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Service Quality at the Seaport System of Saigon Newport Corporation

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Abstract

The paper synthesized the elements of quality of seaport services from which analyzes the relationship between the elements of the service quality to the level of customer satisfaction. The research model is recognized by a group of customer at 6 seaports (Tan Cang, Cat Lai and Hiep Phuoc in Ho Chi Minh City, Cai Mep in Ba Ria - Vung Tau, Tan Cang - Mien Trung in Quy Nhon, Tan Cang - 128 in Hai Phong) of Saigon Newport Corporation. The results showed several significant differences in the degree of influence of 5 variables: Resources; Capacities; Process of services; Management capacities; Image and reputation.

Keywords: Quality of seaport services, customer satisfaction, Saigon Newport Corporation, Vietnam

1. Introduction

Service is a special form of product/market, with the specific characteristics different from tangible product and is understood that any action or performance that one party may offer to the other and in the nature of amorphism, not leading to the ownership of anything and even their production may be independent from or associated with tangible product (Kotler, 2000). Nguyen Bach Khoa (2013) assumed that not all action is service but only its "utility effects" that creates product' and brought forward a concept that 'service is a combination of utility effects of an act of working offered by provider to the target organizations and individuals who may pay or free of charge to satisfy their defined need, wish. Hence, service is generally characterized by five relevant features (Bitner et al., 1993), including (1) intangibility as it is intangible and doesn't exist under the form of object; (2) variability as it is impossible for standardizing service; (3) inseparability as it is closely associated with service supply activity; (4) perishability as service cannot be in stock, stored, or transported from this place to another; and (5) impossibility for assignment of ownership.

With over 80% of the volume of imports and exports (Vietnam Marine Administration, 2014) transported by sea, the commercial seaport system plays a special role in Vietnam's trade activities. The development of the seaport system of Vietnam at present is not proportion to its potentials, with a coast of 3,260 km, numerous bights, bays linking directly with the Pacific Ocean, lying along many important maritime trade routes. While countries in the region have the world leading seaports such as the ports of Singapore, Kaoshiung (Taiwan), PortKlang (Malaysia)…, then Vietnam's seaports still do not have a position in the region and one of the causes is that their service quality has not reached the international level (Thai & Devinder, 2005; Từ Tâm, 2010; Cao, 2010).

2. Theoretical Framework

2.1 Service Quality

Service quality is a concept that increasingly attention has been paid since the 1980s in service businesses. The approach to service quality is based on the well-known theory by Parasuraman et al. (1985): "*Service quality is a tool to measure how service is provided to satisfy customer expectations*". In service business, service is provided basing on "*customer expectations*" is the result of a continuous process of improving *"from quality is perfection to quality is value, quality is the accordance with standards, and lastly, quality is to meet or/and to exceed customer expectations*" (Pariseau & McDaniel, 1997).

Notwithstanding many scholars' other suggested approaches as well as adjustments in the approach above, research efforts have recently been concentrated on the academic values of the two basic service quality serve models. The first model was established by Parasuraman et al. (1985), known as "SERVQUAL", applying a space frame, suggests that the difference between the quality service expected and the service quality perceived

decide service quality evaluation of customers. Although at first there were 10 factors considered, after it was found by the expanded researches conducted in 1988 that there remained much close association among the factors, this number was reduced to 5, namely *reliability, responsiveness, empathy*, *assurance,* and *tangibles*.

In practice, SERVQUAL consists of 22 variables related to expectation (E) and perception (P). Interviewee is requested to give the answer to each presentation, using Likert 5 to measure space. When the mean value of presentations is calculated, the value of the expression P – E = Q (service quality) shall be determined. If Q is negative, there exists a weakness in terms of service. On the contrary, when Q is positive, the service provider exceeds customer expectation. Those being a very popular academic model of service quality, there still remain criticisms against the model of SERVQUAL.

