

# THE PRICE DIFFERENTIATION STRATEGY FOR MULTI-SEGMENT MARKET: CASE STUDY IN AN INTERNATIONAL SHIPPING COMPANY

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## Abstract

The global market gives opportunities to the shipping company to develop its business, such as the larger market, the addition of new routes, the broader port of destinations, and the development of services. It will give effect to the increase in the number of markets served. Generally, shipping companies have a multi-segment market and apply specific strategies for each segment. One is the pricing strategy. To be more focus on each segment and able to serve it best, the company should define the appropriate price (rate) policy for every market segment. A study has been carried out at PT X, an international shipping company at Surabaya. As a world-wide company PT X has shipping service to various ports of destination around the world. From observation it was known that the company applies different pricing strategies for each segment of its market, like contract rate, negotiated rate, market rate, etc. Each strategy has certain advantages for its market segment and the company determines specific requirements for this strategy. Through those strategies a multi-segment market could be served well in accordance with the characteristics of each segment. It will provide benefits for the company, such as establishment and maintenance of good and profitable relations with customers.

Keywords: price, segment, shipping

## RESEARCH BACKGROUND

Sailing or shipping via ocean or shortened by shipping is a transportation mode which is most often used, because its excellence characteristics, such as the flexibility to send various kinds and volume of goods, and can reach far destinations, which cannot be reached by other transportation modes. About 90% of world trade is carried by international shipping industry. [5] In addition, low price is also a consideration why the shipping is most commonly used. For goods with big volume but have a low value, shipping is the most appropriate transportation mode, especially if the company does not focus on time delivery and speed of response to customers. Trends show an increase in the shipping world that reflects the ability to absorb the volume of shipment of goods in larger quantities. [11] The new vessel now is able to transport approximately 10,000 containers the size of 20ft. [12] The increased capacity means that more cargo can be loaded, which also led to increasingly competitive pricing. Furthermore the integration performed by several voyages creates more capacities. The integration can be done via the operator alliances or mergers and acquisitions to increase scale of operations and reduce costs. [8] An example is the acquisition of PONL by Maersk Line in 2005 and the acquisition of Delmas and CNC by CMA CGM completed in 2006. The acquisition will lead to increased capacity and also the addition of new routes, making it possible to reach a wider area and grab a larger market share. Of course, this will also increase competition among ocean carriers. [6]

As one of the shipping company PT X is experiencing the impact of adding capacity and more competitive shipping business. By serving a wide range of products delivered to almost all port

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of destination (POD) in the world, PT X serves several customer segments which are divided by trade, type of shipment, type of payment, and frequency of shipments. To obtain the optimal profit of each segment, then the PT X implements specific pricing strategies accordingly. Therefore a study was conducted in PT X to analyze how the PT X determines different pricing strategy for its multi-segment customers. The objective of this paper is to present a case study of how the service B2B company sets its pricing strategy for multi-segment customers it serves. Data required in this paper were collected using some depth interviews with the branch manager and related people in the Commercial side, such as trade coordinator, salesperson, and inside sales. The paper is organized as follows. First, the literature on pricing is presented. Next, an analysis of case study is discussed. Finally, overall conclusions are drawn and practical implications discussed.

## **LITERATURE REVIEW**

Price is one component of the marketing mix (4P), in addition to product, place, and promotion. Price is the sum of all the values given by the customer to benefit from owning or using a product or service. [3] Compared with other marketing mix elements, only the price generates revenue for the company, because the other elements relate to cost. The price for products or services should reflect how much the value is offered by products or services to customers. Customers will compare the prices they pay and benefits they get from products or services. Customers will buy if the benefit is greater than the price. Instead customers will be reluctant to buy if the price is greater than the benefits.

