

# THE INFLUENCE OF REPORT CULTURE FACILITY CARE ON ENHANCING PASSENGER SATISFACTION AT YOGYAKARTA INTERNATIONAL AIRPORT

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## ABSTRACT

Yogyakarta International Airport (YIA) serves as a major airport in Indonesia, handling millions of passengers annually and playing a strategic role in supporting the tourism sector and regional economy. Passenger satisfaction serves as a critical indicator in evaluating airport performance. One of the primary factors influencing passenger satisfaction is the quality of facilities and services, where Facility Care as the party responsible for facility maintenance plays a crucial role in ensuring airport facilities are always in optimal condition. This can be prevented and minimized through real-time reporting actions and responsive measures to repair any forms of damage that are perceived as disruptive. Therefore, the author seeks to determine whether there is an influence on passenger satisfaction experienced by passengers. This research applies a quantitative descriptive approach. Data collection was conducted through observation and questionnaire distribution. The instrument used to test the hypothesis is simple linear regression analysis. Data analysis was performed using Likert scale techniques, supplemented with validity tests, reliability tests, linearity tests, and normality tests. Based on the data analysis conducted, there is a coefficient of determination indicating that the influence of facility care report culture on passenger satisfaction has a quite significant effect.

**Keywords:** Yogyakarta International Airport, Influence, Report Culture, Passenger Satisfaction, Facility Care.

## 1. INTRODUCTION

Yogyakarta International Airport (YIA) as a major airport in Indonesia holds a strategic role in supporting tourism and regional economic development. Passenger satisfaction serves as a critical indicator of airport performance, where facility quality constitutes a primary determining factor [1]. Facility Care, as the entity responsible for facility maintenance, faces challenges in implementing an effective report culture, as evidenced by persistent issues such as unmonitored damaged restrooms and depleted hand soap that is not promptly addressed.

This research focuses on two problem formulations: (1) How does the report culture of Facility Care influence passenger satisfaction? (2) What efforts can be undertaken to enhance this report culture? Data indicate that conventional reporting systems through suggestion boxes are insufficiently effective in detecting and addressing facility problems rapidly, potentially diminishing passenger experience [2].

The research objective is to analyze the relationship between report culture and passenger satisfaction, as well as to identify improvement strategies based on field findings. This study is expected to provide practical recommendations for

enhancing digital reporting systems, accelerating repair response times, and optimizing facility supervision.

By addressing the existing limitations of report culture, this research not only contributes to improving airport service quality but also supports the achievement of higher passenger satisfaction standards. These findings are relevant for airport management in formulating more effective facility maintenance policies.

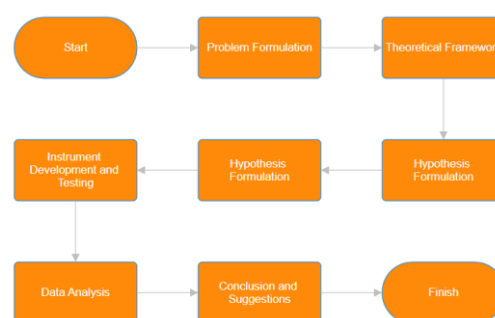
Based on the above description, the author is interested in conducting research entitled "THE INFLUENCE OF REPORT CULTURE FACILITY CARE ON ENHANCING PASSENGER SATISFACTION AT YOGYAKARTA INTERNATIONAL AIRPORT"

## 2. METHOD

Methodology originates from the word "methodology," which refers to the discussion of various methods or approaches employed. Meanwhile, research encompasses the meaning of an investigative process conducted repeatedly and comprehensively. Therefore, research methodology can be defined as a branch of science that studies systematic and rational stages in data collection related to a particular problem. This data is subsequently processed, analyzed, and interpreted to obtain conclusions and identify appropriate solutions (Ruslan, 2003).

Research serves as an activity for developing scholarly knowledge, functioning as an instrument to advance both natural sciences and social sciences. Research methodology constitutes a systematic approach to studying and examining problems through the application of rigorous and methodical scientific procedures. This process encompasses stages of data collection, information processing, and in-depth analysis to draw objective and structured conclusions. The objective is to resolve problems or test hypotheses in order to generate knowledge beneficial to human life.

