

CUSTOMER SATISFACTION WITH A CONTAINER DEPOT IN BANGKOK

Bhinyapat Boonchuay*

Department of Industrial Management, Assumption University, Bangkok

Abstract

This study explores the relationship between logistics service quality, service pricing, service location, and customer satisfaction, in the context of a container depot in Bangkok. The research focuses on the depot's distribution process of outbound empty containers. 100 questionnaires were distributed to current customers. Multiple regression analysis was used to test the four hypotheses. The results indicate that logistics service quality and service location are significantly related to customer satisfaction while the influence of service pricing is not related. The factor that has the highest impact on customer satisfaction is timeliness, followed by order discrepancy handling, order accuracy, ordering procedure, and order quality.

บทคัดย่อ

งานวิจัยนี้สำรวจความสัมพันธ์ระหว่างคุณภาพการบริการ ราคาของบริการ สถานที่ให้บริการ และความพึงพอใจของลูกค้า ในแง่มุมมองของคลังสินค้าในกรุงเทพฯ งานวิจัยจะเน้นถึงขั้นตอนการกระจายตู้คอนเทนเนอร์เปล่าช่วงขาออก โดยเก็บข้อมูลจากแบบสอบถามจากลูกค้าจำนวน 100 ราย โดยใช้การวิเคราะห์ถดถอยพหุคูณ เพื่อทดสอบสมมติฐาน 4 ข้อ ผลที่ได้แสดงให้เห็นว่าคุณภาพการบริการด้านลอจิสติกส์ และสถานที่ให้บริการ มีผลต่อความพึงพอใจของลูกค้า ในขณะที่ราคาของบริการไม่มีผลต่อความพึงพอใจของลูกค้า ปัจจัยที่มีผลต่อความพึงพอใจของลูกค้ามากที่สุดคือ เวลา (ที่เหมาะสม) ตามด้วย การจัดการกับความคลาดเคลื่อนของคำสั่งซื้อ ขั้นตอนในการสั่งซื้อ และคุณภาพของคำสั่งซื้อ

*This is a greatly reduced version of a research project report, completed as part of the requirements for the degree of MSc in Supply Chain Management, awarded in January 2013 by Assumption University of Thailand.

INTRODUCTION

Marine transport is the major international transportation mode. Containerization accounts for 80% of cargoes (Yun & Choi, 1999) as it provides protection, speed, cost-effectiveness and standardization. In a container supply chain, the container depot is vital, as a storage yard which links containerships and land transport. It synchronizes ships, full containers and empty containers. Containerization is extremely competitive, with low profit. Therefore it is vital to ensure customer satisfaction by providing quality services. Logistics service quality (LSQ) has a strong connection with customer satisfaction and loyalty (Mentzer, Flint & Hult, 2001).

The ABC Container Depot is one of the largest container yard operators in the Bangkok area, providing container storage for many well recognized ocean liner companies. Its location is very convenient. On its site it is possible to service a huge number of containers, up to 6,000 twenty-foot equivalent units (TEUs), with vertical stacks, seven high. ABC has an experienced skillful team, and abundant infrastructure and equipment. Its computer system produces a complete series of data, with updates and track reports. The yard also has a container repair service, a plug-in service for reefer containers, and a road transport service by skilled truck drivers. The depot service dispatches empty containers to each ocean liner's customers, for the export process. The services begin after an export booking acknowledgement between a shipper and an ocean liner.

Most third party logistics companies (TPL), and ocean liner companies, have received customer complaints regarding low service performance of container depots in Bangkok, because of failure to deliver promised containers to customers or delays. Quality of service is thus a major issue, and this research, on behalf of ABC Company, is to examine the influence of depot service quality, service pricing, and service location, on customer satisfaction. The focus is service performance in dispatching empty containers to customer. Data is gathered from an interview, observation, and a Questionnaire survey of current customers of the ABC container depot. The nine dimensions of the logistics service quality model of Mentzer et al. (2001) are applied.

