EXPLORING CITIZEN’S SATISFACTION WITH THE INFRASTRUCTURE OF SERVICES AT A LOCAL SEAPORT IN TERNATE, NORTH MALUKU

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ABSTRACT

Main objective: This research aims to explore the aspects of citizen satisfaction with basic government infrastructures, using a specific seaport as the site for the research. Background problems: Their impacts on people’s lives of basic infrastructures that the Indonesian government is currently developing should be measured, particularly how satisfied citizens are with these infrastructures. Extant literature indicates there has been limited discussion using qualitative research—which has mainly used the grounded theory approach—to understand citizen satisfaction. This context has rarely been used to explore users’ satisfaction with the local seaport. Novelty: This current research offers theoretically grounded and real aspects of citizen satisfaction that lead to a testable model to enrich a comprehensive conversation of customer satisfaction in the public sector. Methods: This research has used a grounded theory approach to define and explore, in depth, the main aspects of satisfaction felt by citizens who are the customers frequently using the seaport to enable their mobility between the islands. Results: The results identify five main aspects of citizen satisfaction when using local seaports. These aspects were used to revisit the dimensions of SERVQUAL. The sentiments of the users were also recognized and analyzed as a part of an overall evaluation of the satisfaction. Conclusion: While previous studies have provided a great deal of evidence on citizen satisfaction, the results of this study are drawn from an in-depth examination of those earlier pieces of evidence, including those regarding emotions and sentiments. Future studies are also recommended to overcome some of the limitations of this research.

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INTRODUCTION

Up to 2019, the Indonesian government had been intensively building the nation’s basic infrastructures, including seaports across the country. It is therefore interesting to note whether the efforts have met public expectations. These expectations include narrowing and accelerating the connections between the islands in Indonesia, particularly in the Province of North Maluku. In other words, the availability of reliable infrastructures is also an effort to narrow the gap between regions in Indonesia and within the province.

With an administrative area of 145,801.10 km², nearly 80% of the province is the ocean. The city of Ternate is an economic center in the province (BPS, 2019). The geographical conditions has burdened the city with having to cater to the mobility of people and goods from outside the province to the other small cities and places on the scattered islands. Hence, four major local seaports in Ternate play essential roles in guaranteeing this mobility. In particular, Bastiong seaport, the busiest local seaport (BPS, 2019; KSOP, 2018), serves the needs of most parts of the province.

These circumstances mean that inter-island commuters are highly reliant on the local seaport. In other words, these seaport users have almost no choice except to use it. However, this also implies that their satisfaction could be ignored by the government who has provided basic infrastructures, including the seaports. Under these conditions, this study considers their levels of satisfaction more as citizens and as customers (Hu et al., 2017; Wai et al., 2013).

Kotler et al. (2014) have defined satisfaction as someone’s feelings of pleasure or displeasure resulting from judging a product’s perceived performance. Some have studies discussed this topic mainly from the perspective of the service sector (Pullman & Rodgers, 2010; Strenitzerová & Gaña, 2018) or information technology infrastructure (Lenka et al., 2010; Yap et al., 2013), while other concerns have been primarily about physical evidence that defines satisfaction with basic infrastructure (Basir et al., 2015; Soelasih, 2015).

Meanwhile, others have mostly been concerned with how customer satisfaction can improve infrastructure capacity (Koga & Kaminishi, 2013; Pham, 2016; Wirasinghe et al., 2013). In particular, almost none of the studies focus on how citizen satisfaction could lead to a better capacity design of the basic infrastructure in urban areas.

Moreover, this study emphasized ‘feelings’ from the definition above. These feelings are related to the definition of public satisfaction, as highlighted by Zhong and Duan (2018) that the status of the public’s feelings is a subjective evaluation of how government institutions meet their expectations. This subjective evaluation is a measure of public satisfaction. This definition led this research to use a qualitative approach in revealing citizen satisfaction, particularly the satisfaction of the seaport users. Discussions of this type of satisfaction as citizen satisfaction rather than public satisfaction are more recognized by the literature (Akinboade et al., 2012; Zenker & Rütter, 2014). Nonetheless, this current research uses the terms interchangeably.

The notion of feelings contained in the definition of satisfaction above becomes more subjective than objective when defining the quality of service. Here, Parasuraman et al.’s (1985) seminal studies have stood up for decades in measuring the level of service quality, which influences customer satisfaction. Interestingly, a critique by Buttle (1996) verifies that the original basis for the service quality (SERVQUAL) is an inductive approach. He argues, “Parasuraman et al.’s work is highly inductive in that it moves from historically
situated observation to the general theory” (Buttle, 1996).

This research has to admit that a minimal number of studies have employed a qualitative approach to thoroughly verify customer satisfaction to measure the maximum benefits of a product or a service (Adel & Wiesner, 2015; Papalexi, 2017). Although other studies have demonstrated a qualitative approach to customer satisfaction, these studies are more focused on customer satisfaction than citizen satisfaction (Ambrose et al., 2005; Lu et al., 2015; Maccarthy et al., 2006). Arguably, when a service has competitors, the satisfaction measurement tends more toward customer satisfaction than citizen satisfaction. On the other hand, limited studies on citizen or public satisfaction use a qualitative approach to emphasize a subjective aspect (Tan & Lim, 2019; Wai et al., 2013). The limited discussions in those contexts revealed an interesting research gap in exploring citizen satisfaction specially in the context of seaport users while at the same time using the grounded theory approach.

LITERATURE REVIEW

1. Service Quality

Service quality has become one of the essential topics of discussion when dealing with customer satisfaction. The most well-known approach is service quality (SERVQUAL), which was first introduced in the mid-'80s. SERVQUAL has been popular in measuring the level of a service received by its customers. In a previous study, Parasuraman et al. (A. Parasuraman, Zeithaml, Valarie A Berry, 1985) identified ten components of SERVQUAL—reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer, and tangibles.

Throughout their later study, Parasuraman et al. (1988) broke down those ten components into five dimensions: reliability, assurance, tangibles, empathy, responsiveness (RATER). Reliability, tangibles, and responsiveness stayed separate, whereas the other seven components were collapsed into two composite dimensions: assurance and empathy. Parasuraman et al. developed a 22-item instrument to calculate consumers’ preferences and impressions (E and P) of the five RATER measurements. Four or five numbered objects had to be used to calculate each one. The instrument was administered twice in various forms, first to measure expectations and second to measure perceptions.

SERVQUAL has been exposed to various theoretical and practical procedures during its increasing success and widespread use. As a result, SERVQUAL has also been criticized (Buttle, 1996; Souca, 2011). On the flip side, however, this concept was still being used in the last few years, such as in the airline industry (Basfirinci & Mitra, 2015; Rezaei et al., 2018), banking sector (Ali & Raza, 2017), higher education section (Galeeva, 2016) and in many more recent studies. However, only a few studies have paid attention to the use of SERVQUAL in the public sector, especially when the government is a producer/provider and when the public are the customers. Therefore, literature needs to zoom in to explore the discussions in this area, especially in ensuring the satisfaction of the citizens or the public.

