TALLINN UNIVERSITY OF TECHNOLOGY

School of Business and Governance

Department of Business Administration

Imre Minjo

IMPROVING CUSTOMER SERVICE QUALITY IN CONTAINER SHIPPING INDUSTRY ON AN EXAMPLE OF APL ESTONIA

Master's Thesis

Management and Marketing, Enterprise and Export Management

Supervisor: Tarvo Niine

Tallinn 2017

I declare I have written the master's thesis independently.

All works and major viewpoints of the other authors, data from other sources of literature and

elsewhere used for writing this paper have been referenced.

Master's thesis consists of 16363 words from the introduction till the end of the summary

Imre Minjo

(signature, date)

Student's code: 132375TATM

Student's e-mail address: imre.minjo@gmail.com

Supervisor Tarvo Niine:

The thesis conforms to the requirements set for the master's theses

.....

(signature, date)

Chairman of defence committee:

Permitted to defence

.....

(Title, name, signature, date)

TABLE OF CONTENTS

A	Abstract					
In	Introduction					
1 Customer service expectation and satisfaction measurement						
	1.1	Definition of customer service	8			
	1.2	Customer expectation	15			
	1.3	Customer satisfaction				
	1.4	Measuring customer satisfaction	22			
2 Applied Research methods						
	2.1	Object of Research	25			
	2.2	Applied Research of Methods				
	2.2	1 SERVQUAL				
	2.2	2 Open-ended questionnaire				
	2.2	3 Internal data				
	2.2	4 Author's survey				
3 Analyses		42				
	3.1	Findings from the survey	42			
	3.2	Internal data integration	54			
	3.3	Suggestions for improving customer satisfaction	56			
	3.4	Research limitations	59			
4	Su	nmary	60			
5	Kokkuvõte63					
6	References					
7	Ap	pendices	69			
	7.1	Appendix 1. Customer Satisfaction Survey at APL Estonia	69			

ABSTRACT

The topic of the thesis is "Improving customer service quality in container shipping industry on example of APL Estonia".

The problem of the research is that customer satisfaction is unknown at APL Estonia and APL Global Shared Service Center (GSSC). In a search of the solution, the customer expectations and perceptions are identified. Then, the gaps between them are calculated. Company's internal data is also analyzed to give overview how fast customers' bookings are created and confirmed back to customers. Based on the results, the suggestions are conducted on how to improve overall quality of customer service and throughout this, increase customer satisfaction.

The method for finding the gaps between customer expectation and perceptions is conducting a survey among the APL Estonia customers. The survey is composed of a SERVQUAL scale and open-ended questionnaire. In addition to survey, turntime of booking creation is analyzed.

The expected result of the thesis is that customer satisfaction among APL Estonia customers is not sufficient, meaning the expectation are higher than the actual services customers perceive. As the scope of the local customers is humble, the main solution for increasing the customer satisfaction is to focus on each customer as individual. By doing that, overall customer service should increase and be close to superior. Additionally, company's' internal customer service should be increased by conducting regular trainings.

Keywords: customer service, customers' expectations, customer satisfaction, customer satisfaction measurement, SERVQUAL, container shipping industry, service quality.

INTRODUCTION

Container shipping does not have an ancient history, but it has made shipping cheap and comfortable, re-shaping the world economy. During the modern day, containerization has greatly reduced the expense of international trade and increased its throughput, especially in relation to consumer goods and commodities (Marine Engines & Systems, 2015). As of 2016, around 90% of non-bulk cargo worldwide is moved by containers stacked aboard container vessels, with total volume of containers transported being over 175 million TEU-s per year (Review of Maritime Transport, 2016).

Despite the popularity and comfort in twentieth first century, the container industry has suffered a marginal drop in shipping rates. The main reason of the industry's problems is a persistent global supply-and-demand imbalance. Given the challenging market conditions, a decline in revenues for the major shipping companies was from \$204 billion in 2011 to \$173 billion in 2015 (Alixpartners, 2016). The most-recent forecasts expected global container fleet capacity to grow by 4.6% in 2016, and another 4.7% in 2017, though spot prices for major routes have dropped 21 to 44% from a year ago because of plunging demand, now about half the current growth forecast (Knowler, 2016).

Maintaining loyal and long-term customers in maritime industry is essential and shipping companies must comply on. In order to do that, companies must regularly measure customer satisfaction level and increase it by improving customer service. There are relatively many different methods available to measure customer satisfaction, but few companies in container shipping industry are actually doing it. Regarding of this issue, author of thesis thinks it is relevant topic to find out how measuring customer satisfaction can improve customer service in container shipping company and also increase profit and strengthen the market position.

The problem of the research is Estonian customers' expectations and over-all satisfaction is unknown to APL Estonia and APL Global Shared Service Center (GSSC). It is not common to do customer satisfaction surveys among APL-s customers, instead, meeting all deadlines and accomplishing turntimes are more important, about which APL has a strict

policy. All collected data is analyzed, measured, stored and is available for company's employees to have an overview. Regarding APL market position, with only 3% in 2016, they are not among the leaders. After becoming part of CMA CGM Group, together their market share improved and is now around 12%, while current market leaders are Maersk and MSC, whom are both part of the same alliance, has market share of 15% and 13% respectively (Financial Times, 2016). Weak market position means company has to play for the lower rates to attract customers, and has neither time nor interest in conducting customer satisfaction surveys in order to keep current customers.

Regarding of this problem, the aim of the research is to find out the how satisfied are Estonian customers of APL and what are their expectations to customer service. Main tasks will be to find out what are Estonian customers' expectations, perceptions of received experience and recommendation about what APL is doing right or wrong. Based on the survey results, weaknesses, woes and over-all suggestions will be pointed out to APL GSSC management, located in Tallinn, to show in which direction company is moving and how to increase customer service level, by implementing additional measures to restore customer's trust.

The author wants to find answers to the following research tasks, with the general research aim to improve the quality of APL customer service:

- Analyze theoretical base of customer service; customer expectation; customer satisfaction and customer satisfaction measurement;
- Analyze SERVQUAL model scale and based on it, conduct a survey among APL Estonian customers;
- Based on survey results, point out weaknesses and troublesome areas in APL customer service and make suggestions on how to improve customer satisfaction.

With final results, main purpose is to show that regarding of the market position or company policy, customer satisfaction is still important factor in increasing revenue and profit. It may take additional costs and customers are not always willing to answer to surveys, but knowing what customers want and expect, is worth the effort.

Author of this thesis uses the quantitative research method to find answers to above research tasks.

The thesis consists of three parts: theoretical part, methodology and analysis of the author's findings.

In the first step of the theoretical part, the author gives an overview of customer service by comparing different definitions. In the second step, are brought out the explanation of the customer expectations and customer satisfaction, and how they are related and why are they important to organizations. The third and final part, author describes measurements of customer satisfaction, with bringing out some methods.

In the methodology part, the author gives an overview of the object of research, APL Global Shared Service Center and applied research methods. First the APL brand history is introduced, then, the structure and background of the APL GSSC, located in Tallinn, Estonia, is described. In the applied research methods, SERVQUAL and open-ended questionnaire essence are described. In the final part, the author also gives an overview of company internal data sources and presents survey that was used in this thesis.

In the analytical part, the author analyses findings from the survey and the company internal data sources. The gaps between expected and perceived service are presented for each area, following by customer statements regarding overall opinions about APL. Author also presents turntime chart, which shows how fast bookings are created and confirmed back to customers. Based on the analysis and findings from company internal data, the author makes suggestions for improvements. In the end, the author also points out research limitations and future research possibilities.

The final results of the research will be presented to APL management to point out weaknesses in customer service, point out customer discontent and make suggestions on how to improve it.

1 CUSTOMER SERVICE EXPECTATION AND SATISFACTION MEASUREMENT

In the theory part, firstly author analyses different sources about customer segmentation and customer service definitions. Following, the explanation of the customer expectations and customer satisfaction are presented. In the final part, the importance of the customer satisfaction measurement is defined.

1.1 Definition of customer service

Who or what is a customer and customer service? Most comprehensible definition would say that "customer is a person or group that buys goods, products or services from organization he/she has a relationship with". In return, customers can be divided into external and internal customers. External customers are the customers the organization does business with, while the internal customers are people within the organization itself (Harris, 2010). Customer differentiation can also be called as customer segmentation.

Organizations can divide existing customers into different groups. These groups can be managed through customer management strategies, which are varying extensively. Such process is called customer segmentation – being the foundation of customer relation management and important tool for managing customer relation. Tao and Zhixiong have stated Susanna Donner, who considers proper customer segmentation as an ability to reduce various costs; acquire more profitable and powerful market separation, in order to better identify different customers, and adjust customer strategy to be in line with different customer characteristics. (Tao and Zhixiong, 2006)

In daily business, logistics companies have a contact with various customer types, whose requirements are different, whether it is logistics time, place, delivery type or other various details. By making no classification of customers and distributing services equally, enterprises are risking with spending too many resources on customers who provide minimal profit, while customers with greater profitability are left aside. Such situation is unfavorable to companies, who wish to develop a close relationship with special customers and at the same time, they are wasting great resources. (Tao and Zhixiong, 2006)

On Figure 1 customers of logistics enterprises are divided into four types, based on the resource usage and business contact. These are key customers; potential customers; customers to be handled and problematic customers (Ibid):

- Key customers have frequent business with logistics companies. Contribute to steady business income, by making use of great amount of resources. They require immediate attention and co-operation;
- Potential customers Do not have frequent business with logistics enterprises. Their contact is unstable, but they can make great use of resources during a contact;
- Problematic customers Rare business contact, but if occurs, logistics enterprises need to organize particular resources to serve the customer;
- Customers to be handled Often approach logistics companies for service, which needs a specialized plan and organization, but adds great burden to companies.

High	IV Key customers	Ⅲ Potential customers	
Resources utilization ratio	I Customers to be handled	II Problem customers	
Low			
	High Degree of business contact Low		

Figure 1. Customer segmentation Matrix of Logistics Organisations. Source: (Tao and Zhixiong, 2006).

The organization itself has to provide wants, needs and requirements of the customer (Ahoy, 2008). It is important to recognize the importance of internal and external customer requirements, because both contribute to the customer service of the organization (Harris, 2010). Meeting these requirements is often stated as "customer services", while exceeding them through delivery of products or services throughout superior relationship is the key the greater success (Ahoy, 2008). Simply put, customer service is providing service to the customer before, during and after the purchase of product or service, so the customer requirements are fulfilled and they are overall pleased.

La Londer & Zinszer (1976) have stated that the meaning of the customer service is difficult to define, as it varies from one company to another. Definitions could range from the marketing logistics to accepting processes, delivering goods and fulfilling customer orders through the friendliness of staff at over the course of the service process. Additionally, customer service is a process which involves procedures like pre-sale, sale and post-sale transaction. It should be considered as a relationship with most loyal consumers as well as relationships with suppliers and even the supplier's suppliers. (Christopher, Payne & Ballantyne, 1991)

According to research "Customer services and their roles for industrial small and medium companies", conducted by Lucie Kanovska, almost 80 % of respondents perceive customer services as competitive advantage for differentiation from other companies on the market. Kanovska continue that "diversification of views on customer services are very interesting and profitable, because it is enable to think more about whole problem" (Kanovska, 2009). On Figure 2 are shown different definitions of customer services by various authors that have emerged in over the years.

10

Author	Definition of customer services		
LaLonde & Zinser (1976)	Services are the kind of activities between the organization and customers to improve or simplify sale and using of products. They involve also operations of producers provided for customers during the whole transaction.		
Rinehart et al (1989)	Services are common factor for integration of marketing and logistics.		
Bovée & Thill (1992)	Services involve all what organization makes for satisfaction of their customers and help to realize as big advantage as possible from products bought by customers. Services are activities which can add the value to products.		
Horovitz (1994)	Services are complex of promises which are expected from the product by a customer, as function of price or image.		
Pernica (1998)	 Services can be defined by three ways: Organization context: complex of functions in concrete organizational system. As reflection of expecting efficiency: services are defined by percentage of orders during some period. As value-creating process: services are seen as the process of simple transaction or long-term partnership with added value. 		
Horáková and Kubát (1999)	Services present important activities from the purchase order of customer to delivery of products. The activities are customer-oriented and depend on the kind of product and type of customer.		
Christopher (2000)	Services are the system organized to assure continuity between the time of purchase order and delivery of goods. The aim is to satisfy customer needs from the long-lasting view.		
Amico & Zikmund (2001)	Services present company activities created to increase value of selling products to strengthen customer satisfaction.		
Kotler (2001)	Services involve all aspects of mutual relationships among producers, distributors and customers.		
Spáčil (2003)	Services are the system of accompanying services bought by customer with product.		
Lehtinen (2007)	Services are all activities connected with assuring relationship with customer - from product delivery to different ways of help by its using.		