REVIEW OF RELATED LITERATURE

Asia and Europe face similar problems of imbalanced empty container allocation and fleet management (Meng & Wang, 2011; Gendorn, Potvin and Soriano (2006). An Optimization method is often used to solve these problems, to minimize process costs (Mhonyai & Suthikarnnarunai, 2011).

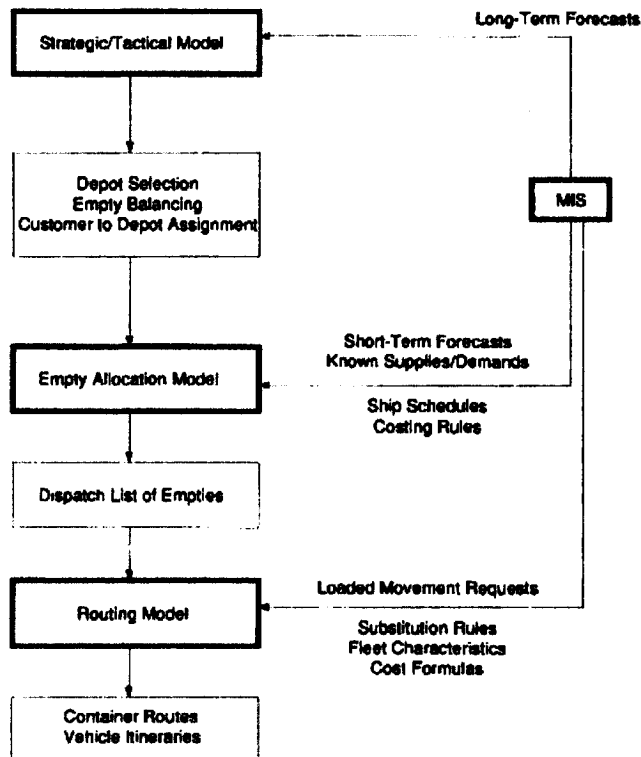
A container depot is storage area for empty containers (often called a Container Yard or

CY). Empty leased containers and ocean-liner owned containers have to be stored, maintained and available for dispatch to shippers for export transportation. Song (2007) said that empty containers can be allocated at container yards as maintenance stock or substitute for supplementary depots, so that if the shipping liner owner containers cannot meet customer demand, supplementary containers can be leased.

Once there is a demand from an exporting firm requiring delivery of empty containers, a shipper would handle the booking acknowledgement by contacting a logistics service provider (ocean liner, freight forwarder or TPL provider). Once the fleet booking acknowledgement is completed, the container specification type and quantities would be assigned to each shipper to pick up those specified empty containers at a requested container yard for the purpose of loading cargo at the customer’s place and then exported.

After loading is completed, containers are transported to the export seaport and are loaded onto ships together with some empty containers that are being shipped overseas. Figure 1 shows an overall container repositioning planning approach.

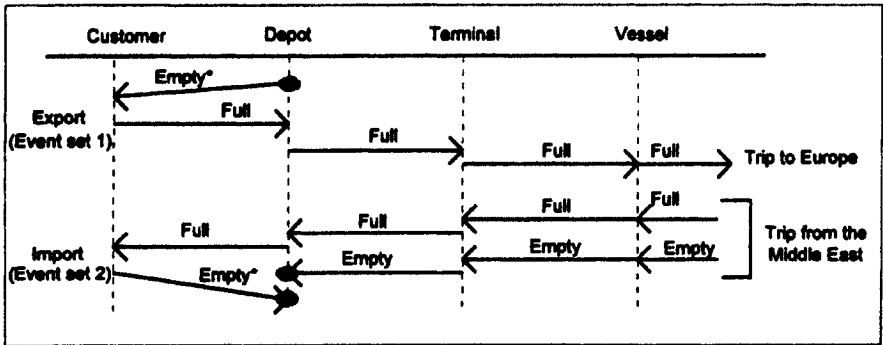
Figure 1: Container Reposition Planning



Source: Crainic et al. (1993) (p.104)

A further study by Lai et al. (1995) proposed that export and import circumstances established the container trip cycle. The container trip cycle starts and finally ends at a container depot with the container being empty. The two circumstances that set up a container trip cycle are shown in Figure 2 below.