### **Market Segmentation Pricing**

Market segmentation is one of the most important tasks in marketing. Identify and describe the subgroups of the market in ways that guide decision-making of marketing and sales marketing and pricing make the process much more efficient and effective. The goal of any market segmentation is to divide the market into subgroups whose members have common criteria that distinguish their purchasing behavior. [4] Market segmentation pricing is determining different prices for various customer segments based on differing perceptions of service quality levels. Although perhaps the cost of providing services for each segment is no different. This is based on the belief that various market segments has a diversified elasticity of price demand and expect a different quality levels. [10]

### **B2B Marketing Pricing**

Prices in the business market are different from consumer markets in many ways. Two of more important differences are regarding the perception and price flexibility. Even though the perceived value is the primary determinant of value products for consumer and business customer, consumers considers the price in relation to similar, competitive products. The inside-out approach, or cost-based pricing, is widely used in B2B marketing. This approach can be divided into several methods, namely (1) mark-up pricing involves applying a percentage of production cost or purchase price; (2) peak-load pricing considers the customer demand and uses pricing to manage demand for acceptable levels; (3) competitive bidding is performed by a large number of organizations and as the basis for a large number of transactions in the private and public sectors. [1]

### **Price Structure of Shipping Company**

Shipping company which is also called a carrier is any individual, firm or company engaged in the delivery of goods. Shipping lines that use container is sometimes referred to as the ocean carrier. [9] Shipping companies do their business in the transportation service industry business to business (B2B). Generally, a price for transport services is known as fare. However, in the shipping business, a term more commonly used is the rate. Rate consists of several

components, namely: (1) freight rate: rate/price charge made by a shipping company (carrier) to deliver the goods from one place to another. [9] This kind rate is adjusted to the country/POD, container size, and type of commodity goods (for certain destinations); (2) Doc (Document) Fee, the cost for document creation. This fee is usually common for all shipping companies in a country. For example, in Indonesia Doc Fee is usd 10/BL (Bill of Lading); (3) OTHC (Origin Terminal Handling Cost), namely the cost of loading at the port of origin from which the goods dispatched. For Indonesia OTHC common tariff is 95/145/145 for container 20ft/40ft/40HC usd. While DTHC (Destination Terminal Handling Cost) is the cost of unloading at the port of destination; (4) BAF (Bunker Adjustment Factor) is the costs associated with the price of oil (fuel). The amount also varies depending on shipping destination country; (5) additional charges, for example, WRS (War Risk Surcharge), the additional charges caused by insecurity in the country of destination; the amount is adjusted to the country of destination. For example: to Syria usd 30/teu; to Poti usd 100/teu; to Um Qasr 500/teu usd. [6]

## DISCUSSION

The company group is a world wide shipping company with head quarter in France. The company operates 150 shipping lines, serving 400 ports in 150 countries around the world. These trades cover twelve major regions: North Europe, South Europe (West Mediterranean and Adriatic), East Mediterranean and Black Sea, Red Sea and Gulf, North Africa, Africa (West, East, and Southern), North America, Central America and the Caribbean, South America, Asia/Far East, Asian subcontinent, Australia/Pacific. In addition to general-purpose containers, the company also offer shipping services in reefer and special containers (45', Open Top, Flat Rack).

PT X is a branch of the company in Surabaya. To simplify the shipping regions, PT X divides it to 6 trade with specific regions as described in Table 1.

Table 1. The classifying of trade and regions

Trade	Regions
Trade 1	North America, Central America and the Carribean, South America
Trade 2	Australia/Pacific
Trade 3	North Europe
Trade 4	West Mediterranean and Adriatic, East Mediterranean and Black Sea
Trade 5	Africa, North Africa, Red Sea and Gulf, Asian subcontinent
Intra Asia	Asia/Far East

