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Dissertation for Master's Degree

**A STUDY ON MARKETING STRATEGY FOR  
CONTAINER TERMINALS OF PORT KLANG IN  
MALAYSIA**

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## **ABSTRACT**

# **A Study on the Marketing Strategies for Container Terminals of Port Klang in Malaysia**

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Asian countries are the major contributor to the world container throughput with 64 per cent in total. Nine out of top ten container ports in the world are from Asia region. Among those countries in Asia, there's an undeniably strong competition between them. With the domestic and external competition environments, the port marketing become a core part of port management activities. In order for Port Klang to survive in the container terminal market, it is crucial to enhance the marketing strategy of its ports.

The purpose of this study is to determine the marketing strategies of container terminal in Port Klang by comparing it with three major international ports. The data gathered from past researches are used to develop the SWOT analysis of Port Klang. SWOT Matrix is then used as to help in establishing the marketing strategies. The marketing strategies are based on marketing mix which will help to enhance the service quality of Port Klang. In conclusion, this study may help not only to establish the marketing strategy of container terminal but also to the develop sea transport industry.

**KEY WORDS:** Container terminal, marketing strategy



## 국문초록

# 말레이시아 포트 클랑항(Port Klang)의 컨테이너 터미널 마케팅

## 전략에 관한 연구

아시아 국가들은 총 64%의 세계 컨테이너 물동량 처리하는 등 세계 컨테이너 항만의 발전에 주요한 기여를 하고 있다. 세계 주요 10대 컨테이너 항구 중 9개가 아시아 지역에 있고 이들 상호간에는 치열한 경쟁이 지속되고 있다. 국내외의 경쟁 환경 속에서, 항만 마케팅은 항만 관리 활동의 핵심 부분이 된다. 그러므로 포트 클랑항이 컨테이너 터미널 시장에서 살아남기 위해서는 항만 마케팅 전략을 강화하는 것이 중요하다.

본 연구의 목적은 포트 클랑항 컨테이너 터미널의 마케팅 전략을 수립하는데 있다. 즉, 포트 클랑항을 주요 국제 항구 3개와 비교함으로써 경쟁력 있는 마케팅 전략을 분석, 실행하는데 있다. 과거 연구들에서 수집된 데이터는 포트 클랑항의 SWOT 분석을 하는데 사용되며 이를 이용하여 마케팅 전략을 수립한다. 또한 포트 클랑항의 마케팅 전략은 항만 서비스 품질을 향상시키는 데 도움이 될 마케팅 믹스에 기반을 두고 있다. 결론적으로 본 연구는 포트 클랑항의 컨테이너 터미널의 마케팅 전략뿐만 아니라 말레이시아 해상 운송 산업 발전에도 도움이 될 수 있다.

# **CHAPTER 1: INTRODUCTION**

## **1.1 BACKGROUND OF THE STUDY**

According to UNCTAD Review of Maritime Transport 2018, the 2017's world seaborne trade gathered momentum with volumes expanding at 4 per cent, which is the fastest growth in five years. The world seaborne trade was estimated at 10.7 billion tons, with dry bulk commodities powering nearly half of the volume increase supported by the world economic recovery and the improved global merchandise trade. Considering the low base effect, the recovery benefited all market segments; containerized trade and dry bulk commodities recorded as the fastest expansion. Following the weak performances of the two previous years, containerized trade increased by 6.4 per cent in 2017.

It is also stated that the export growth accelerated in both the developed and developing regions, therefore trade volumes of developing countries firmed up. Their import demand increased by 7.2 per cent, up from 1.9 per cent in 2016. Their exports expanded at 5.7 per cent, higher than the 2.3 per cent recorded in 2016. Exports from developing Asia in particular strengthened during the year following a rebound in electrical and electronic products trade and the region's integration in global value chains.

Asia recorded the fastest growth in exports (6.7 per cent) and imports (9.6 per cent). Stronger domestic Asian demand supported by policy stimulus measures in countries such as China have sustained the region's demand for imports. Developments in China are of acute relevance to shipping, as the country remained at the centre of shipping activity in 2017 and accounted for nearly half of seaborne trade growth recorded during the year.

In 2017, with the exception of the tanker market, the global shipping industry saw a marked improvement of fundamentals in most market segments. Key drivers were the combined strengthening in global demand, on the one hand, and the reduced fleet growth, on the other. With the exception of tankers, the freight rates improved across all markets in 2017.

Container freight rate levels increased, and averages surpassed performance in 2016. A better supply–demand balance in container ship markets, underpinned by stronger demand, was the main driver. The container shipping industry ended 2017 with a total profit of roughly \$7 billion, driven mainly by a significant increase in transported volumes, freight rates and revenue, as well as proactive operational management discipline.

For the past few years since 2015, the container shipping has been experiencing a significant increase in demand. According to figure 1.1, following a challenging market environment in 2016, the container freight market improved significantly. Global container demand grew at 6.4 per cent in 2017, taking total volumes to an estimated 148 million TEUs. The fundamental improvement in the global economic environment occurred by the strong development in global container shipping demand in 2017 reflects. Demand growth was particularly high in the first three quarters of the year, although it slowed down in the last quarter.

<Figure 1.1> Growth of demand and supply in container shipping, 2007–2017 (percentage)



Source: UNCTAD Review of Maritime Transport 2018

## 1.2 OBJECTIVE OF THE STUDY

Even though Port Klang is strategically located on the middle of Malacca Strait, foreign vessels are preferred Singapore as their destination. The reasons will be discussed in the later part of this study.

This study is focused on determining the marketing strategies of container terminal in Port Klang by comparing it with several other international ports. The chosen ports are Port of Singapore, Port of Shanghai, and Busan Port. These three ports represent the leading port in Asia. Even though there is a big gap in term of the technology and the country status (Malaysia as developing country) between the chosen ports and Port Klang, this study aims to make the chosen as benchmarks for Port Klang to improve their productivity and efficiency.

This study also aims to make Port Klang stands equally alongside with the chosen three ports. Currently as this study being written, the ranking of the ports are referred from the 2018 edition of Lloyd’s List’s One Hundred Container Ports.

Based on the list in figure 1.2, Port of Shanghai is strongly maintained its growth trend and its position as the busiest container port in the world with throughput levels up 4.6% to 20.5 million TEU. Then it follows by Port of Singapore, placing in second, also maintain its position with throughput of 33.6 million TEU. On the other hand, Busan port is placed on the 6<sup>th</sup> with 20.4 million TEU. All of these three ports experienced increase in annual percentage change.

Unfortunately, Port Klang is placed in the 12<sup>th</sup> with the throughput of 11.9 million TEU, 9% decrease from 13.1 million TEU in 2016. Port Klang saw volumes fall back in 2017 at the expense of transshipment rival Singapore.

<Figure 1.2> Top 15 Ports in 2017

Ranking	Port	Country	Region	2017 annual throughput (teu)	2016 annual throughput (teu)	Annual % change
1 ⇄	Shanghai	China	Asia	40,233,000	37,133,000	▲ 8.3%
2 ⇄	Singapore	Singapore	Asia	33,666,600	30,903,600	▲ 8.9%
3 ⇄	Shenzhen	China	Asia	25,208,700	23,979,300	▲ 5.1%
4 ⇄	Ningbo-Zhoushan	China	Asia	24,607,000	21,560,000	▲ 14.1%
5 ⇄	Hong Kong	China	Asia	20,770,000	19,813,000	▲ 4.8%
6 ⇄	Busan	South Korea	Asia	20,493,475	19,456,291	▲ 5.3%
7 ⇄	Guangzhou	China	Asia	20,370,000	18,857,700	▲ 8.0%
8 ⇄	Qingdao	China	Asia	18,262,000	18,010,000	▲ 1.4%
9 ⇄	Dubai	United Arab Emirates	Middle East	15,368,000	14,772,000	▲ 4.0%
10 ⇄	Tianjin	China	Asia	15,040,000	14,490,000	▲ 3.8%
11 ▲1	Rotterdam	The Netherlands	N. Europe	13,734,334	12,385,168	▲ 10.9%
12 ▼1	Port Klang	Malaysia	Asia	11,978,466	13,169,577	▼ 9.0%
13 ▲1	Antwerp	Belgium	N. Europe	10,450,897	10,037,341	▲ 4.1%
14 ▲2	Xiamen	China	Asia	10,380,000	9,613,679	▲ 8.0%
15 ▼2	Kaohsiung	Taiwan	Asia	10,271,018	10,464,860	▼ 1.9%

Source: Lloyd’s List One Hundred Ports 2018

The decreasing throughput for Port Klang is considered undesirable if it's compared to the other ports in this list. Because of this, it makes Port Klang hard to catch up to its main competitor which is Singapore. Therefore, this study will somewhat contribute in making Port Klang catch up the leading ports by attracting more ships using the marketing strategy proposed in later part of the study.

