

DOCUMENT DIGITIZATION AND QUALITY OF SERVICE EFFECT TO CUSTOMER'S SATISFACTION IN SOEKARNO HATTA INTERNATIONAL AIRPORT

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Abstract. The purpose of this research is to perceive more deeply about how the document digitization can help the passenger expedite and shorten their time for managing their documents at Soekarno-Hatta International Airport, Document Digitization can make the passengers' movements become easier. The research method of this paper was quantitative descriptive analysis, by spreading questionnaire or interview as the data collection technique, and data analysis technique used multiple linear regression analysis altogether with T Test and F Test. This research was conducted at PT Angkasa Pura II (Persero) Soekarno Hatta International Airport as one of State-Owned Enterprises (BUMN) in Indonesia which engages in airport business and airport-related services in western part of Indonesia. Variables of the research consist of two (X) variables which are Document Digitization (X1), Quality of Services (X2), and also (Y) variable which is Passenger's Satisfaction. Population of the research were all of the passengers who were the customers of Soekarno-Hatta International Airport's flight services. The sample was taken by using Random Sampling techniques, which took a total sample of 100 respondents. The results of the research shows that there is a positive relation and significance between Document Digitization and Quality of Service towards Customer's Satisfaction at Soekarno-Hatta International Airport, in attempt of doing innovation in digitalizing document and giving a good quality of service; thus, it can be accepted and felt by the public.

Keywords: Document Digitization, Quality of Service, Facility, Soekarno-Hatta Airport

Introduction

The COVID-19 outbreak began in December 2019 in Wuhan city, Hubei Province, China. The virus continues to spread throughout the world amid significant public health risks; moreover, the effect of this virus (COVID-19) is greatly impactful in economic and industrial activities in Indonesia, particularly in the aviation industry of the nation. As we all know, the impact of the virus causes air transportation got frozen or stopped entirely because every country/region which has been affected by the virus implementing a lockdown policy or limiting the entire space for entry or exit of people or goods and applying physical distancing policy for every sector of activity.

Currently, related to the implementation of (PSBB) which has just ended and entered the New Normal Era, all industrial activities, especially the aviation industry in Indonesia, shall adapt to new living conditions. These conditions require every airport to make adjustments and adaptations. New concepts are needed for all activities that ensue at the airport. Considering the patterns and behaviors of visitors and passengers, the activities have changed from usual ones, starting from direct contact with officers when manually completing travel documents, queuing when checking in, taking care of luggage and immigration (traveling abroad), and even boarding to the plane. All these activities need a physical contact.

As we can see, the growth of information technology is extremely fast. This condition impacts the product of information technology in the form of hardware which transforms into more modern one, from analog to digital tools. Also, the process of media has been changing from printed to digital which is known as scanning or digitization.

Amid the outbreak of COVID-19, almost all companies are competing to escalate the quality of their service, commitment and consumer's satisfaction; thus, the business scope can successfully survive in every condition. As a consequence, the quality of service needs to be monitored and escalated altogether. Then, the customer's satisfaction can be optimally snatched because of the quality, and customer's satisfaction holds the most crucial role in business to become successful.

The purpose of this research is to know if there is an impact of Document Digitization and Quality of Service towards Passenger's Satisfaction. This research is expected to assist companies in knowing that the Document Digitalization and Service Quality applied can affect Customer's Satisfaction at Soekarno-Hatta International Airport.

Literature Review

a) Document Digitization

Digitizing documents/archives is one way of converting conventional documents into forms and media to become electronic/digital documents (Dhani Sugiharto, 2010). Digitization is the conversion of traditional analog materials, such as books, maps and any other paper items into digital and electronic conversions (Perry, 2014). However, "Digitization does not mean replacing original documents, images, sounds, etc. Paper documents can be destroyed or stored, depending on organizational needs or legal requirements" (Yakin Bakhtiar Siregar, 2019). The methods used in transferring the documents provided include:

1. Scanning

This is the way of transferring media using document scanner that will produce image data that can be stored on a computer.

2. Conversion

Converting document is a process of converting a word processor or spreadsheet document into permanent image data to be stored on a computerized system.