Figure 2. Definition of customer services. Source: (Kanovska, 2009).

Customer service influences total customer satisfaction and can help to survive on the market (Kanovska, 2009). Therefore, customer service is how the organizations maintains its positions among competitors over the time, while quality is how the offers stand out and get extra value in the eyes of the customer (Christopher, Payne & Ballantyne, 1991).

Decisions customer service make, are part of the marketing strategy. Taking a charge or collaborating in a service quality management is an important responsibility in marketing area. This includes planning, organizing improvements and continuously monitoring customer service requirements, while controlling the service support process externally and internally. Marketing, quality and customer service are all connected in such relationship. The challenge is to bring these critical areas closer to get a strong alignment. On Figure 3 is shown linkage and determinants of how to bring these elements closer to each other. (Ibid)



Figure 3. Linkage between marketing, quality and customer service. Source: (Adapted by author based on Christopher, Payne & Ballantyne, 1991).

Additionally to above linkage, management must acknowledge, that customers usually search for long-lasting relationships with industrial producers. It means they purchase products and services from companies, where they predict long-lasting relationships for both sides (Kanovska, 2009). Christhopher Aloy has cited that "*high-level relationship depends on how well company knows its customers*". He also agrees that while customer relationship building focus has been present in some firms marketing activities, the goal is not the gain customers, but to build, maintain and develop customer relationships (Ahoy, 2008).

In order to build strong relationship, it is essential to know that all customers have their requirements and they are willing to pay only if they feel that they are being treated appropriately, fairly and served superior quality of service. For better understanding, a viable organization will listen to its customers and satisfies their requirements. These requirements surpass the basic wants and needs, and are often called critical-to-customer requirements (CCR). CCR are minimal conditions organization must meet, but they may shift due to variations at the supply chain. Additionally a globalization of our world and new e-economy favors our diversified population to choose between multiple options, thus the new entrants to the market struggle to percept the newer wants, needs and requirements of their customers (Ibid).

The customer service in container shipping industry is a very complex environment. Container shipping companies are usually divided into specialized departments. These departments are having an interface with the customers, directly or indirectly. Most common departments in the shipping companies are sales and marketing, bookings, operations, documentations and customer claims. In addition, customers also use telephone services and personally visit the office of the shipping companies. (C. Mehta & Durvasula, 1998)

In order to stay competitive, corporations must provide consistent professional customer service, at the same time being agile and flexible (Rahman, 2012). Maintaining ongoing client relationships is an extremely important part of customer service, which is the key to success and increased incoming revenue (Bonah, 2016).

Murnane, Saxon & Widdows start their article "Container Shipping: The untapped value of customer engagement" by stating "Despite challenging market dynamics and rising operational complexity, container shipping companies can both increase profitability and improve their customers' service". They point out that to provide higher level of service, is not equal to having higher costs. Stating the fact, the organizations which provide top-class

13

customer service often have a lower cost than average companies in same industry. The visual concept and knowledge of each container placement, while delivering the same information to the customers via the internet and mobile applications, could reduce the unnecessary costs. By making right decisions and reducing calls from unsatisfied customer, the costs are likely to go down. (Murnane, Saxon & Widdows, 2016)

Despite company's best efforts, customers are dissatisfied with customer service from time to time. To maintain superior customer service, container shipping companies should focus on the six hallmarks of customer service, as shown on Figure 4. (Ibid)



Figure 4. Six hallmarks of customer experience leaders. Source: (Murnane, 2016)

To sum up above, it can be said, that customer service definitions vary from different perspectives. Providing it on excellent level is challenging task not only to front-office desk and customer service representatives, but also to management. Managers have to make decisions on how to improve customer service internally and externally. For this, they have to find right people with right skills, provide them with regular training to improve their skills and map the customer expectations. Through operating relationships, organization can increase customer service level. Once customer service level improves, customer expectations can be met. These expectations change in time and scope. To understand them better, they are interpret in next chapter of this thesis.

1.2 Customer expectation

In twentieth-first century it is increasingly hard to find satisfied customers and this has been caused by two mayor changes: information revolution and rising customer expectation. Expectations and wealth have risen among customers in the developed countries over the latter half of the twentieth century and such increase in expectation has many causes, including below three most notable: (Harrison, 2008)

- Level of general education is better;
- Spotting the alternative product in the market is much easier;
- Lifestyle issues in media are exposed to everyone.

These expectations have led customer not only to eager to more desirable products, but they are also demanding better levels of service associated with these products.

On the simple level, customer expectation can be divided into two category – primary and secondary expectation. Primary expectations are customers' basic requirements in doing business (Harris, 2010). For example in container shipping industry, primary expectation is to receive your container. The secondary expectations are based on previous experiences that are enhancements to our primary expectations (Ibid). In container shipping industry for example, secondary expectations can be polite customer service, on-time delivery of the container or undamaged and in good condition container.

In research "Understanding Customer expectation of service", Parasurman *et al* (1991) point out that when providing services to customers, companies have to remain accurate and dependable. In order to keep promises and to understand customers better on company level, customer expectations are categorized into five dimensions: reliability, tangibles, responsiveness, assurance and empathy. These expectations are usually defined into two groups: desired or adequate. Desired expectation is the level of the service the customer expects to receive, while adequate expectation is the level of service the customer accepts, but does not remain satisfied. (Parasurman *et al*, 1991) On Figure 5, are shown the factors that influence desired and adequate service.



Figure 5. Factors that influence desired and predicted service. Source: (Parasurman *et al*, 1991)

Between these two levels, there is a gap, usually called a "zone of tolerance". Based on Parasurman *et al* 1993 article "The Nature and Determinants of Customer Expectations of Service", Robert Johnston has defined zone of tolerance as the range of how customer percept the services between desired and least acceptable. The importance of this zone of tolerance is that each customer accepts differently the desired performance, and slight increase or decrease will have a distinct marginal effect on overall perception. When the performance moves beyond the range, it has affect on perceived service quality. Regarding of the range of a zone of tolerance, the narrow gap makes customers highly sensitive, while wide gap have a less sensed impact. (Johnston, 2017).

Figure 6 shows, that performance below the zone of tolerance is seen as dissatisfying and performance above the zone of tolerance is seen as delighting. The width of the zone of tolerance varies a lot, and is usually different depending on customers' profile or current market situation (Ibid). For example in a container shipping industry, one customer can only accepts 1-2 day delay of their cargo, while other customer can accept up to 7 days of delay. Thus, if the customer can choose between many alternative options, the zone of tolerance is smaller and if they do not have many options, the adequate level is higher.



Figure 6. Zone of tolerance. Source: (Parasurman et al, 1991)

One way to keep from customer expectation from rising is performing service properly for the first time (Parasurman *et al*, 1991). This could build up a long-term customer relationship. They continue by citing that "*customer relationship is central to exceeding customer expectation, because genuine customer relationship is built on foundation of fairness, sincere efforts to understand and help the customer*". In order to design a relationship service system consistent with the expectation of customers, a communication between firm and customer should be proper. Below are presented four essentials which are highly necessary in service system (Ibid):

- Customer must have access to service when their need arises;
- Communications between company and customer should not be customer initiated, but company should contact customers as well;
- Each customer has different needs, thus, service providers should be flexible;
- Service providers should not only be *able*, but also *willing* to be flexible.

The match between what customer expects and what they experience is called perceived quality. Any mismatch between these two is known as a quality gap. The goal of marketing and quality management is to narrow this gap. Once the quality goes up, the nonvalued wastes and time related costs come down. Every production generates outputs, which may turn out to be beyond expectation. The quality management process is to reduce it, because process variation is passed along the whole chain of internal customers and suppliers to the final consumer. (Christopher, Payne & Ballantyne, 1991) In container shipping industry, customer expectations are currently raising on unstoppable pace. The market is vast and service providers are lowering their prices just to get a new customer. If the customer is not satisfied with the provided service, they can easily change the service provider.

Customer expectations vary from person to person, from company to company. Meeting these requirements can be very profitable to company, while neglecting them may hamper the profit and drive them to loss. If customer expectations are met, customer is satisfied. The customer satisfaction is what makes company successful and in order to understand it, the next chapter will explain the customer satisfaction meaning and importance.

1.3 Customer satisfaction

Customer satisfaction has many different definitions. Mäntyneva has stated that "customer satisfaction is as a mayor driver for the firm's competitiveness, growth and even survival". He also cites Gravenes (1987) and Miller (1994), that "successfulness of marketing strategy can be evaluated based on whether it achieves customer satisfaction or not". While according to Müller (1991), "customer satisfaction is the most important profit stimulant and powerful competitive defense, because satisfied customers are expected to be more loyal than non-satisfied customer". Above three statements have a different view on customer satisfaction, but the importance of customer satisfaction remains the same. (Mäntyneva, 2004)

Anderson and Sullivan (1996) have proposed that quality, which does not meet expectations, has a greater impact on customer satisfaction and loyalty than quality, which exceeds expectations. This means that the relation between quality and satisfaction is not linear. For that statement, Mäntyneva proposes that organizations should indentify the quality related expectations of their customers and set these as performance standards that should be met. He continues that concept of customer satisfaction is best defined by Parasurman *et al* (1990): "*Customer satisfaction is buyer's perceived performance in relation to its expectation's toward a seller prior to relational transaction*". (Ibid)

Leaders of the organizations need to focus on customer satisfaction. Many economies in the OECD (Organization for Economic Co-operation and Development) are now occupied by service sector in central role, with overall percentage being more than 70. Despite of quality being essential role in service firms, problems remain and hamper lots of companies' profitability. Crosby (1980) has estimated that every third employee is involved in correcting the service mistakes made by other co-workers. These firms are lacking sufficient strategies on how to deal with service failures or how to handle customer complaints. (Durvasula, Lysonski and Mehta, 2000)

US marketing Guru Philip Kotler (2000) define customer satisfaction as: "The consumer's feelings of pleasure or disappointment, resulting from a comparison between the perceived performance of the goods or service and the prior expectations." (Angelova & Zekiri, 2011) By this definition, happy customers are those who get what they expect - or more. Thus customer satisfaction is a formula: P - E = S where, P=Perception, E=Expectations and S=Satisfaction.

John Dudovskiy stated in his article "Concepts of Customer Service and customer Satisfaction", that professor Alok Kumar Rai (2008) sees customer satisfactions formula as following: "*Customer satisfaction = Customer Perception of the Service Received – Customer Expectation of Customer Service*". The concept of this formula states that if perception of the received service is higher than expected, the customer satisfaction will be positive, but if the perception of the received service is below the expectations, the customers will be left dissatisfied. (Dudovskiy, 2012)

According to Inamullah Khan's, to define customer satisfaction there are multiple options, by conducting studies in different ways. He presents many examples in article "Impact of Customers Satisfaction and customer's retention on customer loyalty" how scientists have explained their results from studies (Khan, 2012):

- Kahn himself state in the same article, that to obtain satisfaction, expectations must be met.
- Similarly to Kahn, study conducted by Gerpott, Rams & Schindler (2001) reveals that the amount of satisfaction depends on how expectations are met. When expectations are supplied sufficiently, the expectations are likely to exceed;
- Slightly different approach is taken by Hauser, Simester & Wernerfelt (1994), who state that satisfaction of customer can indicate the possible revenue company may obtain in future;
- Guo, Xiao & Tang (2009) think that in order to retain the existing customers, companies must take customer satisfaction as a necessary foundation;

• The unsatisfied customers, who constantly receive services under expectations, will not have a relationship with the company, as stated by Lin & Wu (2011).

Lin & Wu add that developing customer satisfaction is a commitment in meeting expectation and providing service relationship, while always improving reliability in order to keep customers with a company (Khan, 2012).