2. Citizen Satisfaction

According to Kotler et al. (Kotler et al., 2014), “Satisfaction is a person’s feelings of pleasure or disappointment that result from comparing a product’s perceived performance.” This definition has been used to describe customer satisfaction in studies of customer satisfaction for years. It mainly illustrates the reciprocal relationship between the producer and its
consumer. However, this definition also means that a producer must maintain a long-lasting relationship with its customers. The relationship is enabled when the producer realizes that customer satisfaction is far more important than attracting new customers (Kim & Lee, 2011; Yoshida & James, 2010).

Retaining customer loyalty due to their satisfaction with certain products is almost impossible in a highly competitive business environment. This situation has caused fierce competition recently through the use of social media to promise better products than those of competitors (Agnihotri et al., 2016; Alalwan et al., 2017). This context is more appropriate than another one which uses a producer-customer paradigm (Abdullah & Kalianan, 2008).

However, the situation above occurs in a free market where competitors are available and have similar services. When a producer—especially when it is a government—monopolistically runs a product or a service, a customer is different from a user (Daunorienė & Žekevičienė, 2015; Moodley, 2012). The need to represent the sovereign consumer is well in line with the democratic political philosophy where the individual is the repository of supreme power. The producer-customer paradigm needs to be changed into a government-citizen one in this context. Abdullah and Kalianan (Abdullah & Kalianan, 2008) clarify the difference between the two, as shown in Table 1.

It is further noted that the definition of a person as a 'customer' might, therefore, seem inappropriate under the government-citizen paradigm. However, the word 'customer' is helpful in the context of enhancing service delivery because it supports specific values that are as central to the provision of services for commercial benefit as they are to the provision of services (Abdullah & Kalianan, 2008). Furthermore, Moodley (Moodley, 2012) explains that, in considering the citizen as consumers, the government needs to listen to and take into account citizen opinions when making decisions: to decide what services should be provided, to treat them considerately and respectfully, to ensure that the agreed level and quality of service are always of the highest standard and to react quickly and sympathetically.

The explanations above briefly differentiate between customer satisfaction and citizen satisfaction. Again, Abdullah and Kalianan (Abdullah & Kalianan, 2008) have stated that the primary measure of local government efficiency is citizen satisfaction and not just consumer satisfaction. However, within the context of the government being the exclusive provider of some services, citizens have no option but to use the products and services provided by the government. In this situation, citizen satisfaction needs to be measured. Zhong and Duan (Zhong & Duan, 2018) have stated that the public's feelings a subjective evaluation of how government institutions meet their expectations, and this subjective evaluation measures citizen satisfaction.

**Table 1** – Dimension of the Two Paradigms (Abdullah & Kalianan, 2008)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Producer-Customer</th>
<th>Government-Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
<td>Producer/Provider</td>
<td>Government/Protector</td>
</tr>
<tr>
<td>Challenge</td>
<td>Production/Management</td>
<td>Welfare and Safety/Consultation/Balance</td>
</tr>
<tr>
<td>Relationship</td>
<td>Economic</td>
<td>Political/Social</td>
</tr>
<tr>
<td>Indicators</td>
<td>Productivity/Satisfaction</td>
<td>Support/Participation</td>
</tr>
<tr>
<td>Public</td>
<td>Consumers/Recipients/Buyers</td>
<td>Deciders/Participants/Tax Payers</td>
</tr>
</tbody>
</table>
Because the basic paradigm for citizen satisfaction is distinct from the one for customer satisfaction, the measurement should also be differentiated. First, however, it is crucial to highlight how customer satisfaction is measured. Several studies have attempted to make the measure of customer satisfaction more holistic by integrating emotional aspects into the customer satisfaction index (Deng et al., 2013). Other studies have examined how customer satisfaction surveys affect strategic marketing performance (e.g., Ilieska, 2013) and overall performance (Sun & Kim, 2013).

Unfortunately, these previous studies were mainly concerned with customers’ satisfaction under the producer-customer paradigm. Until recently—when the public has been treated as customers—limited studies have dedicated to exploring citizens' satisfaction (Zenker & Rütter, 2014), because they are mostly users who have no option except to use the products or services provided by the government. “Citizen satisfaction is an important metric in evaluating cities, an effort to improve city performance ultimately affect the benefit and comfort of city inhabitants” (Nakamura & Managi, 2020, p. 3). It is suggested that surveys on citizen satisfaction have tremendous appeal as they are a realistic way to measure the effect of governance (Akinboade et al., 2012).

The tendency for there to be a lack of hard evidence in citizen satisfaction studies is thought to be because of the nature of the provided products or the service. It is almost certain that this is because the citizen has no option but to use those services and products. In other words, the citizen’s satisfaction would not be the government's concern as no other options are available. Hence, measuring government effectiveness and efficiency are needed by borrowing the producer-consumer paradigm as the basic concept (Abdullah & Kalianan, 2008; Daunorienë & Žekevičienė, 2015).

To fill this gap, as mentioned earlier, other studies are likely to be proposed which conduct surveys that borrow from those that use the producer-customer paradigm. In addition, governments worldwide have been striving to measure how effectively they take care of their citizen through an institutionalized mechanism. This effort includes the Indonesian Government under Ministerial Decree (KEPMENPAN) Number KEP/25/M.PAN/2 of 2004 regarding the General Guideline on Establishing Citizen Satisfaction Index of Government Institution Unit.

Although the surveys provide significant evidence for decision-makers, especially the government, such studies exhibit other flaws. Most studies on customer satisfaction that use a survey suffer from a survey’s inherent flaws, including “the possibility of missing appropriate context and of lacking respondents’ knowledge” (Supriyadi, 2010, p. 431); this is because a survey tends to use a general assumption (Tan & Lim, 2019). A more subjective approach is needed to explore those feelings being studied to avoid this general assumption.

Cheng and Rashid (2013) have suggested that open-ended questions would allow researchers to have greater access to the respondents' thoughts about the issues. In other words, a qualitative approach is likely to be proposed to fill this missing gap, as stated by Van de Walle (2018). Unfortunately, studies are seen as ignoring customers’ feelings toward the products they consume. This negligence is also why Deng et al. (Deng et al., 2013) integrated the emotional aspect of their study. Therefore, besides missing hard evidence measuring citizen satisfaction, a survey is not always a panacea. Another approach is still needed, and it is believed that this missing gap is more comprehensive when it comes to measuring citizen
satisfaction. This current research will contribute to filling this gap by thoroughly exploring and understanding citizen satisfaction factors by considering their subjective feelings and emotions that lead to their level of satisfaction.