Figure 2: Container Trip Cycle



Source: Lai et al. (1995, p.689)

A container depot plays a crucial role in container shipping. Crainic et al. (1993) found that a major European container shipping company operated over 300,000 container movements, and 40% of the distribution costs were due to the ineffective allocation and movement of empty containers. Lai et al. (1995) focused on the management of empty containers. They emphasized that to satisfy more customers, the company has to prevent lost sales due to unavailability of empty containers.

Service Quality

There are many meanings of service quality. Gronroos (1989) found it is the extra capability of the firm to meet or exceed customer preferences, and that service quality is the set of related activities between materials, service system, customer and service providers in how well they can respond to problems.

Service quality also play an important role in terms of customer retention (Reichheld & Sasser, 1990), profit advantage (Rust & Zahorik, 1993), satisfaction of customer (Boulding, Kalra, Staerin & Zeithaml, 1993), financial performance (Buttle, 1996), cost (Crosby, 1997) and service guarantees (Kandampuly & Bulter, 2001).

Parasuraman et al. (1988) modified their earlier conceptual model of service quality by defining five dimensions. They proposed that perception of service quality is considered as the preference level of discrepancy between a customer’s need and want. Customers often estimate service quality according to five stated dimensions: reliability, responsive-

ness, assurance, empathy, and tangibles.

Logistics service quality (LSQ) is a major factor of competitive differentiation, through boosting customer satisfaction. Many researchers describe LSQ as being the firm's expertise capability to serve the right quantity of the right product to the right place at the right time in the right condition at the right price with the right information (Coyle, Bardi, & Langley, 1992; Stock & Douglas, 1987).

Concerning customer satisfaction with the service quality of a container depot, the most relevant strategy is the logistics service quality model of Mentzer et al. (2001) which uses the nine-dimension model of the logistics service process: personal contact quality, order release quantities, information quality, ordering procedures, order accuracy, order condition, order quality, order discrepancy handling and timeliness. Mentzer et al. (1999) have described their LSQ model in two significant stages, starting when an order is begun until satisfying the customer's need by delivering on time. The model of Mentzer et al. (1999) is illustrated below.

Table 1: Logistics Service Quality Dimensions

LSQ Dimension	Meaning
Personnel contact quality	Refers to the customer orientation of the supplier's logistics contact people. Specifically, customers care about whether customer service personnel are knowledgeable, empathize with their situation, and help them resolve their problems.
Order release quantities	Related to the concept of product availability. The 3PL provider can challenge customer's requests to ascertain the need behind their volume requests. Customers should be the most satisfied when they are able to obtain the quantities they desire.
Information quality	Refers to customer's perceptions of the information provided by the supplier regarding products from which customers may choose.
Ordering procedures	Refer to the efficiency and effectiveness of the procedures followed by the supplier.
Order accuracy	Refers to how closely shipments match customer's orders upon arrival. This includes having the right items in the order, the correct number of items and no substitutions for items ordered.
Order condition	Refers to the lack of damage to orders. If products are damaged, customers cannot use them and must engage in correction procedures with suppliers, depending on the source of the damage.
Order quality	Refers to how well products work. This includes how well they conform to product specifications and customers' needs. Whereas order accuracy addresses the complete set of products in the order (i.e., the accuracy of the kinds and quantities of the

LSQ Dimension	Meaning
	products in the order) and order condition addresses damage levels of those items due to handling, order quality addresses the manufacturing of products.
Order discrepancy handling	Refers to how well any discrepancies in orders are addressed after the orders arrive.
Timeliness	Refers to whether orders arrive at the customer location when promised. More broadly, timeliness also refers to the length of time between order placement and receipt. This delivery time can be affected by transportation time, as well as back-order time when products are unavailable.

Source: Adapted from Mentzer et al. (1999, p.90)

The problems that are encountered in container depot services include: empty container allocation delay, inaccurate container information, incomplete service, delay, and inefficient supply chain operations. The LSQ model developed by Mentzer et al. (1999) is able to cover all the logistics service quality in transportation service and containerization system, and is therefore selected for this case study.