This research employs quantitative methods for data collection. Quantitative data represents a research approach grounded in positivism, where the obtained data consists of numerical values that will be processed using statistics as an analytical tool, related to the investigated issues to produce conclusions, as explained by Sugiyono[3]. There are several steps that need to be undertaken in implementing this quantitative research, the following are the steps:



**Figure 1. Research Design Flowchart**

This research employs two main variables: the independent variable, which is report culture facility care (X), and the dependent variable, which is passenger satisfaction (Y). Data collection was conducted using Likert scale-based questionnaires and direct observation of field activities. The research sample consists of 30 respondents from staff members and 30 respondents from passengers. The selected technique employs non-probability sampling methods. Data analysis techniques utilized include validity tests, reliability tests, normality tests, linearity tests, simple linear regression tests, t-tests, and coefficient of determination tests to measure the influence of the investigated variables. Thus, this research aims to provide a clear overview of the relationship between report culture facility care and passenger satisfaction.

## 3. RESULT AND DISCUSSION

### 3.1. Research Observation

Observation was conducted by the author at Yogyakarta International Airport from January 6 to February 28, 2025. The author performed field observations regarding report culture facility care and its impact on passenger satisfaction improvement at the airport. The expectation from enhancing report culture activities is to improve passenger satisfaction.

Yogyakarta International Airport has 166 Facility Care staff members divided into 3 work shifts. Each shift consists of approximately 50 personnel with morning shift schedules starting at 06:00 WIB until 13:00 WIB, afternoon shift starting at 13:00 WIB until 20:00 WIB, followed by one day off after duty. This rotation system ensures staff availability during 14 hours of daily operations while providing adequate rest time for staff. Daily operations run smoothly with two Team Leaders on duty providing supervision. Personnel placement has been efficiently arranged across various areas: one person in the Departure Lobby, six people in the Check-In Hall, three people in the SCP, and eight

people in the Waiting Room. The Mezzanine area is supervised by five personnel, while Baggage Claim has three personnel, and Arrival Hall has four personnel. For connectivity, four personnel are assigned to the Connecting Building. Vehicle operational support comes from three Collector Drivers and one person in the Parking Building. External areas such as Bus-Taxi Parking and Drainage are handled by one personnel each, while Road Access is also managed by one personnel. In logistics, two people are assigned to Cargo PK Empu. Finally, the General Cleaning team consisting of six people is responsible for maintaining general cleanliness from 07:00 WIB to 15:00 WIB.

Based on field observations regarding the implementation of Report Culture Facility Care (X), several challenges were identified despite optimal personnel allocation. Field observations were conducted to obtain direct insights into facility conditions and identify implementation issues and problems related to "Report Culture Facility Care (X)" within the research environment. The "Report Culture Facility Care (X)" variable is measured through four main indicators: ease of reporting facility problems, response speed to reports, transparency in the reporting process, and quality of facility repairs. Observation results indicate several issues suggesting that the reporting culture and facility management still require serious attention, particularly in the context of the facility care team's role itself.



Figure 1. Documentation

### 3.2. Validity Test

Validity testing was conducted to determine the extent to which statement items in the research instrument are capable of measuring the intended variables, namely Report Culture Facility Care (X) and Passenger Satisfaction (Y). An instrument or questionnaire is considered valid if the questions in the instrument or questionnaire are able to reveal what is to be measured by that questionnaire[4]. This testing was performed on 30 respondents. Based on the  $r$  distribution value with degrees of freedom ( $df$ ) =  $n - 2 = 28$  and a significance level of

5%, the  $r$  table value obtained is 0.349. The validity test results are shown through SPSS software with the following results:

**Table 1. Research Instrument Validity Test Results**

Variabel	Item	$r_{hitung}$	$r_{tabel}$	Keterangan
Report Culture Facility Care (X)	1	0,762	0,349	valid
	2	0,775	0,349	valid
	3	0,763	0,349	valid
	4	0,875	0,349	valid
	5	0,545	0,349	valid
Passenger Satisfaction (Y)	1	0,767	0,349	valid
	2	0,754	0,349	valid
	3	0,829	0,349	valid
	4	0,758	0,349	valid
	5	0,781	0,349	valid

Based on the validity test results in Table 1, it can be determined that all statement items for the Report Culture Facility Care (X) variable and Passenger Satisfaction (Y) variable have calculated  $r$  values greater than the  $r$  table value, thus these statements are declared valid.

