

ANALYSIS OF SERVICE QUALITY AND EFFECTIVENESS – EFFICIENCY OF USE OF ONLINE CHECK-IN TOWARDS THE FLOW OF PASSENGER TRAFFIC FOR CUSTOMER SATISFACTION AT SOEKARNO HATTA INTERNATIONAL AIRPORT IN 2022

Putra Mahardika¹, Charissa Mediana Putri², Lira Agusinta³, Danang Darunanto⁴

^{1,2,3,4} Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

✉ putram.works@gmail.com

Abstract: This study aims to analyze the effectiveness and efficiency of online check-in users at Soekarno Hatta International Airport. The methodology of this writing is using quantitative. we distribute questionnaires to customers of the Soekarno-Hatta international airport using various airlines (PNS/Private Employees/Students/Students) and we got 107 correspondence in this journal. The data uses SEM - SmartPLS version 4.0 which is applied to test relationships and hypotheses. From the results of this study, it can be concluded that the quality of check-in services significantly affects the smooth flow of passengers and customer satisfaction, while the effectiveness and efficiency variables do not significantly affect the smooth flow of passengers and customer satisfaction. This journal provides new knowledge about the effect of online check-in on customer satisfaction.

Keywords: *check-in counter, effectiveness & efficiency online check-in, customer satisfaction, service quality*

Introduction

Transportation plays a very important and strategic role in supporting, advancing, and supporting all aspects of life. Air transportation become very important in Indonesia because the biggest territory of the Republic of Indonesia is separated by wide waters, and Indonesia has so many islands in its region. Air transportation is the only transportation that allows you to connect these areas with faster travel times. Building a reliable, integrated, and targeted national air transportation system requires planning and development. Therefore, it needs to be supported by improving the quality of flight statistics talent that is timely, reliable, and accurate. There are several reasons why consumers use air transportation services. This includes business destinations, tourism destinations, and freight forwarding services. (Majid et al., 2022)

One-off many industries that are developing in Indonesia, the service industry is one of the industries with the highest development and demand in Indonesia. However, the rapid development of the service sector also adds to the difficulties. In other words, the inability to meet customer needs is reflected in the low interest of consumers who buy products and services produced by the company.

Check-in is a facility whose quality and quantity are directly felt by passengers, check-in is in the form of processing time, and the capacity of the check-in area must be able to

accommodate several passengers who are queuing to check in during the check-in process, and problems often occur the number of passengers doing check-in does not match the flight schedule so there is no regular queue at the check-in counter so that the flight is also delayed.

The check-in process itself is carried out in a unit called the check-in counter in the departure area of the airport terminal building. In general, the function of the check-in counter is to receive the check-in process carried out by passengers to obtain a document called a boarding pass and allow passengers who board the aircraft to enter the boarding gate.

With the development of a global era like this, the implementation of online check-in is expected to make it easier for passengers to check in online, which previously checked-in was done at the check-in counter to reduce problems that exist when passengers check in planes at the airport. airports, and to see if the things that already exist are of good use.

performance of passenger service at the Check-in Counter facility started to cause problems. In the Check-in room, especially during peak hours, it seems that it has started to become critical to accommodating the surge of passengers who will carry out the Check-in process. The conditions are irregularities, baggage accumulation, and passengers jostling with each other. The limited time of the Check-in Counter service and the size of the Check-in Area has an impact on the queue of passengers waiting to check in. (Silvia, 2019)

Literature Review

Transportation

Transportation is the activity of moving goods and passengers from one place to another. There are two important elements involved in transportation: movement and physically changing the place of goods (commodities) and passengers to other places. Transportation can be defined as a business and activity of transporting or carrying goods and/or passengers from one place to another. (Nasution, 2013)

Air transportation is the cause and effect of economic growth, which creates a 'virtuous circle in economic growth which is followed by an increase in demand thereby creating greater growth and so on. This is particularly relevant for Indonesia, where the oil and extraction industries (both of which rely heavily on air transport compared to many other industries) are significant contributors to economic growth. (Friedman & McLernon, 2016)

In Law no. 2 of 1962, an aircraft is a transportation that can move from land or water to the air over the sky or vice versa. (Parliament, 1985)