Price satisfaction is an influential factor leading to competitive advantage and business success. Consuegra et al. (2007) performed empirical research, concluding that service price is one factor which is able to enhance customer satisfaction as well as to facilitate customers loyalty, and that price comes to be an important factor in marketing research. In addition, Consuegra et al. (2007) constructed an integrated model of price, satisfaction and loyalty.

Dovaliene and Virvilaite (2008) also stated that in the marketing mix elements, price is one of the most adjustable factors that become rapidly adapted once changing a product's feature or service performance. Besides, the customer's attention to price would be extremely great when compatible with other elements of the marketing mix, including product or service, place, and promotion. In much of the literature, price is defined as the most significant factor in customer satisfaction, because customer evaluation is always concerned with the price affect.

Thus, research about price related satisfaction found that the degree of customer satisfaction relies on service quality, price and personal factors. Hence, this research selects service pricing as a measure of the logistics service quality of a container depot.

Relationship between Customer Satisfaction and Service Locations

Schiller and Voisard (2004, p10) proposed that "Location services can be defined as services that integrate a mobile device's location or position with other information so as

to provide added value to a user". They concluded that location intelligence leads to improved service ability and competence, to the customer's satisfaction.

Mantel (2011) identified that excellent customer satisfaction included an optimal opinion of a real service location; therefore developing organization service locations can increase excellence in customer satisfaction and enhance competitive advantage.

Customer Satisfaction

Zineldin (2000) proposed that satisfaction is an overall customer opinion viewpoint towards a service provider, or an emotional response to the comparison between anticipation and what was actually obtained. Oliver (1997) also defined that the customer's gratification reaction is an evaluation tool that a product or service offered a satisfying degree of customer related gratification reaction, as it is the overall level of satisfaction of a customer's experience.

Assael (1998) defined dissatisfaction as the customer's overall opinions of the customer's actual experience when customer anticipation is not satisfied, that significantly affects customer dissatisfaction and changes their behavior to other competitors.

Relationship between Logistics Service Quality (LSQ) and Customer Satisfaction

Much of the literature strongly supports the relationship between LSQ and customer satisfaction improvement (Parasuraman et al., 1998; Shemwell et al., 1998). Also, Rafiq and Jaafar (2007) concluded that LSQ has a direct effect on profitability through customer satisfaction and loyalty. Mentzer et al. (2001) concluded that excellence in logistics service capabilities can lead a company to increase customer and supplier value through service ability performance, growth in market share, enhance customization, build an efficient customer-reaction based technology system, obtain a positive effect on customer satisfaction and increase a firm's performance.

METHODOLOGY

Three main hypotheses and eleven independent variables are used to identify the relationship between logistics service quality, service pricing, service location and customer satisfaction.

Customer satisfaction is the dependent variable in this research, the three independent variables being logistics service quality, service pricing and service location. A self-administered questionnaire is used to collect data from a sample of 100 customers, from a total population of 259 (Malhotra, 1999). These customers are direct shippers, shipper's agents, custom brokerage agents, transport agents, freight forwarders, and other third

party logistics agents. The questionnaire is successfully pre-tested for reliability, using Cronbach's scale (Burns & Bush, 2008). Using SPSS as a statistical tool, and multiple regression analysis (Zigmund, 2003), the data is analyzed to test the hypotheses and determine the relationship of the variables.

Questionnaire

The first part of the questionnaire explores the nine dimensions of logistics service quality, using thirty-six questions and a five-point answering scale. The second part explores the level of ABC's customer satisfaction. There are five assessable items, modified from the literature by using a 5 point anchoring scale. The last part identifies the general characteristics of the respondents, customer characteristics, company profile, and behavior pattern such as frequency, volume and type of service.

RESULTS

In the results from 100 respondents, the major business type was freight forwarder company (30%). Most respondents exported their shipments via containerization many times per week (86%) and mostly only one empty container was picked up each time (57%). Also, 60% never used to pick up empty containers at ABC, and the 20 ft dry container was the most popular container type (55%). 53% had been ABC's customers for 4 to 6 years, and their most important reason for using ABC services is convenient location (22%).