The calculated  $r$  values for statement items on the Report Culture Facility Care (X) variable range from 0.545 to 0.875, while those on the Passenger Satisfaction (Y) variable range from 0.754 to 0.829. This indicates that all statement items in each variable have significant correlations with their respective variable total scores.

Therefore, it can be concluded that all statement items in this research instrument are declared valid and suitable for use in measuring the Report Culture Facility Care and Passenger Satisfaction variables in this study.

### 3.3. Reliability Test

Reliability testing was conducted to determine the consistency and dependability of the research instrument. Reliability is essentially a tool for measuring a questionnaire that serves as an indicator of a variable or construct[4]. An instrument is declared reliable if the Cronbach's Alpha value is greater than 0.70 ( $>0.70$ ). The reliability test results in this study are presented in Table 2 below.

**Table 2. Reliability Test Results**

Variabel	N of Items	Cronbach's Alpha	Keterangan
X	5	0,799	Reliabel
Y	5	0,828	Reliabel

Based on the reliability test results displayed in Table 2, the Cronbach's Alpha value obtained for the Report Culture Facility Care (X) variable is 0.799 and for the Passenger Satisfaction (Y) variable is 0.828.

Since both Cronbach's Alpha values are above the minimum standard value of 0.70 (Cronbach's Alpha > 0.7), it can be concluded that the questionnaire instruments for both variables are declared reliable and can be used for data collection and analysis in this study.

### 3.4. Normality Test

The normality test aims to determine whether the residual data in the regression model is normally distributed. The normality test results can be seen in Table 3 below.

**Table 3. Normality Test Results**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandar dized Residual
<b>N</b>		<b>30</b>
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.57801568
Most Extreme Differences	Absolute	.157
	Positive	.157
	Negative	-.136
Test Statistic		.157
Asymp. Sig. (2-tailed) <sup>c</sup>		.057
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.057
	99% Confidence Interval	Lower Bound .051
		Upper Bound .063

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 1042130385.

Based on Table 3, the Kolmogorov-Smirnov normality test results on the residual values from the regression model between independent and dependent variables yielded a significance value of 0.057. Since the significance value is greater than

0.05 (>0.05), it can be concluded that the residual data is normally distributed. This means that the data can be used for further analysis with parametric regression statistical tests as it has met the normality requirements.

### 3.5. Linearity Test

Linearity testing was conducted to determine whether there is a linear relationship between variable X and variable Y before performing regression analysis[5]. Where variable X is report culture Facility Care and variable Y is passenger satisfaction. This test uses the ANOVA Test for Linearity method, with the criteria that the relationship is declared linear if the Linearity significance value < 0.05 and the Deviation from Linearity significance value > 0.05. The linearity test results are presented in Table 4 below.

**Table 4. Linearity Test Results**

ANOVA Table				
			F	Sig.
Kepuasan	Between	(Combined)	7.369	.000
Penumpang	Groups			
* Report		Linearity	42.790	.000
Culture		Deviation	2.309	.065
Facility Care		from		
		Linearity		
	Within Groups			
	Total			

Based on the linearity test results displayed in Table 4, the Linearity significance value is 0.00, which is less than 0.05 (<0.05) and the Deviation from Linearity significance value is 0.065, which is greater than 0.05 (>0.05). This means that the relationship between the two variables follows a linear relationship pattern and meets the assumptions for conducting linear regression analysis.

### 3.6 Simple Linear Regression Test

Simple Linear Regression testing was conducted to determine the direct influence of the Report Culture Facility Care (X) variable on the Passenger Satisfaction (Y) variable. This testing uses IBM SPSS Statistics version 27. The decision-making criteria is that if the significance value (Sig.) < 0.05, then the independent variable has a

significant effect on the dependent variable. The test results are presented in the following table.

