

THE EFFECT OF THE E-TICKET AND ONLINE CHECK-IN USAGE ON CUSTOMER VALUE ON DOMESTIC FLIGHTS DURING THE COVID-19 PANDEMIC

Mohammad Awaldiyanto¹, Husni Mubarak², Tito Warsito³, Ratna Suminar⁴

1,2,3,4 Trisakti Institute of Transportation and Logistics

Corresponding author : m.awaldiyanto@gmail.com

Abstract

This research was conducted to determine how much effect of the E-tickets and Online Check-in usage on domestic flights during the COVID-19 pandemic had on Customer Value. The sampling method was carried out by purposive sampling technique with the number of respondents as many as 50 people selected based on specific criteria. The data collected were analyzed using multiple linear regression analysis with the help of the SPSS version 25 program. After processing the data, the results obtained from the t-test are known that E-tickets significantly affect customer value. Likewise with Online Check-in has a significant effect on Customer Value. From the results of the F test, it is found that E-tickets and Online Check-in concurrently and simultaneously have a significant impact on Customer Value.

Keywords: Air Transportation, E-ticket, Online Check-in, Covid-19 Pandemic, Customer Value.

INTRODUCTION

The rapid pace of the aviation industry and the current situation and conditions as a result of the COVID-19 pandemic. Thus, we need a system that aims to avoid physical contact between individuals. Therefore, the use of e-tickets and online check-in is very beneficial to avoid the spread of the covid-19 virus and provide convenience to users of air transportation modes when traveling on flights which have an impact on providing efficiency and effectiveness for users and airlines so that they can create value for customers using air transportation modes. Customer value means what customers want and confidence in what they get by buying and using certain products provided by product providers.

The Central Bureau of Statistics recorded that the number of domestic air transport passengers throughout 2020 reached 32.4 million people. That number decreased by 57.76% compared to 2019 which reached 76.7 million people. Meanwhile, airlines with domestic routes operating in Indonesia, such

as; Garuda Indonesia, Citilink, Lion Air, Batik Air, Air Asia, and Sriwijaya Air have implemented electronic tickets (e-tickets) and online check-in systems. With the implementation of the two systems, of course, the airlines can reduce the operational burden of company.

In the application of e-tickets and online check-in, there are problems faced by airlines, including if there is a prolonged system down and unstable connection (bad network) therefore these impacts will affect the effectiveness of using e-tickets and online check-in, which will result in a decrease in the value of both systems.

Based on the description above, the formulation of the problem that can be taken in this study are; 1) Is there any influence in the use of e-tickets on customer value on flight trips during the covid-19 pandemic? 2) Is there any influence in the use of online check-in on customer value on flight trips during the covid-19 pandemic? 3) Can the use of e-tickets and online check-in affect customer value on flight trips during the covid-19 pandemic?

LITERATUR REVIEW

Marketing Management Definition

According to Sofyan Assauri (2013), marketing management is an activity of analyzing, planning, implementing, and controlling programs designed to establish, build and maintain exchange benefits. Because of the topic raised by the author is a service product, the elements of marketing management using the 7P marketing mix include: a) Product. b) Price. c) Promotion. d) Place. e) People. f) Process. g) Physical Evidence.

E-Ticket Definition

The term e-ticket (Electronic Ticket) is a way to document the service request process from service activities without issuing physically valuable documents or paper tickets (Arnomo, 2019). It provides convenience and security for consumers. Electronic tickets are digital data stored in each airline's computer system so that if the printed electronic ticket is lost, the passenger mentions the booking code. On June 1, 2009, IATA (International Air Transport Association) had mandated each member to use electronic tickets in all forms of payment (Choiriah, 2019).

Online Checking Definition

Check-in is a reporting process that will do flights to airline company officers at the departure terminal building. *“The Online check-in is a system designed to handle passengers by way of communicating in via a web interface. The web-based (online) check-in provided by air carriers is both fast and simple. It enables reservation of a chosen seat, printing out one’s own board-ticket whether from the comfort of their homes, office or elsewhere”* (Adamčík et al., 2017).

Customer Value Definition

According to Kotler and Keller (2009), customer value is the difference between a prospective assessment of the customer based on all the benefits and costs of an offer against its alternatives.