METHODS, DATA, AND ANALYSIS

1. The Use of Grounded Theory Approach

The literature review offers a theoretical perspective for a study but is not a conceptual framework, as it might not drive the study or provide a framework for the analysis (Klopper, 2008). Although the literature is not reviewed to generate a conceptual paper, in grounded-theory research, the literature is used to explain, support, and extend the generated concept and middle-range theory that appears from the research (Grove et al., 2012). These brief explanations are essential to establish expectations from the literature for this study and how these expectations affect the analysis and discussions.

As mentioned earlier, this research emphasized the ‘feelings’ of the users of local seaports. This context was aligned with the subjective evaluation of government investment made by the public (Wai et al., 2013; Wirasinghe et al., 2013), including the infrastructure such as a seaport. This subjectivity, however, existed among citizens who had no option unless using a regulated system provided by the government. Both subjectivity and the regulated system led this research to point out the four-research paradigm by Burrell and Morgan (1979, p. 22) and used interpretivism as a basic paradigm in using a qualitative approach.

Moreover, citizen satisfaction in this research was considered from a more subjective perspective. Hence, exploring the aspects of citizen satisfaction and how the users defined them was expected to be grounded theoretically. This context directed this research to learn more about grounded theory (GT) as it is “derived from data and then illustrated by characteristic examples of data” (Glaser & Straus, 1967, p. 5). Interestingly, GT is also perceived as a process and methodology (Charmaz, 2014; Creswell, 2012).

2. Research Site, Population, and Sampling

Several steps were employed in implementing GT in this research, as summarized in Figure 1. First, the research process was initiated by collecting secondary and primary data. Data collection was commenced by gathering secondary data as the process required the researchers to choose which of the five local seaports in Ternate has the highest number of passengers and various destinations compared to others. Based on the Seaport Authority (KSOP), the Bastiong seaport was selected. In other words, the population in this seaport allowed this research to use convenient sampling to approach the potential participants. This technique was used because the participants were experiencing travelling by sea for first time. In grounded theory, according to Morse (2010, p. 236), “the researchers use convenience sampling to locate persons who are available who have already gone through and observed the process”. Interestingly, in this current study, the “opportunity to participate is not equal for all qualified individuals in the target population and study results are not necessarily generalizable to the population” (Etikan et al., 2016, p. 4). Therefore, although they have had quite similar experiences, the result should not be generalized equally in this current research.

3. Data Collection and Analysis

The primary data were the transcripts from the interviews of the research participants. These participants were approached and selected and interviewed at their convenience while at the
port. The interviews were conducted using an unstructured approach because all the potential participants, as seaport users, had similar characteristics. Therefore, although the participants could provide different responses, they were in a similar environment, Bastiong Seaport. Fruitful answers were then expected from them.

Importantly, all the participants were asked a similar research question, which was: “What do you think about the infrastructure and its facilities in Bastiong Seaport?” This focused question was based on earlier observations by the researcher when selecting a potential seaport in Ternate and figuring out the main characteristics of the potential participants. During these observations, it initially appeared that the seaport users were most concerned about the seaport’s infrastructure and facilities. This initial finding allowed the question to be more specific, focusing on the satisfaction with infrastructure and facilities given the similar characteristics of the potential research participants.

The probing technique was also employed to elicit deeper explanations by asking the participants more questions when they tended to provide shorter answers (Whiting, 2008). The probing technique also allowed the researchers to explore more than just the facilities and infrastructure of Bastiong seaport. The interviews were then digitally recorded and transcribed verbatim.

Once the transcripts were available, the three coding processes were conducted. The processes consisted of initial (open) coding, focused (selective) coding, and theoretical coding. These processes relied on NVivo Pro 12. These coding processes increased the abstraction yet should be able to represent the actual data. To ensure this, a constant comparative analysis was conducted in parallel with it, along with a check on the other supporting notes (memos) while interviewing the participants. Constant comparative analysis means using unambiguous coding and analytic processes to generate theory (Glaser &Straus, 1967) systematically.

**Figure 1 - Implementing Grounded Theory (Charmaz, 2014)**

Data Collection

Initial (Open) Coding

Focused (Selective) Coding

Theoretical Saturation

Concepts Generating & Theory Building

Constant comparison and memo-writing

Maintaining validity and reliability
4. Validity and Reliability

Also depicted in Figure 1 are the processes that must be valid and reliable. Maxwell (2012) suggested using comparison, feedback, triangulation, and quasi-statistics to ensure the validity of the results. In terms of reliability, this research used Long and Johnson’s (2000, pp. 30–31) reliability elements, consisting of stability, consistency, and equivalence. Along with constant comparative analysis and memo-writing, these were expected to ensure the identified aspect of citizen satisfaction could be conceptually generated.

Generating themes and the participants’ sentiments were conducted in parallel with the validity and reliability testing processes. As mentioned earlier, the validity testing process consists of comparison, feedback, triangulation, and quasi-statistics (Maxwell, 2012). Leaving feedback aside—because the processes did not confirm back the answers to the participants—comparison between the participants' answers and triangulation between the results of analyzing participants' answers were conducted. Besides this, the number of travelers to specific destinations was considered for the convenient sampling of the potential participants. Therefore, it was believed this was a quasi-statistical approach to this research.

Meanwhile, the reliability measurement was based on stability, consistency, and equivalence. (Long & Johnson, 2000). Arguably, consistency and stability could be measured during the comparison and triangulation processes. In other words, both validity and reliability testing were conducted equally. As qualitative research, this study only reached its internal reliability since it was only a minimal number of participants.

RESULTS

1. The Research Site

As explained earlier, this research process started with a collection of secondary data, particularly in choosing the site to be researched. The selection process referred to one of Maxwell’s (Maxwell, 2012) validity elements for qualitative research that is quasi-statistical. The choice of the region started the selection of the site. Although, geographically, the municipal administrative area of Ternate is the smallest (0.35%) portion of the total area of North Maluku Province, the city has the second largest population after South Halmahera District (BPS, 2019).

There are four seaports in Ternate, which are points of departure for goods and people to other islands within the province. They are Dufa Dufa, Gamalama, Semut Mangga Dua, and Bastiong. The number of people who travel from Bastiong has been shown to be the highest in Ternate (KSOP, 2018). This is because this seaport caters to people and goods to most parts of the province, including Bacang and Obi in South Halmahera, several islands such as Tidore, Makian, Kayoa, and Moti. Consequently, Bastiong seaport had more potential participants both in number and in its variety of destinations, compared to the other seaports.
2. Data Collection and Analyses

In-depth interviews were conducted with nine research participants at this seaport. The number of participants initially indicated that the answers had a similar tendency or reached their saturation earlier. This saturation occurred due to the initial observations during the selection of the site to be researched that allowed a narrowing of the interview questions. This question led to a thorough exploration of the answers of the participants, so the saturations were obvious due to their identical characteristics as the seaport users. As a result, nine participants were sufficient to describe the saturation of seaport users’ satisfaction. Table 2 shows a brief description of the research participants based on the destinations.

