

A Comparative Analysis of Port Development Strategies in Hong Kong and Busan

Myoung-Hee Kim* · † Doo-Gun Hwang

* Division of Shipping Management, Korea Maritime University, Busan 606-791, Republic of Korea

† Division of Shipping management, Korea Maritime University, Busan 606-791, Republic of Korea

Abstract : *This paper discusses the strategies for the future of the Hong Kong Port and Busan Port. We assess whether they prepare the ports for the position of being the logistics hub, and as such could assist the ports to maintain their position in the world's container port. We reviewed both the current situation of the Hong Kong Port and the strategy of the port for the future (Master Plan 2020) to keep the status of logistics hub. With the case study on the Port of Hong Kong, this study attempts to examine what the strategic planning is needed for the Busan Port. We debate the Port of Busan could be seen as a logistics chain for the future. In our discussion, the strategic planning on "Port Vision 2020" for Port of Busan does not address the issues regarding this part, nor does it make any recommendations in terms of the requirement of the logistics private sector.*

Key words : *Hong kong port, Busan port, Logistics chain, Port strategy*

1. Introduction

The distinctive competitive advantage of Hong Kong Port (HKP) includes (but is not limited to) the geographical location, capacity of port, hinterland (the Pearl River Delta region in Southern China) and inter-modality from and to the port.

The Hong Kong government has a strategy to make HKP a logistics hub in Asia. The impact of the loss of containerized cargo to the Port of Shenzhen and the strong competition posed by Shanghai and Singapore, forces HKP to restructure, find a strategic fit and maintain its competitive advantage within the Asian market. To this effect, the government of Hong Kong developed "Master Plan 2020" which makes HKP ready for the role of being a major logistics hub in Asia.

The Busan port faces a similar situation to HKP and Busan Port Authority(BPA) also announced their vision, "The Port Vision 2020", for the future.

This study compares "The Port Vision 2020" of Busan with "Master Plan 2020" for HKP and explains the differences in strategies between the ports.

This study investigates what the role of the ports is as a nodal point in whole logistics chain and how to evaluate the strategy of the port for playing this new role in logistics chain. However there are not so many literature discussion about assessing the strategies for port as an important link

in supply chain. So this paper assesses the strategy for the future of ports in the supply chain by Heaver's five pillar approach for logistics.

2. Port in Logistics (Literature Review)

The port has had an important role in an international trade, because seaborne trade distributes over 90% of total world trade(Marisec, 2006), Recently the port has changed their role to satisfy their customers in a global economy that from just a place for international trade to an important nodal point in logistics chain in a highly competitive market.

This section deals with the questions about "what is a concept of ports as part of a logistics chain" and "how does this link translate to a port's competitive advantage" by reviewing literature.

2.1 Supply Chain Management and Logistics Chain

John T. Mentzer et al. (2001) explained about definition of Supply Chain Management(SCM),

"Supply chain management is defined as the systematic, strategic co-ordination of the traditional business functions and tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply

* kmusm@naver.com, (051)410-4380

† Corresponding author : Doo-Gun Hwang, relax@hhu.ac.kr, 051)410-4445

chain as a whole."

Otherwise, logistics is the concept smooth flow of whatever to achieve efficient and effective SCM; this implicates not only physical flow of inventories but also flow of needed information, service, etc. in the whole system of SCM. The US Council of Supply Chain Management Professionals (CSCMP) explains definitions of SCM and logistics management,

"Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, Supply Chain Management integrates supply and demand management within and across companies." (CSCMP, 2008)

"Logistics Management is that part of Supply Chain Management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements." (CSCMP, 2008)

The more knowledgeable and socially intelligent customers have become, enabled mainly by information technology, has led to a demand economy, where customers call the shots. This has been exacerbated by the exposure of customers to best practice in terms of service delivery, putting pressure for best service quality. This created ripple effects in the logistics chain as the flows of commodities increased and the life span of products are shortened. The requirements of customers are quicker turnaround times for delivery, so speed and efficiency have both become keys in every service industry.

The Fig. 1 illustrates generalized supply chain model of supply chain management program at Michigan State University. Bowersox, Closs and Cooper(2002) explained this model according to five critical flows namely information, product, service, financial and knowledge, the firms make value. The supply chain is involved logistics activity within its arrangement and logistical activities must integrate within whole supply chain performance.

Consequently, we can use the terminology of SCM as whole managerial system in integrated supply chain performances and efficient links or smooth flows of each node as logistics chain. Therefore, this paper uses the terminology 'the port in the logistics chain' because the port is a node for whatever's flows.

