A Gap Analysis of Service Quality in the Ferry Transportation Business at an Executive Terminal Ferry Port

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ABSTRACT

Attention from the management of transportation operators to meet the needs of passengers, encouraging them to continue to understand the importance of customer perceptions in service quality in the ferry business. Improvements are made to make improvements to service standards, so that customer expectations for service are continuously improved in order to narrow the gap between the expectations of service quality from passengers and those felt by service quality. With the presence of executive services, of course, the customer segmentation is divided into the regular segment and the premium segment. This research was conducted by conducting a survey with the research object of executive service users in the last 3 months and aims to determine or analyze the gap between service quality expectations and service quality perceived by passengers in the crossing industry for several dimensions such as comfort, cleanliness, safety and security, information and attention to consumers (responsiveness). In conducting this research, the analysis used Pair Sample T-test to determine the size of the gap and the priority of management concentration. This study processed data from questionnaires distributed to 313 service users who had used executive services (convenience sampling) assisted by SPSS. By comparing the mean between service quality expectations and service quality perceived by passenger, it can be seen that the gap of service quality dimensions in ferries industry. From this analysis, it is known that those with the highest gap are items related to the dimension of information, especially items of information related to Ferry Express departure schedule information. So it can be concluded that the concentration of management on improving executive services must be prioritized on the Ferry Express.

Introduction

Providing excellent service to people is one of many efforts carried out by transportation operators. Various methods are used by transportation service providers to serve customer, one of which is by improving the infrastructure. Nowadays, the transportation service industry has made attempts to improve its services and infrastructure. Those have been started in the air transportation mode and ferry transportation mode. The improvements have been continuously carried out until the emergence of a transportation service equipped with sleeping chairs (from trains to buses). To improve public transportation, the appropriate e development tools to measure and monitor are required. Changes must consider different characteristics in each service related to various aspects such as the service program, reliability, convenience, information, personnel, and many more (Eboli & Mazzulla, 2014). The transportation industry in several years has developed to become industry which continues to improve in serving its customers, so that it can provide an increasing quality of service.

The Republic of Indonesia is the largest archipelago in the world, consisting of 17,504 large and small tropical islands located in Southeast Asia and bordered by white sandy beaches. Two third of the territories of the Republic of Indonesia are coastal waters that extend outward from Sabang to Merauke. There is an urgency from the management of transportation operators to meet the needs of passengers. This encourages them to continually understand the importance of customers' perceptions in service quality in the ferry transportation business.

Improvements are made to improve service standards, so that customers' expectations for service are gradually improved to narrow the gap between the service users' expectations and realization. The ferry transportation industry is one of the mainstays of an Indonesian company because it has an important role in uniting regions spread across Indonesia islands. Therefore, the ferry transportation sector has enormous duties and responsibilities, so that the state interest in pursuing inter-regional connectivity through strengthening sea transportation facilities can be achieved. Through a maritime vision, the government is trying to make the maritime industry sector, particularly ferry transportation, be competitive at the national and regional levels. This is in accordance with the government's program through a sea highway to facilitate people's economy and the government's aspirations to strengthen it by making Indonesia as the world's maritime axis.

Service improvements in the Indonesian ferry industry are very important if they are associated with this business, not only accommodating the mobility of goods but also the people's movements. Indonesia is an archipelago with thousands of islands extending from the westernmost region (Sabang) to the easternmost region of Indonesia (Merauke). In an archipelagic country such as Indonesia, ferry transportation is a vital link to generate the economy and logistics evenly throughout Indonesia's regions. This makes ferry transportation vital and a true link between the islands and a daily necessity for the community. Therefore, port and ferry operators must continue to improve the services for their users so that quality gaps do not occur. Unsatisfactory service may be due to the lack of available ships and customer services, poor ship conditions, the mixing of passengers and cargo, and insufficient safety equipment (Mramba, 2012). This shows the importace of conducting research on the port and ferry service industry related to service quality gaps because the industry is a strategic

service industry and national vital object which is a bridge between Indonesia's island as one of the backbones of the economy in the country. The port and ferry industry also have a role in building connectivity among the islands and reducing the national logistics costs.

The available literature on transportation shows that service users' satisfaction will vary from person to person, product to product, or service to service. It also depends on several factors such as psychological, economical, or physical factors (Kumbhar, 2011). According to Baird *et al.* (2012), in order to satisfy customers, service industry companies must possess sufficient knowledge of customer expectations, especially in situations where the production and consumption of a service are carried out simultaneously. Passenger satisfaction is considered one of the important issues in the transportation service sector (Kai & William, 2006). Passenger preferences for one mode of transportation or another can be greatly influenced by the satisfaction of the service provided by the service provider. One example of an expectation of the service users is the accuracy of ship departure and arrival schedule. Service users are willing to spend more to get a better quality of service.