Inamullah Khan continues in his article by stating that many previous academics have found that customer's satisfaction and loyalty have ties between themselves. According to Rust and Zahorik (1993), customer satisfaction impacts loyalty directly. This statement is backed by many academics through years, such as Auh & Johnson (2005), who argue that there are strong relationships between satisfaction and loyalty; by Bodet (2008), who confirmed customer satisfaction and customer loyalty does have a connection; by Shankar, Smith and Rangaswamy (2003), who provided evidence about satisfaction and loyalty having a positive relationship; by Kim, Jeong, Park, and Kim (2007), who stated "*customer satisfaction has impact on customer loyalty*"; by Vesel and Zabkar (2009), who confirmed that customer satisfaction determines customer loyalty significantly and by Hallowell (1996), who supported the fact that customer satisfaction and loyalty are indeed related. (Ibid)



Figure 7. Relation between service dimension, customer satisfaction and customer loyalty. Source: (Vasumathi & Subashini, 2015)

Mokhtar *et al* (2011) wrote in their paper "The Relationship between Service Quality and Satisfaction on Customer Loyalty in Malaysian Mobile Communication Industry" about two constraints affecting the link between loyalty and satisfaction, based on Coyne (1989) theory. As seen on above Figure 7, five dimensions of service quality form a customer satisfaction, which in turn has an impact on customer loyalty (first constraint), but these five dimensions could have a direct impact on customer loyalty as well (second constraint). Mokhtar *et al* continue in their article by stating Oliva, Oliver & MacMillan (1992): "*when satisfaction reaches a certain level, loyalty increases dramatically; at the same time, when satisfaction declined to a certain point, loyalty dropped equally dramatically*". (Mokhtar *et al*, 2011)

As a container shipping industry is vast and market is segregated with a lot of service providers, the customer loyalty is not as important as is customer satisfaction. Thus, customer loyalty will not be a subject of this research and rather different segments on satisfaction will be explored next.

John Dudovskiy discusses in his article "Concepts of customer services and customer satisfaction" that Williams and Buswell (2003) divided potential customer satisfaction levels into three categories (Dudovskiy, 2012):

- First category is negative experience. When the level of service received by the customer is below than expected;
- Secondly, positive experience. When the level of service received by the customer is above the expected;
- Third, regular experience. When the level of service received by the customer is what expected.

Online article "An outlook of consumer satisfaction and review of literature" review book "Kotler on Marketing" by stating "*most companies pay more attention to their market share than to their customers' satisfaction*". The issue with this focus is when customer satisfaction decreases; market share will diminish in a time as well. They continue by stating "Companies need to monitor and improve the level of customer satisfaction. The higher is the *satisfaction, the higher is the retention*". They also present four facts from Kotler (1999):

- Acquiring new customers costs 5 to 10 times more than satisfying and retaining current customers;
- The average company loses 1-3 consumers out of 10 each year;

- A improving customer defection rate may increase profits up to twice, depending on the industry;
- The retained consumer may increase a company's profit over life time.

Customer satisfaction is considered one important factor in company's success. If the indicator is low, the customers are driven away and company will eventually struggle to regain their trust. In contrary, high customer satisfaction should also not be ignored, because if creates comfort zone and company may think that happy customers will be always happy, which is wrong. In order to know customer satisfaction level, the measuring methods should be considered and performed at least one or two times annually. Different customer satisfaction measurements and importance is discussed in next chapter.

1.4 Measuring customer satisfaction

Getting and keeping customers requires continuous improvement and innovation. The choice management must make is whether to drive workers harder at their assigned tasks, or whether to invite them to participate in generating new ways of improving the performance system (Christopher, Payne & Ballantyne, 1991). Front-line office staff has to perform at excellent level and in order to succeed they need a training to improve their customer service skills. However, these efforts also add costs, but not value. Real commitment to quality improves involves organizational change. The starting point for effective management of customer service has to be the measurement of service quality performance and the response of customers to the performance (Ibid).

The purpose of measuring customer satisfaction is to understand how customers see company and initiate a service and product improvement to lead to higher satisfaction levels. A survey to measure customer satisfaction assumes that organization understands its customers; their perspectives are known, and company plans to be responsive. In that way, customer satisfaction measurement (CSM) will enable organization to (Wallis, 2008):

- Understand customers perception on your organization and whether the expectations are met through performance;
- Identify improvement areas where performance will produce the greatest value in customer satisfaction;

- Establish goals on how to improve service and monitor progress;
- Set a target performance different from competitors;
- Increase profits through improved service providing and retention.

Wallis states that "one of the best ways of determining customer expectations and measuring satisfaction (the two essential elements in determining satisfaction) is through focused post-purchase research – usually undertaken by completion of a survey questionnaire". Few tips for conducting a survey are presented below (Wallis, 2008):

- Measure reality get to know what products and services customers actually use, and how they use them;
- Ask from your customers' what are their needs;
- Listen carefully and ask product related questions;
- Try different research methods surveys, interviews, observation, etc.;
- Solve problems by using customers experiences;
- Develop simple forms for complaints and compliments and take results with seriousness;
- Measure regularly, to see results.

Improvement of customer satisfaction in companies requires usage of measuring methods that need to provide how current market situation is expressed and what are the needs and wishes of customers. Two basic approaches to satisfaction measurement at company level are: Qualitative or explorative research, which has subjective character and experimental habit; and Quantitative research, which is more objective and usually has precise consideration. Both approaches are equal, significant and applied in companies when measuring customer satisfaction, but have advantages and limitations. Selection of approach is conditional, with objectives of measuring customer satisfaction and specifics known to research provider. (Maričić, Veljković, & Đorđević, 2012)

In qualitative approach the most frequent methods of measuring customer satisfaction are in depth interview and focus groups, while most popular quantitative approach is sending out questionnaires. Many other measuring methods and techniques have also been developed with elements of above mentioned methods at its core. The basic advantage in applying qualitative approach for measuring customer satisfaction is experiences of customers using products or services. (Lesley and Lamping, 2000) "SERVQUAL" is a well-known detailed method to measure customer service quality, developed by Parasuraman, Zeithaml and Berry back in the 1980s. Sometimes referred as to RATER score, it is scale, which measures gaps in customer service by comparing customer expectations and perceptions of already received service. This model will be used as a main qualitative approach in this thesis with additional open-ended questionnaire as quantitative approach. Both methods are explained in the methodology second and third chapter, respectively. In the first methodology chapter, overview of APL as a company is presented.

2 APPLIED RESEARCH METHODS

In this chapter, author gives an overview of the APL background, services it provides and overall market position. The SERVQUAL method is explained properly in the second chapter, followed by overview of the customer satisfaction survey, which was sent out to APL Estonia customers.

2.1 Object of Research

American President Lines (APL) is one of the world's leading ocean carriers, which offers container transportation weekly services and call ports in over 70 countries worldwide. Providing container transportation through international shipping networks which combine high-quality intermodal operations with advanced technology and equipment, APL has more than 160 years of experience in shipping industry. (APL Company Overview, 2017)

Before becoming part of CMA-CGM, in February 2016, NOL published, that total revenue for 2015 was US\$6.021 billion, out of which a net profit was US\$707 million. One-time US\$888 million gain was from the sale of its APL logistics unit. Excluding it, NOL incurred a full year net loss of US\$181 million, an improvement of 30% over 2014. (APL Internal data, 2017)

The history of APL goes back to 1848, when APL's earliest predecessor, the Pacific Mail Steamship Company was incorporated. Initially providing steamship services across Pacific Ocean, company were one of the first shipping companies to embrace containerization in 1961, while in 1974 they launched their first fully containerized ships. In containerization industry, APL has introduced many technological innovations (APL History, 2017):

- Opened first container train service by linking port cities within the U.S in 1979;
- Introduces the 45-foot container in 1980;
- Pioneered "stacktrain" and container tracing technology in 1984;

- Introduced the first 53-foot container for U.S. domestic use in 1989;
- Launched industry's first website and offer online shipment transactions;
- Pioneers online shipment transactions via the Internet in 1996;
- First shipping company to install real-time container locating system using Radio Frequency Identification (RFID) in 2005;
- First container shipping line to use cleaner-burning, low sulphur fuel in 2011.

In 1997, APL was bought by Neptune Orient Lines, Singapore-based global container shipping company. Twenty years later, in 2016, APL and NOL became subsidiaries of CMA-CGM, French global container shipping company. Starting from April 2017, when Ocean Alliance will activate, APL will offer 38 loops and enhanced existing global network of over 70 services. With more port calls and port pairs served at additional frequencies, customers can now expand their businesses into new markets with greater speed and reliability. On Figure 8 are shown APL largest service loops, provided globally. (APL, 2017)



Figure 8. APL service loops. Source: (APL, 2017)

Apart from container leasing and transportation services, APL continues to offer own exclusive suite of products and services, and maintaining strengths in the following areas (APL, 2017):

- APL Owned Global Gateway South terminal in Los Angeles Offering dedicated on-dock rail, intermodal and landside operations exclusive to APL customers;
- U.S. Flag Vessel services Available for U.S. flag impelled shipments;
- SMARTreefers Reefer containers provide precise temperature, humidity and atmosphere control for perishable cargoes;
- Hazardous Cargo Full regulatory and compliance support for all hazardous freight;
- Project and Over-sized Cargo Out of Gauge (OOG) and special cargo handling, including special projects and break-bulk shipments.

APL has offices all around the world. In Estonia, its own office was opened in 2006 after having agency presence since 2000. Due to its open business environment, geographical location and language skilled people, APL Estonia office has one of the six Global Shared Services Centers, providing many supportive functions to APL local offices in Europe. On Figure 9 are shown the current organization chart of Estonian office. From January 2016, the local front office was closed and moved to Poland. This was part of cost reduction process, where all Baltic and Scandinavian, except for Sweden, local offices were relocated to one office in Poland. (APL, 2017)



Figure 9. Organizational chart of APL GSSC Europe. Source: (APL, 2017)

On Figure 7 is shown local APL GSSC internal structure. The head of local office is director, who has five managers reporting directly to her/him. Managers of Customer Claim or Process Improvement & Training do not have their own department, while managers of bookings and customer support; operations and sales and AR support have more subdivision. These departments deal with following tasks:

- Bookings Creating and updating bookings in the system;
- Customer support advise customer of arriving ocean vessels, prepare invoices and issue them to customers;
- Equipment update container information in the systems, prepare redelivery details for empty containers and resolve EDI (Electronic Data Integration) issues.
- Transshipment Connect arriving container from Asia or America with feeder vessels, heading to smaller port of Europe;
- Gateway Prepare loading list for containers to be loaded onto ocean vessels, prepare required manifests and make sure all planned containers are loaded or follow up if not loaded and find out best solutions;

- Sales & Trade support insert rates into APL systems;
- AR support When customer disputes their invoice, accounts receivables investigate who is responsible customer or APL, by finding valid proof from internal systems;
- Customer claim/lawyer Deals with legal representation if issues/disputes deepen.
- Process improvement and Training Creating/analyzing performance reports and creating training material;
- Other departments, whose direct managers are not located in the Tallinn, but instead in London or other Europe capitals.

In total there are more than 250 employees currently under APL GSSC contract.

Required customer service	Customer service tasks	Customer service	
skills		requirements to company	
Must be accessible,	Receive and place	Employees need to have the	
knowledgeable and courteous	purchase orders and	latest and most accurate	
	confirm sale/buy prices	information about products	
		and company policies	
Have an excellent listening	Coordinate shipments	Providing up-to-date	
skills	with carriers	information	
Willingness to compromise to	Communicate with	Periodic assessment of	
reach a resolution	customers	customer service is essential	
Train in conflict resolutions	Forecast, gather, input	Send out surveys to customers	
	and coordinate inventory	to provide feedback	
Speak clearly and slowly while	Enter data and compile	Maintain and update system	
maintaining a calm demeanor	invoice for billing	database for comfortable	
		usage	

Table 1. CSR required skills, daily tasks and CSR requirements to company

Source: Author's combined table based on CSR job requirements in APL. Source: (APL, 2017)

The APL local front office was also part of APL GSSC before relocating to Poland in January 2016. Front office consists from customer service representatives, sale persons, documentation persons and their manager. Customer service representatives (CSR) are communicating with the customers on daily bases and must maintain high quality of service. On above Table 1, author of thesis has combined a table, showing required customer service skills, their daily tasks are and what company must provide to their CSR in order to keep customers satisfied.