3. Importing

This method transfers data electronically, such as office documents (e-mail), graphics or video data into an electronic document archive system. Data can be moved by dragging and dropping into the system and still using the original data format. (Saifudin, 2014)

b) Service Quality

Modernity with technological advances will result in very fierce competition to obtain and retain customers. Quality of service is a necessity to be done by companies and institutions in order to be able to survive and continue to get the trust of consumers and society. Traditionally, service quality has been conceptualized as the difference between customer expectations regarding received services and perceptions of services (Grönroos, 2001; Parasuraman, Zeithaml, & Berry, 1988) cited in (Akbar & Parvez, 2009). In several previous studies, according to Kotler (1997) the dimension of service quality is a portrait of how far the difference between the genuineness of service (perceived service) and the expectations of users of the service that they should receive (expected service). The discrepancy is seen in perceived service for expected services. So, as to create service quality problems according to users, this phenomenon is called a gap (GAP) (Nani & Wolok, 2014).

There are more opinions which said that, Service (service) is a program, benefit, or satisfaction that has been given in an intangible and unapproved agreement (Kotler and Armstrong, 2012) cited in (Pangastuti, 2017). Providing quality services is questioned as an important strategy for the success and challenges of life in today's competitive environment (Zeithaml et al., 1996).

c) Customer Satisfaction

At present, the company's attention to customer's satisfaction and dissatisfaction has been increasingly greater because the purpose of a company is basically to create a sense of satisfaction with customers. The higher the level of customer's satisfaction is, the greater the profit it will bring for the company because customers will repurchase the company's product. However, if the level of satisfaction felt by the customers is small, there is a possibility that the customer will move to competitor's product (Nani & Wolok, 2014).

Customer's satisfaction is important for a company. The slogan "Customer Is the King" has been commonly displayed according to Kotler, et al (2015) cited in (Alfin & Nurdin, 2017). Besides, it can be concluded that satisfaction or dissatisfaction is the customers' response to the evaluation of the discrepancy perceived between expectations before purchase and the actual performance of the product felt after its use (Tjiptono & Chandra, 2011).

Hypotesis Formulation

- **H1** : Document Digitization(X1) towards Customer's Satisfaction (Y)
- **H2** : Quality of Service(X2) towards Customer's Satisfaction(Y)
- **H3** : The Influence of Document Digitization (X1) and Quality of Service (X2) simultaneously towards Customer's Satisfaction (Y)

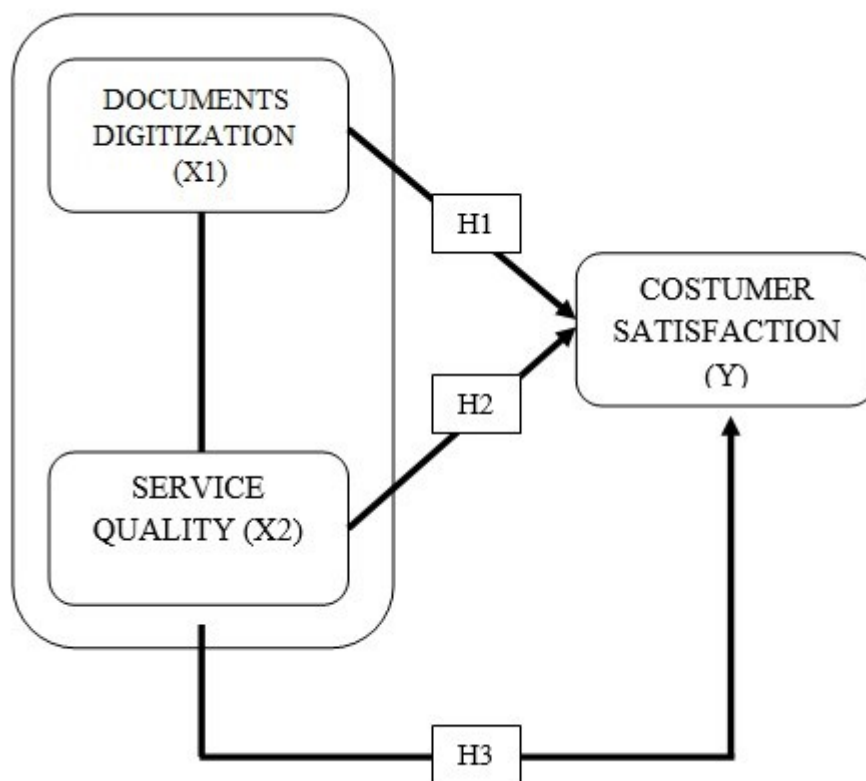


Figure 1.