Figure 3 and Table 2 summarize the destinations of the travelers and indicate that those who traveled to Bacan, South Halmahera District (Kabupaten Halmahera Selatan), outnumber other participants.

Because the targeted participants were considered to have similar characteristics, a traveler, the interview process used an unstructured interview technique and relied only on their most convenient on the site. The interview results are then transcribed to be changed in textual form. This transcription was made for each participant and further analyzed through the stages of coding: initial coding, selective coding (selective coding), and theoretical coding (theoretical coding), as well as concept generating as briefly elaborated in the methods above. The results of this coding are then analyzed to develop concepts of consumer satisfaction based on explicit descriptions from participants.

Table 2 - Destinations of Research Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Destination</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 01</td>
<td>Obi, Southern Halmahera</td>
<td>Male</td>
</tr>
<tr>
<td>Participant 02</td>
<td>Bacan, Southern Halmahera</td>
<td>Female</td>
</tr>
<tr>
<td>Participant 03</td>
<td>Bacan, Southern Halmahera</td>
<td>Male</td>
</tr>
<tr>
<td>Participant 04</td>
<td>Bacan, Southern Halmahera</td>
<td>Female</td>
</tr>
<tr>
<td>Participant 05</td>
<td>Tidore Island</td>
<td>Female</td>
</tr>
<tr>
<td>Participant 06</td>
<td>Tidore Island</td>
<td>Male</td>
</tr>
<tr>
<td>Participant 07</td>
<td>Makian Island, Southern Halmahera</td>
<td>Male</td>
</tr>
<tr>
<td>Participant 08</td>
<td>Makian Island, Southern Halmahera</td>
<td>Male</td>
</tr>
<tr>
<td>Participant 09</td>
<td>Moti Island, City of Ternate</td>
<td>Male</td>
</tr>
</tbody>
</table>
Table 3 below shows the process result of initial coding. The coded lines were based on the transcripts where in Bahasa Indonesia and local dialect, although the coding processing produced sentences in English. This initial coding was conducted by using line-by-line coding and then coded the line based on its abstract meaning. The process of coding them utilize NVivo Pro (Figure 4), including the next coding processes selective coding, theoretical coding, as well as concept generating (Table 4).

Table 3 - Coding Process: Initial Coding

<table>
<thead>
<tr>
<th>Initial Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>(add more rubbish bins) near seating area to avoid people throwing rubbish into the sea</td>
</tr>
<tr>
<td>(expecting) the stairs should be made from concrete,</td>
</tr>
<tr>
<td>(section of seaport) for Tidore is small</td>
</tr>
<tr>
<td>(showing expectation) by providing an example on how to separate between parking area for cars and motorcycles</td>
</tr>
<tr>
<td>(staff replied) that's how it is</td>
</tr>
<tr>
<td>(the ships) are parked in parallel too far so it's difficult and dangerous to board</td>
</tr>
<tr>
<td>a fishery student cannot see a dirty seaport</td>
</tr>
<tr>
<td>a scale of one to ten, a maximum of seven</td>
</tr>
<tr>
<td>acknowledging the existence of waiting room'</td>
</tr>
<tr>
<td>another concern is parking</td>
</tr>
<tr>
<td>as far as I can see it is not a waiting room</td>
</tr>
<tr>
<td>better to have assigned place for smoker such as for males</td>
</tr>
<tr>
<td>boarding the ship can be dangerous</td>
</tr>
</tbody>
</table>
both the authority and the passengers need to be responsible for the facility
broken seats
chairs for example
clarify the entrance fee (tariffs)
cleanliness as an example
collecting levy with no legal identity
collecting levy with no legal identity (2)
comfortability for all users
comparing waiting rooms (indoor and outdoor)
complaints because of lack of services for the government
concern about parking in Bastiong local seaport
concerning aging factor (to use stairs)
concerning low and hide tide
considering the speed of services from the speedboats
consequence in needing better chairs (in waiting room)(
depart right away when the passengers are full
do not provide wooden chairs
don't like and not satisfied with the available facilities
double payments taken from citizen
expecting authority to organize the sellers (in the seaport area)
expecting cleaning service
expecting cleaning service to do their jobs
expecting cleanliness at seaport area
expecting free payment for toilet
expecting more attention from related institution
expecting more rubbish bins
expecting no charge for public facility
expecting seaport staff to manage the situation
expecting seating availability in waiting room
expecting shower as a part of waiting room facility
expecting the government to provide all its people needs
fishing port is seen as better and more feasible as a port
for example, chairs for passengers when waiting.
from ternate to bacan
generally, it's about parking
how come the area is much modern but there's no toilet
how is that possible become four thousand
I cannot say I am satisfied
I don’t understand the rules and regulations now
I guess the entrance fee is unclear (questionable)
I guess the facility (infrastructure in Bastiong seaport is not good
I guess the problems lie in entry fee, toilet, and ship parking
I might punch him
I though it was still one thousand
I was not allowed to enter the port because I paid only one thousand
indoor waiting room is enough
indoor waiting room would be sultry
ineffective effect of the services (or infrastructure)
infrastructure is the problem.
it creates narrow space for the seaport area
it is more as a bridge with roof top than a waiting room
it needs to be well managed between car parking and motorcycle parking
it seems unmanageable
it was used to be one thousand (rupiah) only when I came here in 2005 (2)
it's about the ship (parking position)
it's actually illegal levies
it's confusing the amount of levy of this seaport
it's enough because only for boarding and alighting
it's hard to go to do our thing in bathroom
it’ more a relaxing room for speedboat crew
it's my argument
it's not possible for use to seat on the floor
it's so difficult to look for a toilet when I needed it
it's so ridiculous to pay for using a toilet
lack attention to toilets
lack of cleanliness
lack of hygiene
lack of infrastructure
lack of services
less comfortable
less people can have a seat because less chairs in good condition
Levy are also charged for those who deliver or leave
levy for not passengers.
levy is applied based on local government regulations
levy rates as a second concern at the port of Bastiong
levy should be included in ticket price bought by a passenger
local seaport that has minimum facility
local young men look after the parking
main concern toward the stairs to board the speedboat
municipality does not provide chairs as needed in waiting room
many destinies that need more attentions
mayor regulation but rubbish are every where
minimum seating condition provided by dishub
more convenient design for parking area
most important aspect
my first concern (in this seaport)
my motorcycle was asked to park mixing with cars
my motorcycle was blocked by a car
my second concern about entrance fee or levy
my suggestion is please clean this rubbish
need more attention on parking
need more attention to cleanliness
need tidier seats
no chairs in waiting room
no family in Ternate so that need to continue their journey as soon as possible. Rain makes their travels delayed.