One of the most important developments was that by Cronin and Taylor (1992). These two authors assumed that the model was unsatisfactory and pointed out that measures of expectation were unrelated and caused confusion. They provided a second substitute model, without using the "space frame" approach, but only measuring the "performance" of the service provided. Named SERVPERF, the approach by Cronin and Taylor merely observe the number of variables meeting half of what requested by the SERVQUAL model. This enabled the model to be supported by a good many researchers, as it was a tool with numerous applications and easy to manage.

While there were examples with the adjustment to use both research frames (SERQUAL and SERVPERP) in the past (Pariseau & McDaniel, 1997), recently came the opinions that no models could be completely suitable for all services. The critic who stood out with using not any among the above-mentioned models was O'Neill and Palmer (2004). This man used the premise by Abercrombie (1967) stating perceptions change over time to point out that SERVQUAL is efficient for service transactions within a short time. Meanwhile, for some prolonged services (credit, insurance, education…), measurements of this model lack of suitability. Intrinsically, that customer perception changes over time (Hill, 1995) makes P - E measurements of the SERVQUAL model "*basically wrong as it ignores the time factor in customer perception*" (O'Neill & Palmer, 2004).

In several recent researches by Kotler (2001) and Kotler and Keller (2015), a new approach to the structure and measurement of service quality, firstly developed by Grönroos (1984), including technical quality (utility level of service) and functional quality (responsiveness to demand expressed or implicated of service). This is a development when combining the advantages of the two models of SERVQUAL and SERVPERF, and overcoming several criticisms. If technical quality is biased towards assessing efficiency, then functional quality tends to take responsiveness to service expectation from quality gaps. Nevertheless, if only these two indicators are applied, then the connotation of service quality is still not fully covered. In order to have impact on and create the ability to meet the demand, there shall be not only technical quality and functional quality but also two important factors, i.e., positioning quality and relationship quality of the service with its target customer. Here, the positioning quality of the service/customer couple is presented in positioning factors for service image and credibility with core capacity, differentiation of service provider with the target clientele. And the service/customer relationship quality represents the attachment between the service and customer, service relationship with service provider, with community and society.

Based on the approach above, we summarized the service quality frame model comprising four independent variables and one dependent variable (see figure 1).

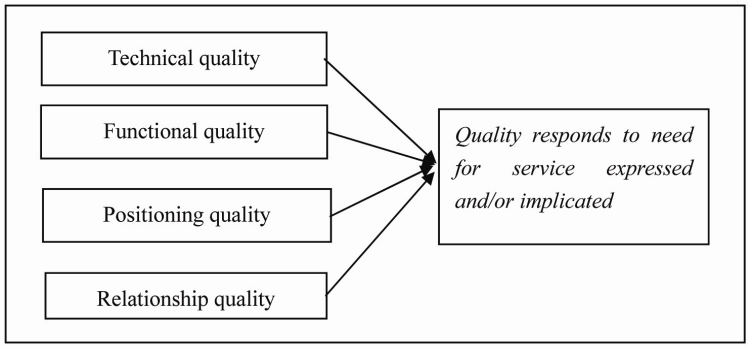

Figure 1. General model of service quality

From the model above, service quality measuring frame will involve the following 15 intermediate variables:

(1) For technical quality, there are four intermediate variables: Customer / Services Solutions; Customer Costs;

Customer Convenience; Customer Communication.

(2) For functional quality, there are four intermediate variables: Options; Opportunity; Objectives; Organization.

(3) For positioning quality, there are four factors: Salient Position; Quality/Price Competitive Position; Image Position; Credible Position.

(4) For relationship quality, there are three factors: Attachment; Attitudes; Sense of Community.