### **1.3 THESIS STRUCTURE**

This study has structured into chapters and they are briefly described as follows;

In order to achieve the objectives designated by this study, this study started with a general introduction on the background information for this study. The container shipping market is first to be reviewed. Then, research statement and objective are explained.

In Chapter 2, several relevant literatures are reviewed. These relevant literatures are grouped into two parts, container terminals and marketing strategies. The chapter not only explains the definition of the terms based on the past researches but also illustrates the overview of container terminal industry. After that, Chapter 3 identified and examined the current situation on the subject port. In this study, SWOT analysis is used.

While in Chapter 4, descriptive comparative analysis is used to compare the subject port with three chosen ports; Busan Port, Port of Shanghai, and Port of Singapore. The author studies the SWOT analysis of these ports and make a comparison based on the findings. Furthermore, Chapter 5 evaluates the findings and come up with few suggestion on strategies by using marketing mix strategy. Lastly, Chapter 6 concludes the findings of the study and recommendations for future studies.

# **CHAPTER 2: ACADEMIC BACKGROUND OF CONTAINER TERMINAL MARKETING**

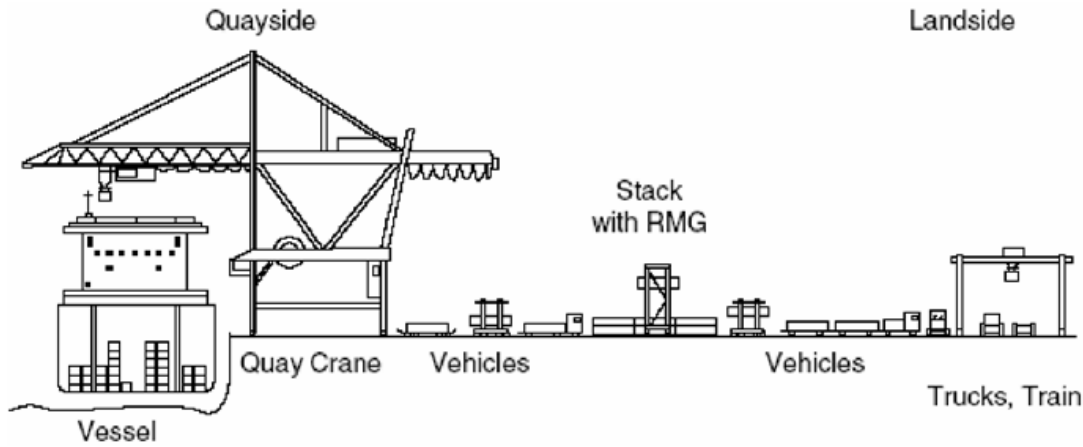
## **2.1 CONTAINER TERMINAL**

### **2.1.1 OVERVIEW OF CONTAINER TERMINAL**

Container terminal acts as the interface between worldwide compartment shipping systems and the business sectors they serve. Terminals burden and release compartments on and from vessels, store holders and exchange compartments between the terminal and an assortment of inland transport modes: street, rail and canal boat. Holder terminals, likewise, go about as transfer focuses in the systems of lines, transshipping compartments between mainline vessels and among mainline and feeder vessels, in this manner enabling lines to expand advertise inclusion and lessen arrange costs.

Generally, container terminal can be roughly distinguished into four areas. Those areas are the quayside of the terminal, the stacking area, the landside of the terminal and then the areas for supporting activities. The figure 2.1 shows a generally side view of a basic container terminal.

<Figure 2.1> Side view of Container Terminal



Source: Steenken et al. (2004) Container terminal operation and operations research – a classification and literature review

As defined by the U.S. Department of Transportation, Bureau of Transportation Statistic, container throughput means a measure of the number of containers handled over a period of time. It is standard measure for the productivity of a seaport. Twenty-foot equivalent units (TEU) is the measurement for the container throughput.

Container port throughput is driven to a great extent by developments in the world economy and global demand, including investment, production and consumption requirements. Trans-shipment is a major area of container port activity that results in particular from hub-and-spoke container networks and could be enhanced by the further deployment of ultra-large container vessels. Trends in 2016 and 2017 indicate the strategic importance of containerized port activity. Some 873 ports worldwide regularly received over 560,000 individual port calls from fully cellular container ships across 141 countries (Clarksons Research, 2017 as cited in UNCTAD Review of Maritime Transport 2018).

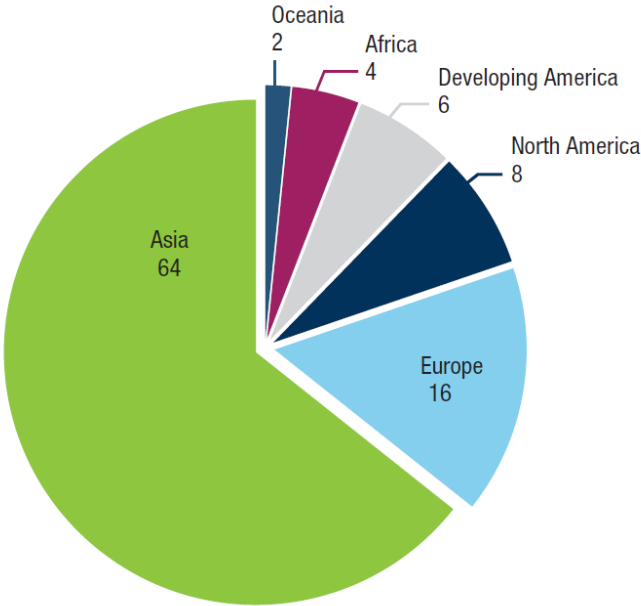


<Table 2.1> World Container Throughput by Region, 2016 and 2017 (TEU)

	2016	2017	Annual percentage change
Asia	454 513 516	484 176 997	6,5
Africa	30 406 398	32 078 811	5,5
Europe	111 973 904	119 384 254	6,6
North America	54 796 654	56 524 056	3,2
Oceania	11 596 923	11 659 835	0,5
Developing America	46 405 001	48 355 369	4,2
<b>World total</b>	<b>709 692 396</b>	<b>752 179 321</b>	<b>6,0</b>

Source: UNCTAD Review of Maritime Transport 2018

<Figure 2.2> World Container Throughput by Region 2017 (Percentage share in total TEU)



Source: UNCTAD Review of Maritime Transport 2018

### **2.1.2 CONTAINER TERMINAL MARKET**

The container terminal markets have characteristic's that make the marketing thereof a special trade and sometimes and sometimes also an art. Container stevedoring is an international business-to-business industry focussed on delivering services, being part of the intercontinental logistic chain of transporting goods.

Container terminal service marketing is defined as a whole service activities such as planning, establishing and implementing innovative services to satisfy current and prospective customers through the effective container terminal operation (Stenvert and Penfold, 2004 as cited by Shin, 2009). Unlike exporting product, this service deals with invisible one and tries to improve service itself.

It is certain that best service marketing strategy is important in modern competitive business. It markets the strategy to maximize profit of service. Especially in modern harsh market competition, the company which rapidly anticipates and meets the customers' requirements can lead the market (Lovelock, 2001 as cited by Shin, 2009). As the competition between terminals has growth, one needs to establish active marketing services to attract liner shipping companies. In this case, it is necessary that container terminals set superior strategy to the others.

## **2.2 PORT COMPARISON**

### **2.2.1 PORT COMPETITIVENESS**

When container ships becoming bigger and faster, ports are fighting each other to capture more cargo throughput. When it comes to comparing between ports, one of the main ideas is about port competitiveness. Fleisher and Bensoussan (2007) defined the competitive position of an organization as the position of an organization compared to its competitors in the same market or industry. Information of competitive positions allows enterprises to sort tactical plans to uphold or improve their current positions or possibly withdraw from the market.

Thus, the information of the competitive position of an organization and its rivals is critical. Since rivals are defined as organizations that are able to obstruct a company's market goals, and important moderators of a company's performance. Therefore, considered as the most influential elements in competitive strategies (Porter, 1985).