Check-in counter

Since 2004, the International Air Transport Association (IATA) has been promoting the StB (Simplifying Business) project. The main goal of this project is to use information technology and automation to simplify existing complex flight operations and save airlines' costs, time for passengers, and space for airports. In the past, before the introduction of self-service check-in, travelers going overseas had to wait in line for two hours before boarding the plane to allow ground staff to complete check-in procedures. Such services will cause congestion during peak hours and increase passenger waiting times while reducing the level and quality of service. Airlines generally promote this service to passengers because it is easier and faster. After all, self-serve check-in reduces passengers' time at the airport, reduces congestion, and prevents long queues at the check-in counters. If the passenger does not have luggage to check in then the check-in process takes about one minute and the boarding pass is printed on the spot; if passengers have baggage to check in, they can move quickly to the special line (drop-off baggage points) usually offered to them to reduce waiting time. (Kuo & Jou, 2018)

Customer Satisfaction

Kotler dan Keller (2010) Consumer satisfaction is a person's feelings of pleasure or disappointment that arise after comparing the performance (results) of the product that is thought to the expected performance (expectations). Consumers form their expectations from previous experiences, such as asking colleagues or friends who have bought or used products that have been offered, as well as information on offers from the company. If the company's expectations are too high, consumers will be disappointed. And vice versa if the expectations offered by the company are too low, then consumers will not be interested in the products offered. (Min, 2016)

The service industry has become an industry that is growing rapidly by becoming one of the industries that are starting to be in demand by business actors. In this case, the development of services, especially in Indonesia, has grown with the evidence of the emergence of many new businesses in the service sector. One of them is the development of business in the field of expedition or courier services. The increased mobilization of goods and technology will make the expedition service business mushroom and have a high potential for competition. The best services will certainly be the choice of customers in looking for services to meet their needs.

Service Quality

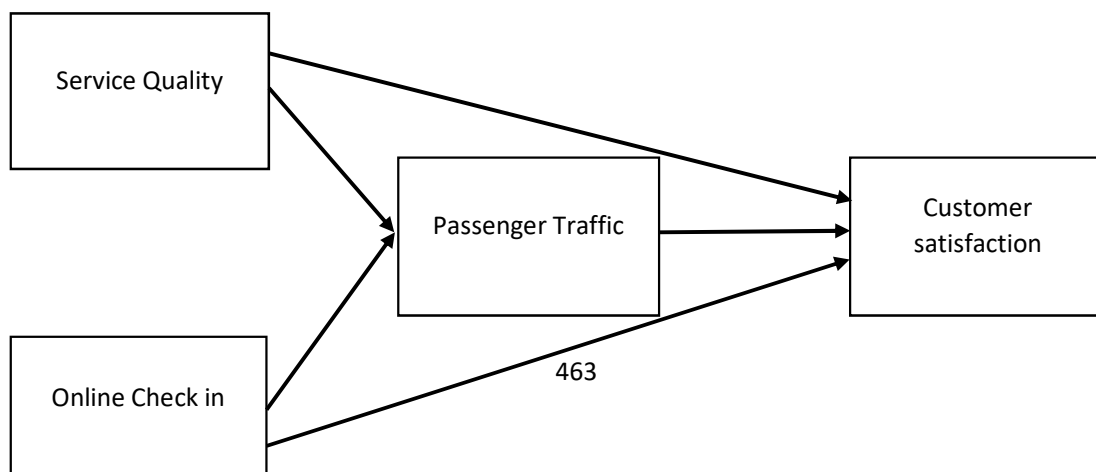
Many experts explain the importance of service quality, one of which is Tjiptono (2007) who defines service quality as an effort to meet consumers' needs and desires with appropriate and balanced delivery.

Another explanation of the importance of service quality in a company's activities has also been previously stated by Kotler (2000:25) where according to him the quality of service is a form of totality that must be done by the company in satisfying its customers both visible and hidden if a company wants to achieve success. (Min, 2016)

Passenger Traffic

Dynamic traffic management on the network level is more complicated than at the road degree. It entails joint tracking and coordinated control of the lines and submodels, thinking about the passenger flows. Dynamic, community-huge visitors management ought to be aided with the aid of and based on, a site visitors project model, to in shape the actual-time actions to the current pattern of passenger journeys in the community. The development of a absolutely multimodal travel surroundings for the character experience-maker by using offering custom designed statistics approximately all means of delivery, which includes parking situations and charges. remaining however no longer least, the ubiquity of records enables novel offerings of automobile sharing, experience sharing, and park sharing to be advanced: in other words, intermediary modes that contain the sharing of small-ability motors between statistics-linked customers. Such modes bridge the distance between the traditional automobile and transit modes, in addition to between the non-public and public operations of shipping resources. some planning scenarios need to give vicinity to the massive diffusion of such travel alternatives: all the more so in less dense regions to serve them with small-capacity cars and to reserve the big-ability cars to the ones components of the city area where they are maximum wanted. (Friedrich et al., 2016)