2.2 Relationship between Service Quality and Customer Satisfaction

Customers will continue using the service and will use more if their need is met (Bitner & Hubbert, 1994). Opinions about customer satisfaction vary. As defined by Bachelet (1995), customer satisfaction is an emotional response of customers to their experience or a product or service. Normally, service businesses often believe that service quality is customer satisfaction. Many researchers, however, point out that service quality and customer satisfaction are two distinctive concepts (Zeithaml & Bitner, 2000). Customer satisfaction is a general concept to express their satisfaction when consuming a service. In the meantime, service quality merely focuses on the particular components of the service (Zeithaml & Bitner, 2000). A good many researchers establish this relationship and suggest such relationship between service quality and customer satisfaction (Cronin & Taylor, 1992).

2.3 Seaport Services

Seaport services involve any service carried out at a seaport (Finance Act, 1994). According to OECD (2011), "Seaport services are the services related to serving and exploiting seaports, including:

- Pilotage services are the services provided by pilots, with their experiences and knowledge about the maritime zones, will guide vessels to pull in the port safely.

- Towage services are the services provided by a towage company in order to support large-sized vessels in pulling in and out of the port.

- Stevedoring services are the services related to moving cargoes within the port area."

In a word, seaport services are the services related to serving, exploiting seaport operations, including stevedoring services, towage services, counting services, repairing services, marine brokerage services, ship chandler services, ship sanitary services. Developing seaport services is a combination of measures to expand scope of supply, diversify types of services, improve seaport service quality by increasing customer satisfaction and link up closely with improving operating results.

2.4 Seaport Service Quality

There have been many researchers applying the SERQUAL model by Parasuraman et al. (1988) to measure seaport service quality (Durvasula et al., 1999). Thai Van Vinh & Devinder Grewal (2005), based on qualitative research, theory of services, service quality and SERVQUAL scale to provide a particle measuring scale comprised of 6 components of seaport service quality including: (1) Resources, (2) Capabilities, (3) Process, (4) Management, (5) Image (6) Responsibilities. The measuring scale by Thai Van Vinh & Devinder Grewal (2005) was developed and tested in Australia, where the economic environment and conditions for seaport system development are largely different from that of Vietnam.

Till 2007, in their research, Thai Van Vinh & Devinder Grewal conducted survey of seaport service quality once more time, including a survey in Vietnam. Sea port service quality was measured through the following 06 groups:

- *Resources:* Readiness of equipment; conditions of equipment; ability to track cargoes; infrastructure.

- *Capacities:* Speed in carrying out service; reliability of service (time of delivery and acceptance); supply of homogenous service; safety assurance for cargoes; exactness of documents; diversification and readiness of service.

- *Process:* Employee serving attitude; response to customer requirements; knowledge about customer requirements, needs; technological application in customer service.

- *Management:* Technological application in development; performance in development and management; levels of management and development such as loading/unloading capacities; customer need understanding; customer need-oriented improvement.

- *Image:* The port's reputation, reliance in the market.

- *Responsibility:* Comportment, responsibility for safety in development.

3. Methodology

3.1 Research Field

This paper aims at assessing customer satisfaction of the factors constituting service quality at the seaport system of Saigon Newport Corporation (SNP). Established on March 15, 1989 under the Decision No. 41/QĐ-BQP by Minister of Defense, since December 2006, SNP was converted to operating in the parent-affiliate model. On February 9, 2010, Minister of Defense signed the Decision No. 418/QĐ-BQP to change Saigon Newport Company to Saigon Newport Corporation.

Over 26 years of building and growing, SNP has become the largest, professional and modern container port operator in Vietnam with its seaport operation services such as stevedoring services, logistics services, marine services, resource, pilotage, real estate, buildings, offices, civil, military work construction…and multimodal transportation. As Vietnam's leading container port operator with its import-export market share accounting for over 85% in the South and nearly 50% of the whole country's market share, SNP is providing the best and most convenient port services, logistics for customers. SNP's strategic orientation is to develop manufacture and business in a sustainable manner based on the three mainstays: Port operation - Logistics services - Inland sea transportation, on the foundations: "*Leading service quality, customer-oriented; Advanced management, high quality professional human resources; Military disciplines, corporate culture, responsibility for community"*. SNP has been striving to improve service quality and provide package services in merchandise exchanges for customers under the motto *"Come to Saigon Newport - Come to the best quality services"*.

