
Analysis of Domestic Cargo Service of Juanda Airport in Surabaya

Raditya Bromantiyo Bayu A.
Narotama University, Surabaya
Rbromantyo98@gmail.com

ABSTRACT

Fulfillment freight user expectations of service quality is important for service organizations to face business competition. This analysis aims to determine what factors affect the service in the cargo terminal, create a model of the relationship between the factors that affect performance cargo terminal services, provides recommendation to improve the performance of services Cargo Terminal at Juanda Airport in Surabaya. The method used in this analysis is the Importance Performance Analysis (IPA) and the Customer Satisfaction Index (CSI). Respondents came from the expedition Air Freight and of the cargo transport services. IPA analysis known level of service performance still needs to be improved is the creation in serving customers queuing system, compensation for lost property damage in full, Leisure area of customer service, and the availability of parking facilities luas. Hasil CSI analysis resulting interpretation in value by 71.35%. This means that customers are quite satisfied primarily domestic cargo terminal services Juanda Airport in Surabaya.

Keywords: Level of Service Performance, Domestic Cargo, IPA, CSI.

I. INTRODUCTION

Juanda Airport is a hub for domestic airport, pioneer and foreign countries in western Indonesia. Cargo transport at airports juanda every year to experience growth. In this case, the growth of cargo at airport Juanda require attention to the quality of service from time to time becomes very important. In the service industry, the quality of service to customers is the most important factor, because the customer is increasingly critical in selecting services to be used. (Sudarno et al, 2006).

To maximize customer service, air transportation also need a good supporting facilities to meet the needs and mobility of customers who will use the services of air cargo. One of the most important facilities for air cargo services that improve the cargo terminal. Based on the above problems can be formulated as follows:

1. Is the Cargo terminal services at Juanda Airport is optimal?
2. The type of service what needs to be prioritized from the service provider to be improved?

The purpose of this research to:

1. Obtaining the optimization level of service at the Domestic Airport Cargo Terminal Juanda
2. Getting the kind of services that need to be addressed and improved in the Domestic Cargo Terminal Juanda

In doing research at Juanda Airport Cargo betasan defined as follows:

1. The data is used to perform an analysis of survey data obtained in PT. Angkasa Pura Cargo
2. Analysis of freight services performed at Juanda Airport cargo terminal.
3. Conducting a survey of service according to customer expectations Cargo Juanda Airport.

II. REVIEW OF LITERATURE

2.1 Services

According to Parasuraman et.al. (1988) found five (5) basic dimensions of service are:

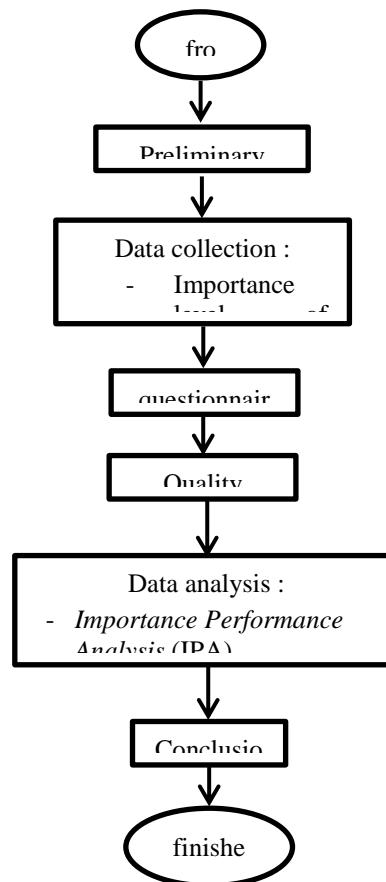
1. Direct evidence (tangible), including physical facilities, supplies or equipment and performance of employees,
2. Reliability (reliability), namely the ability to provide the promised service with immediate, accurate and satisfying,
3. Responsiveness (responsiveness), namely the desire unruk help customers and provide service with responsiveness,
4. Guarantee (assurance), including knowledge, skills, courtesy and trustworthiness owned by its employees, free from danger, risk or doubt,
5. Empathy (empathy), covering care or attention, simplicity in relationships, good communication and understanding the needs of its customers.

2.2 Quality

Yuliana (2017) states that traditionally quality can be viewed as conformity to specifications. Quality can be applied to the manufacturing company and its products. Quality means it can meet or exceed customer expectations.

