Analysis of Torobulu - Tampo Port Service Performance to Improve Mobility of People and Good Movements

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Abstract. South Konawe and Muna Island are strategic locations to make the ASDP Port one of the sea centers in Southeast Sulawesi, but the current performance of the Torobulu port is not maximized in providing services to users. The purpose of this study is to study the performance of the Torobulo Konawe Selatan Port for now. and Provide solutions to the problems of the Torobulu-Tampo port in terms of service to the government. Performance analysis using the Importance Performance Analysis (IPA) method of the analysis method is done by considering the factors of interest and level of satisfaction. The results showed that of the 15 indicators that can be used in quadrant 1 (low priority) is the attitude of officers in serving jobs 3.52 and a value of 4.35, the area of scope with performance of 3.50 and the value of 4.26, supporting facilities in the room wait with a performance value of 3.70 and a value of 4.24, cleanliness of the port area with a performance value of 3.71 and a value of 4.35. Support facilities in the waiting room with a performance value of 3.66 and a value of 4.07.

1. Introduction

Sea transportation has a role as a means of distributing cargo (goods and passengers), as a supporting tool and at the same time driving the dynamics of development, supporting regional development, and further strengthening the development of community life, nation and state in order to realize the Archipelago's Insights and enhance international relations.

The development of transportation is directed to bridge the gap between regions and enhanced equitable distribution of development outcomes. Inter-regional transportation will raise opportunities for trading; reducing price differences; increasing the mobility of goods, services and labors in order to reduce the concentration of skills and abilities in some areas. Thus, encouraging the creation of opportunities for development, opening isolation, increasing mobility and social contact between the population could maintain activities and facilitate access to the use of technology as well as improving social aspects. The process is capable to support the economy aspect of the local citizen and increase local revenue [2].

ASDP Torobulo-Tampo Port is located in South Konawe District, Southeast Sulawesi Province, which is useful for connecting the islands of South Konawe and Muna Island, with a strategic location to make the ASDP Port one of the marine centers in Southeast Sulawesi, but there are still components and services that are less than optimal.

2. Literature review

2.1. Port

According to [5], the port is a place consisting of land and water and surrounding areas with certain limits as place of Government activities and service activities. Besides, port is where the ship is leaned, anchored, lifted up and down passengers and/or loading and unloading of goods equipped with shipping safety facilities and port supporting activities as well as canal and inter-modal transportation. Meanwhile, said that port is a place consisting of land and surrounding waters with certain limits as a place of government activity and economic activity which is used as a place of ship leaning, anchored, up and down passengers, and/or loading and unloading of goods which is equipped...
with shipping safety facilities and supporting port activities and as well as a place inter-modal transportation. The public port is a port that is organized for the benefits of public services [7]. Meanwhile, said that the ports are a watershed protected against storms, waves and currents [6]. So, it can be said that the ships can hold movement, lean back, throw anchor in such a way that loading and unloading of goods and passenger movements can be done well. The main function of port is displacement function of the industry in terms of port entrepreneurs, completing the facilities for the activities of ships at the port such as the shipping channel for in and out of the ships from and to the port, mooring equipment, loading and unloading activities at the dock, checking goods, warehousing, and provision of local transport links in the port area.

Said that ports can play a role in stimulating the growth of economic, commercial and industrial activities from their spheres of influence but they do not create such activities [8]. They only serve to grow and develop these activities such as activities in the increasing role of ports from just as a ship place to the center of economic activity. Said that, in terms of regional importance, port area has an economic meaning that the port has import and export function of other economic activities that are interconnected by cause and effect [3]. The transportation system is an interaction that occurs between three components of a system that are interrelated and influence, namely the system of activities. The port as a marine transportation infrastructure has a very important and strategic role for industrial and trade growth and is a business segment that can provide a constituent for the national economy and development because it is part of the chain of transportation and logistics systems [1].

2.2. The Role of Ports in Port Infrastructure Development

Infrastructure development is an integral part of national development. Infrastructure is the driving force of economic growth. Transportation sector activity is the backbone of the distribution pattern of both goods and passengers. Other infrastructure such as electricity and telecommunications related to the nation's modernization and its supply is one of the most important aspects to increase productivity of the production sector. The availability of housing and settlements, including drinking water and sanitation so as widely and equitably sustainable management of water resources, will determine the level of community welfare. In this context, future approaches to the development of region-based infrastructure are increasingly important to note and consider as major development.

