

OPTIMIZING CUSTOMER SATISFACTION IN USE OF LION AIR**AIRLINE SELF-CHECK-IN MACHINE AT JUANDA****INTERNATIONAL AIRPORT****Sarinah Sihombing^a, Tiarto^b, Aprima Ramdhani^c, Jeconia Damitadora Besarini^d**^{abcd} Faculty of Management and Business, Institut Transportasi dan Logistik Trisakti,
Jakarta, IndonesiaCorresponding author: Sarinah.stmt@gmail.com

Abstract: Airports have an important role in connecting domestic and international flight services. Serving passengers is one of the activities at the airport. The purpose of this study was to determine the level of customer satisfaction with the self check-in machine provided by Juanda International Airport. This research method uses qualitative with research design techniques, time and place of research, data collection using observation and interviews with 10 passengers using self check-in machines. The results of this study indicate that the quality of airport services with the optimization of self check-in machines is significant. The availability of self check-in machine facilities can optimize passenger movement.

Keywords: *Optimizing, Customer Satisfaction, Service Quality, Self Check-In Machine, Juanda International Airport*

1. Introduction

Juanda International Airport (IATA: SUB, ICAO: WARR), is an international airport located in Surabaya, East Java. Juanda Airport is also the third busiest airport in Indonesia (after Soekarno-Hatta Airport and Ngurah Rai Airport) because these three airports are the main gateways to East Java for both domestic and international flights. This airport is located approximately 12 kilometers (7.5 miles) from the center of Surabaya City and serves the Gatekertosusila area which acts as one of the main gateways for flights to the eastern part of Indonesia. Juanda International Airport is operated by PT Angkasa Pura I. The name of this airport is taken from the name of Djuanda Kartawidjaja, the last Indonesian Prime Minister who proposed the construction of this airport. In 2019, the airport served around 500 aircraft per day. Airports in Indonesia have developed rapidly in recent years. According to the Ministry of Transportation of the Republic of Indonesia, the number of air passengers increases every year with the support of improvements in airport infrastructure. This development reflects the government's efforts to improve the quality and capacity of airports to serve passengers better (Ministry of Transportation, 2021).

According to PT Angkasa Pura I, Juanda Airport has undergone various modernizations and expansions to accommodate the increasing number of passengers and aircraft (PT Angkasa Pura I, 2020). Economic growth and increasing social mobility have increased the number of airline users in Indonesia. Currently, with advances in technology, there are 5 check-in systems, namely conventional check-in, online or web check-in, mobile check-in, self baggage drop and self check-in. Lion Air, as one of the largest airlines, records an increase in the number of passengers every year (Lion Air Group, 2020). To increase efficiency and convenience, many airports and airlines have implemented self check-in machines. This facility allows passengers to check-in independently, reducing waiting time and reducing queues at the check-in counter. A self check-in machine is an automatic device that allows passengers to check-in without the assistance of an attendant. Passengers can print boarding passes and organize their own baggage. This technology has been proven to improve operational efficiency and passenger experience (IATA, 2019).

Customer satisfaction is an important factor in the aviation industry. By understanding

customer satisfaction with the use of self check-in machines, airlines like Lion Air can identify areas that need improvement and improve the quality of their service. This research uses the SERVQUAL model which includes the dimensions of Tangibles, Reliability, Responsiveness, Assurance, and Empathy. This model helps measure service quality comprehensively and provides data-based recommendations to increase customer satisfaction (Parasuraman, Zeithaml, & Berry, 1988). Self check-in machines at airports first appeared about 20 years ago in response to the need to increase efficiency and reduce operational costs. Initially, this technology was very basic and was only used by a few airlines on certain routes. However, significant developments occurred in the 2000s following the September 11, 2001 terrorist attacks, leading to increased security and efficiency in the check-in process.

According to Henry Harteveltdt of Forrester Research, the use of self check-in technology at airports brings significant cost savings to airlines. Before this technology, conventional check-in costs per passenger were around \$3.02, while with kiosks, the cost dropped drastically to just 14 cents. In 1998, a group of airlines approached the International Air Transport Association (IATA) to propose common standards for check-in terminals. This initiative resulted in the development of Common Use Self-Service (CUSS) terminals that enable multiple airlines to use the same kiosks to provide check-in facilities to passengers. CUSS kiosks began to be widely implemented in 2005 and continue to grow to this day. However, the reality on the ground proves that the self check-in machine facility has not been implemented optimally by all Lion Air passengers. This is caused by several problems such as the internet network, machines that are slow to respond so that passengers have to press the screen repeatedly, system errors and various other problems that might occur.

2. Literature Review

The word management etymologically comes from Old French and Italian. In ancient French "management" which means the art of organizing and implementing, while in Italian "meneggiare" which means controlling (Aditama, 2020). According to George R. Terry in Aditama (2020), management is a process consisting of planning, organizing, directing, and controlling activities carried out to achieve set goals through the use of human resources and other resources. In management there are several important elements, such as transportation. Transportation is the transfer of goods and people from the place of origin to the destination. The transportation process is a movement from the place of origin, where the activity begins, to the destination. the activity begins, to the destination, where the activity ends. The elements of transportation itself is the existence of the cargo being transported, the existence of vehicles as a means of transportation, there are roads that can be traversed, there are origin and destination terminals, and there are human resources, organization or management that drives the transportation activities. (Nasution, 2004) Transportation has 5 elements, namely, humans, goods, vehicles, roads, organizations (Nasution, 2004). Transportation itself is divided into 3 namely, land, sea and air transportation. According to the Indonesian Infrastructure Initiative Journal in 2012 "Air transportation, is the cause and effect of economic growth, which creates a 'virtuous circle' in economic growth which is followed by increased demand thus creating greater growth and so on. Currently air transportation services are one of the important elements in driving the dynamics of development, supporting the mobility of people, goods and services, and supporting the development and economy of regions around the world.