3.2 Variable Measurement

Service quality measuring scale was based on the model by Thai Van Vinh and Devinder Grewal (2005), in combination with the author's personal point of view. First, the measuring scale was established through qualitative research by group discussion. Three customer groups were selected. The first group comprised 5 customers using SNP's services. The second group composed 5 customers using Cat Lais's services. The third group composed 5 customers using Cai Mep Newport's services. The three customer groups above were direct import-export, commission import-export, shipping company, carrier's agents, manufacturing and service companies. The discussion contents were aimed at learning about customer opinions about the decisive factors for SNP's sea port service quality. Next, customers assessed the observed variables in the research model to see which factors should be retained, disposed or supplemented. Finally were summary of discussion results and establishment of the official measuring scale. The main contents of the questionnaire consisted three parts. The first part was the general information (gender, age, experience and current position). The second part comprised 28 questions corresponding to 5 influential factor groups. And the third part, on the whole, measured service quality through the questions (see table 1). Variables were measured as per Likert 5 scale (from level 1: Strongly disagree to level 5: Strongly agree).

Table 1. Surveying service quality at SNP's seaport system

Composition	Factors	Abbreviation
Resources	Equipment and facilities are always ready to meet customer requirements	RE1
	Equipment and facilities are in good, stable conditions	RE2
	Proper and convenient areas for processing formalities and taking deliveries	RE3
	The Port has strong, stable financial resources	RE4
	Good infrastructure, warehousing conditions	RE5
	Wharfs, yards are in clean and sanitary conditions	RE6
Capabilities	Promptness in carrying out the services	CAP1
	Providing services, delivering and receiving goods on time	CAP2
	Providing homogenous, consistent services among customers	CAP3
	Good security and order (ensuring goods free from loss, damage)	CAP4
	Ensuring accuracy of documentation (error free documents)	CAP5
	Convenient, prompt customs formalities	CAP6
	Diversified services at the Port	CAP7
	Competitive service charges	CAP8
Process	Good serving attitudes and manners of employees towards customers	PRO1
	Employees are willing to satisfy customer requirements in a prompt manner	PRO2
	Employee's good knowledge about customer need and requirements	PRO3
	Good information technology applications to serve customers	PRO4

Management	Good information technology and EDI applications in port operations	MAG1
	High performance in operation and management	MAG2
	Level of management and operation such as prompt cargo loading/unloading capacity, good ability to solve problems	MAG3
	Ensuring safety in port operations	MAG4
	Handling satisfactorily customer enquiries, complaints	MAG5
	Unceasingly improving the process of managing the customer-oriented operations of the Port	MAG6
Image	The Port's reputation, brand name on the market improved	IMG1
	Having good relations with the Customs, Port Authority, Pilotage authorities and local administrations	IMG2
	Responsible for local social activities	IMG3
Satisfaction	Are you satisfied with the Port's serving manners?	SATIS1
	Are you satisfied with the Port's material facilities?	SATIS2
	Are you satisfied with the Port's service quality?	SATIS3

The official survey was conducted by the non-probability sampling method in the two forms of surveying by email and direct interviews. Survey duration was between July and October 2014. Before receiving the questionnaire, customers participating to survey should have contacted in advance by the phone to collect email address. The questionnaire should have been sent attached to a letter of recommendation to explain the method and purpose of the research to the survey sample set in two ways: (1) of the 100 emails sent, 81 customer gave the answers in order (81%); (2) delivering the questionnaire directly to 45 customers, after removing 1 card with insufficient answers, the last remaining sample set amounted to 125 (86.2%). Table 2 summarizes the basic information about the sample set.