Research Method

The research method is using quantitative descriptive, which the data collection was done by questionnaire and interview. This research was held at PT Angkasa Pura II (Persero) Soekarno-Hatta International Airport, as one of State-Owned Enterprises (BUMN) in Indonesia which engages in airport business and airport-related services in western Indonesia. The variables in this research are divided into two variables (X), namely Document Digitization (X1) and

Service Quality (X2). Moreover, the variable (Y) is Customer's Satisfaction. The research population was all passengers who used flight services at Soekarno-Hatta airport. Samples were taken using the Random Sampling technique, which took a total sample of 100 respondents. For the validity and reliability test, this study incorporated SPSS 25, as well as for the Multiple Linear Regression test, the T-test and F-test.

Type of Data Used

Type of data in this research consists of 2 (two) types, namely:

1. Primary Data was obtained from visitors and airplane passengers at Soekarno-Hatta International Airport who answered questions in the form of questionnaires.
2. Secondary Data used the articles and relevant literature in the topic of research.

Data Collection Used is as Follows:

1. Questionnaire technique was the data collection using a set of questionnaires, intended to get data directly from respondents by giving several written questions to the respondent

Data Analysis Technique

1. Descriptive Analysis, was used to analyze respondents' response about Digitizing Documents and Quality of Service on the dependent variable which is Customer's Satisfaction
2. Partial Testing (T Test) was done to find out independent variable (individually) consisting of digitizing documents and service quality to the convenience variable which is customer's satisfaction
3. Simultaneous testing (Test F) was done to find out simultaneously (simultaneously) the influence of independent variables consisting of digitizing documents and service quality to the dependent variable, namely customer's satisfaction

THE RESULT AND DISCUSSION

Validation and Realibility Test Results

Variable / Dimension	Indicator	Average	R value	Cronbach Alpha
DOCUMENT DIGITIZATION	X1.1 The effectiveness to simplify the procedure of a trip	4.35	0.746	0.720
	X1.2 The effectiveness to shorten the time	4.44	0.649	
	X1.3 The implementation before and after Covid-19 Pandemic	4.3	0.691	
	X1.4 Socializing the customer	3.5	0.668	
	X1.5 The ease of document digitalization	3.64	0.733	
SERVICE QUALITY	X2.1 Quick response in problem-solving	3.71	0.716	0.767
	X2.2 Ease to obtain the information about aircraft	4.17	0.706	

CUSTOMER'S SATISFACTION	X2.3	Employee's readiness on service-giving	4.06	0.739	0.810	T able 1. Valida tion and Realib ility Test Result s The data was proces sed by Author with SPSS 25.00.
	X2.4	Health-protocol and physical distancing	4.01	0.728		
	X2.5	Quality in service	3.71	0.739		
	Y.1	Physical appearance and professionalism of the employee	4.09	0.663		
	Y.2	Interesting facilities for the customer	4	0.827		
	Y.3	The readiness on completing the demand	3.81	0.849		
	Y.4	Customer's satisfaction	4.09	0.855		

Validity test was used to calculate questionnaires' validity.

On the first table above, R tabel 0,134 was obtained from the table in R statistic where DF = N (number of the respondent) - 2. Each $r_{\text{value}} > r_{\text{tabel}}$ and all variables were considered valid.

The search for valid-items was performed through reability test. This method is used to measure the questionnaire which is the predictor for the variable. On table 1, it shows that the value of the Cronbach Alpha on each variable was $> 0,60$ using Sugiono's theory, so the instrument on each variable was accurate.

Tabel 2. Multiple Linear Regression's result about Document Digitization and Service Quality of Customer's Satisfaction.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.752	1.003		3.742	.000
	Document Digitization	.091	.054	.104	1.674	.096
	Service Quality	.529	.051	.647	10.392	.000

a. Dependent Variable: Customer's Satisfaction

Source: The data was processed by Author with SPSS 25.00.