Service users' opinions about service characteristics allow them to determine different service quality attributes and preferences (Eboli & Mazzula, 2014). From this condition, it is important to know the feedback from service users of the provided services. There is a method based on customer demand for assessing each attribute on an importance scale or method based on obtaining a measurement of attribute importance by statistically testing the strength of a relationship between individual attributes and overall satisfaction. From this research, the expectations and perceptions of service users on the existing service dimensions provided to service users can be seen.

Previous research related to the satisfaction gap of service users on public transportation is mostly about land and air transportation but has never been carried out on ferry transportation (Eboli & Mazulla, 2014; Cavana & Corbet, 2007). From the various explanations above, the purpose of this study is to identify the service quality gap between what they feel and the expectations by service users in the port and ferry service industry.

Literature Review

Service Quality

The notion of service quality is a concept that has generated great interest and debate in the research literature with difficulties in both defining and measuring with no overall consensus emerging in both (Wisniewski, 2001). Service quality can be defined as the difference between customer expectations for prior service performance to service encounters and their perceptions of the service received (Asubonteng *et al.*, 1996). Service quality can also be defined as the difference between customer expectations and what the customer feels (Parasuraman *et al.*,1985; Lewis & Mitchell, 1990). The concept of service quality and customer satisfaction is highly recommended in marketing activities (Ruyter, 1997). Service quality has several dimensions or elements. The servqual technique can find out how significant the distance is between customer expectations and customer perceptions for service received.

Servqual has 5 dimensions (Parasuraman *et al.*, 1988); tangibles, reliability, responsiveness, assurance, and empathy. In this study, there are 5 dimensions tested to measure the gap between the expectations and perceptions of service users, consisting of tangible and intangible items. Tangibles are related to the appearance of the company's physical, environmental, and service assets, such as equipment, machinery, signage, and communication materials (Bahia & Nantel, 2000; Bitner, 1990; Norazah, 2013).

Convenience

Convenience is a top priority for service users to decide on the choice of public transportation mode (Eboli & Mazzulla, 2014). Communities with a better education level and standard of living are one of the supporting factors for service providers to compete to improve their services. Convenience at the pier or ferry port terminal covers all aspects, from the entrance to the terminal, the waiting room seats, the air conditioning (AC), escalators, lifts, and a bridge to the ship. The comfort on the ship includes recliner seats, tatami, sofas, air conditioning, clean toilets, as well as the timeliness and speed of the ship. Many of these factors are evaluated differently across different user groups. Beirao and Sarsfield-Cabral (2007) found that accustomed public transport users perceive a new vehicle with new air conditioning and a lower floor as "very nice and very comfortable", but that overcrowding on ships during rush hour is seen as added problem. Some researchers argue that the term "facility" implies something extra and is not necessarily necessary (Transport Research Board, 2003). Tyrinopoulos and Aifadopoulou (2008) estimated vehicle load as the number of passengers on the ship divided by the vehicle capacity. Nathanail (2008) evaluated train temperature based on the presence of air conditioning. It also correlates specifically with ships. In contrast, for the regular route there are still many ships that still apply space at an additional cost for an air-conditioned area. This, according to the author, explains that the use of air conditioning in the room on the ship is something luxurious and will increase the level of comfort. This also applies to ports, where at regular ferry ports, there are still a lot of open spaces, while in the services studied, all enclosed spaces and access areas for ships use the same boarding bridge as those owned by airports. Nathanail (2008) also introduced an indicator regarding chair comfort as measured by a trained examiner in terms of seat recline, seat width, and available leg distance, compared to desired values.

Hygiene

Hygiene assessment is a must for transportation operators, as well as transportation such as planes, ships, and buses (Eboli & Mazzulla, 2014). Hygiene refers to the physical condition of ships and ports, especially the interior and exterior of the ship. Clean room conditions, an organized waiting room, and clean seats and toilets (both on board and at the port) are very influential things on the appraisers of service users. According to the Transport Research Board, clean transportation such as clean buses tend to promote a good public image and help attract and retain passengers

(Transport Research Board, 1995). These functions include exterior washing, interior cleaning, detailed cleaning, and removal and protection against vandalism. If on a ship, cleaning is carried out every time the ship is used, there is a time lag between the passenger getting off the ship and before the nexr passenger boarding the ship, and there is a cleaning service on board. Likewise, at the port or terminal, cleaning is carried out every day by a cleaning service. The standard value of interior cleaning and exterior cleaning services per week can be assumed by a reference to the synthesis of TCRP 12 (Transport Research Board, 1995). Various efforts range from periodic control, including service users as a mystery shopper on board were carried out to control cleanliness both on the ship and at the port.