The competitive offering to the host of shippers and shipping lines for specific trade courses, geographical regions and different ports to which the container port is associated define the competitive position of a container port. In any case, at the more extensive measurement, the competitiveness of a container port is determined by the range of competitive advantages that are acquired or created by the port over time (Notteboom and Yap, 2012).

Based on study conducted by Li Wen (2011), port competition is affected by (1) specific demand from consumers, (2) specific factors of production, (3) supporting industries connected with each operator, and (4) the specific competencies of each operator and their competitors. In the study also stated that port competition can be influenced by port authorities and other public bodies.

### 2.2.2 COMPARATIVE ANALYSIS OF PORT

Comparative analysis is a common method to use when there is a need to find differences from two or more subjects. Past researchers have been using the comparative analysis method in their port studies. Most commonly used for are port competitiveness and port selection. There are also other variables such as service quality and marketing strategy.

<Table 2.2> Previous Research on Comparative Analysis

Author	Method
Lee, Song, Park, and Sohn (2014)	Port comparison using AHP method
Liduma, Kairena, and Priedens (2015)	Competitive advantage of ports
Cho, Kim, and Hyun (2010)	Questionnaire on port service quality
Chang Su, Shin (2009)	Service marketing strategy for container terminal

### 2.3 PORT MARKETING STRATEGY

Marketing is management function that identifies what consumers need, plans and develops products and services that meet their needs, and determines the best way to price, promote and distribute the product or service. In other words, the ultimate goal of marketing is to prevent sales activities beyond the need and to develop and sell products and services that meet customers' needs by understanding the customers. There are various opinions about the definition of marketing, but among these diversities, common factors are as follows.

Generally, marketing is defined as a management function that guides and organizes all activities necessary to turn a customer's desire into a realistic purchasing power, thereby realizing the goals or benefits set by the entity, by making it palatable to the customer who needs a product or service. The generalist definition of such marketing can be applied equally to port marketing. In other words, port marketing is a management function that guides and organizes all activities necessary to realize the goals or interests set by the port authority or operator by making the customers who need port services actually use the port (Jung, 2002).

According to An (2003), it is still in concerning level for marketing strategy and the requirement of the formation of a strong marketing strategy along with the introduction of fundamental marketing business on favour of the client's satisfaction is needed crucially. The study also stated that there are very limited results from the previous research studies for the marketing strategy of the container terminal. Thus, in order to contribute in future marketing strategies, more similar studies are need to be done to.

<Table 2.3> Previous Research on Port Marketing Strategy

<b>Author</b>	<b>Summary</b>
A Rum, Park (2014)	Port marketing strategy in a wake of new shipping alliance
Deerod, Kanchisa (2018)	Developing port marketing strategies for Bangkok Port
Nam Soon, An (2003)	Perception of marketing strategy for container terminal
Chang Su, Shin (2009)	Service marketing strategy for container terminal in Busan

## CHAPTER 3: SWOT ANALYSIS OF PORT KLANG

Port Klang is Malaysian biggest port city and it acts as the main access to the sea freight industry in Malaysia. Being located along the Straits of Malacca, it has strategical location for transit cargos between east and the west. Port Klang is currently managed by Port Klang Authority (PKA). It is important to understand the current situations at Port Klang before examining and evaluating the port.

<Figure 3.1> Location of Port Klang



### 3.1 CURRENT STATISTICS OF PORT KLANG

Table 3.1 shows the statistic of container operation in Port Klang. Both import and export experience a significant increase from the year 2013 to 2017. Container imports has increased from the year 2013 until 2017 with the percentage of 4%. The same goes to container export, as it also increase steadily. It shows that Port Klang imports containers more than export.

Meanwhile, transshipment is the main business operation for Port Klang. The transshipment operation of container in Port Klang experiences an increase from 6.5 million TEU to 9 million TEU until 2016 where it is unfortunately went down to 7.6 million TEU.

<Table 3.1> Total Container Throughput (TEUs)

Year	Import	Export	Transshipment	Total
2013	1,907,497	1,860,613	6,582,299	10,350,409
2014	1,962,431	1,942,773	7,040,600	10,945,804
2015	1,992,460	1,962,237	7,931,988	11,886,685
2016	2,063,736	2,038,527	9,067,314	13,169,577
2017	2,175,055	2,161,053	7,642,358	11,978,466

Source: Port Klang Authority

The cargo container also experiences similar situation as from 2013 to 2016, as it increases from 170.4 million FWT to 207.4 million FWT but fall to 186.1 million FWT in 2017 (table 3.2). Not only container cargo, other cargoes such as dry bulk, liquid bulk and also general cargo share the same experience.

<Table 3.2 Total Throughput (FWT)>

Year	Dry Bulk	Liquid Bulk	General	Container	Total
2013	10,531,812	8,063,651	11,246,909	170,436,528	200,278,901
2014	10,327,287	6,212,566	9,425,756	191,323,740	217,289,349
2015	10,140,564	4,929,554	9,223,965	195,548,521	219,842,603
2016	10,846,027	7,281,820	9,972,322	207,488,632	235,588,801
2017	10,623,637	6,547,363	8,318,739	186,145,852	211,635,591

Source: Port Klang Authority

The reason behind this is because the container ship calls decreases from 10,933 to 10,808 even though it has a slight increase in 2015 (table 3.3). The container ship calls give a big impact to the overall ship call statistic. Dry bulk, on the other hand, shows some significant increase from 2015 to 2017.

<Table 3.3 Ship Calls Statistics>

Year	Dry bulk	Liquid bulk	General	Container	Passenger	Other	Total
2013	457	1,676	1,788	10,933	1,849	-	16,703
2014	452	1,435	1,536	10,551	1,188	136	15,298
2015	446	1,265	1,539	11,944	1,325	24	16,543
2016	467	1,449	1,522	11,735	1,154	-	16,327
2017	484	1,490	1,478	10,808	1,073	4	15,337

Source: Port Klang Authority



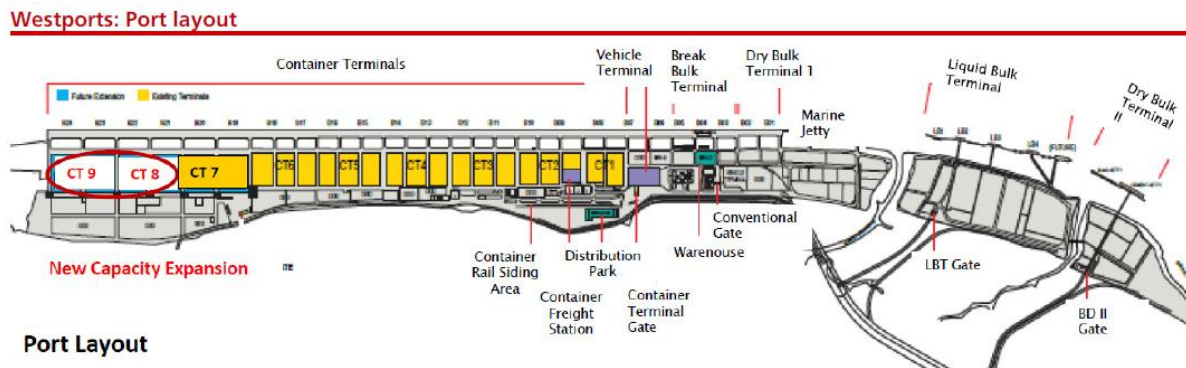
## 3.2 PORT KLANG FACILITIES

Port Klang is separated by three ports, named Westport, Northport and Southport. In this study, only Westport and Northport will be look into. The reason in because these two ports are operating container terminal. Southport, on the other hand is not a container terminal.

### 3.2.1 WESTPORT

Westport is located at the south part of Port Klang city and it is a multi-cargo port which handles all types of cargoes in containers, break bulk, dry bulk, liquid bulk, vehicles (roll-on roll-off) and other conventional cargoes. However, the core business of Westport is container operation.

<Figure 3.2> Westport's layout



Facilities: The total terminal capacity is 187 Hectares consisting of CT1 – CT 9. The number of berths is 20 Berths. The Quay length is 5,800 metres and the depth is 15-17.5 metres. The annual storage capacity is 14 million TEUs.