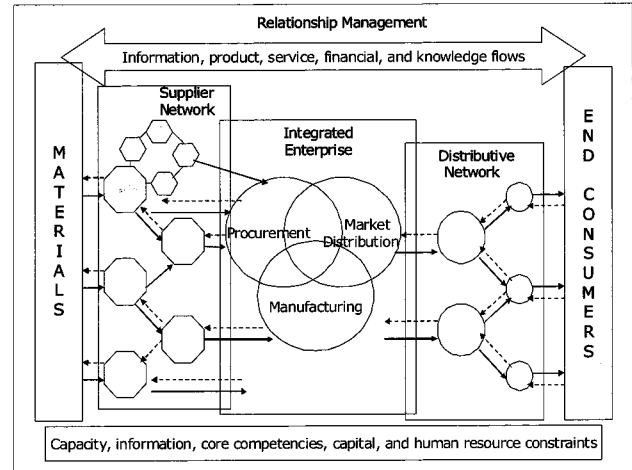


Fig. 1 Generalized Supply Chain Model
Source : Bowersox, D.J., Closs, D.J. and Cooper, M.B.(2002)

Shippers have bargaining power and use this for leveraging economies of scale to save transport costs and request reliable transport service. The shipping lines as service providers of transportation such as Maersk, MSC and Hanjin have changed to satisfy requirements of customers. They opt for larger sizes of ship, integration, and inter-modalism to achieve economies of scale and to provide reliable service. The ports are also changing to be aligned to the demands of their customers.

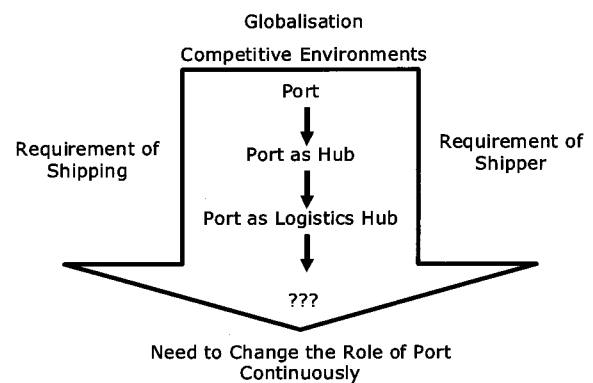


Fig. 2 Change of Port's Role

Fig. 2 explains, the port has changed from port just being a place adjoining sea and land to it in a logistics chain to satisfy the various requirements of shippers and shipping lines as their main customers.

The port has to achieve economies of scale aspects of cost and economies of scope aspects of wider range of service to meet requirements of the customers(Notteboom and Winkelmanns, 2001).

According to Cullinane and Khanna (1999) generally, when size of vessel increases, ship operators obtain economies of scale in the total shipping cost. 8000TEU

container vessel could achieve more economies of scale compared with smaller vessels and the distance of 11,500miles (Europe - Far East): B achieves more economies of scale than 4000miles (Trans a Atlantic): A. Practically, bigger vessels have used Europe-Far East route. See Fig. 3(a).

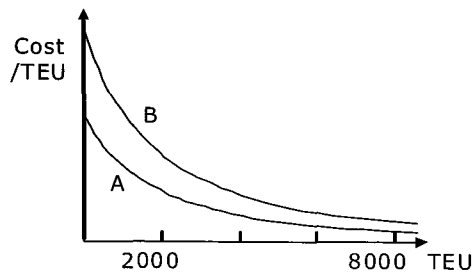


Fig. 3(a) Distance Comparison of Total Shipping Cost per TEU

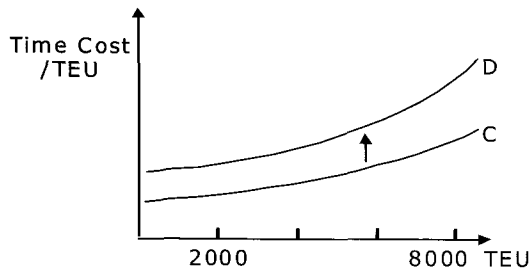


Fig. 3(b) Container Ship Cost of Time in Port per Voyage
Source : Cullinane, K, Khanna, M. (1999).

Fig. 3(b) explains, when port time is increased, the cost is moved from C to D. Bigger vessels are especially more sensitive than smaller ones. Therefore, if shipping lines want to achieve economies of scale through use of bigger vessels, time in port is a very important factor.