Information on a Ship and Port

Consumers conduct extensive reviews that include in-store information, product advertisements, product information tags, packaging, and point of purchase displays (Laroche *et al.*, 2004). From this condition, information is a very important aspect for service users. Information also has a very broad scale. Starting from information for products, which in this case is more about the promotion of the product, to information for services in the form of directions to existing facilities or to notify operational flows for service users, both at terminals or ports or ships (Eboli *et al.*, 2016). Without this information, prospective passengers will not be able to use a transit service (Transportation Research Board, 2003). Therefore, it does not only concern information from the port and the ferry itself. Information related to the connected transportation is also a consideration for service users. Beirao and Sarsfield-Cabral (2007) found that some respondents thought the bus system was difficult to use and information was difficult to obtain. Among bus users, the main problem occurs when bus companies change schedules or routes and do not provide sufficient information to users. This is also felt by the author that information is one of the most crucial things in transportation, such as a ferry. Moreover, the dimensions for ferry ships are much larger in size compared to buses, which causes information, especially directions, to be very crucial for service users.

Security and Safety

The security and safety level in public transportation is a major priority for public transportation (Eboli & Mazzulla, 2014). This aspect refers not only to safety from crime while sailing a ship or waiting at a port terminal but also related to the behavior of others and the operation of the ship. Not to mention that ships and ports are transportation components which ave rigid safety and security standards. It starts from the rules of the International Marine Organization (IMO), Safety of Life at Sea (SOLAS), and safety rules issued by the government through the Ministry of Transportation. In general, the term "safety" is used to denote the possibility of being involved in a road accident, while the term "safety" also refers to the possibility of being a victim of a crime. The security factor is important because security and safety aspects are trust issues for customers because when a customer or service user rides public transportation, the service user entrusts his/her life to the transportation

operator. Due to the explicit importance of safety, this factor is given an outrageous ranking of importance (Solomon *et al.*, 2015). This finding was confirmed by Nathanail (2008) in their study as security and safety at bus stops, and by Eboli *et al.*, (2010), in which they explicitly investigated the safety and security onboard. According to Nathanail (2008), safety during a trip is defined as the number of passenger deaths due to the responsibility of the transit operator.

Attention Officer to Customer (Responsiveness)

Customer service is a channel that must be owned by companies engaged in the service sector, especially transportation services (Eboli & Mazzulla, 2011). Customer service officers are needed as the link between the company and its customers or service users. Its existence is so important in the success of a business in serving transactions, handling complaints, and resolving problems faced by its customers, so that it should not be taken for granted. Customer service includes the elements necessary to make travel on a transportation business such as ships and seaports easier and more enjoyable, such as courtesy and knowledge of drivers and assisting service users, the appearance of officers along with elements related to the ease of buying a ticket or paying for a ticket, the presence and condition of vending machines in printing boarding passes, online ticket purchasing websites, as well as easy ticketing applications and the expansion of the network of points of sale. According to Eboli and Mazzulla (2011), personnel appearance is evaluated using trained checkers who verify if the personnel are wearing uniforms. As a result, the view of service users on customer care officers' condition is a parameter that is considered by service users. This is associated with the executive service which requires all service officers to wear uniforms according to their respective positions as an advantage. Apart from the officers at the terminal, the executive service is equipped by flight attendants on duty on the ship while the ship is being operated. In the same study, the authors proposed indicators in serving service users such as long queues, speed of complaint handling, and friendliness to be factors in measuring customer care. Tyrinopoulos and Aifadopoulou (2008) introduced indicators aimed at accessing the adequacy and effectiveness of the ticket sales network and the ease of buying tickets. For each point of sale, the mystery shopper collects some data about ticket availability, in addition to the presence of a special indication that informs the customer of ticket availability, position, and visibility of the indication. This information can be used to calculate the percentage and location of points of sale for which there are no tickets to sell and points of sale that are clearly indicated.