III. METHODOLOGY

Picture 1. Flowchart of the research phase



3.1 Data collection

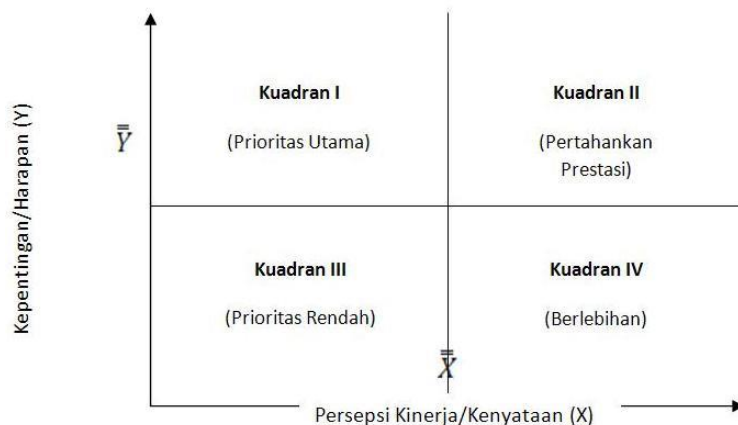
The data used in this study a questionnaire data. The research data was obtained through a questionnaire to respondents about 20 (Twenty) service quality attributes with answer choices Likert scale of 5 (five). Respondents were asked to answer about satisfaction with care at every stage in the domestic cargo terminal. In this study the wear variable service quality dimensions, namely: Reliability, Responsiveness, Assurance, Empathy, and Physical Evidence.

Stages of research in the final project will be explained on flowcharts shown on **Picture 1**.

3.2 Data analysis method

3.2.1 Importance Performance Analysis (IPA)

In science there are several quadrants in order to obtain information which the performance level of service is low while the level of interest in these services is high, the level of service performance and the level of interest in these services is equally high level of service performance and the level of interest in these services are equally low, and high levels of service performance, but the level of interest to these services low



Picture 2 Quadrant IPA

3.2.2 Customer Satisfaction Index (CSI)

Customer Satisfaction Index (CSI) is a type of measurement used to determine the overall level of customer satisfaction with an approach that considers the level of expectation of the factors being measured. (Nurrasjid, 2013) As for the stages to measure Customer Satisfaction Index as follows:

1. Weighting Factors calculate by dividing the value of the average importance score that is obtained from each factor by the number of overall importance score.
2. Factors weighting value is multiplied by the value of satisfaction (satisfaction score) to obtain Weighted Score.
3. Weighted Score for each factor are summed so that the result is called Weighted Average.
4. Weighted Average divided Likert scale used later obtained value multiplied by 100% Satisfaction Index

Table 1 Interpretation of Results Calculation CSI

Figures Index	Interpretation
$X \leq 64\%$	Very poor
$64 < X \leq 71\%$	Poor
$71 < X \leq 77\%$	Cause Of Concern
$77 < X \leq 80\%$	Border line
$80 < X \leq 84\%$	Good
$84 < X \leq 87\%$	Very Good

X > 87%	<i>Excelent</i>
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source: www.leadershipsfactor.com