Most shipment is on Trade 3 called 'wet trade'. It can be understood because the HO is in France and the company's core business is shipment to Europe. The newest trade is Intra Asia booming since China opened its market. For this time being PT X handles many kinds products that consist of General Cargo (Genco), Reefer, seasonal products such as agriculture product (coffee, tobacco, cocoa, green beans, seaweed), fish, natural resources, mining products (ore, manganese, iron, nickel), canned product (pineapple), plantation products (cashew nut, nutmeg, spices), seafood (fish, shrimp). Like the products, the company has also many different customers. Customer in shipping business is called shipper, i.e. any person or organization that pays for the cargo to be shipped from one place to another. [9] Therefore it does segmentation for shippers based on some criterion. The first criteria was relating to the geographic segmentation. It is not about geographic of the shipper, but geographic of port of destination to where the shipper will deliver his goods. The second criteria was user status relating to behavioral factor of segmentation. It was done by dividing sales portfolio based on trade to another group based on types of shipper: direct shipper, forwarding, or trading. The third criteria was types of shipment whether it is FOB or CNF cargo. The last criteria was usage

frequency whether shipper is VIP (often/regular order), potential shipper or just shopping shipper or bargain hunters, the shipper who just asks and requests lower rate but order seldomly. The shipper segmentation is presented on the following Table 2. [7] Based on information on Table 2 PT X has multi segments for its market. Therefore to take optimal profit from each segment PT X implements price differentiation strategies for its multi-segment. Here is the explanation of the pricing strategies for each segment.

Table 2. Shipper Segmentation

Port of destination/POD (country)	Trade 1	Type of shipment	FOB
	Trade 2		CNF
	Trade 3		
	Trade 4		
	Trade 5	Usage frequency	VIP
Intra Asia	Regular shipment		
Direct shipper			
Type of shipper	Freight forwarder	Seldom shipment	
	Trading		

### Segment 1

For trade segmentation based on POD PT X has different pricing for each trade. It can be understood because POD gives impact on distance, how far the goods will be shipped, and relates to specific criterion for different POD. It is common for transportation services that general basic aspects relating to pricing is the geographical distance traveled. [10] Furthermore, this is a cost-based price, because price is set depending on the financial costs plus a mark-up. Pricing Team defines price window for each trade. Based on that price they inform the initial rate to the branches. Most of them except Intra Asia (set in Taipei) are determined by Hongkong as Asia Regional Office (ARO). PT X receives the public rate quarterly. The initial rate is for the elements of price structure which is changeable and fluctuating, such as freight rate and BAF. OTHC is generally fixed and unchanged. Sometimes companies offer all-in rate, typically for the trade which price structure does not contain too many components. Like Australian trade, the elements of price structure are freight rate, OTHC and BAF. So if the company offers an all-in rate, it means including freight rate, OTHC, and BAF. It is only added with doc fee. This strategy refers to price bundling, because the shipper has to pay it in a single entity as a whole and that price cannot be paid separately. Except for the FOB shipment, freight rates and BAF generally will be paid by the buyer or consignee at the POD, while OTHC and doc fee will be paid by the shipper at the POO. Because BAF, OTHC, and doc fee tend to be similar for all shipping companies, then the difference between PT X and competitors is on the freight rate.

The initial rate will be offered to the market as the public or market rate. Usually it is the same for several carriers, especially for some carriers who are members of association. This is a competition-based pricing strategy, since price is set not much different or the same as competitors. The public or market rate can be used as guideline that can be announced to the market or to be informed when the shipper asks. If the shipper requests the lower rate, the sales person will negotiate it with Pricing Team in related trade. The sales person cannot give lower rate than guideline rate without the approval from Pricing Team. To obtain a lower rate (special rate/flat-rate pricing) for the delivery of some shipments or during a specific time period, the shipper can make a deal with the company by making a contract. The contract can be made with the approval from Pricing Team with subsequent segmentation into account, namely the type of shipper.

