

PERSONEL OPERATOR AVIOBRIDGE PERFORMANCE ANALYSIS ON ON-TIME PERFORMANCE AT I GUSTI NGURAH RAI BALI INTERNATIONAL AIRPORT

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Abstract

This research was conducted to determine the performance of personnel operating aviobridges concerning on-time performance at I Gusti Ngurah Rai Bali International Airport. I Gusti Ngurah Rai Bali International Airport is one of the airports in Indonesia with a considerable number of flights, especially international ones, making it a significant reflection of aviation in the country. This study employed a quantitative descriptive method with a hypothesis testing approach and determination test, using data collection techniques such as observation and questionnaires. The results of this study revealed a positive influence of personnel operator aviobridge performance on on-time performance, with a significance value of the relationship between personnel performance and on-time performance being $0.000 < 0.05$. The strong impact of personnel operator aviobridge performance on on-time performance was measured at 60.8%, as obtained from the R-square value in the determination test, while 39.2% was influenced by other aspects not examined in this research.

Keywords: performance, aviobridge operator, on-time performance.

INTRODUCTION

Indonesia is an archipelago consisting of several separate islands. One of them is the island of Bali, which is a popular tourist destination. Bali Island has an international airport named I Gusti Ngurah Rai International Airport. Until now, PT Angkasa Pura I has the responsibility of managing I Gusti Ngurah Rai International Airport. In the context of airport development in Indonesia involving Asean Open Skies and changes in the concept of airport city to city airport, I Gusti Ngurah Rai International Airport Bali seeks to improve services to airport service users and improve the quality of its human resources. However, the big challenge lies in improving the facilities and supporting facilities for air transportation related to the 3S + 1C corridor, namely Safety, Security, Service, Compliance. In order to improve the quality of service that reflects discipline, smoothness, and comfort for air transportation service users.

In order to constantly improve the comfort of aviation service users and protect their confidence in using this service, airlines and airport personnel always strive to maintain on-time flight performance. Personnel who work on the air side or air side of the airport have a very

large contribution in fulfilling on time flight performance. The sub unit of Apron Movement Control, namely the Aviobridge Operator, has a significant role in fulfilling on time flight performance. Aviobridge Operator is part of Apron Movement Control where this sub unit is tasked with operating the aviobridge if the airline requires an aviobridge when getting on and off passengers. When the author carried out On The Job Training (OJT) on the air side service users on the air side still need to be improved, for example the timeliness of the aviobridge operator personnel to the aviobridge to be operated and the timeliness of the airline in requesting the use of the aviobridge which affects the on time performance of the flight is not met. From observations made for 4 months when researchers carried out On The Job Training (OJT) there were still aircraft that departed or took off not according to the scheduled time due to delays in avionridge operations which were influenced by personnel performance factors.

Based on the description of the problem identification above, the authors can formulate the formulation of existing problems, namely:

1. Is there an effect of aviobridge operator personnel performance on on time performance in aviobridge services?
2. How much influence does the performance of aviobridge operator personnel have on on time performance in aviobridge services?

In this study the authors limit the issues raised so as not to expand and not get out of the context of the title, the authors only focus on discussing the Aviobridge Operator personnel involved in carrying out tasks in the air side of the airport in carrying out aviobridge services to fulfill the on time performance of flights at I Gusti Ngurah Rai Bali Airport not included in other factors that affect this research variable, and the results and conclusions of this study are not related to the discussion.

In this study there are two types of hypotheses, namely H0 and H1. H0 is the hypothesis that will be tested, so that later it will be accepted or rejected. H0 means indicating "nothing" and is usually formulated in a negative sentence. H1 is the hypothesis put forward during the research. H1 means indicating "there is" or "there is" and is a comparison hypothesis formulated in a positive sentence. The hypotheses that researchers propose and must be tested are:

1. H0
There is no positive and significant influence between personnel performance on on time performance at Ngurah Rai International Airport Bali.
2. H1
There is a positive and significant influence between personnel performance on on time performance at Ngurah Rai International Airport Bali.