IV. RESULTS AND DISCUSSION

4.1 Importance Performance Analysis (IPA)

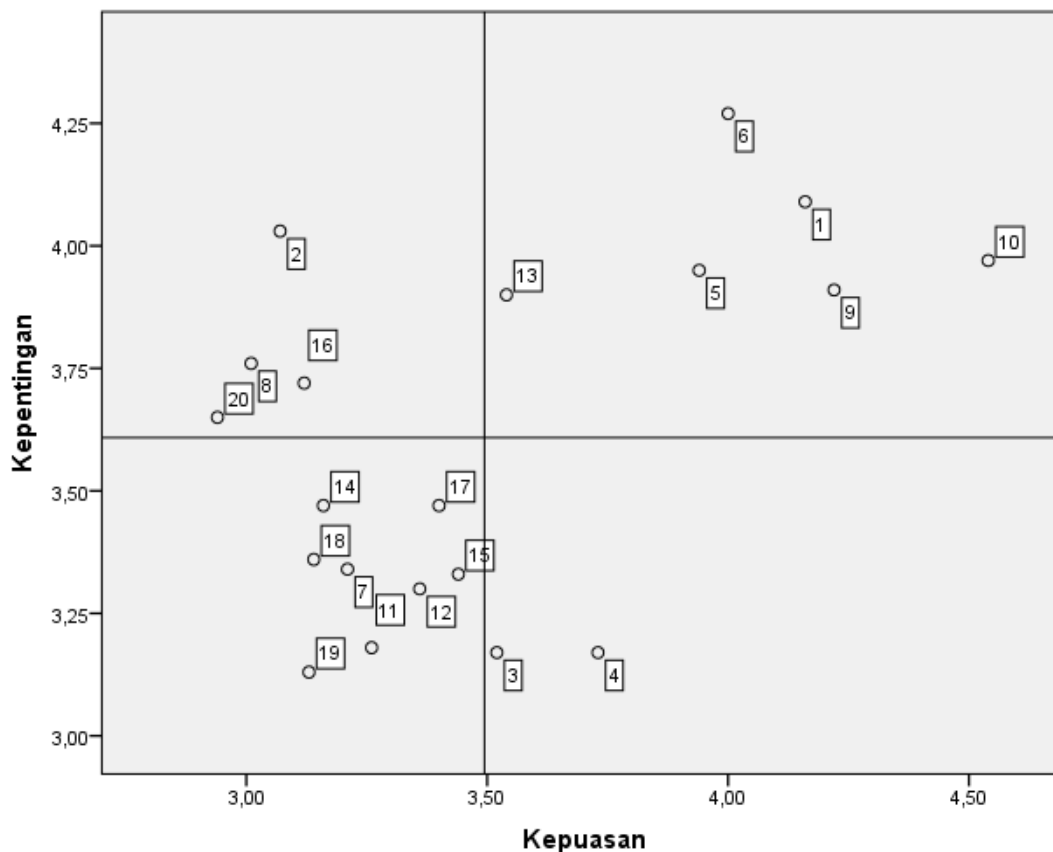
Based on the analysis results of the questionnaire answers in the Air Freight Forwarding Angkasa Pura Cargo Terminal Juanda Airport in Surabaya, the average level of satisfaction can be seen in Table 2.

Table 2. Average Level of Satisfaction and Importance Attributes Cargo Services

code	attribute Service	Weight X	Weight Y	\bar{X}	\bar{Y}
K	1. On Time Delivery Capability	416	409	4.2	4.1
	2. Making the queuing system in serving consumers	307	403	3.1	4
	3. Explanation Officers Against Whole Process Delivery and provide answers to questions consumers with good	352	317	3.5	3.2
	4. Submission of records / documents of cargo correctly	373	317	3.7	3.2
DT	5. Desire officers help solve the problem of cargo	394	395	3.9	4
	6. Payment of freight charges by consumers easily and quickly	400	427	4	4.3
	7. Fast service in cargo	321	334	3.2	3.3
J	8. Compensation for lost property damage in full	301	376	3	3.8
	9. Got operational procedures clear and complete services	422	391	4.2	3.9
	10. Can choose the speed cargo shipments	454	397	4.5	4
E	11. All the officers want to give attention and service with a smile and a polite word	326	318	3.3	3.2
	12. All officers concerned with the security of cargo and handled in accordance with the procedure	336	330	3.4	3.3
	13. Courtesy and friendliness of the staff at the cargo terminal	354	390	3.5	3.9
	14. Officers consumers with good care for all stages of cargo processing	316	347	3.2	3.5
	15. Officers understand the needs of consumers	344	333	3.4	3.3
BF	16. Comfort customer service area	312	372	3.1	3.7
	17. The service area clean	340	347	3.4	3.5
	18. Area neat	314	336	3.1	3.4
	19. Areas of adequate services	313	313	3.1	3.1
	20. The availability of extensive parking facilities	294	365	2.9	3.7

Source: Personal processing

An average of twenty attributes above was added Quadrant IPA. The results of IPA analysis of the level of service performance and the level of interest of the domestic cargo terminal services, generate incoming service attributes in quadrant I - IV. For more details can be seen in Picture 3.