Before conducting regression analysis, the independent variables (logistics service quality, service pricing and service location) together with dependent variable (customer satisfaction) were tested for every factor. The mean and standard deviations of each variable were calculated for all items. A five-point scale was used for measuring these variables from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree),; therefore the mid-point of each factor is 3.00.

The mean of service location and customer satisfaction are above mid-point, at 3.66 and 3.13 respectively. Also, almost all dimensions of logistics service quality have average means above mid-point, except two dimensions which are personal contact quality 2.76 and order condition 2.90 which were lower. Service pricing had the lowest mean, at 2.15.

Hypotheses Testing

Multiple regression analysis is the statistical method used to test all hypotheses. The testing of all hypotheses is classified into two groups. First, the hypotheses testing of the relationship between logistics service quality, service pricing service location and cus-

customer satisfaction, which were established as hypotheses 1 to 3. Second, the hypotheses testing of relationships between each nine sub-dimensions of logistics service quality and customer satisfaction, which were established as hypotheses H1a to H1i. Therefore, two multiple regression models were designed to analyze the relationship between the nine dimension of logistics service quality, service pricing and service location on customer satisfaction at ABC container depot, and the results are presented below.

The relationship between customer satisfaction and the three factors: (logistics service quality, service pricing and service location) is significant and can be predicted due to P-value being less than 0.05.

In addition, R-correlation indicates that there is a strong linear relationship between all proposed independent variables and customer satisfaction, as the strength of relationship of R is equal to 0.863. Also, 73.7 percent of total variations in customer satisfaction is explained by logistics service quality, service pricing and service location (Adjusted R Square = 0.737). Besides, this prediction model can be summarized as logistics service quality having the highest impact on customer satisfaction, with the highest standardized beta coefficients of 0.711

To test the hypotheses, the p-value of each factor is taken into consideration. The p-value must be less than 0.05 in order to reject the null hypotheses which mean that particular factor is significantly related to customer satisfaction. The first three hypotheses are tested in this analysis as below.

Positive relationships between logistics service quality, service pricing, service location and customer satisfaction were indicated. For Hypothesis 1: the null hypothesis was rejected due to its p-value being 0.000. This determines that there is a positive relationship between logistic service quality and customer satisfaction. For Hypothesis 2, the p-value of 0.316 is considered. The results indicated that the null hypothesis cannot be rejected. Thus, service pricing was not significantly related to customer satisfaction. The null Hypothesis 3 was rejected due to its p-value of 0.01 which is less than 0.05. This determines that there is a positive relationship between service location and customer satisfaction.

To understand the relationship between each dimension of the logistics service quality and customer satisfaction, another regression analysis was performed. The significant F-value of the regression coefficient is 0.000, which indicates that the relationship between customer satisfaction and each dimension of logistics service quality is significant and can be predicted due as the P-value is less than 0.05.

In addition, R-correlation indicates that there is a strong linear relationship between all

proposed independent variables and customer satisfaction as the strength of relationship of R is equal to 0.866. Also, 72.5 percent of total variations in customer satisfaction is explained by the nine dimension of logistics service quality (Adjusted R Square = 0.725). Moreover, this prediction model can be summarized that timeliness has the highest impact on customer satisfaction as it had the highest standardized beta coefficient of 0.237.

All hypotheses testing results are summarized in Table 2 below.

Table 2: Hypotheses Testing Results

Hypotheses	Statements	Result
H1	There is a positive relationship between logistics service quality and customer satisfaction.	Partially Supported
H1a	There is a positive relationship between personal contact quality and customer satisfaction.	Not supported
H1b	There is a positive relationship between order release quantities and customer satisfaction.	Not supported
H1c	There is a positive relationship between information quality and customer satisfaction.	Not supported
H1d	There is a positive relationship between ordering procedures and customer satisfaction.	Supported
H1e	There is a positive relationship between order accuracy and customer satisfaction.	Supported
H1f	There is a positive relationship between order condition and customer satisfaction.	Not supported
H1g	There is a positive relationship between order quality and customer satisfaction.	Supported
H1h	There is a positive relationship between order discrepancy handling and customer satisfaction.	Supported
H1i	There is a positive relationship between timeliness and customer satisfaction.	Supported
H2	There is a positive relationship between service pricing and customer satisfaction.	Not supported
H3	There is a positive relationship between service location and customer satisfaction.	Supported