Table 2. Sample information summary

Unit: person, %

Factor	**Features**	**Frequency**	**%**
Gender	Male	98	78.4
	Female	27	21.6
	Total	*125*	100.0
Survey site	Newport - Cat Lai	31	24.8
	Newport	28	22.4
	Newport - Cai Mep	22	17.6
	Newport - Central Vietnam	15	12.0
	Newport - Hiep Phuoc	12	9.6
	Newport - 128	17	13.6
	Total	*125*	*100.0*
Customer	Goods direct import-export company	41	32.8
	Goods import-export commission company	22	17.6
	Manufacture and service company	23	18.4
	Shipping company or carrier's agent	33	26.4
	Other	6	4.8
	Total	*125*	*100.0*
Service usage frequency	Under 5 times/month	14	11.2
	5 -10 times/month	56	44.8
	Over 10 times/month	55	44.0
	Total	*125*	*100.0*

4. Research Results

Table 3 summarizes the statistic results of the independent variables of the components of the service quality at SNP's seaport system. The mean value in Table 3 indicates that the most important factors are as follows: Image (4.08), Resources (4.01), Management (3.87). The standard deviation falls between (0.56-0.77), meanwhile the coefficient of variation is between (0.11-0.25).

Table 3. Statistics of customer satisfaction of 5 factor groups

Factor	Sample	Average	Standard deviation
Resources (RES)	125	4.01	0.60
Capacities (CAP)	125	3.73	0.56
Process (PRO)	125	3.60	0.77
Management (MAG)	125	3.87	0.65
Image IMG)	125	4.08	0.71

After EFA, conducted reliability test of the 5 factors by Cronbach's Alpha. The test results indicate that Cronbach's Alpha of these 5 variables were all over 0.6; item-total correlation of all the variables was over 0.3 (see table 4). So, the measuring scale was in order and highly reliable.

Table 4. Cronbach's Alpha coefficient of factors

Factor	Cronbach's Alpha
Resources (RES) - F1	0.892
Capacities (OUT) - F2	0.875
Process (PRO) - F3	0.885
Management (MAG) - F4	0.728
Image (IMG) - F5	0.745

Next, the multiple regression model was used to test the influence of service quality on customer satisfaction. The phenomenon of multicollinearity among the 5 independent variables was measured through tolerance and variance inflation factor (VIF). That VIF values varied between 1.2 and 1.6, and < 10 indicates the phenomenon of multicollinearity was inconsiderable and the variables were stable. Multiple regression was conducted with one dependent variable (SATIS) of service quality and 5 independent variables (F1, F2, F3, F4, F5). From the regression results in table 5, we can see that with R = 0.816, this shows in the relations among the variables in the model there exists a fairly strong interrelation. The square value of the correlation coefficient (R Square) = 0.627 indicates the degree of stability of the model is 62.7%, or in other words, the 5 independent variables in the model account for 62.7% of the variance of service quality. The adjusted R Square reflects more correctly the stability of the model for the totality which was attained at a fairly high rate, i.e., 51%.

Table 5. Regression result

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin - Watson
0.816	0.627	0,510	0,584	1,807
	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Beta		
(Constant)	3.965		108.271	0.000
F1	0.203	0.286	5.527	0.000
F2	0.255	0.266	6.940	0.000
F3	0.232	0.354	6.325	0.000
F4	0.131	0.323	3.569	0.000
F5	0.177	0.351	4.826	0.000

The next step was to conducting regression analysis to determine the specific weight of each factor with influence on customer satisfaction. Regression analysis should have carried out with 5 independent variables, from F1 to F5 and one dependent variable of customer satisfaction (service quality). The factor value for regression was effectuated by the method of population regression of variables. The analytic results of the regression coefficients in the model show that all the independent variables at significant level (Sig) equal 0.000. This affirms that all the 5 independent variables F1, F2, F3, F4, F5 have influence on the dependent variable of service quality with the reliability of 99%, and this influence is in the same direction as all Beta coefficients are positive.