According to Musso (2005), in order for the port to achieve competitiveness, not only time in the port but also pricing, service reliability and flexibility are seen to be key components in a logistics chain. Similarly, Nottboom and Winklmans (2001) mentioned, in terms of economies of scope, the port has to be complimented by great flexibility and logistics activity like port-related VAL activity, information system and intermodality and this allows a port make inimitable and durable core competences to confirm competitive advantage.

Consequently, the port, as an important nodal point in logistics chain, must have the several factors of reasonable price, speed (time in port), service reliability (contact frequency/ time/ place/ volume/ capacity/ appearance, etc.) and flexibility (responsibility) to satisfy requirements of customer. To meet competitive requirements, an efficient

inter-modal system for connectivity with hinterland becomes an important factor of the port activity.

3. Evaluation of HKP as a Link in Logistics Chain

With introduction of huge vessels of about over 10,000TEU, the ports need larger and deeper terminal berths to provide efficient services and to handle this capacity. A number of ports have the dilemma of developing additions to their ports, extending the ports or dredging further to accommodate the deep draught of the new vessels. Fortunately the Port of Hong Kong does not have this problem as it has an advantage of natural deep sea.

The port of Hong Kong has been become both a main port of the region and an international hub port of Asia for a long time. However it is currently facing threats from the competitors such as Shenzhen and Shanghai. These ports have grown rapidly and increased in their capacity; they are now competitors of Hong Kong Port. The port of Singapore has been benefited through the developing countries which are blocked from sea in South-East Asia. We will address qualitative as well as quantitative evaluations of the Hong Kong Port, by comparing it to other ports in the region.

3.1 SWOT Analysis

The result of SWOT analysis is showed on Table 1. With Porter's Five Force Model, the position of the HKP as a nodal point in a logistics chain will be discussed briefly.

Table 1 SWOT Analysis of the HKP

| Strengths | Weaknesses |
|---|---|
| <ul style="list-style-type: none"> · Stable economy and politics · Location · Hinterland · Brand reputation · Knowledge (Know-How) · Productivity | <ul style="list-style-type: none"> · Price · Congestion · Old facilities at river terminals · High dependency on roadways |
| Opportunities | Threats |
| <ul style="list-style-type: none"> · Master plan 2020 · Pan-PRD · Economic growth of region | <ul style="list-style-type: none"> · Growth and development of competitors |

Perceived value is the evaluation of the client on the level of service quality offered to him or her. This is important because it spells out the level of success of the ports performance.

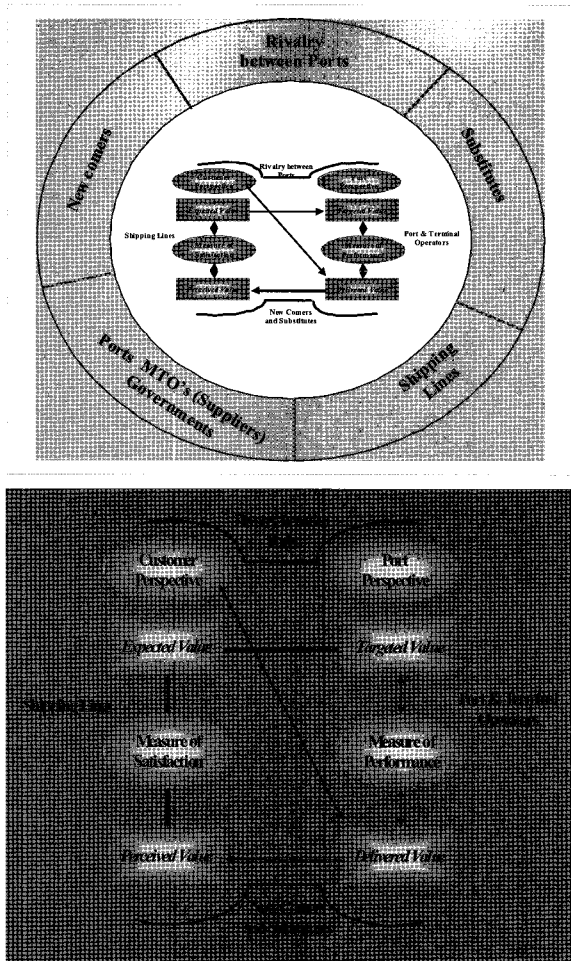


Fig. 4 Value Added Model Adapted to Porter's Five Force Model

Source : Constructed by author

Expected value is what the customer expects based on prior knowledge (cognitive factors). This knowledge could possibly be previous port performance or performance of similar ports around the area or of the same caliber. The idea is that perceived value must be equal or higher than expected value in order to ensure satisfaction of client. In other words, customer expectations must always be met or exceeded if the port wants to retain such a client.