According to Moenir (1992), a service is a process to meet the needs of others directly. Meanwhile, Kotler (2003) states that service is an act of an action or performance provided to others. Services can be classified into two, namely:

-        A high contact service is a classification of a service where the contact between consumers and the service provider is very high. Consumers are always involved in process of the service.

-        A low contact service is a service classification where the contact between consumers and service providers

is too low. Physical contact with consumers only occurs at the front desk, which is classified as a low-contact service.

Service Quality Gap

This study uses the quality gap theory and the expectation confirmation theory to provide a frame of reference. The service quality gap model is a quality theoretic model used to assess customer expectations and perceptions on business service quality. Perceived gaps in service quality can be defined as the differences between the expectations and perceptions of consumers and the services delivered (Parasuraman *et al.*, 1985). The assumption made here is that customers' level of service quality is affected by the gaps between their expectations prior to using the service and their perceptions of what they actually receive. Industries in the service sector have certain characteristics that greatly influence the design of marketing programs; namely, they are intangible, inseparable, varied, and easily disappear. The main differentiating factor for service companies is the quality of customer service. According to Payne (1997), customers are getting smarter with their demands and demanding increasing service standards. Nowadays, service companies realize they need to improve customer service to face competition in a highly competitive service environment. To measure service quality, an approach is needed through a model that determines service quality and support from a model that determines product quality in general.

Customer perceptions are subjective in assessing the actual service experience. Customer expectations are beliefs about service delivery that serve as references or ideal points against evaluated performance. Customers not only compare their perceptions of performance with ideal points when evaluating services, but they also perceive service in terms of service quality and how satisfied they are with their overall experience. The main focus of the service quality gap model is the customer gap, which represents the differences between customer expectations and perceptions (Zeithaml & Bitner, 2003). This gap needs to be closed to satisfy customers, enabling companies to build long-term relationships with their customers. Customer perception of service is a focused evaluation of satisfaction that reflects customer perceptions of the three elements, which are the 'physical environment', 'interactions', and 'results' (Zeithaml & Bitner, 2003). As such, service users will assess ferry port services based on their perceptions of technical results, the process by which these results are delivered, and the quality of the physical environment in which the services are provided.

Method

Measurement

Data collection for the service gap analysis was carried out for executive terminal service users for the Merak - Bakauheni trans, operated by PT ASDP Indonesia Ferry (Persero), through a survey. We took the executive terminal as the object of the sample because this terminal just began operating in early 2019, so of course, there are many expectations from service users regarding the services provided to them. To conduct the survey, we used a questionnaire in which we took the statements from previous studies which we considered relevant to this research. A total of 3 items related to the comfort dimension were taken from research conducted by Cavana and Corbet (2007). Then 2 items related to security and safety dimensions and 3 items related to cleanliness dimensions were taken from Eboli and Mazzulla's (2014) research. The dimensions of the officer respondents had 3 items and 1 item related to information was taken from research conducted by Cunningham and Young (2002). From research conducted by Cascetta and Carteni (2013), we adopted 2 items related to the information dimension.

In the sampling process, the survey was differentiated into the expectations and feelings of the service users. The survey also covered all the dimensions that were the focus of the research to determine the gap analysis in services at the executive terminal Then the researchers used a Likert scale ranging from 1 to 5, where 1 indicates that the respondent strongly disagrees and 5 shows that the respondent strongly agrees with the statement given by the researcher in the questionnaire. The statements used by researchers to capture the value of the gap between expectations and feelings of service users can be seen in the appendix.

Data collection was carried out through primary data collection of questionnaire distribution to service users of Merak Executive Terminal and Bakauheni on the Merak - Bakauheni route in last 3 months with as many as 299 questionnaires up to a certain number randomly. Data collection was carried out using the convenience sampling method for all groups of service users and conducted in a normal environment without any intervention from the researchers. After that, it grouped the results of the questionnaire from the respondents' data on the expectations and feelings of service users according to the dimensional group of each question in the questionnaire column. Data management using the SPSS application applied the pair sample t-test method to find a comparison of the mean (mean comparison) of the expectations and perceived values. Then the researcher classified the average value of each question into the average value of the dimensions and the average value for the gap between the expectations and those perceived by the service users. Then the significance was tested using a confidence level value of 95%. This means that each question element that had a p-value less than 5% would be considered significant.