The order of importance of each factor depends on Beta coefficient. Which factor with a higher Beta coefficient

will have greater influence on the service quality. So, from this model, the influence of factors on SNP's seaport service quality can be ranked in a descending order as follows: Capacities (F2) with beta = 0.359; Image with beta = 0.351; Management (F4) with beta = 0.323, Resources (F1) with beta = 0.286 and Process (F3) with beta = 0.266.

5. Implications and Suggestions

5.1 Improving Capacities

With respect to promptness in carrying out services: Quick dispatch to releases vessels is one of the most important factors for customers to decide to bring their ships into ports for handling. This not only plays an important role but also is a matter of great concern to ship-owners. Since investments took place rather long ago, there still remain limitations of quality in the loading/unloading equipment, in the lifting capacity of cranes at Cat Lai Port and Newport. The high frequency of vessels pulling into the ports results in limited maintenance time and continuous damages to cranes. This causes discontinuity in the handling work, thus affecting the time of releasing vessels as committed to customers. At the present time, the small number of technicians prevents from meeting the requirement for repairing cranes on time. This section, therefore, should be reinforced with work clearly allotted each employee of the section. This solution helps enhance employees' sense of dutifulness in repairing damaged equipment.

With respect to time of shipping and receiving: The situation of too large quantities of cargo stored at warehouses, yards of the ports occurring every day, as the space though large but still cannot meet the market demand. Ports thus should have specific plans for arranging storehouses, yards to meet customer demand. This solution helps ports raise revenue when making full use of the type of business of hiring warehouses, yards to store cargoes. This type can produce very high economic effects as it involves no high cost.

With respect to kinds of services: Currently, in the total revenue from activities of developing SNP's seaport services, revenue of stevedoring accounts for over 50%; of waterway transport 30%, and the rest about 20%. For logistics and road transport services, as SNP has been concentrating on the development of these services not long ago, customers still hesitate to choose SNP as their partner in this type of service. SNP, therefore, should continue to complete its service network system to provide customers with flexible, handy and effective road transport packages.

With respect to price: The service charges applicable to single customers are still higher than that of other ports. Nevertheless, SNP has a very good mechanism for supporting price of the entire system of affiliated, whereas cargoes transported by barges from other competitors to SNP's ports have to increase very high charges. Hence, as for customers of shipping companies, they do not feel really satisfied with the pricing policy being applied, because in the case they pull into two different ports, two pricing policies may be imposed on them. SNP, thus, should make flexible pricing policy and avoid the situation of differentiating prices from a too long distance in order to create an equal competitive environment by service quality instead of pricing policy.

5.2 Developing the Image and Reputation

With respect to occupational safety loss: The tendency to increase in the cases of losing occupational safety, traffic safety, marine safety due to high intensity of labour (the most occurrences are in the second and third quarters), two cases a week on average. SNP should propagate and train its employees, on a regular basis, to have sense of carefulness and always observe the safety regulations that have been set out. In the case of losing occupational safety, as found out, resulting from employee's failure to comply with safety regulation, then there should be strict sanctions to be imposed, such as work suspension for six months or more (instead of two months as at present) or transfer to other positions without directly affecting corporate operations.

With respect to pollution-causing equipment: Not to mention some newly invested items, most of the equipment has been in existence for long. In addition, except for the new ports in the area of Cai Mep, Newport with investments in electrically operated shore-based cranes and yard-based cranes, the remainder is almost oil fuelled. In order to minimize environmental pollution, SNP should strictly comply with plan for equipment maintenance on a monthly basis so as to extend the service life and working conditions of machinery and equipment. Also, there should be investments in replacing the equipment that has been in operation for years with environmentally friendly one. And SNP should also strengthen with more equipment for collecting, treating waste oil from marine operations under provisions of the law.

With respect to relations with customs authorities: Take the initiative in working with customs authorities to check, minimize customs formalities, formalities for merchandise exchange at warehouses for customers; promote new customs mechanisms for expanding logistics services.