Dimensions of Customer Value according to Sweeney & Soutar in (Tjiptono, 2011) there are four main aspects of customer value: 1) Emotional Value is the ability related to the impression of feelings or emotions caused by the use of the product. 2) Social Value is the ability of a product related to its ability to increase an excellent social impression in society. 3) Performance Value is the ability of a product considered to have good performance and function. 4) Price Value is the ability of a product to be obtained from a price that seems to have price efficiency.

Pandemic

According to the Covid 19 Prevention and Control Guidelines, Coronavirus Disease (Covid 19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Common signs and symptoms of COVID-19 infection include acute respiratory disorders such as fever, cough, and shortness of breath. Severe cases of Covid 19 can cause pneumonia, acute respiratory syndrome, kidney failure, and even death.

Flight

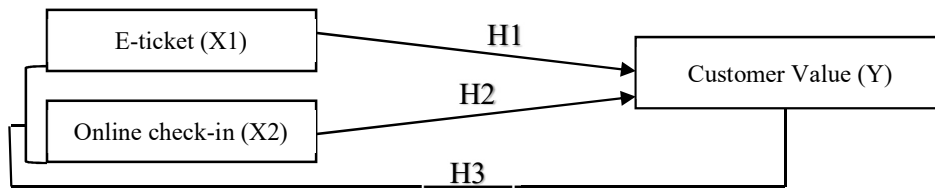
Flight is a unified system consisting of airspace, aircraft, airports, air transportation, flight navigation, safety and security, the environment, supporting facilities, and other public facilities. (Sugiarti, 2020).

Passanger

According to Damadjati (1995), the definition of a passenger is any person who is transported or who must be transported on an airplane or other means of transportation based on approval from the company or agency that organizes the transportation.

Conceptual Framework

The framework of thought in this study can be seen in Pucture 1.



Picture 1. Conceptual Framework

Hypotheses

From the theoretical basis and framework of thought that has been described, the hypotheses set out in this research are;

H1: It is suspected that there is an effect of using e-tickets on customer value on flight trips during the covid-19 pandemic.

H2: It is suspected that there is an effect of using online check-in on customer value on flight trips during the covid-19 pandemic.

H3: It is suspected that there is a relationship between the use of e-tickets and online check-in on customer value on flight trips during the covid-19 pandemic.

METHOD

In this research, the authors use a causal approach, where the researcher examines whether or not there is a causal relationship between the dependent

and independent variables. The place where this research was conducted is in the city of Jakarta. In collecting respondent data, the researchers distributed as many as 50 questionnaires, which were addressed to the public using air transportation services, especially domestic flights, who had used e-ticket and online check-in services during the COVID-19 pandemic. Roscoe in Sugiono (2012, p. 91) suggests the sample size for research as follows: If the research is to conduct multivariate analysis (correlation or multiple regression for example), then the number of sample members is at least 10 times the number of variables studied. The research sample consisted of the entire community, both men and women, aged 17 to 60 years. The types of data and data sources used in this study consisted of primary data and secondary data. Primary data is a data source that directly provides data to data collectors (Sugiyono 2018, p. 137). The primary data source in this study is a questionnaire distributed to respondents, while the secondary data source in this study uses passenger movement data during the 2019-2020 period. Data collection techniques are the main things that affect the quality of research data. In this study, the author used a questionnaire by giving a set of questions or a written statement to the respondent to answer. In quantitative research, data analysis techniques are used to answer problem formulations or test hypotheses that have been formulated. Researchers used the SPSS version 25 program, which can help speed up and accurate the results of research data processing. This analysis is used to describe the data obtained, such as the location of the study, the respondent's data under study, the frequency distribution of each variable. In conducting the data quality test, researchers used the most frequently used tests, the validity test, and the reliability test. Test the validity of the data, which will later describe how much variation is obtained, representing the inequalities among the respondents under study. A reliable questionnaire is a questionnaire whose answers are consistent from time to time. So that the research can be said to be good, the researcher can pass the classical assumption test, which are normality test, heteroscedasticity test, and multicollinearity test. The normality test was carried out with the aim of testing whether our research data were normally distributed or not (Ghozali,