Research Subjects

This research aimed to see the service quality gap found in the Merak - Bakauheni Executive Terminal and the Express Ferry. The existence of this new executive ferry service will certainly make ferry service users have options to get more premium services, so that service users are eager to get quality services according to their expectations before departing. From the number of respondents, they were dominated by men (79.3%) with an average age between 21 and 30 years old (51.8%). Most respondents used executive services for the purpose of meeting with their families (39.5%). Meanwhile, information related to the subject of this study stated that 51.2% of service users chose not to use

vehicles. The complete information related to the research

subjects can be seen in Table 1 below:

TABLE I.   Respondent profile

Characteristic	Number	%
Gender		
Male	237	79%
Female	62	21%
Age Range		
Under 21 years old	25	8%
21 – 30	155	52%
31 – 40	86	29%
41 – 50	29	10%
Above 50 years old	4	1%
Profession		
Private officers	162	54%
State officers/ BUMN	76	25%
Students/ college students	27	9%
Entrepreneur/enterpriser	19	6%
Unemployed	6	2%
Others	9	3%
Interest		
Meet family	120	40%
Business	70	23%
Tourism	54	18%
Commuter	33	11%
Travel	8	3%
Business trip	6	2%
Survey activities	4	1%
College	4	1%
Vehicle		
By vehicle	146	49%
No vehicle	153	51%

Result

Researcher took the executive terminal at Merak – Bakauheni as a service gap analysis object research because it is the only terminal in Indonesia that provides executive services to users. Therefore, indirectly this terminal has a different service user segmentation from the regular terminal. With crossing rates that are different from regular ones, service users' expectations of the quality of services provided at the terminal will be different from regular services. The executive service segment will certainly make service users have a high perception because the prices charged to service users are more expensive than regular services.

From the results of this data collection, the researchers later found out the gap value (GAP / G) between what was expected and felt by service users who used the executive terminal services. From Table 2, it is known that the average value (Mean / M) of service user expectations (Expectation

$= 4.748$) and the average value of perceptions ($M_{Perception} = 4.224$) has a different value ($G = 0.524$). If a significance test is carried out with a 95% level, it is known that the gap analysis has a significant impact with a p-value below 0.05 (5%). The gap value shows that there are still expectations of service users that the company has not fulfilled, so this can be an opportunity for companies to improve the quality of services provided to service users. From the 5 dimensions specified in this study, the service gap value is different. As viewed from each dimension that has the lowest gap value of the response or attention from officers to service users (0.436), the largest gap value is in the information section (0.702). Meanwhile, if seen from the significance value, all dimensions have a significance value below 5%, which means that all these dimensions have significant results. It is known that the 5 attributes with the lowest gap value include: facilities at the executive terminal are comfortable (0.284) [Convenience], the room temperature in the executive terminal is comfortable (0.331) [Comfort], the condition of the executive terminal is clean (0.334) [Hygiene] and the service personnel pay attention to service

users (0.361) [Responsive]. From this, it is known that the executive terminal has a smaller gap value than the executive ship. This shows that there is still plenty of room to improve the quality of service on executive ships in order to reduce the value of the gap between expectations and what service users feel. Meanwhile, the information dimension is one with a large gap, including; directions for departure and arrival from the ship make it easier for service

users (0.763) and the knowledge that the staff has about executive services is good (0.753), while the guaranteed availability of seats on the ferry express for service users (0.763) has the highest gap value with the comfort dimension, and 2 other attributes are in the dimensions of hygiene and safety.

The results of the service gap analysis obtained by the researchers from the questionnaire are as follows:

TABLE II.   Service Gap Value for Each Attribute

Dimension	Expectation ($M_{Expectation}$)	Perception ($M_{Perception}$)	Gap (G)	P-Value
Convenience	4.708	4.218	0.490	0.000
a. The facilities at the executive terminal are convenient.	4.709	4.425	0.284	0.000
b. The facilities on the ferry express are convenient.	4.722	4.177	0.545	0.000
c. The temperature at the executive terminal is comfortable.	4.652	4.321	0.331	0.000
d. The temperature at the ferry terminal is comfortable.	4.696	4.171	0.525	0.000
e. There is guaranteed seat availability on the ferry express for service users.	4.759	3.997	0.763	0.000
Hygiene	4.758	4.273	0.485	0.000
a. The executive terminal condition is clean.	4.763	4.418	0.344	0.000
b. The ferry terminal condition is clean.	4.753	4.127	0.625	0.000
Information	4.748	4.046	0.702	0.000
a. Information on the departure schedule of the ferry express is clear and accurate.	4.766	4.154	0.612	0.000
b. Directions for getting on and off the ship are easier for users.	4.726	3.973	0.753	0.000
c. Staff knowledge of the executive service is good.	4.753	4.010	0.742	0.000
Security and Safety	4.797	4.242	0.555	0.000
a. The security on the executive service is guaranteed.	4.786	4.171	0.615	0.000
b. Safety is ensured during the journey on the ferry express.	4.806	4.234	0.572	0.000
c. My fare data transaction is safe with ASDP.	4.799	4,321	0.478	0.000
Responsive	4.756	4.320	0.436	0.000
a. Executive service officers pay attention to the service users.	4.756	4.391	0.365	0.000
b. When a problem happens, there is an officer who shows genuine interest to solve it.	4.742	4.328	0.415	0.000
c. Officers show the same politeness to any passengers.	4.769	4.241	0.528	0.000
Average Mean Compare	4.753	4.220	0.533	0.000

