management experience from the international ports, train staff jointly, carry out international cruise business. At present, the cruise line types concentrate in Japan and South Korea route, which are very simple. Cooperate with the international ports can enrich the route types to meet the different needs of tourists.

6.6.2 Cooperate with Domestic Ports
At present, the inter ports competition is fierce., Wusongkou international cruise port can cooperate with other domestic ports, such as the cruise ports in Yangtze River Delta region constitute port group alliance. Cooperate with distant ports such as Tianjin port and Hainan port, forming the port link to allow the foreign cruises continuously anchored in domestic ports, which can increase the number and variety of shore attractions. Form the complementary advantages, joint development, cooperation and win-win development pattern.

Acknowledgment
Thanks the sponsor: 14KY0351 The Study of Port Everglades Business Model and The Enlightenment to Shanghai Port(E1-0903-14-01094)
Reference