LITERATURE REVIEW

PERSONNEL PERFORMANCE

According to Torang (2014), performance is the quantity or quality of the work of an individual or group in the organization in carrying out the main tasks and functions that are guided by norms, standard operating procedures, criteria and measures that have been determined or that apply in the organization. Based on Rivai (2013), performance is a concept that generally refers to actions or activities carried out by an organization within a certain period, with reference to certain standards such as past cost projections based on efficiency, management accountability, accountability, and similar aspects.

ON TIME PERFORMANCE

According to Soemohadiwidjoyo (2017), On Time Performance (OTP) is a measure that shows the ability of transportation facilities to arrive on time at their destination. On time performance and time delay cannot be separated, because delay is the opposite of on time performance. On time performance is a provision of time that can be achieved by a flight. While the delay is explained in the Law of the Republic of Indonesia Number 1 of 2009 concerning Aviation, delay is defined as the time difference between the scheduled departure or arrival time and the realization of the departure or arrival time.

AVIOBRIDGE OPERATOR

Aviobridge Operator is a sub-unit of Apron Movement Control where personnel are tasked with carrying out aviobridge docking and un-docking activities. Docking activity is the activity of installing the aviobridge on an aircraft that has stopped or blocked on. While un-docking is the activity of removing the aviobridge after all passengers have boarded the aircraft (embarking) which was previously installed.

Before operating the aviobridge, the Aviobridge Operator personnel on duty previously checked the aviobridge movement area and aviobridge readiness to ensure that the aviobridge operation to be carried out runs safely. Based on Ministerial Regulation Number 178 of 2015 concerning Airport Utilization Service Standards, in evaluating the top service time for departures and arrivals, especially related to the use of the aviobridge is less than 2 minutes. Thus, the Aviobridge Operator must not be late to get to the aviobridge that will be operated.

AVIOBRIDGE

Aviobridge or garbarata is a facility consisting of a passageway that connects the aircraft with the airport terminal building. This facility is designed to facilitate the process of getting on and off passengers from and to the airplane through the airport terminal building.

METHOD

RESEARCH METHOD

This writing uses quantitative methods. Quantitative research is research that involves numerical data and statistical analysis (deductive) including quantitative research. According to Zein (2019) SPSS is software specifically designed for processing statistical data, being one of the most popular and most widely used worldwide. The use of SPSS is widespread in various market studies, quality control and improvement, and scientific research.

RESEARCH VARIABLES

This research variable consists of two kinds of variables, namely; dependent variables or variables that depend on other variables, and independent variables. The variables used in this study are:

1. The independent variable, which in this research is called the independent variable, X, has the ability to influence the dependent variable, which is called Y. In this context, the independent variable that is the focus of the research is the performance of aviobridge operator personnel, which is called X.
2. Dependent variable or dependent variable (Y) is a phenomenon that changes due to the influence of the independent variable (X). In the context of this research, the phenomenon that becomes the dependent variable is on time performance.

POPULATION, SAMPLE, AND RESEARCH OBJECT

1. Population

Population refers to a group of individuals, animals, plants, or other objects that have specific characteristics that will be studied. This population will be the basis for generalization of the conclusions obtained through research.

In the context of this study, the population studied was the aviobridge operator personnel at I Gusti Ngurah Rai International Airport Bali.

2. Sample

The sample is part of the number and characteristics of the population. Sample measurement is the process of determining the size of the sample taken in an investigation of an object. The sample size is determined through statistical methods or based on research estimates. A sample is a subset of the population consisting of several members of the population. In this study, not all members of the population were taken, but only a part of the population. The sampling method used is non probability sampling using random sampling technique, which is a technique of taking sample members from a population that is carried out randomly without regard to the strata in that population.

3. Object of Research

The object of this research is personnel who serve as aviobridge operators at I Gusti Ngurah Rai International Airport Bali.

DATA COLLECTION TECHNIQUES

Observation

In this case the author conducted observations at I Gusti Ngurah Rai International Airport Bali from October 2022 to January 2023.

Questionnaire

The questionnaire involves measuring the answers of the respondents using a Likert scale. The Likert scale is used to describe the variables to be measured into variable indicators. Likert scale is a tool for measuring attitudes, opinions, and perceptions of individuals or groups towards social phenomena. The procedure carried out is to ask respondents to provide answers to general questions that will be used as the basis for measuring variables. Respondents are asked to state their level of agreement using a scale consisting of the categories Strongly Agree (SS), Agree (S), Disagree (KS), Disagree (TS), and Strongly Disagree (STS).