Targeted value is the service delivery goal of the port. The port considers its internal capabilities and set a practical, but normally challenging target level of performance.

Delivered value is the internal measure of service quality delivered to client. This value is internal in that it is based on how the port looks at its own performance. Logically, this must ideally be higher than perceived value, the opposite is not required.

The interesting point of note on the model is that it contains customer perspective of value, internal achievable targets, delivering on the set targets, delivering on the set

targets consistently, managing customer expectations and keeping them in realistic, thereby influencing perceived value.

Within this contest, therefore, competitive advantage is defined as "the ability of the port to utilize a combination of its resources in a manner that consistently adds value above customer expectations and whose value add is perceived to be consistently above that of competitors".

It is the sustenance of this competitive advantage that keeps the port on top of its rivals, and the competitive forces, as defined by Porter, are constantly at play to challenge the port's position.

3.2 The Future of HKP in Logistics Chain

The future of Hong Kong Port would depend on 'its ability to build its core capabilities' and 'how to use these for differentiating themselves from their competitors'. However, for the port to be able to maintain this position there is a need for investment in some of the strategic initiatives that will see the port sustaining its leadership position and attaining the advantage of being an international logistics hub.

In this section we attempt to address the future of Hong Kong by focusing on examining the demand for HKP in the future, the capacity of HKP to meet the induced demand, and finally reviewing the plans to sustain the competitive advantage of port.

The seven ports (including the HKP, six of them are located in Asia) of the top ten world's container ports have the plan for the port development to enlarge their capacity for fulfilling various demands of the customers.

In earlier section, we analyzed address of the HKP in a logistics chain(See Table 1.). They have competitive advantages like hinterland, reputation, know-how and natural deep harbors. However competitors have caught up to HKP very rapidly and the gap with competitors closed more. In other words, the gap between competitive advantage and competitive requirement is not far.

"The Master Plan 2020 (Strategy 2020)" will give a new opportunity to the HKP and it could be a chance to enlarge the gap with competitors.

3.3 Project for HKP

The HKP is an important link in a logistics chain. Therefore, the government of Hong Kong confirmed a strategy to achieve their competitive advantage as an international hub port in Asia and to induce cargoes from South China as a main regional port. Its strategy and application would be the opportunity of the port of Hong

Kong to advance into the world as an international logistics hub and a major regional port.

1) Master Plan 2020 (HKP 2020)

The government of Hong Kong is investing in the infrastructure to achieve their strategic logistics hub through establishing the value added logistics parks, intelligent logistics system, road and rail logistics pipeline. Hong Kong has a strategy to enhance the entire supply chain. The government of Hong Kong is now strongly supporting the port development to maintain its competitive advantage.

Hong Kong government has made a push for strategies such as 'Study on Hong Kong Port Master Plan 2020 (HKP 2020)' to be a logistics center. In terms of nation, Hong Kong is competing with other countries to be international logistics hub not just in transportation such as seaborne and air but also in whole logistics chain in a highly competitive Asian market.

2) Strategy of Hong Kong Port by the Five-Pillar Approach to Logistics

This paper will assess the 2020 Strategy of Hong Kong Port and to evaluate its alignment to Heaver's Five Pillar Approach to logistics. Heaver(2005) identifies the followings as five pillar approach to logistics.

The first is "The provision of efficient infrastructure and services in transportation". Heaver mentions that logistics is facilitated by the presence of transportation that enables the delivery of logistics.

The second is "The provision of efficient infrastructure and services in communication". The communication infrastructure and services are seen as a critical element in shaping and management of supply chains. It is further explained that the role of information in logistics performance is its effects on the potential for customs to provide fast and reliable clearance of goods.

The third is "Appropriate public policies and institutional practices". It is also believed that the government (national and regional) should be supportive to the logistics and supply chain as whole. This can be achieved by providing the necessary public policy and infrastructure investment. The policy could regulate the entry and structure of firms in the transport and logistics industries. Also the efficient customs procedures are seen as a competitive advantage. On the other hand, investment could be in a form of providing investment for the IT network, (such as an integrated information system, used across the supply chain), road, rail and port infrastructure funding.