Equipment:

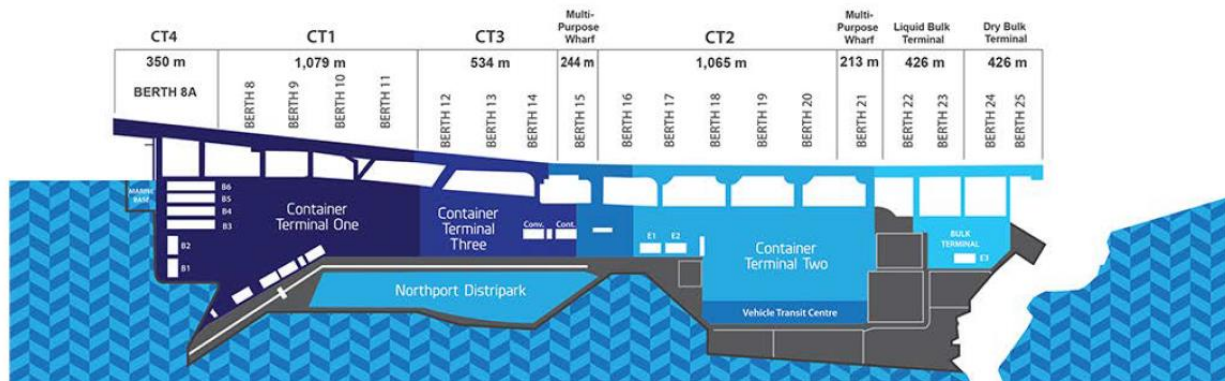
- 67 Quay Cranes
- 185 Rubber Tyred Gantries
- 524 Terminal Tractors
- 11 Reach Stackers

- 2,428 Refrigerated Points (Reefers)
- 46,922 Total Ground Slots

### 3.2.2 NORTHPORT

Located at the north side of Port Klang, Northport is one of the largest multi-purpose ports in the Malaysian port system offering dedicated facilities and services to handle wide variety of cargoes ranging from containers to cars, break bulk cargoes along with capacity to handle liquid and dry bulk cargoes of all types and shipment sizes.

<Figure 3.3> Northport’s layout



Facilities: The number of berths is 13 Berths. The Quay length is 3,200 metres and the depth is 11-15.5 metres. The annual storage capacity is 5.6 million TEUs.

Equipment:

- 32 Quay Cranes
- 84 Rubber Tyred gantries
- 20 Straddle Carrier
- 4 Reach Stackers
- 1,052 Refrigerated Points (Reefers)
- 19,894 Total Ground Slots

### 3.3 SWOT ANALYSIS

SWOT analysis is one of many tools that can be used in an organizational strategic planning process. As stated by Samejima, Shimizu, Akiyoshi, & Komoda (2006), SWOT analysis is a regularly used method for analyzing and positioning an organization's resources and environment in four regions: Strengths, Weaknesses, Opportunities and Threats. Strengths and Weaknesses are internal (controllable) factors that support and obstruct organizations to achieve their mission respectively. As for Opportunities and Threats, they are the external (uncontrollable) factors that enable and disable organizations from accomplishing their mission (Dyson, 2004). By identifying the factors in these four fields, the organization can recognize its core competencies for decision-making, planning and building strategies.

<Figure 3.4> Elements of SWOT Analysis and SWOT Matrix

<b>SWOT / TOWS Analysis</b>		<b>Internal Factors</b>	
		<b>Strengths</b>	<b>Weaknesses</b>
<b>External Factors</b>	<b>Opportunities</b>	<b>S-O</b> (Strengths-Opportunities)	<b>W-O</b> (Weaknesses-Opportunities)
	<b>Threats</b>	<b>S-T</b> (Strengths-Threats)	<b>W-T</b> (Weaknesses-Threats)

<Table 3.4> Port Klang’s SWOT Analysis

<b>STRENGTH</b>	<ul style="list-style-type: none"> <li>• Strategically positioned on Malacca Straits</li> <li>• Malaysia’s premier and largest seaport</li> <li>• Hinterland connectivity</li> </ul>
<b>WEAKNESS</b>	<ul style="list-style-type: none"> <li>• Less port promotion</li> <li>• Lack of joint-venture</li> <li>• Weak marketing strategy</li> <li>• Poor handling equipment</li> </ul>
<b>OPPORTUNITY</b>	<ul style="list-style-type: none"> <li>• Potentially increasing market size</li> <li>• Investment from Republic of China (One Road One Sea Policy)</li> <li>• Chances of foreign direct investment and strategic alliance from global terminal operator</li> </ul>
<b>THREAT</b>	<ul style="list-style-type: none"> <li>• Strong competition from the neighboring port, Port of Singapore</li> <li>• Emergence of new port at Kuala Tanjung in Indonesia</li> </ul>

After the SWOT analysis is established, the SWOT Matrix can be constructed. David (2009) stated, the Strengths-Weaknesses-Opportunities-Threats (SWOT) Matrix is an important tool that helps managers to develop four types of strategies: SO (strengths-opportunities) Strategies, WO (weaknesses-opportunities) Strategies, ST (strengths-threats) Strategies, and WT (weaknesses-threats) Strategies.

SO Strategies use an organization's internal strengths to take advantage of external opportunities. All managers would like their organizations to be in a position in which internal strengths can be used to take advantage of external trends and events. Organizations generally will pursue WO, ST, or WT strategies to get into a situation in which they can apply SO Strategies. When a firm has major weaknesses, it will strive to overcome them and make them strengths. When an organization faces major threats, it will seek to avoid them to concentrate on opportunities.

WO Strategies aim at improving internal weaknesses by taking advantage of external opportunities. Sometimes key external opportunities exist, but a firm has internal weaknesses that prevent it from exploiting those opportunities. ST Strategies use a firm's strengths to avoid or reduce the impact of external threats. This does not mean that a strong organization should always meet threats in the external environment head-on. WT Strategies are defensive tactics directed at reducing internal weakness and avoiding external threats. An organization faced with numerous external threats and internal weaknesses may indeed be in a precarious position.

Table 3.5 shows the SWOT Matrix that is developed from the SWOT analysis in table 3.4.

<Table 3.5> Port Klang's SWOT Matrix

	<b>Strengths (S)</b>	<b>Weaknesses (W)</b>
	<ol style="list-style-type: none"> <li>1. Strategically positioned on Malacca strait</li> <li>2. Malaysia's premier and largest seaport</li> <li>3. Cheaper port charges</li> <li>4. Hinterland connectivity</li> </ol>	<ol style="list-style-type: none"> <li>1. Less port promotion</li> <li>2. Lack of joint-venture</li> <li>3. Weak marketing strategy</li> <li>4. Poor handling equipment</li> </ol>
<b>Opportunities (O)</b>	<b>SO Strategies</b>	<b>WO Strategies</b>
<ol style="list-style-type: none"> <li>1. Increasing market size potential</li> <li>2. Investment from Republic of China</li> <li>3. Chances of foreign direct investment and strategic alliance from global terminal operator</li> </ol>	<ol style="list-style-type: none"> <li>1. Maintaining/Improving port presence in ASEAN market (S1, S2, O1)</li> <li>2. Maintain the price strategy for port charges to increase productivity (S3, O1)</li> <li>3. Expand hinterland connectivity sources from foreign investment (S4, O2, O3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase the promotion to attract investment from major players (W1, O2)</li> <li>2. Improve collaborative effort between port authority and global terminal operators (W2, O3)</li> </ol>
<b>Threats (T)</b>	<b>ST Strategies</b>	<b>WT Strategies</b>
<ol style="list-style-type: none"> <li>1. Strong competition from the neighbouring port, Port of Singapore</li> <li>2. Emergence of new port at Kuala Tanjung in Indonesia</li> </ol>	<ol style="list-style-type: none"> <li>1. Establish a flexible port charges that can be comparable with competitor ports (S3, T1, T2)</li> </ol>	<ol style="list-style-type: none"> <li>1. Improve marketing strategy by benchmarking competitor's port (W3, T1)</li> <li>2. Develop marketing strategy to encounter incoming threats (W3, T2)</li> <li>3. Improve handling equipment by investing in technology of container handling (W4, T1)</li> </ol>

# **CHAPTER 4: INTERNATIONAL COMPARATIVE ANALYSIS OF MAJOR PORTS**

Pickvance (2005) stated that the main reason comparative analysis is conducted is to describe and gain a better understanding of the causal processes involved in the creation of an event, feature or relationship typically by grouping variations in the explanatory of a variable or more. By using this method, this study able to examine the differences between these ports.

In this chapter, three major ports are chosen to be as benchmarking for the marketing strategy. The ports are chosen based on the top five leading container ports in the world. As mentioned in Chapter 1, these ports are top leading ports in the world of container terminal. Therefore, it is crucial for Port Klang to look up for these ports in order to improve the port's quality.