RESULT AND DISCUSSION

ANALYSIS RESULTS A. RESEARCH

INSTRUMENT TEST A.1 VALIDITY TEST

RESULTS

Validity Test Results Table

Variables	Indica tor	<i>Pearson Correlat ion</i>	Descripti on
Personnel performance (X) ₁	X ₁	0,397	Valid
	X ₁	0,598	Valid
	X ₁	0,854	Valid
	X ₁	0,857	Valid
<i>On time perfomance</i> (Y)	Y ₁	0,487	Valid
	Y ₂	0,755	Valid
	Y ₃	0,871	Valid
	Y ₄	0,710	Valid

Source: SPSS data processing version 25

Based on the results of instrument testing by distributing questionnaires to 30 aviobridge operator

personnel, researchers have conducted validity tests on 30 samples. As listed in the table above, it can be observed that all variable indicators in this study are declared valid, because the calculated r value obtained is greater than the r table value > 0.349 .

RELIABILITY TEST RESULTS

Reliability measurement can be carried out through the One Shot method or one-time measurement. In this method, measurements are taken only once, then the results are compared with other questions or used to measure the correlation between question answers. One of the instruments used to measure reliability is Cronbach's Alpha. A variable is considered to have good reliability if the α value is > 0.60 , while a variable with an α value < 0.60 is considered to have low reliability. Table of Reliability Test Results

No.	Variables	Cronbach's Alpha	Description
1	Personnel performance	0,679	Reliable
2	On time performance	0,670	Reliable

Source: SPSS data processing version 25

By referring to the above table listed above, it can be concluded that all the instruments mentioned above have a high level of reliability, because the Cronbach's Alpha value of each instrument is > 0.60 . This conclusion indicates that all research instruments are reliable and can be used to carry out research or test research hypotheses.

CLASSICAL ASSUMPTION TEST B.1 NORMALITY TEST RESULTS

Normality Test Table using Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,33483345
		Absolute
		,121
Most Extreme Differences	Positive	,081
	Negative	-,121
Test Statistic		,121
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: SPSS data processing version 25

From the attached table, it can be seen that the normality test value is $0.2 > 0.05$. In this case, it can be explained that the regression model has met the assumption of normality, namely that the data has a normal distribution.

HETEROSCEDACITY TEST RESULTS

Heteroscedasticity Test Table

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,008	1,376		1,459	,156
	Total .X	-,005	,093	-,011	-,058	,954

a. Dependent Variable: ABS_RES

Source: SPSS data processing version 25

Based on the table presented above, it can be seen that the significance level in the heteroscedasticity test is $0.954 > 0.05$. Therefore, it can be concluded that in this study there are no symptoms of heteroscedasticity.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,672	2,539		-1,052	,302
	Total X	1,131	,172	,779	6,583	,000

a. Dependent Variable: Total.Y

LINEARITY TEST RESULTS

Linearity Test Table

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Total.Y * Total.X	Between Groups	(Combined)	278,219	9	30,913	4,963	,001
		Linearity	244,708	1	244,708	39,285	,000
	Deviation from Linearity		33,511	8	4,189	,672	,710

Within Groups	124,581	20	6,229		
Total	402,800	29			

Source: SPSS data processing version 25

From the table listed, it can be concluded by comparing the significance value (sig.) of 0.710 with the limit value of 0.05. Based on the results of the linearity test that has been carried out, the sig value is $0.710 > 0.05$, which indicates a linear relationship between personnel performance and on-time performance.

SIMPLE LINEAR REGRESSION ANALYSIS

Simple Linear Regression Analysis Table

Source: SPSS data processing version 25

So the regression equation based on the table above is obtained:

Description: personnel performance on on time performance at Ngurah Rai International Airport Bali.

$$Y = a + \beta_1 X \quad Y = -2.672$$

$$+ 1.131 (X_1)$$

- The constant coefficient (a) of -2.672 is a constant when the on time performance variable has not been influenced by other variables, namely personnel performance. This means that if there is no attention to the performance of aviobridge operator personnel at Ngurah Rai International Airport Bali, the on time performance variable is -2.672.
- The recorded β_1 value of 1.131 indicates that when the personnel performance variable increases by 1 unit, the on-time performance also increases by 1.131. Thus, an increase in personnel performance at Ngurah Rai International Airport Bali has a positive impact on increasing on time performance. The positive regression coefficient indicates that there is a positive influence of personnel performance on on time performance.