With respect to order and security: Strengthen the guard forces in yard areas and thorough inspection of centers. As for the container inspection section, before containers are loaded or unloaded, carry out seal test and take the minutes of every case so as to notify the shipping companies and customers on time. In the case of thefts due to the port's fault, SNP shall have to be solely responsible and impose strict sanctions if the Company's image is affected with the highest sanctions, i.e., dismissal and compensation for the entire goods stolen.

5.3 Improving Management

With respect to IT software: The CMS software reveals a lot of weaknesses when the volume of cargo in operation exceeds 1 million TEUs. In 2013, Cat Lai Port alone received up to 3.2 million TEUs of cargo and the usage of CMS hindered the process of accessing system data, causing the IT section's delay in entering data, the business transaction section's frequent difficulties in charging customers for its services, and this affected the entire production process.

With respect to EDI applications: SNP should continue improving the program for data exchange with shipping companies and ports inside and outside the country, information exchange with State management bodies such as the Customs Authorities, Port Administration, Pilotage Authorities… in order to expand scope of IT applications. Utilize dedicated systems; be prepared for future expansion to meet the growing customer demand. EDI data, when sent, must all be tested and format tested to ensure to be free from any syntax, special character errors. Transmission will not by instable email but by way to ensure reliability such as FTP (including put/get), AS2. Be prepared to receive EDI from such shipping companies as: COPRAR Load, COPRAR Discharge, COPARN, VESDEP. The Port will work with Internet service provider to ensure stable and continuous operational status so as to meet the requirement for data transmission anytime, anywhere.

With respect to accuracy of documentation: At many sections, information errors are still being made, the sections, therefore, should work together to overcome this situation to make it more convenient for customers to deliver and receive cargo at warehouses. Check all paperwork and formalities related to the information provided at the Port for any errors and to rectify all at once to achieve 100% accuracy of documentation. In the case errors made by employees when entering data, there should be regulations on priority support in rectifying the errors for customers as such instead of requiring them to queue up in order.

5.4 Improving Factor Resources

With respect to equipment: With the rapid, robust development of the sea transportation market, in order to save expenses, shipping companies have to increase the carrying capacity of their ships. Meet this tendency, SNP should carry out planning and design of its system of wharfs by further expanding the existing wharfs, berths, piers and dredging to ensure depth alongside berth for receiving vessels with high-load carrying capacity for handling, making it possible for loading/unloading activities to produce high effect. Dredge the passageways along the berths at the Newport at a depth of under 9.5m in order to receive 50,000 DWT vessels to compete with SPCT. Through the practical development process and in reference to customer opinions, it is revealed that receiving vessels with high-load carrying capacity into the Port is still very difficult at Cat Lai and Newport (except Cai Mep Port). Despite the fact that the designed berth length can receive 8 vessels at a time at Cat Lai, the number of vessels pulling into the Port reaches 60 a week. The berth arrangement is, therefore, very difficult. For the present time, there is a growing need for loading/unloading oversized, overloaded containers whereas the existing number and conditions of the Port can only meet well normal containers but without dedicated equipment of handling for vessels with high-load carrying capacity. In time to come, the Port should step by step invest and equip itself with a new crane system having large lifting power. This will help increase the capacity for loading/unloading heavy weight cargoes and avoid damages to the cranes for loading/unloading standard containers only to better cargo loading/unloading operations.

With respect to human resources: The strength of the workforce at ports is usually great, but at different levels, of unequal quality. Their professional skills, more importantly, sense for responsibility of a small part of them is below par. Particularly, the majority of those who directly involved in doing the work have lower academic qualifications; their jobs are mainly stevedoring, tallying at warehouses and yards, driving trucks, without modern, professional work style—this results in errors in the course of providing services for customers. Employees' foreign language competence at present is still very limited meanwhile the Port's foreign customers are growing in numbers. Activities of training, recruiting employees, therefore, should be strengthened so that they'll have access to new knowledge and experiences. Training courses shall be held on a quarterly basis to facilitate timely employee refresher training. In addition, SNP should also pay more attention to and make more proper arrangement for planning to coordinate with managers of the Business Transactions, General Computer sections in working out strategies for marketing and customer service.