Since repositioning, only one sales person remained in Tallinn, and according to him, local front office did not perform any customer satisfaction surveys in the past. Only available reports are annual performance reports, which APL stores as internal data. Performance reports include turntime data about how fast was certain tasks completed. Most important task is creating booking in the APL system and confirming them back to customer. Each customer has agreement how fast bookings should be done. The types will be explained later in "Internal Data" chapter.

Analyzing internal data is not sufficient to understand the customer satisfaction level and thus, additional methods need to be considered. Author has chosen SERVQUAL model, combined with open-ended questionnaire, to conduct survey and find out what are customers' expectations and overall satisfaction level among the APL Estonian customers. These methods will be explained in the next chapter.

2.2 Applied Research of Methods

2.2.1 SERVQUAL

The original SERQUAL model developers Parasurman, Zeithaml, and Berry published in 1985 an article "A Conceptual Model of Service Quality and its Implication for Future Research" in a Journal of Marketing. They attempted to reveal the importance of the service quality, by explaining that it has not been defined and researched before. Besides, the product quality and service quality rose to the consumer relevance during the 1980s, when customers demand on better quality was higher than ever before (Parasurman *et al* 1985).

Despite the growth of the service sector, only few academics researchers have attempted to define and model quality because of the difficulties involved in delimiting and measuring the construct (Parasurman *et al* 1985). Parasurman *et al* attempted to rectify it in article by setting four objects (Ibid):

- Review the few number of studies that have focus on service quality;
- Report insights obtained from the exploratory investigation made of quality in four service businesses;
- Develop the model of service quality;
- Offer propositions on future research about quality.

After examining previous studies, Parasurman *et al* pointed out, that service quality has seen discussed only in few of them (e.g. Gronroos 1982, Lehtinen 1982, Lewis and Booms 1983). From these writings, he presented three notes:

- Consumers have more difficulty to evaluate service quality than goods quality;
- Comparison of consumer expectation with actual service performance defines a service quality perception;
- Quality evaluations are made on outcome of a service and evaluation of the process of service delivery.

Additionally, these studies pointed out, that unlike goods quality, which can be measured objectively by such indicators as durability and number of flaws (Crosby 1979, Garvin 1983), service quality is abstract and elusive construct because of three unique features to services: intangibility, heterogeneity, and inseparability of production and consumption. Academics like Bateson (1977), Berry (1980), Lovelock (1981) and Shostak (1977) point out that "*most of the services are intangible*". (Parasurman *et al* 1985)

Parasurman *et al* give three explanations; first, services are performances rather than objects. Few years prior the publishing the paper, Zeithaml alone cited that "*most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality*". Because of tangibility, corporate may find difficult to understand how consumers perceive their services and evaluate service quality (Ibid).

Secondly, services which have high labor content are heterogeneous. That means, the performance between producers varies, and so does it between customers, and also from day to day. Parasurman *et al* continue by stating (Booms and Bitner (1981) "*the consistency of behavior of the personnel is difficult to assure because what firm intends to deliver may be entirely different from what consumer receives*". The third statement is that many services include production and consumption, which are inseparable. Service quality is not

manufactured nor is intact to product, but according to Lehtinen (1982), occurs during the delivery of the service, usually between the client and firm's contact person. (Parasurman *et al* 1985)

Parasurman *et al* go on by revealing from previous studies, that those researchers and managers of the service firms coincide jointly that service quality involves a comparison of expectations with performances. Parasurman *et al* state the Lewis and Booms (1983): "*the service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis*". They also point out that Gronroos (1982) developed a model in which he contends that customer compare the service they expected with perceptions of service they receive in evaluating service quality. (Ibid)

After the previous researched were studied and analyzed, Parasurman *et al* conducted a exploratory qualitative study, mainly because the literature on service quality was not rich enough at that time to provide a firm conceptual foundation to investigate the concept of service quality. In-depth interviews of executives in four nationally recognized firms along with the focus group interviews of customers were performed, with questions asked (Ibid):

- What do managers perceive to be the key attribute to service quality?
- What do customers perceive to be the key attribute to service quality?
- What problems and tasks are included to provide high service quality?
- Do discrepancies exist between the perceptions of consumer and service marketers?
- Can consumer and service marketers' perceptions be combined?

From these interviews, even though perceptions about service quality were specific to industry, there were lots of commonalities which dominated. Such prevail is encouraging for developing a general model of service quality. Parasurman *et al* summarized the most important insight gained from the research with following statement: "*A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality. (Ibid)*

To better understand this re-correlation between service quality perceived by consumers and gaps occurring on the marketers' side, Parasurman *et al* needed to investigate the perceived service quality components. Their focus group revealed that consumers use

similar criteria in evaluating service quality regardless of the service type. These criteria seem to fall into 10 key categories which are labeled "service quality determinants" (Parasurman *et al*, 1985):

- **Reliability** by being consistent and dependable. Performing the service correctly for the first time, by keeping it promises;
- **Responsiveness** of employees, by willingly providing the service. Performing service in timeline and without irrational delay;
- **Competence** of the employees, possessing the required skills and knowledge to perform the service;
- Access to easily approach the service provider;
- **Courtesy** involves most sincere behavior of contact personnel;
- **Communication** means keeping customers informed in language they can understand and listening to them. Company's willingness to adjust its language for different consumers;
- **Credibility** involves trustworthiness, believability, honesty, by having the customer's best interests at heart;
- **Security** is the freedom from danger, risk, or doubt;
- **Sensing the customer** with making the efforts to understand the customer's;
- **Tangibles** include the physical evidence of the service like facilities; personnel; tools or equipment used to provide the service.

Parasurman *et al* combined the components of service quality and created a whole new model (Figure 11). The result was that perceived service quality is comparison of expected service with perceived service. (Ibid)



Figure 11. Determinants of Service Quality (Parasurman, Zeithaml, Berry, 1985).

In 1988, Parasurman *et al* published a new article "SERVQUAL: A multiple Item Scale for measuring consumer perceptions of service quality". As the article topic states, the scale was to measure service quality, by using 10 dimensions presented and explained in first Parasurman *et al* article. Each dimension had 9-10 items explaining the case, all together, 97 items was generated. Each item was recast into two statements – one to measure expectation and one to measure perception. Each item needs to be answered by responded from 1 = "strongly agree" to 7 = "strongly disagree" scale. (Parasurman *et al*, 1988)

Parasurman *et al* combined some dimensions, so only 5 dimensions were left. First three dimensions – tangibles, responsiveness and reliability, were taken from the initial determinants of service quality, while communication, credibility, security, competence, courtesy, understanding/knowing customer and access were combined to form last two dimensions – assurance and empathy. These new five dimensions are shown on Figure 12. Out of first proposed 97 items, in the end, only 22 remained. The reason for change was that some items did not contribute at all to the gap or instead, their impact on the result was too steep. (Ibid)



Figure 12. Determinants of Service Quality (Parasurman, Zeithaml, Berry 1988)

The 22 items were divided by the 5 dimensions and each modified accordingly:

- Tangibles: Physical facilities, equipment, and appearances of the firm personnel (4 items);
- Reliability: Ability to perform the promised service accurately (5 items);
- Responsiveness: Willingness to help customers (4 items);
- Assurance: Competence of employees and their ability to convey trust and confidence (4 items);
- Empathy: Providing caring and individualized attention to customers (5 items). (Ibid)

Final form of the SERVQUAL, since it was modified in 1988, has been widely used for the analysis of service quality (by Turner, Beinstock, Reed, 2010). Many academics have found SERVQUAL model to be good service quality measuring scale, while there are also criticism surrounding the model. Author of this thesis has combined some positive and negative feedback from various researches and combined them into table shown on Table 2. Table 2. Positive and negative sides of SERVQUAL scale

Authors who found SERVQUAL positive	Authors who found SERVQUAL negative	
Mainframe software industry research by Pitt	Bresinger and Lambert (1990) used	
et al. (1996) found that the instrument's	SERVQUAL on motor carriers'	
reliability and validity scored well with only	transportation services and found the	
discriminate validity being problematic;	instrument have inferior predictive validity.	
Young and Varble (1997) used the	Nyeck, Morales, Ladhari, and Pons (2002)	
SERVQUAL scale successfully to examine a	concluded that the major difficulty with the	
purchasing department;	use of the model was the researchers" failure	
	to validate the instrument used.	
Farley et al. (1990) used the SERVQUAL	Johns and Tyas (1997) found evidence that	
approach effectively to measure the service	there is a high level of randomness among	
quality perceived by customers of a	scaled perceptions using the SERVQUAL	
manufacturer with multinational	approach. They suggest that a much more	
manufacturing locations.	effective approach would be to use a critical	
	incident analysis where customers are	
	interviewed during the provision of the	
	service;	
	Carman (1990) and Babakus and Boller	
	(1992) recommend revising the SERVQUAL	
	scale by combining the expectations and	
	perceptions into a single question.	

Source: Authors combined table.

In shipping industry, there are evidently only few researches done to study customer satisfaction level, not to mention doing this by using SERVQUAL model. According to Thai, Slack (1985) was one of the first scholars who examined the criteria about how shippers chose shipping port. The options which were included are: size of port, port equipment, and proximity of port, port charges, port security and congestion. Multiple Studies by Murphy *et al.* (1989, 1991 and 1992) showed that when freight forwarders choose carriers and shipping ports, the most important facts are – shipment information, equipment availability, damage performance and convenient pick-up and delivery time. (Thai, 2008)
Thai continue in the same article by stating Frankel (1993), who found nine criteria, which indicate the major quality concerns among liner shipping services. These are availability; delivery time of service; reliability of service; security and maintenance; cargo tracking; documentation and information flow; cost management; service status control and intermodal management. (Thai, 2008)

Thai also states Franceschini and Rafele (2000), who compared traditional logistics service quality attributes with service dimensions defined in SERVQUAL for logistics services in manufacturing. They suggested that "service quality attributes can be categorized through the Kano model, however, there is no any specific example, in the literature, of the integrating the Servqual, Kano model and quality function deployment in the logistics sector". (Ibid)

Durvasula, Lysonski and Mehta published article "Testing the SERVQUAL scale in the business-to-business sector: The case of ocean freight shipping Service" in 1999, which was based on a survey of a cross-sectional sample of 114 business organizations in Singapore, which regularly utilize ocean freight services for their export needs. They revealed that SERVQUAL may be better represented by a more parsimonious (i.e. three-dimensional) factor structure, but summed up the research, by stating following: *"The service quality measures developed for consumer services can only be applied with caution in business-tobusiness marketing. The findings of this study raise a concern about the ready extension of the SERVQUAL scale to the industrial setting. Because of differences between consumer and industrial characteristics, it is likely that the instrument needs to be specifically tailored to the industry under investigation.*" (Durvasula, Lysonski and Mehta, 1999)

Therefore, SERQUAL scale is indeed widely used, and statement by Nyeck, Morales, Ladhari, and Pons is accurately valid to sum up the chapter: *"The popularity of SERVQUAL* [the service quality model] with researcher can be explained mainly by its ease of use and by its adaptability to diverse service sectors. Even if certain researchers have only retained the concept of gap analysis as operationalization of perceived service quality, it appears that the SERVQUAL model remains the most complete attempt to conceptualize and measure service quality". (Nyeck, Morales, Ladhari, and Pons, 2002)

2.2.2 Open-ended questionnaire

Questionnaires are usually related to quantitative research methods, which approach implies examination of a larger number of subjects (customers). In order to avoid the subjectivity of examiner, by eliminating impacts such as demographic, socio-economic or psychological factors, it is suggested to use quantitative approach. When conducting research for marketing analyses, quantitative approach fundamentally provides most reliable information. The biggest insufficiency quantitative approach has, it that when researching customer satisfaction, the reliability of information depends on the questionnaire used for performing the examination. (Lesley and Lamping, 2000)

There is no standard procedure or blank questionnaires to use, when measuring customer satisfaction at corporate level. These have to be created separately and for each research there should be different questionnaire. Such process increases the possibility of error in estimating the satisfaction level. Additionally, it is difficult to motivate customers to complete the questionnaires, by being honest, precise and comprehensive in quantitative approach. In order to get as precise results as possible, it is suggested to rely on combination of open-ended questionnaires (quantitative) and experience of customers (qualitative). (Ibid)

2.2.3 Internal data

One way APL tries to keep its customers satisfied is performing certain tasks on promised time. There is worked out macro program, which is called turntime. It activates and records time stamp once the email or EDI request is received from the customer. The most important turntime performance is about the created and confirmed bookings. These requests are sent via e-mails and EDI.