no need to have bigger (or wider) waiting room
no need to pay for car parking
no need to put mask on to inhale cigarette smoke
no port for Makian Moti
no smoking signage as important aspect
no toilet provided by the authority
no waiting room for Makian Moti passengers
not all services are in the waiting room
not bad not good, personally
not eligible to meet the satisfaction requirements
not from dishub staff but from local young men
not satisfied with the services
not to mention trucks that can occupy and block the area
observation on the Bastiong harbor waiting room
office tasks that require using Bastiong port
once paid levy, no need paying for parking
outdoor waiting room with roof to protect from the sun
paid parking facility
parking rules are confusing
passengers' right for convenient facility
paying levy means they are responsible about us.
people activities in Ternate also heading to other destinations
passengers who are queuing when buying tickets needs can complaints
please ask authority regarding the amount of levy
please manage the sellers around the seaport
please provide chairs that are comfortable for taking a rest
please provide rubbish bins at every corner so the rubbish are more manageable
please tell the authority no need to pay parking in government facility
please the authority manage the ships parking positions
pro and cons on smoking
raining is additional challenge (for passengers)
reality of seaport infrastructure to be prioritized
recognizing two ports
regarding infrastructure in Bastiong seaport
related party (or institution) needs to provide rubbish bins
reluctant to object to the older people
seaport facility still at minimum level
second concern is about waiting room that is at minimum level
shower or take a bath as a minimum criteria in a public facility
signages dumped areas or rubbish bins
so it relates to the seats (or chairs in the waiting room)
so it’s double payment
so the port does not provide proper parking service
so who's the owner of the parking area-the authority or people of Bastiong
sometime two thousand, sometime four thousand they collected
stairs to board the speedboat
sufficient facility (or infrastructure) in the seaport
take and give of government and its people
ternate has been different from the past
ternate now is so crowded
ternate was used to be quite
the chairs are less comfortable for passengers to have a rest after a long journey
the facilities do not satisfy our expectations
the fat staff
the government makes barriers
the indicator is in this room (waiting room)
the levy increase is way too high
the levy or parking fee should be inclusive in passenger's ticket
the sellers can block the motorcycles driveway
the ship already departed in the morning
the staff requested me to pay four thousand and I was surprised
the waiting room is not feasible
then about the departure schedule of the ships
then we pay parking fee to the local young men
there's entry fee (levy), there's also payment for toilet
they point to the waiting room but there are chairs
three chairs are available in the waiting room (as seen)
toilet has similar conditions to other public places in Ternate
two major service in Bastiong seaport- tidore and bacan Obi
uncertain amount of levy
uncertain departing schedule
uncertain schedule of ships
unclear parking area for Bacan and Obi
unexpected paid toilet
unmanaged seaport
unorganized ship positions and schedules
vacant area or chairs (in the waiting room)
very minimum level of facility
waiting for boarding on the port
waiting room already exists
waiting room as the most concern facility at seaport is less satisfying
waiting room for bacan Obi passengers (only)
waiting room needs to be adjusted to the conditions of the passengers
we cancel our trip and continue for tomorrow but the ship isn't there
we have paid for entry fee, we need to also pay for parking
we need to postpone out departure (or travel)
we need to seat while waiting for the ship
we pay entry fee (levy) to dishub
what they offer to us with the facility
what we know is the ship departs at seven in the evening
while (the authority) does not provide chairs (or seats)
wondering whether there is a waiting room
Initial Coding

(add more rubbish bins) near seating area to avoid people throwing rubbish into the sea
(expecting) the stairs should be made from concrete,
(section of seaport) for Tidore is small
(showing expectation) by providing an example on how to separate between parking area for cars and motorcycles

Figure 4 - Example of Initial Coding Process

Table 4 – Coding Processes and Concept Generating

<table>
<thead>
<tr>
<th>Selective Coding</th>
<th>Theoretical Coding</th>
<th>Concept Generating</th>
</tr>
</thead>
<tbody>
<tr>
<td>dumped areas</td>
<td>area</td>
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<tr>
<td>parking area minimum</td>
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<tr>
<td>seaport area infrastructure</td>
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<tr>
<td>seating area</td>
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<tr>
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<td></td>
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<tr>
<td>vacant area</td>
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<td></td>
</tr>
<tr>
<td>bins</td>
<td>cleanliness</td>
<td>Facility</td>
</tr>
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<td></td>
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<td>expecting cleanliness</td>
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<tr>
<td>Lack of hygiene</td>
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<td>legal identity cleanliness</td>
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<td>good condition</td>
<td>condition</td>
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<tr>
<td>seating condition</td>
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<tr>
<td>Selective Coding</td>
<td>Theoretical Coding</td>
<td>Concept Generating</td>
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<tr>
<td>services lack</td>
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<tr>
<td>similar conditions</td>
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<tr>
<td>bacan obi passengers</td>
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<td>passengers</td>
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<td>makian moti passengers</td>
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<td></td>
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<tr>
<td>passenger levy rates</td>
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<td>seating</td>
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<tr>
<td>seating area</td>
<td>seating</td>
<td></td>
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<tr>
<td>waiting room facility</td>
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<tr>
<td>the growth of ternate since north maluku became a province</td>
<td>crowded ternate</td>
<td></td>
</tr>
<tr>
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<td>journey ternate</td>
<td></td>
</tr>
<tr>
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<td>quite ternate</td>
<td></td>
</tr>
<tr>
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<td>bastiong seaport</td>
<td></td>
</tr>
<tr>
<td>frequently used seaport</td>
<td>bastiong seaport (2)</td>
<td></td>
</tr>
<tr>
<td>trash everywhere</td>
<td>dirty seaport</td>
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</tr>
<tr>
<td>unattended speedboat parking</td>
<td>expecting seaport staff</td>
<td></td>
</tr>
<tr>
<td>people do fishing</td>
<td>fishing port</td>
<td></td>
</tr>
<tr>
<td>pier for ships and boats</td>
<td>infrastructure lack</td>
<td></td>
</tr>
<tr>
<td>travel between nearby islands</td>
<td>local seaport</td>
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<tr>
<td>many ships but short piers</td>
<td>minimum level seaport facility</td>
<td></td>
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<tr>
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<td>chosen port</td>
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<td>people come to sell merchandise and food</td>
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**Host City**

**Infrastructure**
<table>
<thead>
<tr>
<th>Selective Coding</th>
<th>Theoretical Coding</th>
<th>Concept Generating</th>
</tr>
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<tr>
<td>seaport area infrastructure</td>
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<td>dishub staff</td>
<td>staff</td>
<td>Management</td>
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<tr>
<td>fat staff</td>
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<tr>
<td>staff do not posit the ships properly</td>
<td>unorganized ship positions</td>
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<td>entrance fee</td>
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<td>entry fee</td>
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<td>local government regulations levy</td>
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<tr>
<td>paid toilet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>paying levy means</td>
<td></td>
<td></td>
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</tbody>
</table>

The initial coding was then continued with selective coding (Table 4). At this step, the nodes from the initial coding were coded into a more abstract level and specifically into more particular themes or nodes. It is interesting to note that parking appears to be the most concerning aspect of the seaport affecting the user's satisfaction. In other words, selective coding allowed the analysis to explore the patterns of participants’ responses to a higher level of abstraction.