## **4.1 CONTAINER TERMINAL OF BUSAN PORT**

Busan Port is situated at the mouth of the Nakdong River and it is the biggest port in South Korea. The port act as a hub port with high-tech logistics facilities in Northeast Asia, trading with 500 ports in 100 countries in the world.

### **4.1.1 PORT FACILITIES**

#### **A. Busan North Port**

With a history dating back over 140years, Busan North Port is undergoing one of the biggest redevelopment project which will change the face of the existing port facilities. The Busan Port Redevelopment Project will see the harbor area into a premier cruise destination. Business, and pleasure will coexist in the brand - new Busan North Port.

<Table 4.1> Facilities of Busan North Port

	Jaseongdae	Uam	Singamman	Gamman	Sinseondae
Quay length	1,447m	500m	826m	1,400m	1,500m
Water Depth	15m	11m	15m	15m	15-16m
Stacking capacity	1,700,000 TEU	300,000 TEU	780,000 TEU	1,560,000 TEU	2,000,000 TEU
Total Area (km <sup>2</sup> )	624	182	294	727	1,170
Handling equipment	14 C/C, 36 T/C	5 C/C, 13 T/C	7 C/C, 19 T/C	11 C/C, 30 T/C	15 C/C, 42 T/C

Source: Busan Port Authority

<Figure 4.1> Layout of Busan North Port



Source: Busan Port Authority



## B. Busan New Port

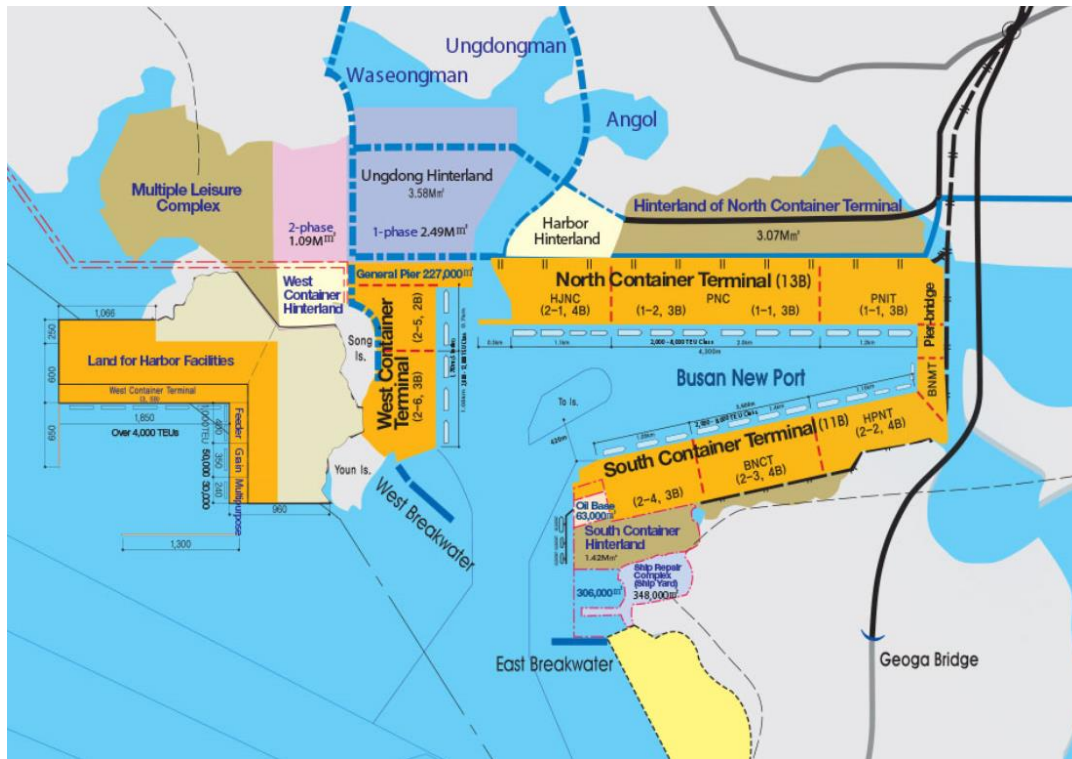
The port opened in 2006, it boasts water depth of over 17m and up-to-date facilities capable of accommodating vessels of 19,000TEU. Busan New Port can handle over 10million TEU annually, with its 23 container berths.

<Table 4.2 Facilities of Busan New Port>

	Phase 1-1	Phase 1-2	Phase 2-1	Phase 2-2	Phase 2-3
Quay length	1,200m	2,000m	1,100m	1,150m	1,400m
Water Depth	16m	16-17	18m	16-17m	17m
Stacking capacity	1,380,000 TEU	2,730,000 TEU	1,600,000 TEU	1,600,000 TEU	1,600,000 TEU
Total Area (km <sup>2</sup> )	840	1,210	688	553	785
Handling equipment	11 C/C, 30 T/C	19 C/C, 61 T/C	12 C/C, 42 T/C	12 C/C, 38 T/C	8 C/C, 38 T/C

Source: Busan Port Authority

<Figure 4.2 Layout of Busan New Port>



Source: Busan Port Authority

#### 4.1.2 SWOT ANALYSIS

<Table 4.3 Busan Port’s SWOT Analysis>

Strength	<ul style="list-style-type: none"> <li>• Reinforcing beneficial geographic location</li> <li>• Increase of transshipment goods</li> <li>• Moderate port charge</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>• Lack of port infra and superstructure</li> <li>• Insufficient hinterland connection system</li> </ul>
Opportunity	<ul style="list-style-type: none"> <li>• Growth of world container trade</li> <li>• Increase transshipment between Asian countries</li> </ul>
Threat	<ul style="list-style-type: none"> <li>• Competition between container terminals such as Shanghai’s Yangshan port</li> <li>• Trans China Railroad/Trans Siberia Railroad threat</li> </ul>

## 4.2 CONTAINER TERMINAL OF PORT OF SHANGHAI

Shanghai port is one of the most famous ports in the world and it is also the world's busiest trading port. The foreign trade of Shanghai port accounted for the major coastal port throughput of about 20% in China, government use Shanghai port to implement open-door policy and participate in the international economy. As mentioned in Chapter 2, Shanghai cargo and container throughput are among the top in the world in 2018. Shanghai port consist of many terminals. In this study, only Yangshan terminal has taken into consideration. This is because of just the port itself is the major contributor to the throughput of Shanghai port.

### 4.2.1 PORT FACILITIES

<Table 4.4 Facilities of Port of Shanghai>

	Yangshan Terminal
Number of Berth	7
Quay length	1,600m
Water depth	12.5m
Stacking capacity	4 million TEUs
Total Area (m <sup>2</sup> )	22.3 million
Handling equipment	10 gantry cranes

## 4.2.2 SWOT ANALYSIS

<Table 4.5 Port of Shanghai's SWOT Analysis>

Strength	<ul style="list-style-type: none"> <li>• Ranked 1<sup>st</sup> and the busiest container port in the world</li> <li>• Port traffic and container throughput is growing at such a phenomenal rate</li> <li>• Equipped with world's biggest crane, high-tech trials and one of most advanced control systems</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>• The port facilities cannot cope with such an increasing volume of exports and imports.</li> <li>• The water depth of port cannot accept the large container vessels.</li> <li>• Shanghai port has low port productivity.</li> </ul>
Opportunity	<ul style="list-style-type: none"> <li>• The strong growth rate of China's containerized</li> <li>• A major hub port and international container shipping center</li> <li>• Has active constructed port facilities</li> <li>• Has active constructed deep-water ports to accept large container vessels</li> </ul>
Threat	<ul style="list-style-type: none"> <li>• Increasing competition from neighboring ports such as the Shenzhen, Yantian, Hong Kong in China, and Kaohsiung in Taiwan.</li> </ul>

### 4.3 CONTAINER TERMINAL OF PORT OF SINGAPORE

Port of Singapore is the hub port in Southeast Asia, located on the southern of Malaysian peninsula. It is the strategic area of the Pacific Ocean and Indian Ocean for passing through Europe and Asia transportation. The facilities of software and hardware in this port are advanced. It is close to all the countries of Southeast Asia economic interior region, and the port is the transfer center of the region of Southeast Asia. Port of Singapore is also a free port with higher port productivity and a higher frequency of callings. Thus, the container terminal is ranked as the second in the world for its container throughput and reputation.

#### 4.3.1 PORT FACILITIES

The containers terminals of Singapore port are mainly in the four terminals—Tanjong Pagar Terminal, Keppel Terminal, Brani Terminal and Pasir Panjang are summarize the facilities in Table 4.6. Because of there are six parts of Pasir Panjang terminal, it is combined as one terminal in the table below.