There is no available SLA (Service Level Agreement) for public presentation, but there are four types of booking examples:

- Bookings, which need to be created and confirmed within 1 hours;
- Bookings, that need to be created and confirmed within 2 hours;
- Bookings, which need to be created and confirmed within 4 hours;
- Special bookings, which need to be created and confirmed within 4 hours.

The turntime performance reports are conducted every period (month) and combined together at the end of each business year. There are two types of turntime performance reports – one report shows the amount of the bookings received and created, while the second one

shows the response rate for each country. The countries, like Estonia or Sweden, have only 100-200 booking request per month, and their response rate is better, and target is usually met. While countries like Germany and UK have booking requests over 1500 per month each and their response rate is lower.

Maintaining customers happy and performing requests on time is essential for increasing customer satisfaction. Annually, APL receives in Europe more than 100 thousand bookings, all created in Tallinn, and it is relevant to analyze the turntime performance of the created and confirmed bookings. The annual 2016 turntime performance report will be presented briefly in chapter 3.3.2, compared also with turntime of Estonian customers' requested bookings.

2.2.4 Author's survey

Author's survey, which was sent out to customers to measure customer satisfaction of APL Estonian customers, was combination on SERVQUAL model and open-ended questionnaire. First 10 questions were modified SERVQUAL statements to fit more to container shipping industry. Out of these 10, first 5 were regarding the overall industry expectations, while second 5 questions were modified regarding the customer services perceived from APL. These statements were as follow:

- **Tangibility** The Company uses up-to date and proper equipment (containers and/or inside office). The company's structures are visually appealing. The company's employees are well-dressed and clean. The company's physical structures are consistent with the type of service industry.
- **Reliability** The Company meets the deadlines and delivers promised service. The company is sympathetic and reassuring, when the customer has problems. The company is dependable and confident. The company provides their service(s) at the times promised. The company keeps their records accurate and correct.
- Responsibility It is normal to not tell the customer when the service will be performed. It is not reasonable to expect immediate service from employees. Employees do not have to be available to help customers. It's normal to be too busy to respond on-time to customer requests.

- Assurance Employees should be trustworthy. Customers should feel safe when transacting with employees. Employees should be polite. Employees should get adequate support from the firm to do their job well.
- **Empathy** Companies should not be expected to give each customer individualized attention. Employees should not be expected to give each customer individualized attention. It is unrealistic to expect employees to fully understand the needs of the customer. It is unreasonable to expect employees to have the best interests of the customer at heart. Firms should not necessarily have to operate at hours convenient to all customers.

Above 22 statements were asked in expectations form and perceived form. In expectation form, customers had to answer on scale 1 to 7 (Where 1 was "strongly disagree" and 7 was "strongly agree"), how relevant are statement to contribute to the successful business transactions in container shipping industry. In perceived form, customers had to answer on the same scale, from 1 to 7, how they feel APL customer service is operating in container shipping industry.

Following these statements, customers were asked to answer to 8 open-ended questions. First question was related to SERVQUAL scale, were customer had to divide 100 points between 5 dimension of the scale (reliability, tangibles, responsiveness, assurance and empathy). This question was asked to learn more on how important each dimension is for each customer. In order to determine, which type of service customer use, the 12th question was "Do you use APL services for export, import or both?". Next 6 questions were related to APL operations and are presented below:

- Did the repositioning of APL Estonia local front office to Poland have an impact on your business transactions with APL? If so, was it positive or negative or both?
- Did the merging of APL and CMA CGM have an impact on your business transactions with APL? If so, was it positive or negative or both?
- Please describe the situation where Your received service was below than expected.
- Please describe the situation where Your received service was more than expected.

- What is Your opinion on what is APL doing right and what is APL doing wrong?
- What are your suggestions on how to improve the business transactions between your company and APL?

Survey was sent out to all APL Estonia customers. They were asked politely to find about 10-15 minutes to answer to the survey. In the beginning, customers were informed about the SERVQUAL model basics. The survey was conducted using survio platform, which is available on survio.com/, and the direct link to survey was included in the e-mail sent out to customers. They were also instructed that survey is strictly anonymous and won't have any impact on the business transactions between them and APL. The exact survey is in Appendix 1. The survey results and customer comments of the survey will be analyzed in the analyses chapter.

3 ANALYSES

In the analyses chapter, author of the thesis gives an overview of the received results from the conducted survey and points out the most important points. In second chapter, company internal data will be presented and in third chapter, suggestions for improving customer service in APL and limitations for conducted survey will be presented.

3.1 Findings from the survey

In the present chapter, the author first interprets data received from the conducted survey. The aim is to find out the gaps and weakest points in the customer service provided by the APL. Overall gaps are compared with the gaps of customers who use APL services for only import services and customer who use for both – export and import services. In second chapter, the internal data of the APL is analyzed and in third chapter, suggestions for improvements are made.

The survey was sent out to all APL Estonian customers, 35 in total. Customers received the survey in the middle of the March, and were asked to provide feedback by the end on the same month. In the survey, there was a question, which asked customer to point out if they use APL services for import, export or both, as it is unknown to author of this thesis. 21 answers were received, from which 12 customers marked that they use APL services for only import and 9 customers use it for both, export and import (Figure 13). In overall, the response rate for this survey was 60%, which is clearly not the best, but still above the average.



Figure 13. Estonian customers of APL (Survey result).

It is relatively import to say, that platform, which was used as a survey website, is able to track if survey has been started. From there, it was seen, that around 20% of customer, who started the survey, did not complete it. Author thinks that it could mean two things: a) customer zone of tolerance is low and b) survey structure was not expected to be as SERVQUAL model. Low zone of tolerance means customer basic expectations are to receive service on time and in expected form, especially for import customers. They are not interested in providing feedback, when it comes to customer satisfaction. Additionally, SERVQUAL model is not common method to measure customer satisfaction in logistics or maritime industry. Nevertheless, the survey results showed important and valuable data, which will be analyzed in below paragraphs.

In the first part of the survey, customers were asked 22 statements about their expectation for container shipping industry and 22 statements regarding their perceived service with APL. They had to rate services on scale from 1 to 7 – strongly disagree to strongly agree – for each statement. Author of the thesis has combined the results into a chart, shown on Figure 14. Comparison includes each SERVQUAL dimensions, its expectation score and perception score, which are differentiated by import customers, export/import customers and overall score.

From the basic gaps, it can be concluded that assurance is clearly the most highly expected dimension, with expectation score being over 6.00 points, without out fluctuating between customer types. In contrary, the assurance perception score is only slightly above the 5.00 points, which makes the overall gap -1.00. Expectations for tangibility, reliability and responsibility are higher than perception, but not by a big margin. Empathy shows the least expected score with overall being a bit lower than 5.00 points and perception being over 5.00 points. The perception score of responsibility for import customers was the only other dimensions to receive below 5.00 point score.



Figure 14. Importance of dimensions (Survey result).

Table 3. Overall gaps from conducted survey

	Import customers	IM/EX customers	Overall
Tangibility (average)	0.08	-0.18	-0.03
The APL uses up-to date and proper equipment			
(containers and/or inside office)	<mark>-0.78</mark>	-0.29	-0.56
The APL uses structures that are visually			
appealing	0.11	0.00	0.06
The APL employees are well-dressed and clean	<mark>0.78</mark>	-0.43	0.25
The APL uses structures that are consistent with			
the type of service industry	0.22	0.00	0.13
Reliability (average)	-0.69	0.09	-0.35
The APL meets the deadlines and deliver			
promised service	<mark>-1.00</mark>	0.14	-0.50
The APL is sympathetic and reassuring, when the			
customer has problems	-0.44	0.14	-0.19
The APL is dependable and confident	-0.67	-0.29	-0.50
The APL provides their service at the times			
promised	<mark>-0.89</mark>	0.29	-0.38
The APL keeps their records accurate and correct	-0.44	0.14	-0.19
Responsibility (average)	-0.56	0.11	-0.27
The APL does not tell the customer when the			
service will be performed	-0.56	-0.14	-0.38
The APL does not reasonable to expect immediate			
service from employees	<mark>-0.89</mark>	0.29	-0.38
The APL employees do not have to be available to	0.50	0.00	0.44
help customers	-0.78	0.00	-0.44
The APL employees are always too busy to	0.00	0.20	0.12
respond on-time to customer requests Assurance (average)	0.00 - <mark>1.06</mark>	0.29 -0.93	0.13 -1.00
The APL employees are trustworthy	<mark>-1.44</mark>	-0.57	<mark>-1.06</mark>
The APL employees can perform secure	0.50	<mark>-0.86</mark>	0.00
transaction with its customers	-0.56		-0.69
The APL employees are polite	-0.22	-0.71	-0.44
The APL employees do not get adequate support	0.00	1.57	1.01
from the firm to do their job well	-2.00	-1.57	- <u>1.81</u>
Empathy (average)	0.00	<mark>0.97</mark>	0.43
The APL does not give each customer individualized attention	-1.00	1.14	-0.06
The APL employees do not give each customer	-1.00	1.14	-0.00
individualized attention	0.00	1.00	0.44
The APL employees do not understand the needs	0.00		0.11
of the customer	0.67	1.14	0.88
The APL employees do not have the best interests			
of the customer at heart	0.33	0.71	0.50
The APL does not operate at hours convenient to			
all customers Source: Author's compilation table based or	0.00	<mark>0.86</mark>	0.38

Source: Author's compilation table based on survey results

The overall results of the gaps, which are presented in above Table 3, show that in total, 4 out of 5 dimensions, tangibility, reliability, responsibility and assurance had a negative gap. Statements marked with red layer have a negative gap above -1.00; with yellow layer have a negative gap above -0.75 and green layer mark a positive gap above 0.75. Empathy, which was also the least important dimension, had a positive gap. When compared the types of customers, there is evidently seen a difference in importance of the dimensions. For example import customers had negative gap in reliability, responsibility and assurance, with empathy being zero. Export/import customers in contrary had only negative gap in tangibility and assurance, while reliability, responsibility and empathy were positive. The gaps does not mean the customers are unhappy or provided service is inadequate, but shows the fields were overall customer service can be improved. Positive gaps show that company is already doing a great job and current customers are appreciating it.

In order to understand better the gaps, each dimension will be analyzed subsequently. When interpret, there can be seen some similarities and variations between dimensions. For tangibility, the only negative gap was about proper and up-to-date equipment. As customers were advised that they can rate also the containers physical appearance, author believes that negative gap is related precisely to insufficient availability of containers. Damaged, smeared and unclean container can leave customer unsatisfied and they may request a swap of containers or charge container owner for greasing the cargo it holds. Additional movements also take time and add costs for both parties. Hence, the clean and proper container is what customer expects to receive, both, when it arrives from overseas and when customer picks it up as empty from depot. Other tangibility statements were positive in overall, which is satisfying result.

Regarding the reliability, negative gap is quite wide for import customers, while for export/import customers it is positive. The common negative gap was for statement regarding firm being dependable and confident. Some customers stated that "when we contacted the customer service, it felt like talking to someone anonymous". On other occasions, customers couldn't get their containers from the terminal because terminal was not pre-advised or mandatory documentation wasn't processed. Author thinks this negative gap is related to meeting deadlines, which should be essential aim in order to keep customers satisfied.

The gaps in responsibility mirror slightly the reliability. The gaps for import customers were negative, while export/import customers were positive. The common negative gap was

that customers are not advised when the service will be provided. This draws some lines with releasing the container or receiving bills, documentation or manifests for customs. Customers stated that "we are not being advised when certain event will happen" or how can they help to accelerate the process. As responsibility is more related to time, and it can be said that if the import customer receive it as soon as possible, they are more satisfied than if they have to wait. Some export/import customers stated few positive facts, for example that "good thing is that APL bookings can be done in advance for many weeks". This gives time to prepare the container and release it on time.

When it comes to assurance, the negative gap is revealed from each statement, and for both types of customers. The gaps are not only negative, but it peaks almost to -2.00 points, which is clearly a huge gap. In such statement, customers think that employees of APL do not get the support from the company to do their job well. There were also some positive comments, but almost each customer added additional negative comment regarding the customer service they receive from APL.