Port infrastructure has a very strong linkage to economic growth, social welfare and even social-politics as indicated that regions with better port infrastructure will have welfare levels with good economic growth. Thus, the development of port infrastructure is one of the main factors of economic growth or the development of a region. Emphasized that infrastructure development through capacity expansion will have a positive impact on national and regional economic development [4]. The development of the infrastructure must be acceptable to the community with various considerations such as environmental effects, urban planning and social-economic aspects although the cost of development becomes more expensive [4].

2.3. Port Connectivity System

Jinca (2011) In the archipelago region, strengthening the connectivity system is needed to make the inside island and inter-island connections run smoothly in supporting the development of a region's economy. Connectivity in Sislognas is Local Integrated, Globally Connected and has 3 levels of integrated connectivity: Local Connectivity (Intra Island), National Connectivity (Inter Island) and Global Connectivity (International) as shown. In the archipelago region, connectivity scenarios are expected to open up isolated areas linked to economic centers in order to aim at reducing price and service disparities, increasing competitiveness and accelerating poverty alleviation. The aims can ultimately increase social and economic accessibility. The role of ports in the connectivity system is the point of transfer of modes between sea transport and land/road transportation as shown in Figure 1. Port as the main element in sea transportation system is a supporting factor of economic activities, providing services for mobility of people and goods and being a catalyst for economic growth. Ports can play a driving role in remote areas development as it is known to be pioneer transportation to open isolated areas, increase trade, mobilize population, reduce regional disparities and regional stability. The connectivity or node chain has 4 functions as (composition, conection, interchange, decomposition) in intermodal transport (Rodrique and Comtois) as shown in Figure 1.
3. RESEARCH METHODS

This study includes the type of description research with a quantitative approach. Description research is research that attempts to solve current problems based on data. The study was conducted at the Torobulu port of South Konawe Regency, Southeast Sulawesi Province. The sampling method used in the study was Accidental Sampling. Accidental Sampling is a sampling technique that bases itself by chance or where it is found, which meets the requirements as a passenger (service user) ASDP Torobulu-Tampo port.

4. RESULTS AND DISCUSSION

4.1. Service Performance and Level of Interest/Expectation of the Port of Torobulu.

Based on the sum of the results in Table 5, the suitability level is 80.92%. Based on the calculation of the suitability level of the 15 indicators, it can be seen the suitability level of each for the quality of the Torobulu Port service, as follows Table 5 the average overall suitability level of the 15 Port Torobulu service indicators. The performance analysis of the service of the Torobulu port using the Importance Performance Analysis (IPA) method of the analysis method was carried out by combining the measurement of importance factors and the level of satisfaction of the visitors and users of port terminals in the graph, making it easier to explain the data. Interpretation of the science chart on four quadrants based on the measurement results obtained from the results of the questionnaire in the field. The equation used to calculate the average score of the level of performance and level of importance is as follows:

Table 1. Average Level of Conformity in Service Quality of Torobulu Port

| No | Statement                                      | quality Performance (X) | quality Interests (Y) | Level Suitability (Tk_i) |
|----|-----------------------------------------------|-------------------------|-----------------------|-------------------------|
| 1  | Attitude of officers in serving passengers    | 352                     | 435                   | 80.92                   |
| 2  | Ship arrival schedule information             | 379                     | 450                   | 84.22                   |
| 3  | Security of ports                             | 350                     | 426                   | 82.16                   |
| 4  | Lighting area system at the port (night)      | 330                     | 402                   | 82.09                   |
| 5  | Availability of supporting facilities in the waiting room | 370                 | 424                   | 87.26                   |
| 6  | Cleanliness of the port area                  | 371                     | 435                   | 85.29                   |
| 7  | Ticket purchase system                        | 362                     | 393                   | 92.11                   |
| 8  | Availability of vehicle parking area          | 380                     | 399                   | 95.24                   |
| 9  | Order hawkers when selling at the port        | 396                     | 436                   | 90.83                   |
| 10 | Port entry fee                                | 402                     | 423                   | 95.04                   |
| 11 | Cleanliness of the waiting room               | 385                     | 433                   | 88.91                   |
| 12 | Departure time                                | 399                     | 404                   | 98.76                   |
| 13 | Seating in the waiting room                   | 360                     | 399                   | 90.23                   |
| 14 | Seating in the waiting room                   | 366                     | 407                   | 89.93                   |
| 15 | Ship comfort                                  | 395                     | 397                   | 99.50                   |