5.5 Improving the Service Procedure

With respect to jams at wharfs, warehouses: The Port should have suitable wharf planning, with reduction in multi-reversal to save loading/unloading time for other containers in addition. At the area near the entrance gateway to the Port, there should be distinctive lanes arranged, the area for customers to wait for their turns to go through procedures should be separated. Food and drink service in front of the Port should be restricted to avoid drivers stopping there to eat and drink thus causing traffic snarl.

With respect to levels of management and development: Apply modern loading/unloading methods at the Port, yards, warehouses to improve operating performance. Keep improving procedures for imports and exports delivery and acceptance, making it possible for customers to get through with their work. Provide shippers with door-to-door service of high quality, at lowest cost price. Diversify the services provided for customers and to ensure that the service quality is always at the highest level.

6. Concluding Remarks

The paper synthesized the elements of quality of seaport services from which analyzes the relationship between the elements of the service quality to the level of customer satisfaction. The research model is recognized by a group of customer at 6 seaports of Saigon Newport Corporation. The results affirm the significant and positive impacts 5 variables: Resources; Capacities; Process of services; Management capacities; Image and reputation on the port service quality. On these result obtained, we proposed some relevant recommendations for improving the capacities; for developing the image and reputation; for improving management, resources and service procedure of Saigon Newport Corporation.

References

Bachelet, D. (1995). Measuring Satisfaction; or the Chain, the Tree, and the Nest. In R. Brookes (Ed.), *Customer Satisfaction Research.* ESOMAR.

Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus service quality: the consumer's voice. In R. T. Rust & R. L. Oliver (Eds.), *Service Quality: New Directions in Theory and Practice*. Thousand Oaks, CA: Sage Publications.

Cao, N. T. (2010). *Phát triển vận tải biển Việt Nam tới năm 2020 và tầm nhìn tới 2030*. Viện Nghiên cứu phát triển TP.HCM.

Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, *56*(3), 55-68. http://dx.doi.org/10.2307/1252296

Durvasula, S., Lysonski, S., & Mehta, S. C. (1999). A Cross-Cultural Comparison Of Cognitive Responses, Beliefs, And Attitudes Toward Advertising In General In Two Asian Countries. *Journal of Marketing Management*, *9*(3), 48-59.

Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, *18*(4), 36-44, http://dx.doi.org/10.1108/EUM0000000004784

Khoa, N. B., & Long, N. H. (2013). *Commerce Marketing*. Thống Kê.

Kotler, P. (2000). *Framework for Marketing Management* (1st ed.). Prentice Hall Business Publishing.

Kotler, P. (2001). *Principles of Marketing*. Pearson Education Canada.

Kotler, P. T., & Keller, K. L. (2015). *Marketing Management* (15th ed.). Prentice Hall.

O'Neill, M., & Palmer, A. (2004). Cognitive dissonance and the stability of service quality perceptions. *Journal of Services Marketing*, *18*(6), 433-449. http://dx.doi.org/10.1108/08876040410557221

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and implications for future research. *Journal of Marketing*, *49*(Fall), 41-50. http://dx.doi.org/10.2307/1251430

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, (Spring), 12-40.

Pariseau, S. E., & McDaniel, J. R. (1997). Assessing service quality in schools of business. *International Journal of Quality & Reliability Management*, *14*(3), 204-218. http://dx.doi.org/10.1108/02656719710165455

Thai, V. V., & Devinder, G. (2005). *Service Quality in Seaports*. Australian Maritime College.

Từ Tâm. (2010). Cảng biển Việt Nam tầm nhìn mới. *Tạp chí Vietnam Logistics Review*, *4*.

Zeithaml, V. A., & Bitner, M. J. (2000). *Services Marketing*. Boston: McGraw-Hill.