Empathy was the most positive dimension. It received only one negative gap. There were two similar statements, one was from regarding the individualized attention customers receive from APL and other was regarding the individualized attention customers receive from employees. The negative gap was for import customers regarding the individualized attention customers receive from APL, while the gap from employees was neutral. All other gaps were positive, some even over 1.00 point, which shows that company itself generates positive aura in order to keep internal and external customers happy.

Following the 44 statements, from which 22 were regarding expectation and 22 were regarding perception, customers were asked to distribute 100 points between 5 dimensions of SERTVQUAL, to understand their importance. On Figure 15 is shown overall importance. It is seen, that most important is reliability, with a bit less than a 1/3. Next are tangibility and responsibility with 22% and 19% respectively. Assurance, which has negative gaps for both types of customers, holds only 17%, but clearly the most problematic area and empathy, which has mostly positive gaps, is least important with 11%.



Figure 15. Importance of dimensions (Survey result).

When compared the overall importance of dimensions with types of customers, it can be seen that three least important areas are quite the same, while tangibility and reliability vary from types of customers. The import customers rate reliability as most important dimension with 33% and remaining four ranges between 20-12%. Export/Import customers rate importance of tangibility and reliability for 27-28% and other dimension are set between 19-10%. The comparison is shown on Figure 16.



Figure 16. Comparison of importance of dimensions (Survey result).

The importance of each dimension also reflects in the weighted gap, which is calculated by multiplying percent of dimension with dimension gap. On Figure 17 is shown overall gaps, before the importance of dimension is added. The average un-weighted gap score between all dimensions is drawn as a line, to show if the each dimension gap is below or above it.



Figure 17. Comparison of un-weighted gaps between dimensions (Survey result).

It can be seen that, tangibility overall gap is below average, and so it is for both types of customers. Reliability on other hand shows that overall gap is a bit over the average, import customers' gap is seen to be above it by 1.00 point, while export/import customers gap is positive. Responsibility gap is similar as for reliability. Assurance is the most problematic dimension, which is also reflected on the chart. Gaps are clearly huge compared to the average. As for empathy, then import customers gap is not showing due to being zero, while export/import and overall are positive and hence being clearly above the average.

When the dimension importance is multiplied with the un-weighted gap score, the results also reflect on the chart (Figure 18). The pattern stays the same, only the gap scores increases. Due to reliability being most import as overall and as for import customer, the gap increases relatively. Gap of the tangibility still remains below average and so does it for responsibility. The gap of the assurance also increases rapidly into negative, while empathy increases more into positive gap.



Figure 18. Comparison of weighted gaps between dimensions (Survey result).

The -22.5 gap in reliability or -17.5 gap in assurance doesn't mean the customers are extremely unhappy or furious, but shows how underperformed is customer service in APL in particular dimensions and need immediate attention. By improving these regions, customers' trust can be regained. Based on the overall results, it can be said, that SERVQUAL method can be used to measure customer satisfaction level in container shipping industry, though the results do not reflect exact customers' satisfaction level when compared to answers from open-ended questionnaire.

In contrary, some customers took longer time to complete survey and their answers to open-ended questions were also comprehensible and explicit. Author combined open-ended questionnaire from 6 questions. These questions were presented at the bottom of the survey. Customers were advised that if they are not willing to answer to them, they can leave fields blank. It was done in order to not drive customers away from completing the survey as they may be sensitive regarding personal questions. Below is combined listing of presented questions and customers answers or suggestions to them. First question asked was "Did the APL Estonia local office repositioning to Poland have an impact on APL customer service level? If so, was it positive or negative or both?" In January 2016, all Scandinavian and Baltic local offices were located to Poland in cost cutting process. Hence, customers were asked about their response. Results show, that from 16 customers, 11 stated that the impact was negative, while others had no impact. The main reason for negative impact was the language barrier. Even though the language used in container shipping industry is English, "local touch" was missing after the repositioning. Some added that now it is harder to get in contact with customer service in the morning hours (Poland has one hour difference).

A second question was similar to first one, only about the merging of APL and CMA CGM fleet, which took place from 1st of July 2016. To question "Did the merging of APL and CMA CGM have an impact on your business transactions with APL? If so, was it positive or negative or both?", most customer stated as "no impact". Few customers answered as negative impact, stating that APL customer service level is higher than it is in CMA CGM. In authors opinion, this answer also confirms that in shipping industry, customer are using APL's competitors services, and thus customer loyalty is not as important as customer satisfaction. One export/import services using customer states that "the merging was positive because of the availability of the empty containers". Due to CMA CGM stock being as twice as big as it was for APL, customers do not have to wait weeks in line to get the containers.

Next question asked about positive experiences customer have had with APL customer service. To "Please describe the situation where Your received service was above than expected.", half of the customers left field blank or answered "no experience". Even though Estonians as considered as cold and senseless nation, this is still worrying point as there was relatively few positive feedbacks. This, of course, does not mean customer service is not performing at their best, but should convince management to consider some changes in near future. On contrary, customers praised the local sales person (the only one left after reposition to Poland), who is mostly dealing with rates and documentations. Apart from customer service, customers value the rates APL is offering in Estonia and that bookings can be created for future month, while competitors offer only for few weeks.

When asked "Please describe the situation where Your received service was below than expected.", customers response rate was 75%, meaning 12 out of 16 customers had negative experience. Out of these, 8 customers had issues with release of the import container.

This issue reflects also on SERVQUAL gap, where import customers' reliability and assurance was awfully negative. Customer state that "release of the goods took 2 days, when we were expecting to receive container right after vessel discharge". Similar issue was with documentation not being ready on time and when contacting customer service, the response came from someone "anonymous" and issue was not solved until next day. Such issues fall into four dimensions of SERVQUAL – responsibility is taking too much time, reliability is poor, assurance not provided on required level, while empathy leaves negative substance. Few customer, who had no negative issues shows that there is some positive essence in customer service, but on restoring it to the level it was before repositioning, takes a lot of time and effort. Thus, management has to view on this issue with high importance.

Apart from already perceived experiences, customers were asked a general question about their opinion about customer service. To "What is Your opinion on what is APL customer Service doing right and wrong? ", most common answer was "closing local office was wrong". Customers were unhappy with people who now represent the APL as they are "unknown" and "not friendly". Few customers stated, that ,,before the repositioning, the local customer representatives' approach was more personal, which is clearly missing now". In addition to customer service, customers were unhappy with the feeder connection services between Estonia and Netherland, while merging with CMA CGM is stated again as a "right thing".

For the last question, customers were asked "What are your suggestions on how to improve customer service between Your company and APL?". Most common answer was again "local representative is necessary". Hence, it can be concluded that local office is necessary as customer want to communicate without barriers and doing it on local language as it is more comfortable.

To summarize the conduct survey analysis, it can be confirmed, that the present gaps are showing the customer satisfaction level as insufficient. Collected data and asked openended questions have similarities which show the downgrade, but the huge gap in assurance of reliability does not mean the actual service is awful. It is important to go on with analyzing the negative gap and implement necessary measures to improve it. The suggestions, which author presents on how to improve customer service quality, are presented in chapter 3.3.3, while in next chapter a brief overview on turntime performance is given.

53

3.2 Internal data integration

Even though APL does not perform customer satisfaction surveys among its customer, meeting deadlines, internally and externally, is strict policy to follow. Most common way to keep customers satisfied, once the agreement has been made, is to create bookings on time. Booking requests are received via e-mails or EDI.

On Figure 19 is shown annual turntime of booking creations, target percentage and total amount of bookings created in Europe. From there it can be seen, that orange area is percentage of bookings that were created within 2 hours; blue area is percentage of bookings that were created within hours and green area show how much of percentage bookings were created within more than 4 hours. The target percentage, which is 95% and is presented as dark red color line, is only met between 50-75% of created bookings. Less than 4 hours reaches above the 80%, while other 20% is created within more than 4 hours.



Figure 19. Booking turntime and amount of 2016. Source (APL, 2017)

Analyzing the chart, it shows that during the January and February, bookings are created faster and within 4 hours in total up to 83%. This period is also known as ebb, when the amount of the requests begins to decrease. During the summer period, the shortage of staff means that the delay of booking creation is visibly sensed, but improves with the beginning of September. Then the amount of requests also increases, with December being the busiest month, after which the decrease begins again.



Figure 20. Turntime of Estonian bookings created. Source: (APL, 2017)

Considering, that overall turntime percentage is intermediate, Estonian customer should be happy with their feedback. When taking a look at Figure 20, which depicts how fast Estonian bookings are created, the overall result is positive. Out of 12 month, on seven occasions all bookings created were confirmed within 2 hours. Below 80% it fell only on JUL-SEP period. During the August, the amount of requests was the lowest and so was the percentage, but on contrary, it is also known as busy vacation period and often signifies a

shortage of staff. During the November and December the percentage was also beneath the target, but the amount of booking requests received then was also significantly higher. Apart from these months, requests were handled within the target hours.

Based on the internal data, it can be summarized, that booking creation turntime, which is set as a target 95%, is hard to meet. For Estonian customer, the target is met usually, except when it is relatively busy time, but the amount of the bookings received in Estonia is only 1% of the total amount APL receives in Europe. As the whole Europe is handled in Tallinn, smaller amount country's' bookings will be created and confirmed back to customer much faster than bigger countries.

3.3 Suggestions for improving customer satisfaction

Conducting customer satisfaction survey among APL Estonian customers presented author a great overview about customers' opinions about how APL is operating in container shipping industry. The overall results show some positive aspects, but there are many relatively deep issues, which need to be given an attention. Ignoring the negative gaps could only worsen the situation and hamper the market position.

The first noticed issue was that regarding statement about "APL uses proper equipment". As customers were advised to give a rating regarding the condition of containers they receive, the overall gap (for both types of customers) showed negative score of -0.56. The import customers score was even lower, as usually they receive container in bad shape, damage or leaked with salty water. Even though there is not much APL can do about the import container, author suggests advising depots to inspect the condition on empty containers more accurately. They are usually checked twice – upon arrival and before releasing to customer. These conditions should also be marked down as an official statement and forwarded to container owner.

For reliability, each statement had a negative gap, but only two statements were negative for both types of customers. Firstly, "The APL meets the deadlines and deliver promised service" was rated lowest, with gap being -0.5 overall and -1.0 for import customers. The issue is regarding the time it takes to process the documentations to terminal and customer. The longer it takes, the more affected are customers' next procedures. The other negative gap was also -0.50 and for statement "The APL is dependable and confident".

56

Some customer stated, that "I felt talking with someone anonymous when reached out to CSR". Regarding above issues, author suggests dealing with import customers on urgent basis and with high importance. If it feasible, then different staff should be appointed for import and export departments. It is important to understand customer issues and convince them that it is under progress.

Responsibility was also rated with multiple negative gaps. To combine them all, the problem was that "Service is not performed on time, customers are not advised correctly and employees are not always available". Author suggests keeping customers always on the line (having a contact). The problem many clients stated is that "they cannot reach the customer service when problem arise". The difference in time zones between Poland and Estonia, public holidays and working hours may also influence customers' satisfaction. As pointed out in the theory, the contact between customer and company should be initiated by customer service and not only by customers themselves. This way customer will feel that they are approached with the individual attention and feel more serve if their service is delayed for some reason.

Assurance had all four statements being rated as negative, and from both types of customers. Import customers had a gap of -1.44 for statement "The APL employees are trustworthy" and gap of -2.00 for "The APL employees do not get adequate support from the firm to do their job well". Export/import customers had a gap of -0.86 for "The APL employees can perform secure transaction with its customers" and -0.71 for "The APL employees are polite". As seen above, all statements had a clearly negative gap and are rated for employees of customer service of APL.

Author suggests that one of the most important ways to improve customer service is to perform regular trainings for staff of the CSR. As the customer service repositioned to Poland in the beginning of 2016, customers were left with dull impressions from CSR. By improving the skills and demeanor of the employees, it is possible to bring down the negative gap and regain customers trust. Additional way to improve rapidly customer satisfaction is to induct export sales person in Estonia. This may not be in the plans of the management, but many customers suggested that local representative is necessary.