The next coding process was theoretical coding. At this step, themes generated from selective coding were analyzed and their level of abstraction increased. When employing theoretical coding, researchers analyze how categories and codes constructed from data might relate to each other as hypotheses to be integrated into a theory (Robert & Charmaz, 2013, p. 159).

A constant comparative analysis was also conducted in parallel to the previous coding processes. This analysis ensured a new theme represented raw data (the transcript), explained by the participants. In other words, as the process of coding escalated, a constant comparative analysis was continuously conducted to ensure themes at a higher level of abstraction still represented the actual data. As part of the grounded theory approach, constant comparative...
analysis was used to ensure the representation of a theme based on the original meanings—as illustrated in Figure 1 above—not necessarily from the words frequently mentioned by the research participants. The use of word frequency would heavily rely on quasi-statistics and could lose the real meaning of sentences. This analysis resulted in producing Table 4.

Five main themes surfaced from this theoretical coding: facility, payment, infrastructure, management, and host city (seaport location), as shown in Figure 6. It was interesting that the facility and infrastructure themes might need their definitions clarified. Therefore, the definition from a dictionary was used to refer to both terms in plain and simple language.

According to the Oxford Dictionary (2020), facilities refer to 1) [plural] buildings, services, equipment, etcetera, that are provided for a particular purpose; 2) [countable] a unique feature of a machine, service, etcetera, that makes it possible to do something extra. In contrast, infrastructure is defined as the basic systems and services necessary for a country or an organization to run smoothly, such as buildings, transport, and water and power supplies. From these definitions, it can be said that infrastructure is an essential system or service, while facilities are supporting aspects that lead to the infrastructure working optimally, as designed. This difference was noticed by a participant as can be seen in one comment as follows (Excerpt 1).

The excerpt strengthens the definition above where the essential function of the port has been working properly. Nevertheless, the participant still had a certain level of dissatisfaction that needed to be explored more, especially how they perceived satisfaction in using the seaport.

3. Identified Factors Affecting Citizen Satisfaction

3.1. Facility

Theoretical coding indicates that the facility is the central aspect of the participants' satisfaction in using the seaport. It can be seen from Figure 5 that there are several sub-aspects for defining satisfaction. Figure 5 clearly shows that the parking facility was the aspect causing the most concern, followed by the cleanliness, other facilities in the seaport, and the waiting room. Here is an example of how a participant implied one’s level of satisfaction in the parking facility in the seaport area (Excerpt 2).

"oo. kalo saya itu saya rasa di pelabuhan bastiong sana itu dong pe pelayanan deng doang pe fasilitas kurang bagus."  

"For me, I guess, at this Bastiong seaport here the service and the facilities are not so good"

Excerpt 1 - Participant 02

"nah kalo masuk ya kita masuk ranah parkiran harusnya di disain lebih enaklah. misalnya ini untukkhusus mobil khusus motor. saya memiliki kendaraan bermotor mau masuk bayar di situ parkir diarahkan tidak jelas ini parkiran mobil ini jadi terampur acak."

"So, if we enter the parking area, it is supposed to be designed more conveniently. [In fact] for example, this [area] is for cars, [and this area] is for motorcycles. I drove my vehicle and should pay [for it]. One has no clue about a parking spots for cars[,] so they are just randomly mixted."

Excerpt 2 - Participant 04
Moreover, it is also interesting to read the participants’ comments on the waiting room. As some ships took longer to depart for various reasons, including loading goods, the waiting room became a sub-aspect measure of the level of satisfaction by the participants. One participant was concerned about the condition of the waiting room, as shown in Excerpt 3. The excerpt implies dissatisfaction with the waiting room and its facilities inside.

3.2. Payments

When using the facilities, the users were required to pay for them, such as the parking area and even the toilets. For this aspect, the users had serious complaints. One of the participants expected the payment to be inclusive; unfortunately, this was not the case, as shown in Excerpt 4.

Another participant also felt dissatisfaction, especially the payment related to the toilet in the waiting room. Like the one above, the following participant expected that the entry fee that they had paid should include access to other facilities, including the toilet (Excerpt 5).

3.3. Infrastructure

As indicated earlier, one participant indicated that a minimum portion of the seaport was working properly. As a result of this perspective, it might not be surprising that infrastructure was in third place after facility and payments for the users as the aspects to determine their dissatisfaction. However, there was still some complaint regarding this essential functions. Another participant mentioned a simple yet important example of this. In Excerpt 6, he expresses that a simple part of the infrastructure is likely to lead to safety and comfortability for the passengers.

Excerpt 3 - Participant 09

”maksudnya kan kalo tong mau barangkat ini kan tong tunggu kapal ini kan butuh tampa dudu. nah sementara pelabuhan dong tara sedikan tampa duduk. kayak orang bilang ruang tunggu begitu. ruang tunggu di sana itu ada cuma dia pe tampa dudu yang tarada. tara mungkin tong dudu kabwa baclepo situ kabawa.”

Excerpt 4 - Participant 09

“kan tong maso kan so bayar, turu abis tong parkir juga bayar. jadi dia ta dobol dobol.”

Excerpt 5 - Participant 02

“john kurang bagus cuman pelabuhan nya untuk ke tempat penyeharangan tangga-tangga umut turun ke spit itu saja yang kendalanya di situ.... intinya kayak begini ...ini kan tangga-tangga ini kalo boleh itu seharusnya pake cor gitu to.. biar cor supaya pas orang pas aer nae aer turun itu [lebih gampang dan aman].”

Excerpt 5 - Participant 05

“I mean, if we wait for a departure—wait for this ship—we need seats. The quays have no seats. People say that [there is] a waiting room there. [It’s true] it’s there, but it has no chairs. No way would we sit on the floor”.

Excerpt 4 - Participant 09

“We have paid as we entered. Then we park, [we] also need to pay. So that means it’s a double payment.”

Excerpt 5 - Participant 02

“It is not good for the port—its stairs to the speedboat. That’s the problem. The point is the stairs—it would be better if the stairs were made from concrete [not from wood] so when people board [the speedboat] when the tide is too high or too low, we could board [easier and safer].”
3.4. Management

The next identified aspect for defining satisfaction was management. This aspect was analyzed and found to be the second-lowest response. Even though it might be low, some responses showed that management played an important role in ensuring a convenient journey for passengers. The responses included how the authority of the seaport managed the information regarding the schedule for departure. A participant complained about the uncertainty of the schedule for several ships (Excerpt 7).