Discussion

From this research, it is known that there are dimensions which have the highest service quality gap value. In the dimension of information related to signage, it has the highest service quality gap value, namely in terms of tangibles. This happens because there is still a lack of adequate directional facilities. This is because there have been several changes in flow to find the operating patterns that best suit the operational conditions. This condition also affects the placement of information boards, both for directions and information boards onboarding and disembarking ships. Another condition that affects information is information on changes in tenant location, either for additions or changes in location placement that have not been changed on the information board. To reduce the value of the service quality gap, operators must immediately add adequate directional information facilities

or make updated information or information for boarding and disembarking that can be seen by service users in a clear and informative manner and increase the knowledge of officers on executive services (responsiveness). Another action that needs to be done is to update the available information boards. This is also described by one of the reference journals, which states that attributes such as reliability, frequency, comfort, information, driver behavior, and hygiene are proven to be key elements of public transport user satisfaction (Bates *et al.*, 2001; Beirao & Cabral, 2007; Friman & Garling, 2001; Hensher *et al.*, 2003).

Furthermore, if seen from the research results, it is known that the smallest gap is in the responsiveness dimension, which is related to the attention given by officers to service users. This shows that the intangibles side is quite well implemented. The warmth of officers to all service users with the same standard has an impact on the high value of service user satisfaction for these actions. By implementing the 3S slogan, namely *Senyum, Sapa, Sayang*, the officers succeeded in winning the hearts of their service users. We think that the existing service standards for officers are sufficient to meet the expectations of the current service

users. The seamless implementation of service standards by officers, both at the terminal and on the ship, is one of the strengths that exist in that service. But, of course, it is necessary to be consistent in responsiveness to all service officers, especially if there is a change or addition of new officers, so that the standardization of services provided to service users is consistently improved in the future.

Of all the existing attributes, guarantees for the availability of seats on the ship are things that need to be prioritized by the company to improve the service quality, especially in increasing the comfort dimension in the service. This is because these attributes also have a high gap value above the attributes possessed by the information dimension. From this research, it can also be seen that in the comfort dimension there is a different gap between the existing facilities between those at the port and the ship, as well as in the cleanliness dimension there is a striking gap between cleanliness at the port and on the ship. Hygiene and comfort factors greatly affect customer satisfaction (Eboli & Mazzulla, 2008; Swanson *et al.*, 1997). If we look at the attributes between ships and ports one by one, it is known that, in general, the value of ship attributes has a higher service quality gap compared to ports. This shows in general that service users feel that the conditions of the service provided are better at the port compared to the overall service on board. This becomes an interesting matter in this study, because it can show that service delivery is carried out more consistently at ports with better delivery than ships, both for the dimensions of comfort and hygiene if compared between ships and ports. In our opinion, the age of the assets will also affect the level of satisfaction of service users, where the port is a new building in the form of a terminal which has a concept like a mall and tends to be modern, while the existing ships are the result of renovations and modifications of ships previously operating on regular routes. This shows that the conditions, shape, and atmosphere of the ship and port (store atmosphere) also affect the level of service user satisfaction. The store atmosphere not only affects purchasing decisions but also affects customer satisfaction. According to Mowen and Minor (2002), store atmosphere affects the emotional state of the shopper, which then encourages consumers to increase or decrease purchases. If it is related to transportation, it can be said that the atmospheric conditions at the executive terminal and express ferries affect the service level assessment of service users in encouraging service users to decide to return to using these services or not.