To sum up all survey results, author presents below a bulletin of suggested performances, which could improve the customer satisfaction level:

• Conduct more regular, precise and formal container condition checking;

- Separate customer service into import and export customer departments;
- Working hours of customer service must be the same as in Estonia;
- Conduct regular training and process improvement tasks to increase customer service level;
- If feasible, consider hiring an export sales person in Estonia.

Author also suggests conducting customer satisfaction surveys among Estonian and other country's customers annually or twice per year, to know the level on contentment. Continuing with using SERVQUAL model could show the improvement points or if something have worsen, but considering other methods is also an option.

The main targets for following customer satisfaction survey could be:

- Maintain equipment checking and repairing, so the gap of the tangible could become positive (X>0, where X is a gap of tangibles);
- Improve reliability, by holding on to deadlines and providing immediate response to customer's inquiries, with the aim of gap target being not negative (X≥0, where X is a gap of reliability).
- Treat import customer with better relevance to bring down their dissatisfaction and increase overall responsibility level. (X≥0, where X is a gap of import customers' responsibility);
- Being more trustworthy and dependable, by reduce gap of assurance to be below -1.00 (X< -1.00, where X is a gap of assurance);
- Maintain or increase empathy, to build on customers' trust (X≥1.00, where X is a gap of empathy).

Reaching above targets could significantly increase customer satisfaction, but neglecting them may drive export customers away. Conducting similar survey is an option, but there are limitation and impediments in using SERVQUAL model as customer satisfaction measurement tool in container shipping industry. In next chapter, author of this thesis has provided some limitation which occurred before and during the conducting of the survey.

3.4 Research limitations

When conducting a research, there were not many limitations, but some occurred right away from the start and some appeared while conducting a survey. Available theory regarding customer service is vast and can be chosen between multiple sources, articles, books and publications. Methodology part had some limitation and analyses part also saw constraints. Nevertheless, it was still possible to conduct a research and survey, with final results being more than expected.

First limitation was that SERVQUAL model is not popular among the logistics nor maritime industry, using it as a customer satisfaction measurement method. There was even one available research paper which suggested not using SERVQUAL model in shipping industry as it is not precise about it results. One customer added a comment that this model is "boring and will not give the actual customer satisfaction results". From authors point, survey based on SERVQUAL was carried out without any obstacles and results were sufficiently reliable.

Limitation, which occurred while conducting a survey, was the actual interest customers had in answering to the survey. Even though, SERVQUAL model was explained and statements were clear and comprehensible, the response rate was below expected. Author gave customers a two week period to answer to the survey. Yet, the first week saw only 6 replies. Author then send the reminder, after which another 6 replies were received right away. As authors though customers neglect the e-mail, second reminder was send on the last day. Another 9 replies were received on the final day. Showing that the customers' interest in answering to such surveys is low, the reminders are necessary or sufficient number of the responses will not be received. It must be added, that 8 customers opened the survey, but did not complete it.

After the completing the research and drawing the final results, author thinks that SERVQUAL is valid model to use in maritime industry, but it is not popular as it is, which many academics indicate. Once the survey is conducted, it should be performed again in 6 to 12 month. This way customer may remember the model, and there may be a better response rate next time. Hence the negative gaps are visible in the SERVQUAL model, author still suggest combining it with additional few questions which may give more information about customers' expectations and their perceptions on already received service.

59

4 SUMMARY

The topic of the thesis was "Improving customer service quality in container shipping industry on example of APL Estonia". The main choice of the topic was that at APL, where author of this thesis works, has not been conducted a customer satisfaction surveys among the Estonian customers and therefore it is unknown how satisfied are the customers.

As a container shipping industry is vast and difficult industry, where millions of customers are looking out for lower rates for their cargo transportation, shipping companies play huge part in a supply chain management. To achieve customer satisfaction, customer service has to meet customer requirements and service representatives need to be trained staff and ready to help each customer with assisting on their requests of issues.

The problem of the research was that customer satisfaction is unknown at APL Estonia and APL GSSC. In order to find out customer satisfaction level, author presented following research tasks, with the general research aim to improve the quality of APL customer service:

- Analyze theoretical base of customer service; customer expectation; customer satisfaction and customer satisfaction measurement;
- Analyze SERVQUAL model scale and based on it, conduct a survey among APL Estonian customers;
- Based on survey results, point out weaknesses and troublesome areas in APL SSC customer service and make suggestions on how to improve customer satisfaction.

In a search of the solution, first author analyzed the different previous studies and identified basic concepts of customer service expectations and satisfaction. It appears that both attributes have been an object of study sine 1980s. The basic customer expectations are to receive the service in promised time and required form, while some customer expectations are much higher. Depending from the requirements, the satisfaction differs as well. In spite of the level of expectation or satisfaction, measuring how satisfied are the customer is important, because it plays huge role in business continuity and the profitability.

Measuring customer satisfaction is relatively easy and can be conducted using different methods, but not every company is using this option. Most common way to get to know customer satisfaction level is using a quantitative method or conducting a questionnaire, while qualitative method, like SERVQUAL model, is usually performed among smaller sample and is more profound. Author decided to use SERVQUAL model due to this method on two reasons, first, it is comfortable and easy to use, and second to know id validity, as it is not popular method to use in container shipping industry. To receive as much a possible valuable data, author combined SERVQUAL with open-ended questions.

The survey was sent out to all Estonian customers, to 35 companies in total. The response rate was 60%, with only 21 customers submitting the answers. Customers were divided into two groups; those who use APL services for import only, and those who use it for export and import services. The overall results show that customers' expectations are higher than services they receive. The gap was negative for 4 dimensions out of 5, with empathy being the only positive gap dimension.

The import customers' main negative response was for assurance and reliability, stating that they do not receive service when expecting and documentation process takes too much time. The inadequate areas were also personal service being void, as customer feel they are not being approached with warmth and kindness. They expect local representative is necessary for two reasons, language barrier and immediate response when needed.

Similarly, the export customers' main negative point was assurance, with main issue being the release of their containers and delay of the documentation papers. They also added that previous local office was kinder and always helpful and it is necessary to have it again. Tangibility was also negative dimension for export customers, which is usually related to availability and condition of the containers.

Addition to the SERVQUAL scale gap measurement, open ended questionnaire was added to get more data about what customer thinks present situation of customer service. Based on the survey results, author suggest below points to management of APL to consider:

- Consider re-appointing more local representatives;
- If above point is not feasible, appoint customer service representatives to each country and department separately;
- Opening hours of customer service should be like local hours, including public holidays;

- All kind of delays of services should be address to customers personally and initiated by customer service representative, not customers;
- Inform customers about potential changes comparatively earlier than few weeks;
- In overall, provide constant training among customer service employees to improve service quality;
- Conduct similar survey in one year with the aim of reducing gaps to 0 or become positive.

Collectively, author proposes to APL management to conduct customer satisfaction surveys annually at least or twice per year, if possible. With measuring customer satisfaction, management can make decisions which could improve the company's market position and increase revenue. The beginning of the 2017 marked the one year since the repositioning of front office to Poland. The results showed that customers were clearly unhappy. If above suggested propositions will be implemented, then conducting similar survey in the beginning of the 2018 could show how customers' expectations and satisfaction have changed.

To summarize, author of this thesis perceived a great chance to get to know actual customer expectations, satisfaction and thoughts on how customers perceive APL actions in container shipping industry. It can be concluded, that conducting a survey and research was positive undertaking and author would gladly perform such surveys in APL in the future.

5 KOKKUVÕTE

KLIENDITEENINDUSE PARENDAMINE KONTEINERTRANSPORTI KORRALDAVA ETTEVÕTTE APL ESTONIA NÄITEL

IMRE MINJO

Konteinertransport on tänapäeval suur osa nii logistika kui ka tarneahela juhtimisest. See võimaldab odavalt ning mugavalt tarnida kaupu üle maailma, vähedades kogukulusid ning tõstes kauba väärtust tarbijate silmes. Kuigi konteinertransport on üldiselt uus haru, mille juured ulatud vaid eelmise sajandi teise poolde, on see tänapäeval üks populaarsemaid kauba transportimise viise. Vaatamata tuntusele, on viimastel aastatel konteinervedude hinnamäärad pidevalt langenud ning sellest tulenevalt on turg ebastabiilne. Seoses sellega otsivad turul olijad pidevalt uusi lahendusi turupositsiooni parendamiseks.

Üks turupositsiooni parandamise viise on kliendirahulolu tõstmine. Kuigi kliendirahulolu ning lojaalsus mõjutavad suuresti ettevõtte sissetulekut, ei ole rahulolu uurimine konteinertranspordi ettevõttetes sagedane tegevus. Seetõttu otsustas töö autor uurida APL Estonia näitel kliendirahulolu Eesti kliendite seas ning välja tuua peamised viisid üldise klienditeeninduse kvaliteedi tõstmiseks.

APL on tunnustatud konteinertransporti korraldav ettevõte, mis mis asustasi 19-ndal sajandil kui laevaettevõte, kuid tänseks korraldab vaid konteinertransporti. Alates 2016. aastast kuulub APL CMA CGM grupi. Eesti turul tegutseb APL aastast 2000 ning kohalik esindus avati aastal 2006. Tänaseks on Tallinnas ka teeninduskeskus, mille töötajate arv on üle 250. APL klienditeenindus ehk front-line office on aga nüüdseks kolinud Poola, kus asuvad kõik Baltikumi kui ka suurem osa Skandinaavia riikide klienditeenindustest.

APL Estonia-s pole varasemalt kliendirahulolu mõõdetud, millest tulenevalt sõnastas töö autor üldise uurimisprobleemi: "Eesti klientide rahulolu ning ootused ei ole APL Estoniale teada". Töö eesmärgiks oli välja selgitada klientide ootused ning rahulolu, ning selle põhjal välja tuua parendamise võimalikud viisid.

Eesmärgini jõudmiseks sõnastas autor kolm tööülesannet:

- Analüüsida klienditeeninduse, kliendiootuste ning kliendirahulolu teooria aluseid nii üldises kui ka logistika valdkonnas;
- Analüüsida SERVQUAL kliendirahulolu mõõtmise mudelit ning rakendamise tõhusust logistika valdkonnas;
- Läbiviia kliendirahulolu uuring Eesti klientide seas. Analüüsida uuringu tulemusi ning välja tuua peamised klienditeeninduse puudused ning kvaliteedi parendamise viisid.

Autor jagas töö kolmeks osaks, millest esimene peatükk selgitab teooria aluseid, teises peatükis annab ülevaata APL-ist ning kirjeldab SERVQUAL uurimise meetodit ning kolmandas peatükkis analüüsib uuringu tulemusi ning toob välja soovitusi kliendirahulolu tõstmiseks.

Kliendirahulolu küsimustik saadeti välja kõigile Eesti klientidele – kokku 35-le. Kokku saadi 21 vastust, millest 12 klienti ütlesid et nad kasutavad APL teenust vaid impordiks ning 9 klienti kasutab APL teenust nii imporiks kui ka ekspordiks. Taoline eristamine võimaldas võrrelda erinevusi klientide vahel, kes kasutavad erinevat teenust.

Kõige suuremad lõhed ootuste ning hetke teenuste kvaliteedi vahel esinesid kindluses (assurance), kus kohati oli lõhe koguni 2 ühikut. Positiivne lõhe esines peamiselt empaatia valdkonnas, kui ka ühes materiaalse põhivara väites. Peamised kommentaarid klienditeeninduse puudulikkuse kohta olid: "klienditeenindus on ebapädev"; "klient ei tunne et teda võetakse tõsiselt ehk klient suhtleb kellegi võõraga" ning "klienteenindajad ei ole kättesaadavad". Kliendid kurtsid ning soovitasid, et kohalik eesliin on vajalik, eelkõige ekspordi suunal. Positiivuse poolelt toodi välja osade töötajate sõbralikkus.

Kuigi APL Estonia ei korralda iseseisvalt kliendirahulolu uuringuid, jälgivad nad klientide broneeringute (booking) kinnitamise kiirust. Tallinnas asub teeninduskeskuse haru, mis tegeleb kogu Euroopa broneeringute kinnitamisega. Autor uuris ettevõtte andmekogu, et teada saada, kui kiiresti klientide broneeringud kinnitatakse. Igal kliendil on oma leping, kui kiiresti nad peaksid broneeringu kättesaama, kuid üldiselt on see kas ühe, kahe või nelja tunni jooksul. Analüüsimise järel selgus, et suuremate riikide puhul kinnitatakse broneeringud vaid 50-70% ulatuses lubatud ajapiirangust. See tähendab, et kinnitus saadetakse peale tähtaega.