The fourth is "The availability of effective private sector logistical organizations". This refers to presence of private sector logistics organisation that contributes towards the development of software for supply chain management or operation of shipping. It is stated that the presence of these private organisations is an important contributor to the attractiveness and the efficiency of locations to industry.

The final is "The existence of a knowledgeable work force of logistics skills and concepts". Heaver argues that the knowledgeable skilled work force is critically important in ensuring logistic performance. Skills may include the knowledge of importance of IT within the entire logistic chain.

We examine the HKP 2020 strategy in terms of Heaver's five pillar approach.

① "The provision of efficient infrastructure and services in transportation"

To achieve their strategy as a logistics hub, the government of Hong Kong should invest not only in the port infrastructure but also in the whole logistics and supply chain.

The HKP 2020 strategy includes the programmes such as the Super-Connectivity Initiatives for enhancing current infrastructure. This initiative seeks to improve the boundary crossings, to raise the efficiency of truck movements, to focus on waterborne freight feeders within the Pearl River Delta (PRD) region, to improve the Port connectors to Pinghu and the mainland. They also plan to create logistics platforms including value added logistics parks (VALP) and to review licensing and registration fees. This is expected to reduce the inland total transportation costs. [Hong Kong Logistics Development Council, 2002]

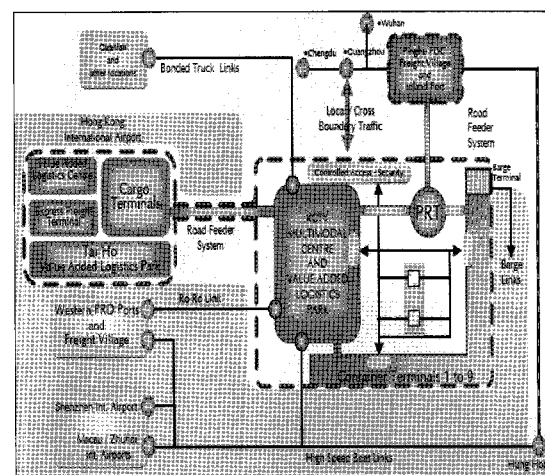


Fig. 5 Hong Kong Logistics Transportation Network
Source: Hong Kong Logistics Development Council, 2002

The government of Hong Kong is now strongly supporting the port development to maintain its competitive advantage. Internationally Hong Kong is competing with other countries to become an international logistics hub not only in transportation such as sea-borne and air but also in the whole logistics chain. Therefore they are investing in enhancing transportation services and infrastructure. In order to become an international and regional logistics hub, the strategy of Hong Kong has network for multimodal transportation and nodes of distribution as illustrated in Fig. 5.

- ② "The provision of efficient infrastructure and services in communication"

According to "Master plan 2020", a critical requirement of a logistics platform is to provide the cyber system required to support the secure areas and pipelines in addition to increasing the efficiency in movement of freight as part of an integrated multimodal system.

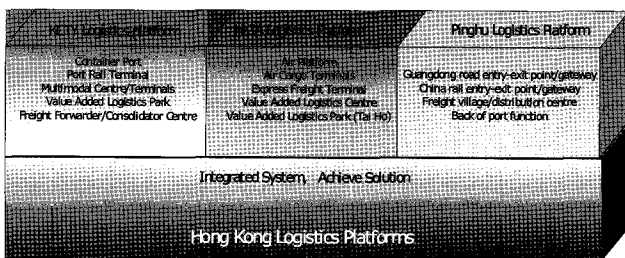


Fig. 6 Hong Kong Logistics Platforms

Source : Constructed by author using by information from Hong Kong Logistics Development Council, 2002

Fig. 6 explains Hong Kong Logistics Platform utilizing three elements, namely KCTY(Kwai Chung Tsing Yi), HKA (Hong Kong International Airport) and Pinghu Logistics system. Logistics platforms should have good infrastructure and service in transportation, they also integrated logistics systems to achieve real time. Therefore, the strategy of HKP suggests Hong Kong digital customs processing, moreover digital outline customs Shenzhen/Pinghu processing to co-operation. Because Hong Kong is Special Administrative Region of China since 1997, they have different customs procedure. The strategy also contains the integration of Track & Trace application/technology such as multi-track (Development of an international intermodal tracking system) and Smart Border(Web based applications for cross boundary customs) to satisfy requirement of customers as logistics hub.