Conceptual framework and hypotheses research



METHOD

The method in this study uses quantitative methods. This method uses primary data to explain the phenomena. Primary data was obtained by distributing questionnaires to customers using check-in counters at Soekarno Hatta International Airport, Tangerang. The sample used by PLS-SEM is 50-100 sample size, so the sample is determined as many as 107 respondents. The data was then analyzed using the SEM-PLS method. SmartPLS software version 4.0, due to multivariate research on variables. SEM is a multivariate analysis technique that combines factor analysis and regression analysis (correlation), intending to test the relationship between variables in a model, both between indicators and their constructs and relationships between constructs.

HYPOTHESIS

Table 1

H1: there is a connection between service quality and passenger traffic
H2: there is a connection between online check-in to passenger traffic
H3: there is a connection between passenger traffic and customer satisfaction
H4: there is a connection between service quality and customer satisfaction
H5: there is a connection between online check-in for customer satisfaction
H6: there is a connection between service quality, passenger traffic, and customer satisfaction
H7: there is a connection between using online check-in, passenger traffic, and customer satisfaction

this table contains hypotheses.

Table 2

	Original sample (O)	T statistics (O/STDEV)	P values
<i>Online check-in -> kelancaran arus penumpang</i>	1.191	22.874	0.000
<i>Online check-in -> kepuasan pelanggan</i>	1.582	6.949	0.000
<i>kelancaran arus penumpang -> kepuasan pelanggan</i>	-0.914	4.663	0.000
<i>kualitas layanan -> kelancaran arus penumpang</i>	-0.355	5.391	0.000
<i>kualitas layanan -> kepuasan pelanggan</i>	0.173	1.874	0.061

Source: smart pls 4.0

Table 2.1

	Original sample (O)	T statistics (O/STDEV)	P values
<i>Online check-in -> kepuasan pelanggan</i>	-1.088	4.476	0.000
<i>kualitas layanan -> kepuasan pelanggan</i>	0.324	3.067	0.002

Source: smart pls 4.0

Table 2.2

	Original sample (O)	T statistics (O/STDEV)	P values
<i>kualitas layanan -> kelancaran arus penumpang -> kepuasan pelanggan</i>	0.324	3.067	0.002
<i>Online check-in -> kelancaran arus penumpang -> kepuasan pelanggan</i>	-1.088	4.476	0.000

Source: smart pls 4.0

Hypothesis test result

1. Hypothesis 1

there is a connection between service quality and passenger traffic.

The result of the first hypothesis test indicates that there was a significant negative connection and influence between service quality and passenger flow which has negative in the original sample (o) -0.355 (-) and 5.391 (significant) in T statistic.

We can conclude that the first hypothesis has negative a connection and influence between the two variables.

2. Hypothesis 2

there is a connection between using online check-in to passenger traffic.

the result of the second hypothesis test indicates that there was a significant positive connection and influence between effectiveness & efficiency in using online check-in to passenger flow which has an original sample (o) 1.191 (+) and 22.874 (significant) in T statistic.

We can conclude that the second hypothesis has a significant positive connection and influence between the two variables.

3. Hypothesis 3

there is a connection between passenger flow and customer satisfaction.

The result of the third hypothesis test indicates that there was a significant negative connection and influence between passenger flow and customer satisfaction which has an original sample (o) -0.914 (-) and 4.663 (significant) in T statistic.

We can conclude that the third hypothesis has a significant negative connection and influence between the two variables.

4. Hypothesis 4

there is a connection between service quality and customer satisfaction.

The result of the fourth hypothesis test indicates that there was a positive connection and influence between service quality and customer satisfaction which has an original sample (o) 0.173 (+) and 1.874 (not significant) in the T statistic.

We can conclude that the fourth hypothesis has a positive but not significant connection and influence between the two variables.

5. Hypothesis 5

there is a connection between online check-in for customer satisfaction.