<Table 4.6 Facilities of Port of Singapore>

	Tanjong Pagar	Keppel	Brani	Pasir Panjang
Quay length	2,097m	3,164m	2,325m	2,319m
Water Depth	14.8m	15.5m	15m	15-18m
Stacking capacity	16,400 TEUs	14,316 TEUs	15,000 TEUs	9,400 TEUs

Berthing capacity	7 berths	14 berths	8 births	38 berths
Total Area (m <sup>2</sup> )	795,000	1,025,000	2,325,000	5,510,000
Handling equipment	13 quay cranes	37 quay cranes	33 quay cranes	152 quay cranes

Source: Singapore Port Authority

<Figure 4.3 Layout of Tanjong Pagar Terminal>

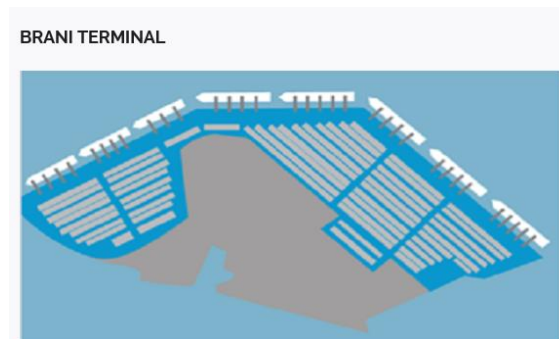
<Figure 4.4 Layout of Keppel Terminal>



Source: Singapore Port Authority

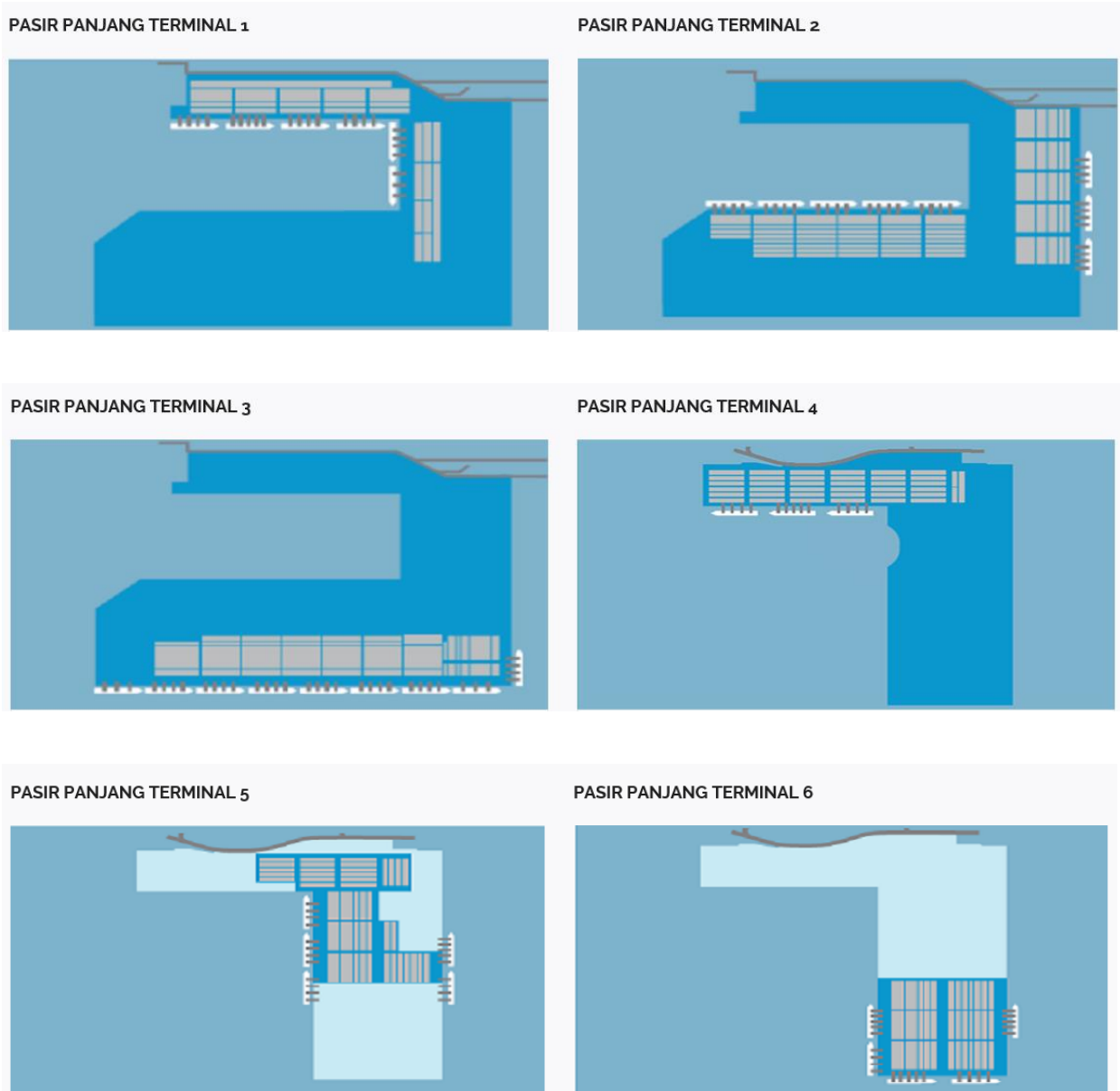
Source: Singapore Port Authority

<Figure 4.5 Layout of Brani Terminal>



Source: Singapore Port Authority

<Figure 4.6 Layout of Pasir Panjang Terminals>



Source: Singapore Port Authority

### 4.3.2 SWOT ANALYSIS

<Table 4.7 Port of Singapore's SWOT Analysis>

Strength	<ul style="list-style-type: none"><li>• Advance facilities of software and hardware</li><li>• It is close to all the countries of Southeast Asia economic interior region, and the port is the transshipment center of the region of Southeast Asia region.</li><li>• Singapore port is a free port, and has higher port productivity and frequency of callings</li></ul>
Weakness	<ul style="list-style-type: none"><li>• In terms of monetary cost comparisons, Singapore has higher operation charges than neighboring lower cost ports.</li></ul>
Opportunity	<ul style="list-style-type: none"><li>• In the next few years, the strong growth rate of Southeast Asia countries' containerized exports will be still the main engine of growth for Singapore port's transshipment traffic.</li></ul>
Threat	<ul style="list-style-type: none"><li>• The port of Singapore will face increasing price competition, as other facilities such as Port Klang, are established and expanded to take a share of the regional transshipment trade</li></ul>



## 4.4 SUMMARY

The comparative analysis is a common method to use when there is a need to find differences from two or more subjects. Based on the SWOT analysis of the ports, the comparative analysis of Port Klang with the three ports are as follows:

Firstly, compared to the three ports, Port Klang has less advanced container handling equipment. Taken Port of Shanghai as example, the port terminal is equipped with fully automated equipment. Same goes to Busan port as the port terminals are using better technologies than Port Klang.

Secondly, as the strongest threat to Port Klang, Port of Singapore has relatively higher port operation charges. Even so, the port terminals in Singapore attracted more vessel than Port Klang's terminal. This leads to the next factor which is the weak marketing strategy in Port Klang. Port Klang has lesser port promotion compared to others makes it less attractive for the container cargoes to visit.

Next, Port Klang indeed has better hinterland connectivity compared to the other three. But as the time goes by, the three ports will possibly overcome the drawback by improving the hinterland connections. In this case, Port Klang has to refine their hinterland connections especially the railroad systems.

Lastly, Port of Singapore has a higher productivity and ship calls than Port Klang. This is because Port of Singapore is mainly a transshipment centre which has more focused port operation. Meanwhile as for Port Klang terminals, transshipment is not the main operation on the port.

The following table 4.8 shows the summary of the compiled SWOT analysis of Port Klang with the other three ports.