3.5. Host City (Location of The Seaport)

As mentioned earlier, the reason for selecting Bastiong seaport was that it caters to many destinations in other regions in North Maluku. This seaport being the departure point is due to Ternate’s role as the center of the economic activities in the province. Based on the responses, it was apparent that the location of the seaport could play a significant role in determining the level of satisfaction. The city's dense population could mean that only a limited area could be further expanded to increase the facilities of the seaport. A participant remarked on how crowded the city is nowadays compared to previously (Excerpt 8).

4. General Sentiments

The excerpts above elaborate on the themes in a real context and imply sentiments based on each element. This research also analyzed these sentiments and found an interesting finding. It can be seen from Figure 5 that most participants have a negative sentiment in terms of all the identified elements of satisfaction. Even with different points of departure, the participants agreed that they were dissatisfied with the facility, payment, infrastructure, management, and location of the seaport.

However, on the positive side, those who were departing to Tidore had more positive sentiments regarding the identified elements than others. This finding is interesting because the route from Ternate to Tidore was the most frequently used one, as depicted in Figure 2 above. In addition, the passengers had a short waiting time at the seaport, so they felt fewer dissatisfactions, as implied by Participant 06 in Excerpt 9.

“dia pe jadwal-jadwal kapal kadang tong tara mangarti ini. kadang berangkat kapal ini tong tau dia barangkat malam itu jam-jam tuju itu. tong datang jam tuju dong bilang dia so barangkat pagi. tong tunda lagi beso malam lagi tong kasana itu taradapa lagi. terpaksa tong tunda tong ke keberangkat turus ini ... cei ..”

“It’s the schedule of the ships. Sometimes we don’t understand. Sometimes we know that the ship will depart in the evening around seven o’clock. We come at seven; they said [that] the ship had sailed in the morning. We postponed again. The next night we went there [and the ship] was not available. So we keep postponing our departure again.”

Excerpt 7 - Participant 08

“kalo saya datang ke Ternate sekarang ini dia beda dengan dulu tarada. kalo dulu kan masih sunyi-sunya tong datang kasana di ternate itu. kalo inikan so rame tong so tara tau dia pe ini me so bagimana stau..”

“If I come to Ternate now, it’s different from previously. In the past, the city was a bit quiet. But now, it’s so crowded, I am confused [by the city]…”

Excerpt 8 - Participant 08
“kalo untuk ruang tunggu ini sebenarnya sudah cukup. mengingat ini dorang juga capat to layani ini spit ganti-ganti. kalo sudah ful penumpang langsung jalan. jadi itu saja masih lebih masih banyak yang kosong.”

“As for the waiting room, it’s actually representable, considering the speedboats are a quick service. They are frequent. So when its passengers are all on board, [the speedboat] departs right away. So [the waiting room] has [always] been vacant.”

Excerpt 9 - Participant 06

In this qualitative research, the analyses were conducted in parallel with the validity and reliability testing process. As mentioned earlier, these processes follow Maxwell’s (2012) technique for validity testing, while Long and Johnson’s (2000) approach was used for ensuring the reliability of the results.

DISCUSSION

As mentioned earlier, this research aimed to explore the factors affecting citizen satisfaction by employing a grounded theory approach. This approach enabled us to fill the missing gap by using surveys in measuring the level of customer satisfaction. However, this situation has been insufficient in the context of citizens’ satisfaction with the facilities provided by their government (Nakamura & Managi, 2020; Zenker & Rütter, 2014). In other words, although studies on customer satisfaction are abundant, research about citizen satisfaction with public facilities is still limited. Moreover, even in the studies using the customer satisfaction index, the subjectively emotional aspects of customers are still neglected (Deng et al., 2013; Zhong & Duan, 2018).

Furthermore, to discuss the findings above in the context of the existing literature, it was necessary to determine that Bastiong seaport is infrastructure provided by the government.
primarily to serve inter-island commuters. By considering the seaport as a service, measuring the satisfaction tends to use the SERVQUAL model, as it “…is primarily developed to measure satisfaction and is premised on the assumption that service quality is critically determined by the variation between consumers’ expectations and perceptions of service” (Pansiri & Mmereki, 2010, p. 224). Parasuraman et al.’s (Parasuraman et al., 1988) SERVQUAL consist of five dimensions: tangibles, reliability, responsiveness, assurance, and empathy.

Although a few recent studies have focused on understanding the satisfaction of port users as customers (Hemalatha et al., 2018; Pak et al., 2015; Sayareh et al., 2016), almost none has paid attention to the passengers’ perspectives. The explorations were able to identify five main factors of citizen satisfaction: facility, payments, infrastructure, management, and location of the port (host city). It is interesting to note how SERVQUAL was elaborated through the citizen satisfaction factors identified by this current research. The grid below has been created to verify how this seminal model was grounded and explained contextually.

Grid 1 triggers an exciting discussion. Although early in the analysis it showed that the facility was the most concerning factor (Figure 6), the most ticked dimensions appear under the management factor. Excerpt 7 was the tip of the iceberg of a user’s feelings towards seaport management. The excerpt indicated that the seaport could not provide reliable information, was less responsive, and had poor communication management.

**Grid 1 - Verifying SERVQUAL (Parasuraman et al., 1988) with the findings**

<table>
<thead>
<tr>
<th></th>
<th>Facility</th>
<th>Payments</th>
<th>Infrastructure</th>
<th>Management</th>
<th>Location of the Port (Host City)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangibles</strong>—refer to the physical evidence of services like physical facilities, equipment, and personnel appearance.</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reliability</strong>—concerns the ability of the service provider to perform the promised service dependably and accurately.</td>
<td></td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td><strong>Responsiveness</strong>—concerns the willingness or readiness of employees to help customers and provide prompt service.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assurance</strong>—communication, credibility, security, competence, and courtesy.</td>
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<td></td>
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<td></td>
<td>√</td>
</tr>
<tr>
<td><strong>Empathy</strong>—understanding/knowing customers and access; refers to the provision of caring and individualized attention to customers by the service provider</td>
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<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
In other words, the SERVQUAL model confirmed that the seaport users' satisfaction was mainly related to how well the seaport was managed. The management of public facilities and transport have been extensively studied in many countries (Ghosh & Ojha, 2017). However, this study’s finding indicates that this poor management could be caused by the lack of maintenance and facilities management (Kamaruzzaman & Zawawi, 2010). Further, Kolanović et al. (2011) admit that port service quality should also be considered in terms of its management.

As defined earlier, infrastructure is the basic systems and services necessary for a country or an organization to run smoothly, for example, buildings, transport, and water and power supplies (Oxford Dictionary, 2020). With regard to this identified factor, Grid 1 shows the alignment between tangible and reliability and infrastructure as one of the identified factors. This alignment also indicates the satisfaction with the minimum standard of the seaport as a rudimentary infrastructure, as depicted in Excerpt 1. This excerpt and a site visit led the analysis to only tick those two dimensions for infrastructure. However, Excerpt 6 was objective evidence and indicated a gap between the expectation and the experience of a seaport user.