Conclusion

Port and ferry operators must continue to improve service standards so that service quality can meet their service users' expectations. Port and ferry ship operators must also understand the needs of their service users, especially their expectations. One of the dimensions that has the highest gap value is related to information systems that must have a good standard for ports and ships. The dimension with the lowest gap value is the responsiveness dimension, which means that the responsiveness and attention of officers, both at the port and the ship, has been conveyed well to service users. Apart from these two things, there are things that are

also of concern because they have a fairly high gap value, namely the seat availability. This is in order to provide certainty for guaranteed seat availability and comfort to service users. If we look closely and compare the dimensions measured at the port and the same dimensions measured on the ship, what is interesting is that the gap conditions that occur on board tend to be higher than the gaps at the port.

Managerial Implications

This research has findings that will have implications for service managers and quality assurance at these companies, as port and ferry operators continue to improve the quality of their services in the future in order to provide the best service standards for their customers. The existence of comprehensive improvements that have been carried out by the company and the large investment costs must also be able to provide improved service quality compared to before. This is to meet the expectations of service users who have used port and ferry transportation services. Operators are expected to be more sensitive to changes, so that the information displayed on ports and ships is actual and very useful for service users. Inaccurate information, especially directions, can cause service users who are not at that location to get lost either at the port or on the ship. Besides that, the signposts also have an important role when an emergency occurs. It is hoped that the improvement of service quality will increasingly make service users feel more comfortable and continue to use the port and ferry industry transportation services with an increasing quality in the future. Since this research discusses transportation, the convenience of service users will have an important role. Ferry management must guarantee the availability of seats for service users on board because this factor has a very high expectation value from service users with a large enough gap value. In general, the delivery of services onboard still needs to be considered by management to be improved immediately. The results of this study indicate that the gap rate for onboard services is proven to be higher than at the port.

With the implication to improve service quality will make service users more comfortable using the executive terminal and express ferry services, service users will continue to use these services. This research will also provide information and descriptions for other modes of transportation (such as planes and trains) that will segment service users for certain services, for example, premium or executive services. The comfort level of service users is the first dimension that must be considered by service providers, especially when service users are waiting for their departure time. The certainty of services provided to service users in terms of facilities and operations is one component that needs attention. In addition, the dimension of information, especially for directions of ascending and descending transportation modes, is also important for regulating the flow of service users, as well as the information location of public facilities.

Suggestions for Future Studies

The current research has several limitations and can be continued with more in-depth research in the future. First, the research we conducted was at a ferry port which is a route with the main branch line category with various service user segments in the executive terminal both in the corporate segment (B2B) and the retail segment (B2C) for executive services, so a suggestion for future research is to dig deeper for service users who use regular services. In addition, further research can be conducted that focuses on one segment, either the corporate (B2B) or the retail (B2B) segment. Second, it is necessary to do additional research on ports and ferries on routes that have different characteristics and market segments, for example, at a ferry port that has tourism and economic leisure segments that will increase our understanding of service quality in the ferry transportation service industry. Additional research efforts are needed to evaluate the validity of the model and the reliability that was investigated from our study. The existence of a service quality gap can increase our understanding of the need to identify the service quality gap between those felt and the expectations by service users in the port and ferry service industry so that it can be an illustration for future service quality to increase, in accordance with user expectations of port and ferry transportation services. In the future, it is necessary to compare the service quality gap from other dimensions that have an impact on the transportation business, such as guarantees of timeliness of departure or operational reliability.

References

[1] Ananth, A., Ramesh, R., & Prabaharan, B. (2011). Service quality gap analysis in the bank private sector: A Customers Perspective. Indian Journal of Commerce & Management Studies. MPRA Paper No. 29505.

[2] Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). "SERVQUAL revisited: A critical review of service quality", Journal of Services Marketing, 10(6), 62-81.

[3] Bahia, K., & Nantel, J. (2000). A reliable and valid measurement scale for the perceived service quality of banks. International Journal of Bank Marketing, 18(2), 84-91.

[4] Baird, B., Smallwood, J., Mrazek, M. D., Kam, J. W. Y., Franklin, M. S., & Schooler, J. W. (2012). Inspired by distraction: Mind wandering facilitates creative incubation. Psychological Science, 23(10), 1117-22.

[5] Bates J. J., Polak J., Jones P., & Cook A. J. (2001). The valuation of reliability for personal travel. Transportation Research Part E, 37(2-3), 191-230.

[6] Beirao, G., & Cabral, J. A. S. (2007). Understanding attitudes towards public transport and private car: A qualitative study. Transport Policy, 14(6), 478–489.

[7] Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses, Journal of Marketing, 54(2), 69–82.

[8] Bitner, M. J., & Zeithaml, V. A., (2003). Service marketing, third edition. New Delhi: Tata McGraw Hill.