According to Strategy of HKP, Cyber Connectivity is required to provide cyber system to increase the efficiency in movement of freight as part of an integrated multimodal

system. So in case of the KCTY Logistics platform include customs regulatory process, real time and advanced freight management systems. Fig. 7 shows through the connectivity requirements between other activities, they could achieve potential positive effects. Also the connectivity could be co-operative planning and operating with each stakeholder. Consequently, those participants could achieve higher levels of efficiency and reduced operating costs.

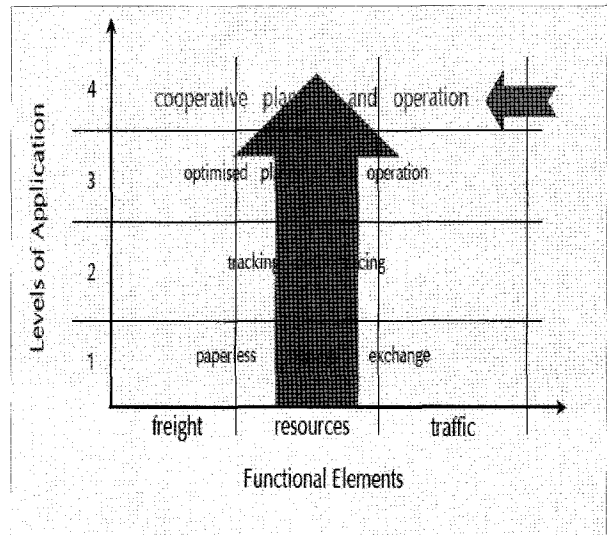


Fig. 7 Port Telematics in Logistics

Source : Hong Kong Logistics Development Council, 2002

- ③ "Appropriate public policies and institutional practices"

Fig. 8 explained the different level of government participation by project type. According to Fig. 8, Intermodal Road-Rail Link is the highest level that Hong Kong government is interested in.

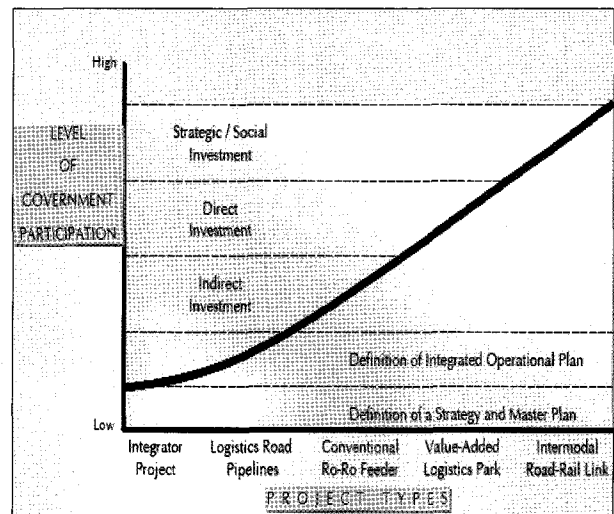


Fig. 8 Level of Government Participation

Source: Hong Kong Logistics Development Council, 2002

Hong Kong's government encourages each sector of logistics chain to work towards achieving international and regional logistics centre. The government support is required for the investment of infrastructure for an efficient logistics system. For example, the development of inland port and sprinter rail shuttle to/from the Pinghu is allocated as government strategic initiative and investment. However, the subsequent spin-offs such as the freight village could be developed purely on private sector basis.

The port of Hong Kong has a massive hinterland from PRD in Guangdong province of South China. Governments of other region need to implement a cooperation policy for efficient excess of all activity in logistics system. Therefore, strategy of the HKP will facilitate the quick introduction of this in each region.

④ "The availability of effective private sector logistical organisations"

The government adopts the Public-Private Partnership (PPP) approach to implementation of HKP Master Plan. Some aspects of implementation will be funded publicly and other would be purely funded by the private sector.

The HKP entered into the joint venture initiatives with private sector on Master Plan implementations. For instance the port obtained the input of the private sector with a focus on physical, cyber and human resource issues and requirements which were incorporated in The McClier Report. [H.K. Logistics Department Council, 2004]

⑤ "The existence of a workforce knowledgeable in logistics skills and concepts"

The HKP 2020 strategy does not address the issue of workforce, nor does it make any recommendations in terms of what is required to develop the required skill for the logistics sector. As a result, it seems as though they ignore the importance of the skills and concepts of logistics as a competitive advantage for the logistics chain.

The HK government faced with the responsibility of implementing a co-operation policy within the region to set up a scene for smooth logistics operation. The government facilitates this process as a matter of priority so that by the time aspects of master plan are implemented, there is a relevant policy in place.