2013, p. 160). Normality test was carried out by Kolmogorov-Smirnov test. The heteroscedasticity test was carried out with the aim of testing whether in the regression equation there was an inequality of variance from the residuals of one observation to another (Ghozali 2013, p. 139). The test is carried out by observing the normal probability plot graph generated through calculations in SPSS. The multicollinearity test was carried out to test whether in the regression equation model there was a correlation between independent variables or not (Ghozali, 2013, p. 105). Multicollinearity test can be seen from the Variation Inflation Factor (VIF). Researchers use multiple linear regression analysis if the researcher intends to predict how the value of the dependent variable changes if the value of two or more independent variables as predictors is increased or decreased (manipulated). So multiple linear regression analysis will be carried out if the number of independent variables is at least two (Sugiyono 2018, p. 153). The coefficient of determination (R^2) essentially measures the model's ability to explain the dependent variable. The value of adjusted R^2 that is getting bigger or closer to 1 means that the independent variables (X) can provide almost all the information needed to predict the variation of the dependent variable (Y). On the other hand, the smaller adjusted R^2 value means that it can be said that the influence of the independent variable (X) is small on the dependent variable (Y). F test To determine the effect simultaneously (simultaneously) between the dependent variable and the independent variable. The t-test was used to test the significant effect of the partial independent variables on the dependent variable. There are two kinds of variables in this research: the independent variable (independent) and the dependent variable (dependent). Free Variable (independent), It is a variable that affects or causes changes in the dependent variable (dependent) (Prof.Dr. Sugiyono, 2019). The independent or independent variables (X) in this study are E-tickets and Online Check-in. The dependent variable (dependent) is a variable that is influenced or a result of the existence of an independent or independent variable (Prof. Dr. Sugiyono, 2019). The dependent or dependent variable (Y) in this study is Customer Value.

Variables	Operational definitions	Indicators
E-Ticket	is a way to document the service request process from service activities without issuing valuable physical documents or paper tickets. (Arnomo, 2019).	1. Performa 2. Esthetical 3. Security 4. Assurance
Online Check-in	Online Check-in is a system designed to handle passengers by communicating via a web interface. Web-based (online) check-in provided by airlines is fast and simple. (Adamčik et al., 2017).	1. Responsiveness 2. Security 3. Punctuality 4. Serviceability
Customer Value	Customer value is the perception of market quality that is adjusted to the price of your product (Gale, 1994)	1. Emotional Value 2. Social Value 3. Quality Value 4. Price Value

Picture 2. Indicators

Using a Likert Scale To analyze the answers obtained from the questionnaire, calculations were utilized with the Likert Scale method developed by Rensis Likert (1932). The Likert Scale (Likert Scale) is a psychometric response scale mainly used in questionnaires to obtain respondents' preferences for a statement or series of reports (Suwandi et al., 2018), The Likert scale used in this study is as follows: Strongly Agree (SA), Agree (A), Doubtful (D), Disagree (DS), and Strongly Disagree (SDS).

Results And Discussions

Description Analysis

From a total of 50 respondents from the age of 17-60 years, the percentage of men is 58%, and women are 42%. According to the results of measurements that have been carried out using questionnaires, the application of E-tickets received a positive response from respondents who are users of the E-ticket system, because customers feel that the quality provided in the E-Ticket service has been carried out well, this opinion is evidenced by the average results. The overall score average is 4,6. Likewise, with the services

contained in the Online Check-in system, customers feel that the quality of the Online Check-in system has been carried out well, as evidenced by the measurements made on the quality of Online Check-in, which received an overall average score of 4,52. The implementation of E-tickets and Online Check-in concerns the customer value provided by the two systems. Customers feel that the matter provided through the E-ticket and Online Check-in system in its application is also quite good. From the results obtained through the distributed questionnaires, the value given by the E-ticket and Online Check-in system gets an overall average value 4,54.