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## Segment 2

The second segmentation relates to the type of shipper that includes direct shipper, freight forwarder, and trading. For direct shipper the company will persuade him to make a local contract which will be negotiated and made in Surabaya as port of origin (POO). Usually the contract is valid for three months. During the contract period the same rate (flat-rate pricing) will be applied for all shipment from the direct shipper. Of course it will be determined based on trade. After the contract expired, the company will evaluate whether the direct shipper keep on his promise to fulfill minimum quantity container (MQC). There are two kinds of freight forwarder, local and international. For local freight forwarder, the company applies the same strategy as for the direct shipper, local contract rate. But for the international freight forwarder it applies different strategy. International freight forwarder (IFF) usually has global contract rate with the company, because it has also branches in overseas. The contract for IFF is usually longer than local contract. For IFF sometimes called worldwide freight forwarder the contract can be for one year and it is not made in Surabaya. For example DLH, Schenker, Geodis, they have contract one year that is made in Hongkong as ARO. The tradings commonly handle specific commodities, such as tobacco, coffee, and reefer cargo. Usually they are appointed by the buyer or consignee at POD. Therefore it has the contract rate made in POD or overseas branches and the payment is FOB.

## Segment 3

The third criterion for shipper segmentation refers to type of payment. There are FOB and CNF. Free on Board (FOB) means that the shipper fulfils his obligation to deliver when the goods have passed over the ship's rail at the named port of shipment/port of destination. This means that the buyer has to bear all costs and risks of loss of or damage to the goods from that point. Cost and Freight (CNF) means that the shipper must pay the costs and freight necessary to bring the goods to the named port of destination but the risk of loss of or damage to the goods, as well as any additional costs due to events occurring after the time the goods have been delivered on board the vessel is transferred from the shipper to the buyer when the goods pass the ship's rail in the port of shipment. [2] Almost all FOB shipment use the rate mentioned in contract which can be for local and buyer nomination. Therefore the shipper pays only OTHC and doc fee. Sometimes only doc fee will be paid at POO. Another price component such as BAF, other surcharges and sometimes OTHC will be paid by the buyer at POD. For CNF shipment all decision is determined by local branch. Rate could be different between FOB and CNF. For FOB it is influenced by the relationship between buyer and head office (HO). The contract for FOB can be negotiated in HO, Hongkong, or POD. For local it is affected by local considerations, i.e. shipment history and lifting volume.

## Segment 4

The last segmentation is usage frequency divided as VIP customers, regular shipment and seldom shipment. VIP is the customers who ships regularly (weekly) in big amount. VIP is 5% of total customers and they have big value. They are usually global account that means they have branch in overseas. For worldwide global account, the contract can be one year and created in Hongkong or in head office (HO). The example of account global is Philip Morris, Philips Electronics, Unilever, Nestle. For local VIP customers (ex: Tjiwi Kimia), the contract cannot be longer than three months. Regular shipment customers are the customers who ships regularly, can be monthly or seasonally (for seasonal products). They are persuaded to make three months local contract. But for seldom shipment or shoppers the company just offers public rate. It is because shoppers have high probability to move to another carrier, they are not loyal, and they ask rate only for the comparison, never give shipment order.

## The Contract

For any kind of contract whether it is three months or one year contract, there are requirements that must be met by shipper. First, there is minimum quantity container (MQC) to be fulfilled during the contract applies. It is related to the volume discounts that give to the shipper who ship in large volume. The amount of MQC depends on the trade (POD), the commodity, and the term of contract. MQC for one year contract will be more than three months contract. The performance of the shipper who has contract will be measured by their lifting (container loading) per week or quarter or during the term or contract. For global account or VIP customers MQC is not only measured from Surabaya, but also from other POO (port of origin) listed in the contract. Second, they should not make shipment on behalf of others by using the contract rate. In other words the name on the bill of lading is a name that has a contract with the company. There are some benefits of contract rate, such as the flat rate during the contract period and all-in rate (including BAF, OTHC). Moreover, the shippers who have contract will get additional benefits of service, like priority for space allocation and container availability, priority for monitoring cargo, and priority for service (example: normal free time detention is 3-5 days for general cargo and 3 days for reefer cargo; but customers who has contract can get 7-14 days of free time detention). Even global account customers who have contract can get space allocation during peak season.