For the main hypotheses, the results conclude that logistics service quality and service location are significantly related to customer satisfaction. Also, timeliness, order discrepancy handling, order accuracy, ordering procedures and order quality have positive relationships with customer satisfaction.

CONCLUSIONS

The research results showed that logistics service quality and service location are positively and significantly related to customer satisfaction. The most significant factor of logistics service quality that has the highest impact on customer satisfaction is timeliness. This is followed by order discrepancy handling, order accuracy, ordering procedure and order quality. These findings are based on the main research hypotheses, as below.

Hypothesis 1: There is a positive relationship between logistics service quality and customer satisfaction.

This determines that there is a positive relationship between logistic service quality and customer satisfaction. With each increase in logistics service quality, customer satisfaction will also increase accordingly. In addition, the most significant dimension that has the highest impact on customer satisfaction is timeliness. In fact, timeliness is the major important factor for all logistics activities in order to prevent any loss that might occur from delay, and therefore this result indicated that the punctuality of container delivery, on the promised date and time, and the quick service procedure, must be considered first if ABC wants to improve customer satisfaction.

Hypothesis 2: There is a positive relationship between service pricing and customer satisfaction.

The finding showed that service pricing did not have any influence on customer satisfaction. The reason could be that there are only small differences in amount of gate charges and lift-on / lift-off charges between each container depot.

Hypothesis 3: There is a positive relationship between service location and customer satisfaction.

This finding indicated that there is a positive relationship. ABC's location is very convenient. Mostly, customers select ABC service in order to save fuel because of lower truck transportation cost. Also the convenient location is able to help customers with a better lead time between depot and cargo warehouse which facilitates better management of outbound loading plans.

It can be concluded that service location represents a place that provides the added value of convenience, but in fact, most customers preferred to receive better service quality in every step of the process in order to get the right container of the right quantity at the right time. The level of importance of each factor of logistics service quality that influenced customer satisfaction can be shown, as below:

1. *Timeliness*: this has the highest impact on customer satisfaction as most customers are concerned with punctual container delivery, on the promised date and

time, with quick delivery services.

2. *Order discrepancy handling*: This has the second highest impact on customer satisfaction as many customers feel satisfied with ABC's reaction to resolve their problems, such as container repair and quickly substituted container.
3. *Order accuracy*: this include special requests for container condition (e.g, a clean container without dust and rust). The correct quantity, type and size of container are important and affect customer satisfaction.
4. *Ordering procedure*: The more convenient and quick service in the requisition container procedure, the more impact on customer satisfaction.
5. *Order quality*: Yard infrastructure and computer technology facilitate improvement, which has the least impact on customer satisfaction.

However, there are only small differences in the amount of service charges between each container depot. Thus, service price cannot be used to determine a relationship with customer satisfaction.