Coefficient of Determination R²

Table of Determination Test Results R²

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	,779 ^a	,608	,594	2,376
a. Predictors: (Constant), Total.X				
b. Dependent Variable: Total.Y				

Source: SPSS data processing version 25

Based on the determination test results listed in Table 4.10, it can be concluded that the adjusted coefficient of determination (R square) has a value of 0.608. This indicates that there is a significant correlation between the performance of aviobridge operator personnel on on time performance at Ngurah Rai International Airport Bali, with a confidence level of 60.8%. The remaining

39.2% is explained by other factors not included in this study.

TEST RESULTS

Table of t test results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,672	2,539		-1,052	,302
	Total.X	1,131	,172	,779	6,583	,000
a. Dependent Variable: Total.Y						

Source: SPSS data processing version 25

In accordance with the table above, the results of the t test data for each variable can be described as follows:

The significance value of the relationship between personnel performance and on-time performance is 0.000. When compared to the threshold of 0.05, the significance value is smaller. Therefore, based on this study, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted. This shows that personnel performance has a positive and significant influence on on time performance.

DISCUSSION

Based on the real results that researchers get using questionnaires, the authors get 30 respondents in accordance with the specified sample target. After the discussion in terms of the respondents above, a discussion can be obtained with the independent variable of personnel performance with the dependent variable on time performance as follows:

1. The effect of aviobridge operator personnel performance on on time performance in aviobridge services

Testing the significance of the effect of personnel performance on on time performance is carried out by conducting a t-test, namely based on table 4.11 of the t test results, the significance of the t of the personnel performance variable on on time performance is significant at 0.000, when compared, the significance value is <0.05. This means that H0 is rejected and H1 is accepted, which means that personnel performance has a positive and significant effect on on time performance. This means that the better or optimized the performance of aviobridge operator personnel at Ngurah Rai International Airport Bali, the more on time performance will increase.

2. The magnitude of the influence of the performance of aviobridge operator personnel on on time performance in aviobridge services.

Based on the SPSS output table "model summary" listed in table 4.10, it is known that the coefficient of determination or R square is 0.608, this comes from squaring the correlation coefficient or "R", which is $0.7792 = 0.608$. The magnitude of the coefficient of determination (R Square) is $0.608 = 60.8\%$. This figure means that the personnel performance variable (X) affects the on-time performance variable (Y) by 60.8%. While the rest ($100\% - 60.8\% = 39.2\%$) is influenced by other variables outside this regression equation or variables not examined in this study.

CONCLUSIONS

CONCLUSIONS

Based on the analysis of this research, the conclusions drawn are as follows:

1. The performance of Aviobridge Operator Personnel has a real impact or influence on flight on time performance, meaning that the more optimal the work done by aviobridge operator personnel, the higher the level of flight on time performance. This is very

logical, because if the performance provided is less than optimal it will affect the level of on time performance. In this context, personnel capabilities are needed in order to achieve optimal performance in various aspects related to time efficiency.

2. The value of the influence of Personnel Performance on on time performance based on this research (60.8%) is only influenced by the performance of personnel based on this research. So there are other factors (39.2%) that influence the success of on time performance at I Gusti Ngurah Rai Bali airport, which in this study was not examined.

ADVICE

Based on the results of the study, the suggestions proposed include:

1. Currently the stand-by location of the aviobridge operator personnel is still at one point, namely parking stand A30, which covers a very large area from parking stand A15 to parking stand A40, so the travel time of personnel from the office at A30, which is the stand-by point, greatly affects the level of timeliness of personnel to the intended aviobridge point. So the suggestion is to evaluate the mapping of stand-by points and the placement of the number of personnel at each point, so as to facilitate and speed up the aviobridge personnel to the point to be addressed or the aviobridge to be operated so that the service becomes effective and efficient.
2. With the influence of the performance of aviobridge operator personnel on on time performance of 60.8% and 39.2% of other factors not examined in this study, it is felt that further research is needed on other factors that affect the performance of aviobridge personnel to achieve 100% on time performance, this can be a reference for further research development.

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