<Table 4.8 Comparative analysis of SWOT's summary>

Ports	Strength	Weakness	Opportunity	Threat
<b>Busan</b>	<ul style="list-style-type: none"> <li>• beneficial geographical location</li> <li>• moderate port charge</li> </ul>	<ul style="list-style-type: none"> <li>• insufficient hinterland connection system</li> </ul>	<ul style="list-style-type: none"> <li>• container trade growth</li> <li>• Increasing Asian transshipment market</li> </ul>	<ul style="list-style-type: none"> <li>• Trans China Railroad/Trans Siberia Railroad</li> <li>• competition with Shanghai port</li> </ul>
<b>Shanghai</b>	<ul style="list-style-type: none"> <li>• strong growth rate</li> <li>• ranked 1<sup>st</sup> among container terminals</li> <li>• advance equipment</li> </ul>	<ul style="list-style-type: none"> <li>• cannot cope with increasing trade volume</li> <li>• water depth of port</li> </ul>	<ul style="list-style-type: none"> <li>• strong growth rate</li> <li>• active constructed port facilities</li> <li>• major hub port</li> </ul>	<ul style="list-style-type: none"> <li>• neighbour ports competition</li> </ul>
<b>Singapore</b>	<ul style="list-style-type: none"> <li>• transshipment centre</li> <li>• high productivity and ship calls</li> </ul>	<ul style="list-style-type: none"> <li>• high operation charges</li> </ul>	<ul style="list-style-type: none"> <li>• growth rate</li> </ul>	<ul style="list-style-type: none"> <li>• price competition</li> </ul>
<b>Klang</b>	<ul style="list-style-type: none"> <li>• strategically positioned</li> <li>• cheaper port charges</li> <li>• hinterland connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• less promotion</li> <li>• weak marketing strategy</li> <li>• poor handling equipment</li> </ul>	<ul style="list-style-type: none"> <li>• potential marketing size</li> <li>• strategic alliance with China</li> </ul>	<ul style="list-style-type: none"> <li>• neighbour port competitions</li> </ul>

# **CHAPTER 5: MARKETING STRATEGY DEVELOPMENT FOR PORT KLANG CONTAINER TERMINAL**

In order to survive the competitive market of port's container terminal, the authority has to develop some strategies to improve. Based on the comparative analysis results of the three advanced foreign ports in Chapter 4, this chapter aims to present Port Klang's marketing strategy for attracting container cargo from the economic bloc behind its ports in terms of centrality, competitive advantage strategies by rival ports. In this study, marketing mix is chosen as the tool to develop marketing strategies.

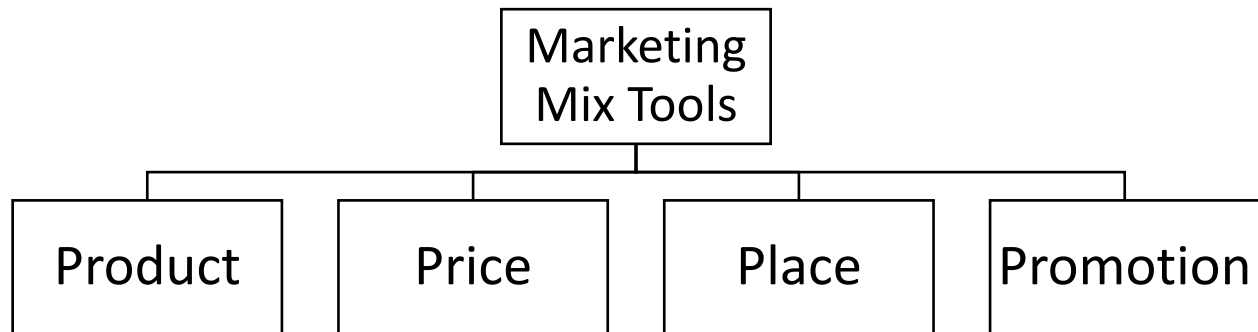
## **5.1 METHOD OF MARKETING STRATEGY FOR CONTAINER TERMINAL**

Ports are operating in a more and more competitive environment and the importance of marketing in port management and development is being recognized by the port community almost all over the world (UNCTAD, 1995). In the port business, container terminal can be classified as its product and service. Container terminal is not just a product but massive national infrastructure which should manage by government or authorities with marketing strategy (Ahn, 2006 as cited by Shin, 2019).

According to UNCTAD 1995, the elements of marketing tools will have an influence on the sales of the product, or services in the case of seaports. The impact of those tools will differ from one country to another. Hence, it is needed to find the suitable mix of all those elements for a given market, so that the result matches the targets aimed at.

This study uses marketing mix to convey the reasoning of the study. Marketing mix tools consist of 4P, which are Product, Price, Place, and Promotion.

<Figure 5-1> Marketing Tools



## 5.2 PRODUCT STRATEGY

Product strategy is defined as a product that should fit the task and the target consumers want it for, it should work, and it should be what the consumers expected to get (Blythe, 2005). In the case of container terminal, price strategy needs to be fit customers requirement and port policy from authorized organization (Shin, 1995 as cited by Shin, 2009). There are three considerations can be taken:

- Service contents, goal and scope should be decided
- Constantly research to create the new form of service
- Appropriate reform of standard of current service

## **A. Port Expansion**

In product strategy, container terminal could be the main product, thus terminal expansion can be one activity of enhance marketing product strategies (Ahn, 2006 as cited by Shin, 2009). To become a hub port like Singapore, plenty of facilities for transshipment is definitely needed. Taken Shanghai's Yangshan port as an example, the terminal operation is fully automated with Automated Guided Vehicle (AGV). From the SWOT Matrix (W4, T1), One of the strategy is improving the technology of its handling equipment. Malaysian government can consider to invest more advance technology for handling the container terminal thus improve the efficiency and productivity of the terminal.

## **B. Create More Various Service Strategies**

This strategy is to meet each different customer's need, so the terminal operators should offer the appropriate services considering each customer such as distinct services in Singapore terminal. These are some of the examples:

- Allocating the certain storage areas for each shipping companies in container yard
- Providing the shipping companies which contribute more container handling than expected with the priority of terminal usage
- Offering priority to transshipment containers to attract transshipment customers

With the increasing market size potential, creating more various services is a recommended strategy to fully utilize the strategical position of Port Klang. By offering different services, Port Klang may able to maintain or improve its port presence in ASEAN market (SWOT Matrix S1, S2, O1).

<Table 5.1> Major Product Strategy

	1 <sup>st</sup> variables	2 <sup>nd</sup> variables	3 <sup>rd</sup> variables
PRODUCT	Product improvement strategy	<ul style="list-style-type: none"> <li>- Large scale of port</li> <li>- Effective handling</li> <li>- Enhancement of storage facility</li> <li>- Increase productivity</li> <li>- Quality of service</li> </ul>	<ul style="list-style-type: none"> <li>- Increase of size vessels</li> <li>- Construction of storage point</li> <li>- Securing marshalling yard</li> <li>- Low cost rate</li> </ul>
	Product mix strategy	<ul style="list-style-type: none"> <li>- Intermodal transport service</li> <li>- Container handling facilities</li> </ul>	<ul style="list-style-type: none"> <li>- Road/rail service</li> <li>- Offering convenient time</li> <li>- Hinterland operation</li> </ul>
	Specific market strategy	<ul style="list-style-type: none"> <li>- Container sorting</li> <li>- Customer sorting</li> </ul>	<ul style="list-style-type: none"> <li>- Cargo sorting</li> <li>- Differentiate service quality depending on price</li> <li>- Offer advantageous service for regular client</li> </ul>
	Different product strategy	<ul style="list-style-type: none"> <li>- Safety</li> <li>- Augment the capacity</li> </ul>	<ul style="list-style-type: none"> <li>- Reduce delay time</li> <li>- Increase correctness</li> <li>- Effectively deal with customers' claims</li> </ul>
	Product portfolio strategy	<ul style="list-style-type: none"> <li>- BCG matrix</li> <li>- GE matrix</li> </ul>	<ul style="list-style-type: none"> <li>- Create strategic services</li> <li>- Nominate one area and develop (i.e. FTZ)</li> </ul>
	Product abolition strategy	<ul style="list-style-type: none"> <li>- Low profit business should be abolished</li> <li>- Anticipated changing trade trend and prepare</li> </ul>	<ul style="list-style-type: none"> <li>- Change the handling product in deficit terminal</li> <li>- Develop port to be sightseeing area</li> </ul>

Source: Shin 2009

## **5.2 PRICE STRATEGY**

In container terminal, price strategy means using port charge or berth rate as a marketing resource to attract shipping company (Ahn, 2006 as cited by Shin, 2009). Generally, when it comes to set the price in marketing, competition-oriented pricing is considered. In the case of some container terminals, price strategy is widely used.

Hiroshima terminal in Japan has attracted more customers with low port charge to compete with Chinese and Taiwan ports since October 1997 (Kim, 2003 as cited by Shin, 2009). Another example can be on Singapore. It offers discounted price for transshipment containers and apply different port charge, reduced price for regular shipping companies and normal price for others.