This excerpt also provides evidence supporting the finding of the study by Hemalatha et al. (2018). Even though this study focuses on non-passenger seaports, it confirms that tangibility is the most essential aspect of customer satisfaction by using the SERVQUAL approach. This importance also means that this current research argues that, once the infrastructure was well managed, it was expected to be followed by better management of other facilities, such as parking, waiting room, and other amenities.

At the beginning of the research, the facility was seen as the central aspect of seaport users. One of the sub-aspects of these was dissatisfaction with the service of a parking facility. This sub-aspect became the most concerning point and led to overall dissatisfaction with the facility. For example, recent studies have proven how parking facilities can lead to a perception of the overall convenience of the facility (Chang & Thai, 2016; Huang & Du, 2015; Pantouvakis, 2010). However, these studies and other quantitative approach-studies do not explore the actual feeling as much as this current research as highlighted in Excerpt 2. In other words, this research strengthens previous studies by providing explored evidence, mainly when those earlier studies primarily did not concern the passengers’ perspective but the investors’ instead.

As an island, Ternate has been a port city for centuries. Its history has also been part of Indonesia’s long history of imperialism and colonialism by Portugal and the Netherlands. This long history has led to the presence of a number of local seaports in Ternate, including the researched site: Bastiong seaport. Based on a study by Zhao et al. (2017), this seaport can be seen as a port-city combination. Interestingly, however, according to their categorization, Bastiong seaport can still be seen as an “expanding city port” and considered suitable for the 19th to early 20th century Zhao et al. (Zhao et al., 2017).

The consideration of this local seaport might be understandable due to its location in an area of the city with highly-dense population. However, this current research argues that because of the small area of the seaport due to the city’s development (a city island), the authority was unable to extend the quays, parking area, or an option for a vertical or two-level waiting room. In other words, although Ternate is one of the developing cities in Indonesia, the condition of its seaports needs
more attention; and this current study is an attempt to shed light on better management in terms of citizen satisfaction and seaport.

The result above indicates that the payments the seaport users had to make led to their dissatisfaction (Excerpt 5). This tendency was mainly when the payment to access the seaport was not inclusive of other services; as a result, the users had the impression they had to pay over and over again (Excerpt 4). Studies on port users' satisfaction by Chang and Thai (Chang & Thai, 2016) and Thai (2016) have also reached a similar conclusion. In other words, this current research supports their findings in so far as it provides a narrative description of how dissatisfied the users are with the payment at the seaport. This support was also why the analysis of payment tended to be included under the reliability dimension. The amount that the users had paid was expected to provide the minimum services they deserve, such as an inclusive payment for parking and a public toilet. The users did not have to make double payments for these essential services in the area of Bastiong seaport. The users even expect that some services in the seaport were supposed to be free. The most important part of this current research is its proposed model that is theoretically and contextually grounded. This research’s novelty offers a model that can be further tested with more subjects—number and characteristics of respondents—and sites—at various local seaports in other regions of the archipelago. The model refers to Grid 1, where the identified aspects were seen their fitness on the current variables of SERVQUAL dimensions. The model is illustrated in Figure 6 and it can be seen to be a mid-range theory generated by this current research. This mid-range theory suggests that seaport users’ satisfaction is influenced by its basic infrastructure, faculty, management, payments, and location.

**Figure 6 – Mid Range Theory: Contextually Grounded Model of Citizen Satisfaction on Seaport**

![Diagram of the mid-range theory model](image-url)
The results above also demonstrate how the participants’ feelings were researched. The subjective opinions could express sentiments to the overall evaluation of those five elements. Studies acknowledge that sentiments resonate from subjective opinions, either as positive or negative sentiments (Akinboade et al., 2012; Deng et al., 2013). In other words, even though the opinions do not have the like or dislike scale produced by a Likert Scale, the statements often have blatant expressions regarding the overall feelings about one particular aspect.

The sentiments analysis has resulted in an exciting finding. The positive and negative results regarding sentiments depended on the period the users experienced the seaport. The longer the waiting time they had, the more experience they had. This was why those who stayed longer waiting for travel to Bacan had more insightful perceptions regarding the infrastructure and the facilities. In other words, those who aimed to travel to Bacan had a more extended period to assess how the infrastructure and the facilities were functioning. At the same time, those in Tidore tended to have shorter waiting times. As a result, they would provide more positive sentiments. In other words, the participants who waited less had, overall, more positive sentiment. This situation was understandable because they had limited interactions when they used the seaport facility.

Studies have shown these tendencies occur when customers have a longer time experiencing a service. As a result, they have a more profound assessment and perception of the level of quality (Gao et al., 2018; Ghobehei et al., 2019; Morton, 2018). Moreover, although this current research has been focused on the seaport, the results solidify previous studies regarding the effect of waiting time on satisfaction (Millonig et al., 2012; Morfoulaki et al., 2012). Importantly, this research successfully demonstrates these sentiments and could be used to evaluate the overall satisfaction level of the participants as citizens.

CONCLUSION

This research has aimed to explore aspects of citizen satisfaction with basic government infrastructures. The findings show that to the researchers can identify five main factors affecting citizen satisfaction in the city of Ternate when using a seaport. These factors are facility, payment, infrastructure, management, and host city (location of the seaport).

Interestingly, further analyses and discussions of the findings from the literature show that the main factor behind satisfaction is the management aspect. This tendency differs from the earlier analysis when the facility aspect had the most responses from the participants. This difference was because the seaport management determined the performance, including basic infrastructures such as quays and stairs, supporting facilities, e.g., public toilets and waiting rooms. However, the host city (location of the seaport) was an aspect that was considered exogenous. This aspect was out of the control of the authority and even the users as the passengers. Furthermore, the seaport location had something to do with the long history of Ternate.

The novelty of this current research is that it offers a testable model that can be seen as a mid-range theory. This mid-range theory suggests that seaport users’ satisfaction is influenced by its basic infrastructure, faculty, management, payment, and location.

Another interesting finding has been about sentiment. The results show that those who had less waiting time and had to be in the port could have more positive sentiments towards five identified factors than those who stayed longer.
This study also supports previous studies concerning customer satisfaction with seaports. However, this research focused on the passengers and not those who use the port for distributing the goods, which had been examined by those early studies.

The researchers recognize that this study has several limitations. Its main limitation lies in its internal generalizability. This limitation is part of the inherent nature of qualitative research and which is that one cannot generalize the findings due to the limited sample size, the type of the users, the research site, and because the authorities at the seaport were not interviewed. This limitation also extends to the lack of background characteristics of the participants, such as their frequency of use of the seaport, their educational level, age group, and occupations. By recognizing these limitations, future studies should increase its generalizability by increasing the number and variety of participants, including business people who use the port to distribute goods around areas. Future studies should also be able to conduct studies at different sites. For other in-depth studies, it is highly recommended to interview the authorities to obtain different elaborations on the existing and newly identified satisfaction factors of the seaport users.

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