Data Quality Test

After measuring the validity of the E-Ticket (X1), Online Check-in (X2), and Customer value (Y) variables, it can be said to be valid if; $r \text{ count} > r \text{ table}$. value of $r \text{ table}$ $df = n-2$, $df 48 = 0.2787$. Variable X1, $r = 0.468$. Variable X2, $r = 0.574$. Variable Y, $r = 0.609$. So, the three variables can be valid because the calculated r -value of the three variables is greater than the table r value. In the reliability test, it is reliable if the Cronbach's Alpha value $>$ Boundary value. Cronbach's Alpha value of the variable X1 = 0.847. Cronbach's Alpha value of the X2 variable = 0.883. The value of the variable Y = 0.900. While the limit value = 0.60. So, the three variables are said to be reliable.

The Classical Assumptions Test

The normality test can be said to be expected if the significance level value is > 0.05 . In the table below, the significance value is 0.065, which means it is more significant than 0.05. So it can be said to be normal.

Tabel 1

ONE SAMPLE KOLMOGOROV		
SMIRNOV - TEST		
		Unstandardized Residual
N		50
Normal parameters	Mean	.0000000
	Std. Dev	1 .92214364
Most extrem	Absolute	.121
	Positive	.072
	Negatif	(-) .121
Test statistic		.121
Asymp sig (2 tailed)		.065c

Source : spss 25,2020

Multicollinearity Test

The value of VIF (Variance Inflation Factor) < 10 and the tolerance value is above 0,1, then there is no multicollinearity. In the table below, the VIF value is 1,929 < 10, and the tolerance value is 0,518 > 0,1. Therefore, from the calculation of the Multicollinearity Test, there is no multicollinearity.

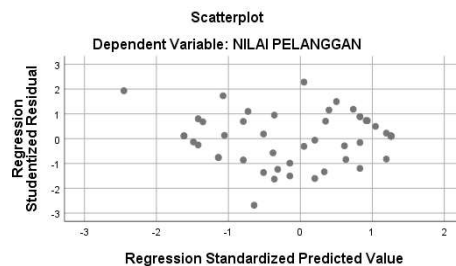
Table 2

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. error	Beta	t		ce	VIF
(Cosntant)	2.035	3.763		.541	.591		
E-Ticket	.228	.121	.185	1.886	.065	.518	1.929
Online check-in	.750	.100	.737	7.521	.000	.518	1.929

Source : spss 25,2020

Heteroscedasticity Test

From the picture below, it can be seen that the dots are spread out and do not form a clear pattern. So, it can be concluded that there is no heteroscedasticity in the regression model.



Picture 3. Heteroscedasticity test

Multiple Linier Analysis Test

Multiple linear regression analysis was conducted to determine the effect of the E-Ticket (X1), Online Check-in (X2) variable on the Customer Value variable (Y). The following is a table of multiple linear regression test results: A value of 2.035 is a constant or a condition when the Customer Value variable (Y) has not been influenced by other variables, namely the E-Ticket (X1) and Online Check-in (X2) variables. a) If the variables X1 and X2 do

not exist, then the variable Y does not change. b) The value of the regression coefficient X1 is 0.228, indicating that every 1 unit increase in the X1 variable will affect the Y variable by 0.228. c) The X2 regression coefficient value of 0.750 indicates that every 1 unit increase in the X2 variable will affect the Y variable by 0.750.

Table 3

Model	Unstandardized		Standardized		Sig.
	Coefficients		Coefficients		
	B	Std. error	Beta	t	
(Constant)	2.035	3.763		.541	.591
E-Ticket	.228	.121	.185	1.886	.065
Online check-in	.750	.100	.737	7.521	.000

Source : spss 25, 2020

The Coefficient Of Determination Test (R^2)

Based on the table, the coefficient value (R^2) is 0.766 or 76.6%, so it can be concluded that the magnitude of the E-Ticket (X1) and Online Check-in (X2) variable to the Customer Value (Y) is 0.766 or 76.6%.