It was already noted in the HKP 2020 strategy but the problem with the HKP is that the implementation programme does not have the organizational structure and ability for dedicating resources to the fast tracking of critical projects. The primary focus of improving Hong Kong's competitive position as an international and regional

transportation and logistics hub (IRTLH) would be lost. Therefore, the authority should soon set the necessary organizational structure in place to ensure implementation of the plan.

The challenge for effective logistics is to share hinterland. This, however, can be resolved by PPP working together in implementing of IT network that will facilitate the integration required. Once the integration of logistic system would be achieved, it would set Hong Kong as an efficient logistic hub.

The integrated IT network, co-operation policy would not be effective without the skilled personnel. HKP has to support training a development of personnel in logistic concepts as well as IT critical enablers in logistics.

Up to now the HKP has been maintained the high position in the world. However, if they do not start as an efficient nodal point in a logistics chain, it will be difficult for them to keep their competitive advantage above their competitors.

4. The Role of Busan Port in Logistics Chain

4.1 The SWOT Analysis of the Busan Port, Comparing with the HK Port

The port of Busan, which was blessed with natural advantages and was opened in 1876 is located on the main truck connecting oceans and continents. The Busan port is fifth largest container and the third largest transshipment cargo dealing port, which has a strength of strategic location and is rising as a competitive logistics center in the world. The port of Busan handles about 78% of the total cargo throughput in Korea, as well as all the exports and imports go through the port(BPA, 2006). The jobs related to port and logistics sector of the Busan has the dominant portion of Korea.

The port of Busan was the third container port as the port handled 9.45million TEU in 2002. However the Busan Port has been ranked the fifth in the world, as the Port faced fierce competition in North-East Asian market since 2003. The 30 berths of New Port under construction will help the port improve its services by adding more advanced facilities and placed itself as the gateway port of Northeast Asia.

During last two decades, the average annual growth rate of GDP in the China was 9.6% and the huge economic growth influenced the increasing of international trade volume and activity of international transportation from/to China.

In 2006, the throughput of the Busan Port was 12.04

million TEU. The rate of transshipment cargo was 44.4% and direct shipment was 56.6% in 2006. Busan Port with a water depth of 16m and stable tides operates 6 container-exclusive terminals: Jasungdae Container Terminal, Shinsundae Container Terminal, Gamman container Terminal, Shingamman container Terminal, Uam Container Terminal and Gamcheon Hanjin Container Terminal. Because of the modal split between the Busan port and land, 9.4% of cargoes was moved by rail, 89.0% by road and 1.6% by water. High percentage of movement depends on road transportation and it has been indicated a big problem of the Busan Port(BP).

The result of SWOT analysis of the Busan Port is shown on Table 1 by comparing it to the Port of Hong Kong. With Porter's Five Force Model, the position of the BP as a nodal point in a logistics chain will be discussed briefly.

Table 2 SWOT Analysis of the BP

| | |
|--|---|
| Strengths | Weaknesses |
| <ul style="list-style-type: none"> · Stable economy and politics · Location · Brand reputation · Knowledge (Know-How) · Productivity · Price | <ul style="list-style-type: none"> · High dependency on roadway |
| Opportunities | Threats |
| <ul style="list-style-type: none"> · Port Vision 2020 · Trans-Asian-Railway · Planning development of the port | <ul style="list-style-type: none"> · Growth and development of competitors |

The competitive advantage is based upon the following key success factors. However, comparing with the port of Hong Kong, Busan has weak macro-economic factors and logistics factors. On the other hand, the port tends to expand their hinterland as a new opportunity. For example, the government of North and South Korea signed to revive the Trans-Korean railway(TKR) and it is a means of establishing a new transportation network from the port of Busan via China (TCR) and Russia(TSR) to Eastern Europe. It will be new opportunity for Busan port to become a logistics hub port.

4.2 The Future of the Busan Port in Logistics Chain

Busan Port Authority has made a push for strategies such as 'PORT VISION 2020' to react to highly competitive environment in North-East Asia and to seek the strategy to be an efficient port in logistics chain in the world.

Port of Busan has been developed into a modern port with four ports(North, South, Gamcheon and Dadaepo ports), six container terminals, and an international passenger terminal through continuous port development since its commencement of the first port construction in 1906. Even at this moment, such port facility expansion investments as the New Port Development Project, large scale distri-park construction, and the North Port Redevelopment Project are continuing. In addition, it is fighting for challenges and revolution to rise and become the logistics center port of the world by establishing the U-port system.(BPA, 2006)

4.3 Vision of Busan Port for the Five-Pillar Approach to Logistics

In this section, we would assess the Port Vision 2020 of Busan Port, comparing with the Strategy 2020 of Hong Kong Port and we evaluate the Port Vision 2020 of Busan Port in terms of Heaver's Five Pillar Approach.