The result of the fifth hypothesis test indicates that there was a significant positive connection and influence between effectiveness & efficiency in using online check-in for customer satisfaction which has an original sample (o) 1.582 (+) and 6.949 (significant) in T statistic.

We can conclude that the fifth hypothesis has a significant positive connection and influence between the two variables.

6. Hypothesis 6

there is a connection between service quality, passenger traffic, and customer satisfaction.

The result of the sixth hypothesis test indicates that there was a significant positive connection and influence between service quality, passenger traffic, and customer satisfaction which has an original sample (o) 0.324 (+) and 3.067 (significant) in T statistic.

We can conclude that the sixth hypothesis has a significant positive connection and influence between the three variables

7. Hypothesis 7

there is a connection between online check-in, passenger traffic, and customer satisfaction.

The result of the seventh hypothesis test indicates that there was a significant negative connection between online check-in, passenger traffic, and customer satisfaction which has an original sample (o) -1.088 (-) and 4.476 in T statistic.

We can conclude that the seventh hypothesis has a significant negative connection and influence between the three variables.

Table of Hypotheses result.

<i>Hypotheses</i>	Connection (+/-)	Significant (s) or not significant (ns)
<i>H1: there is a connection between service quality and passenger traffic</i>	-	S
<i>H2: there is a connection between using online check-in to passenger traffic</i>	+	S
<i>H3: there is a connection between passenger traffic and customer satisfaction</i>	-	S
<i>H4: there is a connection between service quality and customer satisfaction</i>	+	NS
<i>H5: there is a connection between online check-in for customer satisfaction</i>	+	S
<i>H6: there is a connection between service quality, passenger traffic, and customer satisfaction</i>	+	S
<i>H7: there is a connection between online check-in, passenger traffic, and customer satisfaction</i>	-	S

Conclusion

From the results of this study, it can be concluded that the quality of check-in services significantly affects the smooth flow of passengers and customer satisfaction, while the effectiveness and efficiency variables do not significantly affect the smooth flow of passengers and customer satisfaction. The connection between effectiveness & efficiency in using online check-in, passenger flow, and customer satisfaction was negative and significant so we can conclude that H7 or hypothesis 7 don't have any relation and they do not influence one another. And service quality, passenger flow, and customer satisfaction as we can see in the result have a really big impact on each other. As a result, as we can see some of them have influenced each other and others don't.

The results of this study are expected to provide benefits for researchers on how online check-in can affect passenger flow at the airport. further research and as a consideration for the development of learning to continue research on the effectiveness and efficiency of the use of online check-in at Soekarno Hatta International Airport.

BIBLIOGRAPHY

- Friedman, J., & McLernon, A. (2016). Manajemen Aset Infrastruktur. *Jurnal Prakarsa Infrastruktur Indonesia*, 13, 30.
- Friedrich, M., Leurent, F., Jackiva, I., Fini, V., & Raveau, S. (2016). From transit systems to models: Purpose of modelling. In *Springer Tracts on Transportation and Traffic* (Vol. 1004, Issue 9783319250809). https://doi.org/10.1007/978-3-319-25082-3_4
- Kuo, C. W., & Jou, R. C. (2018). Air passengers' willingness to pay for counter check-in services. *Transportation Research Part A: Policy and Practice*, 107(February 2017), 203–215. <https://doi.org/10.1016/j.tra.2017.12.002>
- Majid, S. A., Yundriana, R., Soepriyadi, I., Pahala, Y., Fachrial, P., Setiawan, A., Wardana, A., Soekirman, A., Nofrisell, Fahriza, B., Hikmawati, N. K., & Endri, E. (2022). Strategies for Improving Air Connectivity in Indonesia through the Indonesian, Malaysia and Thailand Growth Triangle Cooperation. *Academic Journal of Interdisciplinary Studies*, 11(5), 62–72. <https://doi.org/10.36941/ajis-2022-0125>
- Min, H. (2016). *Global business analytics models: Concepts and applications in predictive, healthcare, supply chain, and finance analytics* (pp. 1–193).
- Nasution, M. N. (2013). Manajemen Transportasi. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9).
- Parliament, I. (1985). Presiden republik indonesia. *Peraturan Pemerintah Republik Indonesia Nomor 26 Tahun 1985 Tentang Jalan*, 4(1), 1–5.
- Silvia, P. (2019). *Jumlah Penerbangan Terhadap Jumlah*. 5(3), 5.