BIBLIOGRAPHY

- Assael, H. (1998). *Consumer Behavior and Marketing Action*. Cincinnati, OH: South Western College. 6th edition.
- Boulding, W., Kalra, A., Staerin, R., & Zeithaml, V. (1993). A dynamic process model of service quality from expectations to behavioral intentions. *Journal of Marketing Research*, 30(1), 3-27.
- Burns, A. C., & Bush, R. (2008). *Marketing Research*, Upper Saddle river, NJ: Pearson Education, 5th edition.
- Buttle, F. (1996). Servqual: Review, Critique and Research Agenda. *European Journal of Marketing*, 30(1), 8-32.
- Consuegra, D., Molina, A., & Esteban, A. (2007). An Integrated Model of Price, Satisfaction and Loyalty: an Empirical Analysis in Service Sector. *Journal of Product & Brand management*, 16(7), 459-468.
- Coyle, J., Edward, B., & Langley, J. (1992). *The management of Business Logistics*, (5). St.Pual,MN: West Publishing Company, 5th edition.
- Crainic, T. G, Gendreau, M., & Dejax, P. (1993). Special Issue on Stochastic and Dynamic Models in Transportation. *Operations Research*, 41(1), 102-126.
- Crosby, P. (1997). *Quality is Free: The Art of Making Quality Certain*. New York: New Maxican Library.
- Dovaliene, A., & Virvilaite, R. (2008). Customer value and its contribution to the longevity of relationship with service provider: the case of theatre industry. *Inzinerine Ekonomika-Engineering Economics*, (1), 66-73.
- Gendorn, B., Potvin, J. Y., Soriano, P. (2006). A parallel hybrid heuristic for the multi

- commodity capacitated location problem with balancing requirements. *Parallel computing*, 29(303), 591-606.
- Gronroos C. (1989). Relationship approach to marketing in service contexts: The marketing and organizational behavior interface. *Journal of Business Research*, 20(1), 3-11.
- Kandampully, J., & Butler, L. (2001). Service Guarantees: a strategic mechanism to minimize customers' perceived risk in service organizations. *In managing Service Quality*, 11(1), 112-121.
- Lai, K. K., Lam, K., & Chan, W. K. (1995). Shipping Container Logistics and Allocation. *The Journal of the Operational Research Society*, 46(6), 687- 697.
- Malhotra, N. K. (1999). *Marketing Research an Applied Orientation*, 3rd edition, 334.
- Mantel, J. (2011). Don't forget your place when creating customer satisfaction strategy. Retrieved August 1, 2012, from: <http://www.morpace.com/White-Papers/Facility-Assessment-Research.pdf>.
- Mentzer, J. T., Flint, D. J., & Hult, T. M. (2001). Logistics Service Quality as a Segment Customized Process. *Journal of Marketing*. 65(4), 82-104.
- Mentzer, J., Flint, D. & Hult, T. (1999). Developing a logistics service quality, *Journal of Business Logistics*, 20(1), 82-104.
- Meng, Q., & Wang, S. (2011). Optimal Operating Strategy for a Long-Haul Liner Service Route. *European Journal of Operational Research*, 215, 1, 105-114.
- Mhonyai, C., & Suthikarnnarunai, N. (2011). Container Supply Chain Management: Facts, Problems, Solution. *Lecture notes in Engineering and Computer Science*, 2194 (1), 1113-1116.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the customer*. New York, NY: McGraw-Hill.
- Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A multiple item scale for measuring customer perceptions of service quality: *Journal of retailing*, 64(1), 12-40.
- Rafiq, M., & Jaafar, H. (2007). Measuring customers' perceptions of logistics service quality of 3PL service providers, *Journal of Business Logistics*, 28(2), 159-175.
- Reichheld, F., & Sasser, W. (1990). Zero Defection: Quality comes to services. *Harvard Business Review*. Retrieved August 20, 2012, from <http://www.scribd.com/doc/58727842/Zero-Defection-Quality-Comes-to-Services>
- Rust, R., & Zahorik, A. (1993). Customer Satisfaction, Customer Retention and Market Share. *Journal of retailing*, 69(1), 193-215.
- Shemwell, D., Yavas, U., & Bilgin, Z. (1998). Customer-service provider relationships: An empirical test of the model of service quality, satisfaction and relationship-oriented outcomes. *International Journal of Service Industry Management*, 9(2), 155-168.
- Stock, J., & Douglas, M. (1987). *Strategic Logistics Management*, Homewood, IL: Irwin. 2nd edition.

- Yun, W., & Choi, Y. S. (1999). A simulation model for container-terminal operation analysis using an object-oriented approach. *International Journal of Production Economics*, 59(1), 221-230.
- Zigmund, W. (2003). *Business Research Methods*. Oklahoma State University. 7 edition.
- Zineldin, M. (2000). Towards an ecological collaborative relationship management. *European Journal of Marketing*, 32, 1138-64.