Table 4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.875 ^a	.766	.756	1.96261

a. Predictors: (Constant), ONLINE CHECK -IN, E-TICKET

Source : spss 25, 2020

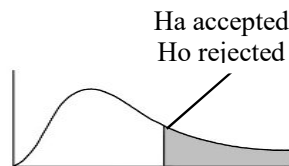
Hypothesis Testing

Table 5

ANOVA ^a						
Model		Sum of square	df	mean square	F	Sig.
1	Regression	593.143	2	296.571	76.994	.000
	Residual	181.037	47	3.852		
	Total	774.180	49			

- a. Dependent Variable: CUSTOMER VALUE
- b. Predictors: (Constant), ONLINE CHECK-IN, E-TICKET

Source : spss 25, 2020

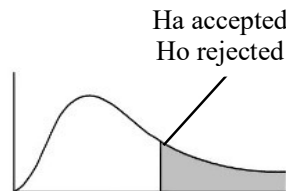


F test. From the table above, it can be seen that the significance value for the effect of E-TICKET (X1) and Online check-in (X2) on customer value (Y) is $0.000 < 0.05$, and f count $76.994 > f$ table value $(2;47) = 3.20$. It proves that H_0 is rejected and H_a is accepted, meaning that there is a significant effect of E-TICKET (X1), Online check-in (X2), on customer value (Y).

Table 6

Model	Unstandardized		Standardized		Sig.
	Coefficients		Coefficients		
	B	Std. error	Beta	t	
(Constant)	9.814	5.314		1.847	.071
E- ticket	.859	.128	.696	6.720	.000

Source : spss 25, 2020

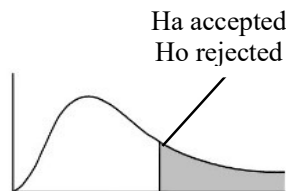


t test. The table above shows that the value of the t-test (partial) shows that the significance value of the effect of E-TICKET (X1) on customer value (Y) $0.000 < 0.05$ and t-value Count $6.720 > t\text{-table}(0.050;47) = 2.01174$, then H_0 is rejected and H_a is accepted, meaning that there is a significant effect of e-ticket on customer value.

Table 7

Model	Unstandardized		Standardized		Sig.
	B	Std. error	Beta	t	
(Cosntant)	5.579	3.346		1.667	.102
Online Check - in	.881	.074	.865	11.951	.000

Source : spss 25, 2020



The table above shows that the value of the t-test (partial) shows that the significance value of the online check-in (X2) influence customer value (Y) $0.000 < 0.05$ and the t value Count $11.951 > t\text{ table}(0.050;47) = 2.01174$, then H_0 is rejected and H_a is accepted, meaning that there is a significant influence of online check-in on customer value.

Description of E-Ticket And Online Check-In On Customer Value

Based on the descriptive analysis of the respondent's previous answer data, the application of E-ticket and Online Check-in concerns the customer value

provided by the two systems. Customers feel that the value provided through the E-ticket and Online Check-in system in implementing the two systems is also excellent. The value provided by the E-ticket and Online Check-in system has an overall average score of 4.54. With details of the average value of answers from respondents for the Emotional Value indicator of 4.6, which means very good. The average value of respondents' responses for the social value indicator is 4.6, which means very good. The average value of respondents' answers for the performance value indicator is 4.51, which means very good. The average value of respondents' responses for the price value indicator is 4,49, which means very good. Thus, it can be said that the implementation of Customer Value (Y) through E-tickets and Online Check-in can be said to be very good.

Effect of E-Ticket And Online Check-In Stimulant On Customer Value

Variable E-Ticket (X1) has a significant effect on Customer value (Y). This statement is evidenced from the results of SPSS 25 data processing showing the t-count value of 6,720, more effective than t-table 2.013. It implies that Ho1 is rejected and Ha1 is accepted, meaning that there is a substantial effect of e-ticket on customer value. The Online Check-in variable (X2) has a significant effect on Customer value (Y). This statement is evidenced by the results of SPSS 25 data processing showing the t-count value of 11,951, which is greater than the t-table of 2,013. It implies that Ho2 is rejected and Ha2 is accepted, meaning that there is a significant effect of e-ticket on customer value. Variable E-Ticket (X1) and Variable Online Check-in (X2) have a significant influence on Customer value (Y). This statement is evidenced by the results of SPSS 25 data processing showing the calculated F value of 76,994, greater than F table 2,807. It implies that Ho3 is rejected and Ha3 is accepted, meing a significant effect of E-Ticket and Online Check-in on customer value.