**Table 5. Simple Linear Regression Test Results**

Model	Unstandardized Coefficients (Beta)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	4,644	2,971	—	1,563	0,129
Report Culture Facility Care (X)	0,793	0,140	0,732	5,678	0,000

Based on the simple linear regression test results in Table 5, the regression coefficient value for the Report Culture Facility Care variable is 0.793 with a significance value of 0.000. Since this significance value is less than 0.05 (sig. < 0.05), it can be concluded that the Report Culture Facility Care (X) variable has a significant effect on Passenger Satisfaction (Y).

Furthermore, the positive regression coefficient value indicates that every one-unit increase in the implementation of Report Culture Facility Care (X) will increase Passenger Satisfaction (Y) by 0.793 units. Therefore, the better the implementation of Report Culture Facility Care at Yogyakarta International Airport, the higher passenger satisfaction will also increase.

### 3.6. T-test (Parsial)

The T-test (partial) was conducted to determine whether the independent variable Report Culture Facility Care (X) has a significant partial effect on the dependent variable Passenger Satisfaction (Y).

**Table 6. T-test Results**

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	4.644	2.971			1.563	.129
Report Culture Facility Care	.793	.140	.732		5.678	.000

a. Dependent Variable: Kepuasan Penumpang

Based on the table, the calculated t value obtained is 5.678 with a significance value of 0.000. Since the significance value is less than 0.05, it can be concluded that the Report Culture Facility Care (X) variable has a significant partial effect on the Passenger Satisfaction (Y) variable. This means that better implementation of Report Culture Facility Care can directly increase Passenger Satisfaction at Yogyakarta International Airport.

### 3.7. Uji Koefisien Determinasi

The coefficient of determination ( $R^2$ ) is used to determine how much the independent variable contributes to explaining the variation in the dependent variable. The  $R^2$  value ranges from 0 to 1. The larger the  $R^2$  value, the greater the proportion of influence the independent variable has on the dependent variable. The coefficient of determination value was obtained through calculations in SPSS software, shown with the following results:

**Table 7. Coefficient of Determination Test Results**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732a	.535	.519	1.606

a. Predictors: (Constant), Report Culture Facility Care

Based on the coefficient of determination test results in Table 7, the R Square value obtained is 0.535. This means that the Report Culture Facility Care (X) variable influences the Passenger Satisfaction (Y) variable by 53.5%.

## 4. DISCUSSION

Berdasarkan hasil uji regresi linear sederhana pada Based on Table 5, the regression coefficient value for the Report Culture Facility Care variable is 0.793 with a significance value of 0.000. Since this significance value is less than 0.05 (sig. < 0.05), it can be concluded that the Report Culture Facility Care (X) variable has a significant effect on Passenger Satisfaction (Y). Furthermore, the positive regression coefficient value indicates that every one-unit increase in the implementation of Report Culture Facility Care (X) will increase Passenger Satisfaction (Y) by 0.793 units. Therefore, the better the implementation of Report

Culture Facility Care at Yogyakarta International Airport, the higher passenger satisfaction will also increase. The coefficient of determination test indicates that variable X influences variable Y by 53.5%.

The statistical test results demonstrate a positive relationship, where the better the implementation of Report Culture Facility Care at Yogyakarta International Airport, the higher passenger satisfaction will increase. There is a need for efforts to enhance the report culture of Facility Care to improve passenger satisfaction at Yogyakarta International Airport (YIA). In the initial phase, focus can be given to active socialization and education. This can be achieved by providing simple reporting channels, such as clear information boards in public facility areas (restrooms, waiting rooms, etc.) that include hotline phone numbers or simple QR codes for damage reporting. Staff also need to be equipped with easy-to-fill physical report forms. Additionally, brief training for all airport personnel regarding the importance of report culture and how to respond to initial reports from passengers or their personal findings is essential, with emphasis on effective communication.