From the standpoint of the provision of efficient infrastructure and services in transportation, the Port Vision indicates needs of inter-modal system for providing of efficient and effective logistics. The Vision suggests shuttle service, Busan Transshipment Shuttle Ship(BTSS), by vessel for transshipment cargo between North Port and New Port or within Busan Port. Also, the Vision suggests the construction of new airport to lead Sea&Air cargoes in Southern area. It played a role of logistics center in Northeast Asian Market. The Vision mentions the establishing of a new transportation network from the port of Busan via Trans-Korean-Railway(TKR), China and Russia to Eastern Europe. The Vision also indicates establishing efficient movement system of container, Inter-Circulation Transportation System(ICTS) in New Port. Also it suggests the increasing of feeder operators for short sea shipping within a region.

Table 3 Analysis of Strategic Plannings with Five-Pillar

| Five-Pillar Approach to Logistics | Master Plan 2020 of Hong Kong | Port Vision 2002 of Bussan |
|---|-------------------------------|----------------------------|
| The provision of efficient infrastructure and services in transportation. | O | O |
| The provision of efficient infrastructure and services in communications. | O | O |
| Appropriate public policies and institutional practices | O | O |
| The availability of effective private sector logistical organizations. | O | X |
| The existence of a work force knowledgeable of logistics skills and concepts. | X | O |

In terms of the provision of efficient infrastructure and services in communications, the Vision considers the operation of port logistics information. It suggests the integration of an efficient information system for cargoes in the port. It also mentions about the application of RFID(Radio Frequency IDentification) as a new technology in terminals for an efficient communication between world ports and USN(Ubiquitous System Network) for logistics parks. It also suggests the establishing of subsidiary company of BPA for administration of logistics information in Busan Port.

In perspectives of appropriate public policies and institutional practices, the Vision indicates making of the port cluster for connection between port related institutions and logistics sectors and raising of the capital for business in this sector. The Vision indicated needs of change in Port Authority Law, Transport Business Law and Korea Container Terminal Authority Law.

From the point of view the existence of a work force knowledgeable of logistics skills and concepts, the Vision includes contents of an educational system for expert human resources in whole sectors of logistics planning for the future. It leads to the developing of core human resources of Korea, China and Japan for the future in port logistics division.

However, from the standpoint of the availability of effective private sector logistical organization, the Port Vision 2020 does not address the issue regarding this part, nor does it suggest any recommendations in terms of what is required to develop the private sector for the logistics organizations. As a result, it seems as though it ignores the importance of the concepts of logistics as a competitive advantage for the logistics chain.

5. Conclusions

In terms of the port development, the port of Hong Kong has developed as a modern port by the private sector. Otherwise the port of Busan has developed by the public sector. Nowadays, the tendency on operating and managing the port has changed into more private forms. Therefore this study would provide some perspectives for the Busan for the future, although there is a little difference between two ports. With introducing the strategy of the Hong Kong Port, this paper has tried to give a wider view on the strategy of the Busan port for the future.

The implementation of the Port Vision 2020 is a critical factor so that the Busan may achieve the planned status. This plan, however, does not incorporate the issue of the

availability of effective private sector logistical organization to drive the strategy forward. Therefore we suggest that it needs to collaborate with private corporations and use their know-how that the other ports don't have. The Busan Port needs a strategy to develop the participation of private sector as well as other advancement and they could benchmark the Master Plan 2020 of Hong Kong. It emphasizes partnership between public and private sectors that as discussed in the previous section.

So effectively, the Port of Busan has some qualities of a logistics hub, but is not satisfying all the requirements to be called a logistic hub. The health of the region's economy definitely set the ground basis for the Port of Busan to become a logistics hub provided that the port enhances its core capabilities and implements its plans at the right pace and at the right time.

However, this study has a few limitations.

First, although two ports have different management and operation system, this paper assesses the strategy for future by the same criterion.

Second, this study assesses the strategies of the ports for the future by only Heaver's Five Pillar for the logistics of the port.

Third, this paper compares with the strategy of two ports by the qualitative approach.

So, we suggest that this issue could be estimated in the future research by utilizing quantitative analysis. Also the following research could be investigated from various standpoints of view regarding this field.

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