Average Amount 89.50

Source: Questionnaire results

Cartesian diagram is a building that is divided into four sections which are bounded by two lines intersecting perpendicular to the points (X,Y), which X is the average of the average score of the level of implementation or passenger satisfaction on the port terminal of all factors or attributes, and Y is...
the average of the average score of the importance of all factors that influence passenger satisfaction. There are all 15 factors or attributes. The next formula:

The Cartesian diagram drawings for the service performance of the Torobulu port can be specified in Figure 2. Based on Figure 3 of this Cartesian diagram, it can be seen that the location of the implementation elements of the factors or attributes that influence the satisfaction of passenger services in the South Torobulu Konawe Port is divided into four parts. The interpretation of the Cartesian diagram is explained as follows:

1) Quadrant I (main priority)
   The factors in this quadrant I are: a) The attitude of officers in serving passengers with an average score of performance levels and interests is 3.52 and 4.35. b) Port area security with performance and interest level scores is 3.50 and 4.26. c) The availability of supporting facilities in the waiting room with performance and interest level scores are 3.70 and 4.24. d) The cleanliness port area with a score of performance and interest levels is 3.71 and 4.24. e) Supporting facilities are shipped with an average score of performance (3.66 and 4.07).

2) Quadrant II (maintain achievement): a) Ship Arrival and Departure Schedule Information with an average level of performance and importance are (3.97 and 4.50). b) The involvement of hawkers when selling in the port area with an average score of the level of performance and level of importance are (3.96 and 4.36). c) The cleanliness of the waiting room with the average score of the level of performance and the level of importance are (3.85 and 4.33). d) Port entry rates with an average score of performance levels and interests are (4.02 and 4.23).

3) Quadrant III (low priority): a) Seating in the waiting room with an average score of performance level and level of importance are (3.60 and 3.99). b) Ticket purchase system with an average score of performance level and level of importance are (3.62 and 3.93). c) Port Lighting Area (Night) with an average score of performance level and level of importance are (3.30 and 4.02).

4) Quadrant IV (excessive): a) Availability of Vehicle Parking Area with an average score of performance level and level of importance are (3.80 and 3.99). b) The departure time of the ship with an average score of the level of performance and level of importance is (3.99 and 4.04). c) Ship comfort average score of performance level and level of importance are (3.95 and 3.97).

4.2. Problem Solutions

Based on the results of the discussion on the service performance of the Torobulu-Tampo port, the researchers recommend solutions:

1) Attitude of officers in serving passengers
   For indicators of the attitude of officers in serving is very important and can affect the level of passenger satisfaction. The problems related to the indicator are frequent clashes between officers and passengers because the port lacks officers in serving passengers, especially on
holidays. So to optimize the indicators that can affect the level of passenger satisfaction, the need for the officers to be more friendly in serving passengers in any situation and the port must add port officers to anticipate the overflow of passengers that can cause noise within the port.

2) Security of the port area
The indicators related to the port security area are one of the factors that enter the quadrant I where the security of the port area is still unfavorable because the port does not provide security or the like, which results in infrequent theft of motorcycles and other electronic devices. As for suggestions from researchers for the port or instasi related to the need to provide security at the port to prevent loss and to ensure passenger safety.

3) Availability of supporting facilities in the waiting room
The availability of supporting facilities in the waiting room is something that cannot be ignored by the port, because the existence of these facilities can provide comfort for passengers. Among them there are 2 bathrooms, TV and seating. Based on the problems found in the supporting facilities in the waiting room, it is necessary to repair the bathroom provided by the port.

5. Conclusion and Recommendations

5.1. Conclusion
Based on the description and analysis that have been stated from the previous chapters, the results of this conclusion can be summarized as follows:

1) Performance of the service of the South Torobulu Konawe port, its implementation has been in accordance with the interests and expectations of passengers, and has provided good services including the following: Information on the ship's arrival and departure schedule, Order hawkers when selling at the port, Cleanliness of the waiting room, Port entry fee.

2) While the indicators that need to be prioritized by the port and are still considered unsatisfactory for passengers are as follows: attitudes of officers in serving passengers, port area security, availability of supporting facilities in the waiting room, cleanliness of the port area.

5.2. Recommendations
The recommendations that can be given related to this research are:

1) Pay more attention to the level of service including: Attitude of officers in serving passengers, port area security, availability of facilities in the waiting room, cleanliness of the port area, supporting facilities in the ship (WC, Canteen)

2) In order to maximize the service performance of the Torobulu port, the need for the port, ASDP or related agencies, pay more attention to facilities at the port and ship which greatly affect the satisfaction of passengers.

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