[9] Cascetta, E., & Carteni, A. (2013). A quality-based approach to public transportation planning: Theory and a case study. International Journal of Sustainable Transportation, 8(1), 84-106.

[10] Cavana, R. Y., & Corbett, L. M. (2007). Developing zones of tolerance for managing passenger rail service quality. International Journal of Sustainable Transportation, 9(8), 612-626.

[11] Cunningham, F., & Young, E. (2002). Cross-cultural perspectives of service quality and risk in air transportation. Journal of Air Transportation, 7(1), 3-26.

[12] Eboli, L., & Mazzulla, G. (2008). Willingness-to-pay of public transport users for improvements in service quality. European Transport, 38, 107-118.

[13] Eboli, L., & Mazzulla, G. (2011). A methodology for evaluating transit service quality based on subjective and objective measures from the passenger's point of view. Transport Policy, 18(1), 172-181.

[14] Eboli, L., & Mazzula, G. (2014). Relationships between rail passengers' satisfaction and service quality: A framework for identifying key service factors. Springer-Verlag Berlin Heidelberg. Public Transp, 7, 185–201.

[15] Friman, M., & Garling, T. (2001). Frequency of negative critical incidents and satisfaction with public transport

services. Journal of Retailing and Consumer Services, 105-114.

[16] Hensher, D. A., Stopper, P., & Bullock, P. (2003). Service quality-developing a service quality index in the provision of commercial bus contracts. Transportation Research, 37(A), 499-517.

[17] Kai, C., & William, J. (2006). Passengers' perceived service quality of city buses in Taipei: Scale development and measurement. A Transnational Trans Disciplinary Journal, 26(5), 645-662.

[18] Kotler, P. (2003). Manajemen pemasaran. Edisi kesebelas. Jakarta: Indeks Kelompok Gramedia.

[19] Kumbhar, V. M. (2011). Factors affecting the customer satisfaction in e-banking: Some evidence from Indian banks. Journal of Management Research and Practice, 3(4), 1-14.

[20] Laroche, M, Cleveland, M., & Browne, E. (2004). Exploring age-related differences in information acquisition for a gift purchase. Journal of Economic Psychology, 25, 61-95.

[21] Lewis, B. R., & Mitchell, V. W. (1990). Defining and measuring the quality of customer service. Marketing intelligence & planning, 8(6), 11-17.

[22] Moenir. (1992). Manajemen pelayanan umum Indonesia. Jakarta: Bumi Aksara.

[23] Mowen, J. C., & Michael, M. (2002). Perilaku konsumen (jilid 1), edisi kelima. Jakarta: Erlangga.

[24] Mramba, C. (2012). Meli za ziwa Victoria ni majeneza yanayoelea.

Journal of Marketing, 55, 20-38.

[25] Nasution. (1996). Manajemen transportasi. Jakarta: Ghalia Indonesia.

[26] Nathanail, E. (2008). Measuring the quality of service for passengers on the Hellenic railways. Transportation Research Part A: Policy and Practice, 42(1), 48-66.

[27] Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64 (Spring), 12-40.

[28] Parasuraman, A., Zeithal, V., & Berry, L. (1985). Conceptual model of service quality and implication for future research. Journal of Marketing, 41-50.

[29] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research. Journal of Marketing, 58 (January), 111–124.

[30] Payne, A., & Rickard, J. (1997). Relationship marketing, customer retention, and firm profitability. Working Paper, Cranfield School of Management, Cranfield, UK.

[31] Ruyter, K., Bloemer, J., & Peeters, P. (1997). Merging service quality and service satisfaction: An empirical test of an integrative model. Journal of Economic Psychology, 18, 387-406.

[32] Solomon, *et al.* (2015). An old model for a new age: Consumer decision making in participatory digital culture. Journal of Customer Behavior, 14(2), 127-146

[33] Swanson, J. L., & Woitke, M. B. (1997). Theory into practice in career assessment for women: Assessment and interventions regarding perceived career barriers. Journal of Career Assessment, 5(4), 443–462.

[34] Transportation Research Board. (1999). A handbook for measuring customer satisfaction and service quality. TCRP Report 47, National Academy Press, Washington D.C.

[35] Tyrinopoulos, Y., & Aifadopoulou, G. (2008). A complete methodology for the quality control of passenger services in the public transport business. European Transport, 38, 1–16.

[36] Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector services. Managing Service Quality: An International Journal, 11, 380-388.

[37] Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). Delivering quality service balancing customer perceptions and expectations. New York, NY: The Free Press.