## CONCLUSION

As B2B transportation service company PT X has several market segments which are divided according to the trade, the type of shipment, the type of payment, and usage frequency. To obtain the optimal profit from each segment PT X should design different pricing strategies for each segment. Globally pricing is distinguished according to the trade that reflects the shipment destination. Then according to the price level pricing is differentiated between the public rate and contract rate. Indeed the contract rate will be cheaper than the public rate. Price of the contract itself is distinguished by the trade /POD, type of shipment, type of payment, and usage frequency. Contract usually applies to three or one year, depending on the criteria above. There are some requirements that must be met by the shipper to make a contract. However, there are benefits that can be obtained by the shipper by having a contract. In addition to lower rate there is also additional services provided only to the shipper who has a contract, such as space allocation and container availability. By applying price differentiation strategy for the multi-market segments the company expects to be more flexible and provides the best service for each segment.

Authors expect further research to provide a more in-depth exposure and accurately by using the primary data, in addition to secondary data. In addition, quantitative analysis will support and complement the qualitative exposure. There is also the need for discussion by focusing on certain areas, such as shipper responses to the price differentiation strategies, so that the research results will be more applicable and useful.

## NOTES [9]

20ft - 20 (twenty) foot container

40ft - 40 (fourty) foot container

Container - a reusable steel rectangular box for carrying cargo that first came into common use about 50 years ago. The sizes of containers are standardized so that they can easily be moved between specially adapted containers ships, trains and trucks.

Carrier - any individual, company or corporation engaged in transporting goods. Container shipping lines are sometimes referred to as ocean carriers.

Freight rates - The charge made by a shipping line for the transportation of freight aboard one of its ships from one place to another.

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teu - Twenty-foot Equivalent Unit. This is the industry standard to measure containers. A 20-foot container's dimensions are twenty feet long (6.09 meters), 8 feet wide (2.4 meters) and 8 feet six inches high (2.6 meters). These dimensions have been set by the International Organization for Standardization (ISO).

## REFERENCES

- [1] Fill, Chris, Fill, Karen E., Business to Business Marketing, Relationships, systems and communications, Pearson Education Ltd., 2005
- [2] FOB-Free on Board (named port of shipment), [http://www.worldclassshipping.com/incoterm\\_fob.html](http://www.worldclassshipping.com/incoterm_fob.html) (accessed on 1 February 2012)
- [3] Kotler, Philip; Armstrong, Gary, Principles of Marketing, 13<sup>th</sup> Edition, Pearson Education Inc., 2010
- [4] Nagle, Thomas T., John E. Hogan, Joseph Zale, The Strategy and Tactics of Pricing: Guide to Growing More Profitably, 5<sup>th</sup> Edition, Prentice Hall, 2011
- [5] Overview, <http://www.marisec.org/shippingfacts/worldtrade/index.php> (accessed on 23 April 2010)
- [6] Rinawiyanti, Esti Dwi, Peran Penting Pelayaran pada Rantai Pasok Global, Proceeding of the Industrial Engineering Conference on Telecommunication (INDECT) 2010
- [7] Rinawiyanti, Esti Dwi, A Case Study of The Effective Customer Management in Global Shipping Company, Proceeding of the 4<sup>th</sup> International Seminar on Industrial Engineering and Management 2010 (ISSN: 1978-774X)
- [8] Singh, Anil, "Future Trends in Global Ports: Managing Growth in an Era of Mergers and Acquisitions", <http://tem.msomail.co.uk/assets/AnilSingh.pdf> (accessed on 23 April 2010)
- [9] Summary of General Industry Terms, <http://www.worldshipping.org/about-the-industry/glossary-of-industry-terms> (accessed on 23 April 2010)
- [10] Tjiptono, Fandy, Pemasaran Jasa, Bayumedia Publishing, 2005
- [11] Value of Volume of World Trade by Sea, <http://www.marisec.org/shippingfacts/worldtrade/volume-world-trade-sea.php?SID=a6012e9a0145fe8c15d3e9d4f5ba181a> (accessed on 23 April 2010)
- [12] White, Ronald D., "Shipping Industry Sees Signs of Slowing", <http://www.latimes.com/business/la-fi-shipping10jun10,1,4220815.story> (accessed on 26 April 2010)