Conclusions

1) The results of this study indicate that E-Ticket (X1) and Online Check-In (X2) simultaneously have a significant effect on Customer Value (Y) and can provide an influence of 76,8% on performance variables and the remaining 23,2% influenced by other variables not examined in this study. 2) The Variable E-Ticket (X1) has a positive and significant effect on Customer Value (Y). 3) Online Check-in Variable (X2) has a positive and significant effect on Customer Value (Y).

Suggestions

1) For companies, based on the results of descriptive analysis obtained from respondents' answers to users of the E-ticket system and online check-in. So far, both E-Ticket and Online Check-in have had a positive impact on the company and have a very significant influence on customer value, so the company should pay more attention to ensuring the security of customer personal data in using the e-ticket system by improving the quality of the system. High data security minimizes and reduces high costs in the use of the e-ticket system because only a system is needed to reserve tickets, the fees should be set cheaper than the conventional way, minimizing network disturbances that can hinder the online check-in process by increasing the quality and quantity of the existing network in the system, and preventing server downs from occurring which can hinder the use of the e-ticket system and online check-in by improving performance, as well as performing routine and periodic maintenance on the server system, By typing the factors and indicators that affect the two systems, the customer value can be achieved which will ultimately bring progress and profit to the company. 2) For passengers, both E-tickets and Online Check-in aim to make it easier for users of flight services on their journey. So far, the use of both systems has had a positive impact on customers. It is hoped that customers will continue to use the E-ticket and Online Check-in system wisely. 3) Readers are expected to first understand what is being discussed in this journal to provide constructive

criticism and suggestions for researchers and others. And can increase knowledge related to the research conducted.

References

- Adamčík, f., galanda, j., jenčová, e., & šulej, r. (2017). The application of online check-in in the process of passenger handling in air transportation. *Mad - magazine of aviation development*, 5(4). <https://doi.org/10.14311/mad.2017.04.02>
- Arnomo, s. A. (2019). Mengukur mutu interaction quality system e-ticket. *Klik - kumpulan jurnal ilmu komputer*, 6(1). <https://doi.org/10.20527/klik.v6i1.171>
- Choiriah, w. (2019). Analisis penjualan e-tiket menggunakan algoritma apriori pada cv. Gutu mulia wisata. *Zonasi: jurnal sistem informasi*, 1(1), 21–27. <https://doi.org/10.31849/zn.v1i1.2382>
- Sugiarti. (2020). Analisis dampak covid 19 terhadap penerbangan di indonesia. *Orphanet journal of rare diseases*, 21(1), 1–10. <https://journal.universitassuryadarma.ac.id/index.php/jmm/article/view/638>
- Suwandi, e., imansyah, f. H., & dasril, h. (2018). Analisis tingkat kepuasan menggunakan skala likert pada layanan speedy yang bermigrasi ke indihome. *Jurnal teknik elektro*.
- Demon, d. (2010). Analisis tingkat kepuasan pelanggan (customer satisfaction) studi kasus pada laboratorium klinik "kawula" di lewoleba- lembata-ntt.
- Kotler, & A. (2006). *Dasar-dasar pemasaran jilid dua*. Jakarta: pt. Indeks.
- Nirwana. (2004). *Prinsip-prinsip pemasaran jasa*. Malang: dioma.
- Prof.dr.sugiyono. (2019). *Metode penelitian kuantitatif*. Bandung: alfabeta.
- Ratih, h. (2005). *Bauran pemasaran dan loyalitas konsumen*. Bandung: alfabeta.
- Sutojo, s. (2009). *Manajemen pemasaran*. Jakarta: pt. Damar mulia pustaka.
- Tjiptono, f. (2011). *Prinsip-prinsip-prinsip total quality service*. Yogyakarta: andi.
- Admin. (n.d.). *Unsur-unsur manajemen pemasaran dalam jurnainternasional manajemen pemasaran*. Retrieved from <http://contohjurnal.web.id/jurnal-internasional-manajemen-pemasaran>
- Nurul asih handayani, n. B. (2019). *Unsur-unsur manajemen ,fungsi-fungsi manajemen dan pendekatan dalam manajemen pendidikan*. Pendidikan.