Väiksemate riikide puhul, sealhulgas ka Eesti, broneeringud kinnitatakse ära üldiselt 95-100% ulatuses lubatud ajapiirangust. Seega võib öelda, et Eesti kliendid saavad oma broneeringud kinnitatud õigeaegselt.

Töö autor reastas analüüsi tulemuste põhjal soovitavad ülesanded, mida täita, et tõsta kliendirahulolu:

- Kaaluda võimalust taastada kohalike esindajate värbamist (Eestis);
- Viivitused ning muudatused tuleb klientidele teavitada koheselt;
- Rohkem personaalset suhtumist ning initsiatiivi ülesnäitamine;
- Läbiviia kliendirahulolu uuringuid vähemalt kord aastas.

Kokkuvõtvalt on autori hinnangul kliendirahulolu uuringu läbiviimine vajalik tegevus, et tõsta ettevõtte kasumlikkust ning klientide paremini tundma õppimiseks. Selleks ei pea kindlasti kasutama SERVQUAL mudelit, vaid võib kombineerida uuring nii, et see oleks klientidele arusaadav, võimalikult lihtne ning mugav. Autor hindab antud tööd tulemuslikuks ning usub, et sarnane ettevõtmine võib olla initsiatiiviks teistele logistika ettevõtetele, et algatada oma klientide seas rahulolu uuringu läbiviimist.

6 REFERENCES

Ahoy, C. (2008). Customer-Driven Operations Management. Aligning Business Processes and Quality Tools to Create Operational Effectiveness in Your Company. New York: The McGraw-Hill.

Alixpartners. Container Shipping Outlook 2016.

http://legacy.alixpartners.com/en/Publications/AllArticles/tabid/635/articleType/Artic eView/articleId/1927/Container-Shipping-Outlook-2016.aspx#sthash.PkuFvSUq.dpbs (20.03.2017)

An outlook of consumer satisfaction and review of literature.

http://shodhganga.inflibnet.ac.in/bitstream/10603/40253/5/chapter3.pdf (21.03.2017)

Angelova, B & Zekiri, J. (2011). Measuring Customer Service with Service Quality Using American Customer Satisfaction Model (ACSI Model). - International Journal of Academic Research in Business and Social Scienses, vol. 1, issue 3, 2011, pp. 232-258

APL Internal data. (2017)

- APL. (2017). APL Estonia. https://www.apl.com/wps/portal/apl/apl-home/local-sites/localsite estonia/estoniahome (18.04.2017)
- APL. (2017). Company overview. https://www.apl.com/wps/portal/apl/apl-home/about-us/company-overview (17.04.2017)
- APL. (2017). History.

https://www.apl.com/wps/portal/apl/apl-home/about-us/history (12.04.2017) Bonah, R.A. (2016). Customer Service.

https://medium.com/@bonah4u/customer-service-is-an-extremely-important-part-of maintaining-ongoing-client-relationships-that-4363f96b5eab (02.04.2017)

Christopher, M., Payne, A. & Ballantyne, D. (1991). The pathology of company-wide quality initiatives: seven prescriptions for failure. "s.l.": Cranfield School of Management.

C.Mehta, S & Durvasula, S. (1998). Relationships Between SERQUAL Dimensions and Organizational Performance in the Case of a Business-to-Business Service. - Journal Of Business & Industrial Marketing, Vol. 13, Issue 1, 1998, pp. 40-53

- Doyle, P. (2000). Value-Based Marketing: Marketing strategies for corporate growth and shareholder value. Chichester: Wiley.
- Dudovskiy, J. (2012). Concepts of Customer Service and customer Satisfaction: Introduction. http://research-methodology.net/concepts-of-customer-services-and-customer satisfaction-introduction/ (18.03.2017)
- Durvasula, S., Lysonski, S., & Mehta, S. (1999). Testing the SERVQUAL Scale in the Business-to-Business Sector: The Case of Ocean Freight Shipping Service. - Journal Of Services Marketing, Volume 13, Issue 2, 1999, pp 132 – 150

Durvasula, S., Lysonski, S., & Mehta, S. (2000). Business to Business Marketing: Service Recovery and Customer Satisfaction Issues with Ocean Shipping Lines. - European Journal Of Services Marketing, Volume 34, Issue 3/4, 2000, pp 132 - 150

Financial Times. (2016). Container shipping lines mired in crisis.

https://www.ft.com/content/1e98963c-1853-11e6-bb7d-ee563a5a1cc1 (18.04.2017) Harris, E.K. (2010). Customer Service. A Practical Approach. 5th ed. "s.l.": Prentice Hall.

Harrison, Van H. (2008). Logistics Management And Strategy (2008). 3rd ed. Harrlow: Pearson Education Limited.

Johnston, R. (2017). Zone of Tolerance. http://www.blackwellreference.com/public/tocnode?id=g9780631233176_chunk_g97 140511096927_ss1-1 (20.03.2017)

Kanovska, L. (2009). Customer Services and their Role for Industrial Small and Medium Companies. – *Economics & Management*, 2009-14, pp. 413-420.

Khan, I. (2012). Impact of Customer Satisfaction and Customers Retention on Customer Loyalty. – International Journal of Scientific & Technology Research, Vol 1, Issue 2, 2012, pp. 106-110.

Knowler, G. Lowest ever container ship growth expected in 2016. (2015) http://www.joc.com/maritime-news/ships-shipbuilding/ lowest-ever-container-ship growth 2016-alphaliner-says_20160121.html (19.03.2017)

Lesley, A. & Lamping, D. (2000). Different ways to measure satisfaction. – *British Journal of Midwifery, vol. 8, No.* 7, 2000. pp. 422 – 428.

 Maričić B., Veljković, S. & Đorđević, A. (2012). Measuring Customer Satisfaction. *Contemporary Issues in Economics, Business and Management* – 2012, pp. 129-139.
 Marine Engines & Systems. (2015). Container.

http://marine.man.eu/applications/container (18.03.2017)

Mokhtar, S. S. M., Maiyaki, A. A. & Noor, N. M. (2011). The Relationship Between Service Quality and Satisfaction on Customer Loyalty in Malaysian Mobile Communication Industry. – School of Doctoral Studies (European Union) Journal, 2011, pp. 32-38.

Murnane, J., Saxon, S. & Widdows, R. (2016). Container shipping: The untapped value of customer engagement.

http://www.mckinsey.com/industries/travel-transport-and-logistics/ourinsights/container-shipping-the-untapped-value-of-customer-engagement (01.04.2017)

Mäntyneva, M. (2004). Competence development for enhancing customer satisfaction. Tampere: Tampereen teknillinen yliopisto.

Nyeck, S., Morales, M., Ladhari, R., & Pons, F. (2002). 10 years of service quality measurement: reviewing the use of the servqual instrument. – *Cuadernos de Difusión*, 7(13), 2002, pp. 101-107.

Parasurman, A., Zeithaml, V.A. & Berry, L.B. (1985). A Conceptual Model of Service Quality and its Implication for Future Research (SERVQUAL) – *Journal of Marketing vol 49*, 1985, pp. 41-50.

Parasurman, A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: A multiple- Item Scale for measuring consumer perceptions of service quality. – *Journal of Retailing vol 64*, 1988, pp. 12-40.

Parasurman, A., Zeithaml, V.A. & Berry, L.L. (1991). Understanding Customer Expectations of Service. – *Sloan Management Review*, 1991, pp. 39-48.

Peterson, R.A. & Wilson, W.R. (1992). Measuring Customer Satisfaction: Fact and Artifact. – *Journal of the Academy of Marketing Science* 20(1), 1992, pp. 61-71.

Rahman, M. (2012). Customer Service Excellence. http://www.morethanshipping.com/customer-service/ (01.04.2017)

Tao, W & Zhixiong, L. (2006). Strategies on Logistics Enterprises' Customer Segmentation. – Proceeding of the 2006 international conference on management of logistics and supply chain. 2006, pp. 438-443.

- Thai, V. (2008). Service quality in maritime transport: Conceptual model and empirical Evidence. – Asia Pacific Journal of Marketing and Logistics, Vol. 20, No. 4, 2008, pp. 493-518
- UNCTAD. (2016). Review of Maritime Transport 2016. United Nations Publication.
- Wallis, A. 2008. Measuring Customer Satisfaction. http://www.aaronwallis.co.uk/Measuring-Customer-Satisfaction. PDF (14.03.2017)

7 APPENDICES

7.1 Appendix 1. Customer Satisfaction Survey at APL Estonia

Dear APL customer,

Thank you for staying with APL!

Appreciate if you could find 10-15 minute to fulfill below survey. With that, you will help us obtain the very best results.

Below questionnaire is conducted for research purpose only to measure customer satisfaction of Estonian customers of APL. The questionnaire is divided into three sections.

In first section, choose your opinion on **how relevant** are below statements to customer service provided **in container shipping industry**? (1 Strongly disagree to 7 Strongly agree).

In second section, choose your opinion on **how relevant** are below statements to customer service **provided in APL** (1 Strongly disagree to 7 Strongly agree).

In third section, open-ended questions are provided (not mandatory).

NB! Please note, that all received answers will be used only for research purpose and will be kept as confidential. Results will be analysed for only statistics purpose and no harm is intended to be made.

I Part: EXPECTATIONS

Tangibility

The company uses up-to date and proper equipment (containers and/or inside office) The company's structures are visually appealing The company's employees are well-dressed and clean The company's physical structures are consistent with the type of service industry

Reliability

The company meets the deadlines and deliver promised service The company is sympathetic and reassuring, when the customer has problems The company is dependable and confident The company provides their service(s) at the times promised The company keeps their records accurate and correct

Responsibility (negative)

It is normal to not tell the customer when the service will be performed It is not reasonable to expect immediate service from employees Employees do not have to be available to help customers It's normal to be too busy to respond on-time to customer requests

Assurance

Employees should be trustworthy Customers should feel safe when transacting with employees Employees should be polite Employees should get adequate support from the firm to do their job well

Empathy (negative)

Firms should not be expected to give each customer individualized attention Employees should not be expected to give each customer individualized attention It is unrealistic to expect employees to fully understand the needs of the customer It is unreasonable to expect employees to have the best interests of the customer at heart Firms should not necessarily have to operate at hours convenient to all customers

II Part: PERCEPTION

Tangibility

The APL GSSC uses up-to date and proper equipment (containers and/or inside office) The APL GSSC uses structures that are visually appealing The APL GSSC employees are well-dressed and clean The APL GSSC uses structures that are consistent with the type of service industry

Reliability

The APL GSSC meets the deadlines and deliver promised service The APL GSSC is sympathetic and reassuring, when the customer has problems The APL GSSC is dependable and confident The APL GSSC provides their service at the times promised The APL GSSC keeps their records accurate and correct

Responsibility (negative)

The APL GSSC does not tell the customer when the service will be performed The APL GSSC does not reasonable to expect immediate service from employees The APL GSSC employees do not have to be available to help customers The APL GSSC employees are always too busy to respond on-time to customer requests

Assurance

The APL GSSC employees are trustworthy The APL GSSC employees can perform secure transaction with its customers The APL GSSC employees should be polite The APL GSSC employees do not get adequate support from the firm to do their job well

Empathy (negative)

The APL GSSC does not give each customer individualized attention The APL GSSC employees do not give each customer individualized attention The APL GSSC employees do not understand the needs of the customer The APL GSSC employees do not have the best interests of the customer at heart The APL GSSC does not operate at hours convenient to all customers

III Part: OPEN-ENDED QUESTIONS

- Do you use APL GSSC services for export, import or both?
- Did the APL Estonia local office repositioning to Poland have an impact on APL customer service level? If so, was it positive or negative or both?"
- Did the merging of APL and CMA CGM have an impact on your business transactions with APL? If so, was it positive or negative or both?
- Please describe the situation where Your received service was above than expected.
- Please describe the situation where Your received service was below than expected.
- What is Your opinion on what is APL customer Service doing right and wrong
- What are your suggestions on how to improve customer service between Your company and APL?