Subsequently, rapid response mechanisms with transparency need to be implemented. This can be accomplished by establishing Service Level Agreements (SLA). According to HubSpot, SLA is a service level agreement that constitutes a contract setting forth a series of agreed outcomes by one party to another party in the business realm. In this case, it is better to create realistic SLAs for common types of damage, such as restroom facility repair targets within 2 hours and chair or lighting repairs within 6 hours. Transparency is also crucial; immediately after reports are received and handled, it is important to install "under repair" signs at damaged facility locations, and if possible, include realistic completion time estimates to provide direct information to passengers.

To encourage active participation, simple recognition or incentives (for example, praise in internal meetings, small spot bonuses) can be given to staff who are proactive in reporting or responding to repairs. Similarly, passengers need to be encouraged to report through the airport's official social media or suggestion boxes, with a promise that every report will be reviewed. It is also important to increase the frequency of routine proactive inspections by staff throughout facility areas to identify and fix problems even before they are reported by passengers.

Long-term solutions for developing digital reporting systems that are easily accessible to passengers and staff involve implementing mobile applications or web-based platforms with real-time reporting features equipped with photos and damage location information. This approach is strengthened by integrating Internet of Things (IoT) technology for automatic facility condition monitoring, as well as close collaboration with maintenance vendors to ensure spare parts availability. Implementation can be carried out gradually, starting from socializing simple reporting systems, followed by limited trials, and continuing to develop specialized applications if budget allows. This comprehensive approach will not only strengthen report culture but also significantly build passenger trust through tangible and measurable facility improvements, which will ultimately enhance their satisfaction.

This research, although conducted with maximum effort, has several significant limitations that need to be explicitly stated. One crucial aspect that necessitates limitations is the potential lack of synchronization between data collected through survey methods and field observation results. This gap indicates that the findings of this research cannot be used as a single reference or absolute truth of 100%.

The main limitation underlying this issue is the presence of data bias caused by internal respondent factors, particularly regarding the potential for dishonesty in questionnaire completion. Although data validation has been attempted, the subjective nature of survey responses, which may be influenced by personal preferences or the desire to provide "good" answers, can affect the accuracy of actual condition representation. Therefore, it is important to acknowledge that the results obtained from this research need to be interpreted carefully, considering the potential for data distortion due to such bias.

The inclusion of these limitations is not to diminish research validity, but rather as a form of transparency and scientific integrity. This also serves as an important foundation for future research to develop stronger methodologies or integrate more sophisticated data validation techniques to minimize the impact of similar biases in the future.

## **5. CONCLUSION**

Based on the simple linear regression test results, it reveals that Report Culture Facility Care (X) has a significant impact on passenger

satisfaction at Yogyakarta International Airport (Y). This is evidenced by the calculated T value of 5.678, which is much larger than the T table value of 0.349 (at 0.05% significance level). From the Likert scale results and coefficient of determination, an R Square value of 0.535 was obtained, confirming the existence of a positive and moderate correlation between variable X and variable Y.

Given the positive influence between variables, efforts are needed to enhance the report culture of Facility Care at Yogyakarta International Airport (YIA).

## 6. SUGGESTIONS

Based on the research results conducted, the author provides the following recommendations:

1. Provide training such as staff socialization about report culture and effective communication, and provide simple reporting channels (information boards, QR codes, physical forms).
2. Establish realistic Service Level Agreements for repairs such as restrooms within 2 hours, chairs within 6 hours, and install "under repair" signs with time estimates.
3. Provide rewards or recognition for proactive staff and encourage passengers to report via social media/suggestion boxes, as well as increase routine inspections.
4. Develop real-time reporting applications/web platforms (with photo/location features), integrate IoT for facility monitoring, and establish collaboration with spare parts vendors, with phased implementation.

## ACKNOWLEDGMENTS

The author would like to express the utmost gratitude to the parties who have supported the implementation of this research. Special thanks are extended to:

1. Yogyakarta International Airport, which has provided the facilities and data required for this research.
2. Respondents who have participated in filling out questionnaires and provided information that is very useful for this research.
3. Supervising Lecturers who have provided direction, input, and guidance throughout the research process until the completion of this report.

4. Family and friends who provided moral support that is very meaningful to the author.

Gratitude is also extended to all parties who cannot be mentioned individually, but have contributed directly or indirectly to the success of this research.

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