For pricing strategies, three methods can be applied for establishing rate levels:

- Cost-based pricing (cost oriented)
- Buyer-based pricing (customer oriented)
- Competition-based pricing (competitor oriented)

### **A. Flexible Port Charge Management**

One of the useful factor for container terminal marketing is alternating load/unload price rate (Ahn, 2006 as cited by Shin, 2009). Based on the SWOT Matrix (S3, T1, T2), Port Klang Authority can established a flexible port charges for its customer. The usage price for the port facilities can be reduced or exempted for each customer. This pricing strategy is customer oriented and based on the buyer.

<Table 5.2> Major Pricing Strategy

	1 <sup>st</sup> variable	2 <sup>nd</sup> variable	Detailed variable
PRICE	Different price strategy	- Seasonal different price - Reduce of container handling cost	-
	High price strategy	- High quality service	Best service and additional offer
	Low price strategy	- Low quality service	Low and cheap port service
	Package price strategy	- Price charge per tonnage - Set the price for intermodal transport service	Transport fare for inland

Source: Shin 2009



### **5.3 PLACE STRATEGY**

Place strategy can be defined as the product that should be anywhere the firm's target group of customers easily finds it. This may be a high street shop, a mail through a catalogue or from magazine voucher, or it may even be door-to-door delivery (Blythe, 2005). For container terminal operation case, normally the transport scope and path by receiver is belong to place strategy, so enhancing hinterland connection and adopting free trade zone can be main consideration for this strategy (Kim, 2003 as cited by Shin, 2009).

#### **Expense of Hinterland Terminals and Feeder Transport Route Network**

The running of a hinterland terminal requires a much different corporate culture. It should be a low cost operation totally focused on the requirements of individual shippers. The promotion of hinterland terminals is not only directed at the regional offices of the shipping lines, especially at the local offices and agents of these lines in the vicinity of the terminal. However, the focus is mainly on the importers and exporters in the catchment area of the terminal.

Between a seaport and hinterland, rail or barge connections can be established to promote traffic to and from the port. In establishing a true network, the terminal, possibly in co-operation with the port, may also desire to get involved in the connections. This involvement may take place operationally, aligning the information services, planning, commercially promoting the connections or financially joining the capacity utilisation. Joint ventures for new connections can be set-up to benefit from the operational, financial and commercial synergies (SWOT Matrix S4, O3).

<Table 5.3> Major Place Strategy

	1 <sup>st</sup> variable	2 <sup>nd</sup> variables	Specific variables
PLACE	Support strategy (push)	<ul style="list-style-type: none"> <li>- Cooperation with intermediate provider level</li> <li>- Represent organization for international trade</li> </ul>	<ul style="list-style-type: none"> <li>- Set same goal</li> <li>- Resolve the conflict</li> </ul>
	Pilling strategy (pull)	<ul style="list-style-type: none"> <li>- Public advertisement</li> <li>- Multi-marketing</li> </ul>	-
	Opening path strategy	<ul style="list-style-type: none"> <li>- Full open of port service</li> </ul>	-
	Selection path strategy	<ul style="list-style-type: none"> <li>- Selective open of port service</li> </ul>	-
	Belonging path strategy	<ul style="list-style-type: none"> <li>- Open the belonging port service</li> </ul>	-
	Approach the port	<ul style="list-style-type: none"> <li>- Select large city as a massive hinterland area</li> </ul>	-

Source: Shin 2009

## **5.4 PROMOTION STRATEGY**

### **A. Online and Offline Advertisement**

Generally, advertisement are showcased through the mess media, and it has merit that attracting more potential customers and demerit that expensive cost. In container terminal operation, the objects are usually shipping companies and freight consignors. Thus, to successfully achieve the effect of advertisement, it is necessary that advertisement should be on their trade magazines or international business journals (Moon, 2003 as cited by Shin, 2009).

### **B. Event and Workshop**

Container terminal event means to hold conference, seminar and exhibition for its related port industry. This brings several positive effects that illuminates and increase interest for publics, and improve image for customers (Ha, Han, 1998 as cited by Shin, 2009).

These events could be more effective when it is held once a year and consequently. Also, the PR team should be formed and advertise Port Klang's terminal events in another international forum or event such as Busan terminal annual events.

Several types of events are illustrated below:

- Open the study by observation opportunities for the publics
- Hold a regular seminar for potential customers
- Organizing port days

<Table 5.4> Major Promotion Strategy

	Method	Special features
PROMOTION	Advertisement	<ul style="list-style-type: none"> <li>- Increase the terminal's reputation</li> <li>- Improve the terminal's image</li> <li>- Enhance the customer's perceptions</li> </ul>
	Post mail	<ul style="list-style-type: none"> <li>- Collect potential customers</li> </ul>
	Exhibition	<ul style="list-style-type: none"> <li>- Maritime related product exhibition</li> </ul>
	Party "Day of the port"	<ul style="list-style-type: none"> <li>- Introduce the terminal facilities</li> <li>- Invite important figures</li> </ul>
	Face-to-face promotion	<ul style="list-style-type: none"> <li>- Build friendly relationship with customers</li> </ul>
	Promotion through agent	<ul style="list-style-type: none"> <li>- More expertise promotion can be perform</li> </ul>
	Domestic network	<ul style="list-style-type: none"> <li>- Increase the network range</li> </ul>
	Visiting the university	<ul style="list-style-type: none"> <li>- PR the container terminal</li> </ul>
	Seminar	<ul style="list-style-type: none"> <li>- Hold regular seminar</li> </ul>
	Newspaper	<ul style="list-style-type: none"> <li>- Use the mass media</li> </ul>
	Others	<ul style="list-style-type: none"> <li>- Refer the research from the experts</li> </ul>

Source: UNCTAD 1995 as cited by Shin 2009

## **CHAPTER 6: CONCLUSION**

### **6.1 SUMMARY OF THESIS**

The economic activities in Southeast Asia are relevantly active. It is in the case of container transportation industry. Fronting this environmental change, Port Klang has been challenged by its strongest competitor, Port of Singapore.

Through the analysis in Chapter 3 and Chapter 4, four ports has been analysed and compared. Thus in Chapter 5, the marketing strategy was presented. Based on the SWOT analysis of the four ports, it is found that Port Klang has a lot to improve from the three major ports. It has been noted that all three ports, China, South Korea, and Singapore, are developed countries, compared to Malaysia, which is a developing country. This comparison might be a little stretch but to improve, Port Klang has to look up to its more superior ports.

This study was conducted to maintain or possibly raise the ranking of Port Klang as the top container terminal in the world. The findings of this study will not only aid to formulate the marketing strategy based on marketing mix but also act as a concept tool to enhance the service quality of Port Klang.

### **6.2 RECOMMENDATION OF STUDY**

This study proposed a few recommendations. Firstly, the previous researches about container terminal marketing were exceedingly concentrated on theory and not practically reflect the customer's need. Due to this, the study suggested ways for the container terminal operators to set up marketing strategy to satisfy their customer's requirements.

Then, the study pointed the necessity of an active marketing strategy for terminal operators, and proved that growth of container terminal business caused huge impacts for local economy by comparing with other international terminals.

Finally, the study showed the example cases of other international terminals' effort to increase their competitiveness, and suggested direction of Port Klang container terminal's development in the future. For the first step, terminal operators should aware of their insufficient marketing operation. Then, they should focus on develop ways to extend port facilities, enhancing the logistic performance, and establishing competitive price, service and promotion strategy.

### **6.3 LIMITATION AND FUTURE RESEARCH AREA**

In spite of the practical suggestions, the study has several limitations. First, the major limitation of this study is the inconsistency of data provision for container terminal of Port Klang.

Secondly, due to language barrier, the lack of information regarding to Shanghai port becomes the limitation of this study. The English version of Shanghai Port Authority website does not gives any information regarding on the recent terminal statistics, in comparison with Port Klang Authority and Busan Port Authority.

Third, the study defined the target, Port Klang container terminal but it needs to research more on specific subjects. In Port Klang, container terminal and shipping companies are not all initiators. Its service is also influenced by port authority, global terminal operators and local self-government organization. Therefore, further study should suggest more detailed and comprehensive marketing strategy by considering all the terminal elements.

In conclusion, these limitations of the study should be resolved by further researches. However, in terms of considering the fact that there is probably no practical study on Port Klang container terminal marketing strategy by now, this study will be a good resource for the future researches.

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