Picture 3. Quadrant IPA

a. Quadrant 1 (Priority)

Variables that entered service in this quadrant are:

- Making the queuing system in serving consumers
- Compensation for lost property damage in full
- Comfort customer service area
- The availability of extensive parking facilities

Variable service in quadrant I, this is a major concern because it has a high value of the interest of the service but the performance of services is still low and should be improved.

b. Quadrant II (Preserve Achievement)

Service attributes that go in this quadrant are:

- Payment of freight charges by consumers easily and quickly
- On Time Delivery Capability
- Can choose the speed cargo shipments
- Courtesy and friendliness of the staff at the cargo terminal
- Desire officers help solve the problem of cargo
- Got operational procedures clear and complete services

Service attributes in quadrant II are those that have high value services and the interest of service performance was also felt was appropriate according to the respondents.

c. Quadrant III (Low Priority)

Service attributes that go in this quadrant is

- The service area clean
- Officers consumers with good care for all stages of cargo processing
- Area neat
- Fast service in cargo meproses
- Officers understand the needs of consumers
- All the officers want to give attention and service with a smile and a polite word
- All officers concerned with the security of cargo and handled in accordance with the procedure
- Areas of adequate services

Service attributes in quadrant III has a low value service performance but also not considered important by the respondents that do not require an increase in the performance of services.

d. Quadrant IV (Tend Redundant)

Service attributes that go in this quadrant are:

- Explanation Officers Against Whole Process Delivery and provide answers to questions consumers with good
- Submission of records / documents of cargo correctly

Service attributes in quadrant IV are considered less important by respondents but has a high service performance so prone to exaggeration

4.2 Customer Satisfaction Index (CSI)

CSI calculations using the formulas as presented in sub-chapter analysis method. The calculation is done by first calculating the average value of the level of interest, the average level of satisfaction, value weighting factor, and weighted score. Table 3 below is the result of the measurement calculation Customer Satisfaction Index (CSI) at the Air Freight Forwarding Juanda Airport in Surabaya.

Based on the calculation results in Table 3 Air cargo expedition CSI valuePT. Angkasa Pura Cargo by 71.36%. Interpetasi CSI value requires attention (Cause of concern).

Table 3. Average Level of Satisfaction and Importance Attributes Cargo Services

attribute Service	X	Y	WF	WS
1. On Time Delivery Capability	4.16	4.09	5.67	23.58
2. Making the queuing system in serving consumers	4	4.03	5.58	22.34
3. Explanation Officers Against Whole Process Delivery and provide answers to questions consumers with good	3.52	3.17	4.39	15.46
4. Submission of records / documents of cargo correctly				
5. Desire officers help solve the problem of cargo	3.73	3.17	4.39	16.38
6. Payment of freight charges by consumers easily and quickly	3.94	3.95	5.47	21.56
7. Fast service in cargo meproses				
8. Compensation for lost property damage in full	4	4.27	5.92	23.67
9. Got operational procedures clear and complete services				
10. Can choose the speed cargo shipments	3.21	3.34	4.63	14.86
11. All the officers want to give attention and service with a smile and a polite word	3.01	3.76	5.21	15.68
12. All officers concerned with the security of cargo and handled in accordance with the procedure	4.22	3.91	5.42	22.86
13. Courtesy and friendliness of the staff at the cargo terminal	4.54	3.97	5.50	24.97
14. Officers consumers with good care for all stages of cargo processing	3.26	3.18	4.41	14.36
15. Officers understand the needs of consumers	3.36	3.3	4.57	15.36
16. Comfort customer service area				
17. The service area clean	3.54	3.9	5,40	19.13
18. Area neat	3.16	3.47	4.81	15,19
19. Areas of adequate services				
20. The availability of extensive parking facilities	3.44	3.33	4.61	15.87
	3.12	3.72	5.15	16.08
	3.4	3.47	4.81	16.35
	3.14	3.36	4.66	14.62
	3.13	3.13	4.34	13.57
	2,94	3.65	5.06	14.87
total	72.17			356, 78
Customer Satisfaction Index				71.36%

Source: personal Processing

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

- 1) Based on an assessment of service users, quality of service and overall customer satisfaction in the expedition Air Muaran (master) PT. Angkasa Pura cargo CSI approach, for an amount of 71.36% is obtained, that need attention (Cause of Concern).
- 2) Services that are essential attributes of science studies known low-performing service attributes but are considered important by the domestic cargo terminal services users and need to be increased again by the service provider is
 - Making the queuing system in serving consumers

- Compensation for lost property damage in full
- Comfort customer service area
- The availability of extensive parking facilities

4.2 Suggestion

To maintain and improve the performance of the service, need to do more in-depth and continuous study of the level of service of service users in the domestic cargo terminal Juanda Airport in Surabaya. not only by using the service user as a respondent but involves also an employee service and Airport Authority office party so that all parties can make suggestions for the betterment of the domestic cargo terminal of Juanda Airport in Surabaya.

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