From the table above, the similarity of regression was gained as follows:

$$Y = 3.752 + 0.091(X1) + 0.529(X2)$$

3.752 is a constant grade in similarity. If 0 is assumed as constant or as the same, the competitive supremacy will be 3.752 units. If the Document Digitization is one unit, that will be followed by the Customer's Satisfaction of 0.091 units, and if the Service Quality is risen by a unit, so the value of Customer's Satisfaction will be 0.529.

Table 3. Coefficient Determination

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.710 ^a	.504	.498	1.818	2.142

a. Predictors: (Constant), Service Quality, Document Digitization

b. Dependent Variable: Customer Satisfaction

Source: The data was processed by Author with SPSS 25.00.

It shows that the adjusted coefficient of the determination, or (r^2), is 0,504. This result means that the independent variables, the Document Digitization and Service Quality, can explain 50.4% of the Satisfaction of the Customer, a dependent variable. Furthermore, other variables that are omitted from this model explains the remaining of 43.9%

TABEL 4. PARTIAL HYPOTHESIS TEST (H1) AND (H2) (T Test)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.838	1.158		6.770	.000
	Document Digitization	.402	.057	.462	7.110	.000

a. Dependent Variable: Customer's Satisfaction

Source: The data was processed by Author with SPSS 25.00

FIRST HYPOTHESIS TEST (H1)

The value of Sig is known. For X1, Y is $0.000 < 0.10$ and t_{Value} is $7.110 < t_{\text{Table}} 1,652$. It can be inferred that H1 over X1 influences Y.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.660	.848		5.498	.000
	Service Quality	.576	.043	.704	13.530	.000

a. Dependent Variable: Customer's Satisfaction

Source: The data was processed by Author with SPSS 25.00

SECOND HYPOTHESIS TEST (H2)

The value of Sig is known. For X2, Y is $0,000 < 0,10$ and t_{Value} is $13,530 > t_{\text{Table}} 1,1652$, so that H2 is obtained through the calculation of X2 towards Y.

TABEL 5. SIMULTANEOUS HYPOTHESIS TEST/ ANNOVA TEST (F TEST)
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	619.814	2	309.907	93.813	.000 ^b
	Residual	611.138	185	3.303		
	Total	1230.952	187			

a. Dependent Variable: Customer's Satisfaction

b. Predictors: (Constant), Service Quality, Document Digitization

Source: The data was processed by Author with SPSS 25.00.

The value of Sig is known. For X1 and X2, Y is $0.000 < 0.10$ and f_{Table} is $93.813 > F_{table} 3.04$, so the inference is that X1 and X2 get an impact, which is calculated simultaneously through Y with X1 and X2.

CONCLUSION

It indicates the optimistic and important effect of Customer 's Satisfaction, based on the concise research method of Document Digitisation. This situation is induced by the good management and service services that can be felt at Soekarno-Hatta International Airport by the customers of all aircrafts. This analysis can be seen on the vector from the overall average and presentation as Around 82% . This study also shows that the digitalization of the document helps smoothness of the travel-declaration document as well. The value of Sig is known. For Y in X1 is $0.000 < 0.10$ and t_{Value} is $7.110 < t_{Table} 1.652$, so it can be inferred that the H1 of X1 may have an effect on Y.

The standard of the service also has a positive and important effect on the happiness, preparation, and hard-working employees when it comes to giving and serving the customers. This analysis can be seen from the overall average and presentation on the variables of 80%. It is also known from the Sig value. For X2, Y is $0.000 < 0.10$, and t_{Value} is $13.530 > t_{Table} 1,652$. It can be concluded that H2 of X2 has the influence on Y, and it is proven that the improvement in the standard of service has an effect on the operation of each passenger at the airport by observing the applied health protocol.

Simultaneously the descriptive analysis of the Digitization Document and Service Quality has had a positive and significant impact on the satisfaction of the Customer. It can be implied from Sig 's value. For X1 and X2, Y is $0,000 < 0,10$ and F_{Value} is $93,813 > F_{Table} 3,04$, so it can be concluded that X1 and X2 simultaneously affect Y.

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