According to Annex 14 of the ICAO (International Civil Aviation Organization) an airport is a certain area on land or water (including buildings, installations and equipment) intended either in whole or in part for the arrival, departure and movement of aircraft. According to the Law of the Republic of Indonesia No.1 of 2009 concerning aviation, the definition of an airport is an area on land and / or waters with certain boundaries "which is

used as a place for aircraft to land and take off, up and down passengers, loading and unloading goods, and a place for intra and intermodal transportation movements equipped with aviation safety and security facilities, as well as basic facilities and other supporting facilities. One of the facilities that passengers need is a place to print tickets, as technology develops, airports have several alternatives for printing tickets, such as conventional check-in, online or web check-in, mobile check-in, self luggage drop, and self check-in. According to IATA 2019 (International Air Transport Association) Self check-in machines are automated kiosks that allow passengers to carry out the check-in process, including seat selection and boarding pass printing, and are often equipped with the ability to print luggage tags and accept payment for additional baggage. Based on the background above, the researcher wants to find out whether the self check-in machine facilities provided by the airport are optimally used by customers.

In this study there are several previous studies that were used as guidelines in writing this research, including as follows.

Table 1. Literature Review

Author & Publish Year	Research Title	Research Result
Nining Rika Anggela, Walid Jumlad (2023)	Satisfaction Analysis of Self Check-In Machine Usage At Yogyakarta International Airport - Kulonprogo	<i>Satisfaction with the use of self check-in machines at Yogyakarta International Airport shows a high number. As evidenced by the evaluation results for the Indicator of conformity to expectations obtained an evaluation value of 4.39, the indicator of interest in reuse obtained an evaluation value of 4.2733, and the indicator of availability to recommend obtained an evaluation value of 4.18</i>
Waro'ah Hardianika (2023)	Implementation of Self Check-in System in Efficiency of Citilink airline check-in services At Soekarno Hatta International Airport	<i>Self check-in machines are quite efficient in using passengers to check-in. with the self check-in machine can shorten the time of the check-in process and passenger baggage drop.</i>
Candra Ananda, Muhammad Syahril, Juliater Simarmata (2024)	Analysis of Decisions to Use Airport Self-Check-in Service Products	<i>1) The decision to utilize airport self check-in service products is influenced by product socialization. 2) The decision to utilize airport self check-in service products is influenced by the behavior of service users. 3) The decision to utilize airport self check-in service products is influenced by the effectiveness of technology usage.</i>
Yasmine Arifah Azizah Liling, Nuramwaalia, Edhie Budi Setiawan, Prima Widiyanto(2020)	The Impact of Customer Handling on Safety Toward the Customer Behavior and Customer Satisfaction in Garuda Indonesia Airline	<i>Significant relation between customer handling and safety because with good handling and safety procedure by the airline, customer will be satisfied by the</i>

		<i>service.</i>
Atika Maharani (2023)	Evaluation of The Use of Self Check-in to Reduce Queues at the Departure Terminal of Yogyakarta International Airport	<i>The level of service to serviceusers at the departure terminalis still not optimal.</i>
Nursyuhada Taufika, Mohd Hafiz Hanafiah (2019)	Airport Passengers' Adoption Behaviour Towards Self- Check-in Kiosk Services: The Roles of Perceived Ease of Use, Perceived Usefulness and Need For Human Interaction	<i>Different factors determine passengers' willingness and adoption of SSTs. Perceived ease of use and perceived usefulness significantly affect passenger adoption and behaviour of SSTs in airports. However, the passenger was much comfortable with the SST as the moderating effect of need for human interaction shows a negative result.</i>
Rida Aulia Wulansari, Syafira Tria Permata (2018)	Analysis of Passenger Satisfaction Of Services in Terminal 3 Ultimate Soekarno-Hatta International Airport	<i>the quality of service consisting of information service boarding signage, Security Check Point, Check-in Counter, Immigration and Boarding Lounge passenger are satisfying with the overall percentage of 76.4%.</i>
Ahmad T. Al-Sultan (2016)	Optimization of Airport Check-in Scheduling at Passenger Terminal	<i>By using simulation, the airport system can be modeled to study the effects of various parameters such as number of passengers on a flight and check-in counter opening and closing time</i>
Muhammad Irfan Ardiansyah dan Ervina Ahyudanari (2017)	Comparison of Self Check-in Service Performance with Conventional Check-in for Citilink and Air Asia Airlines at Surabaya International Airport	<i>Self check-in is very influential in reducing the length of the queue by at most 15 passengers in Scenario 1 and 6 passengers in Scenario 2 when checking in</i>
José I. Castillo-Manzano, Lourdes López-Valpuesta (2013)	Check-in Services and Passenger Behaviour: SelfService Technologies in Airport Systems	<i>The universal use of the new technologies in airport management, and the broad cosmopolitan sample mean that the conclusions can be easily extrapolated to other airport systems.</i>

3. Research Method

In this study, researchers used qualitative methods with purposive and snowball sampling techniques to obtain more valid and detailed results. The purpose of the purposive and snowball sampling technique is that researchers take a population of about 10 informants from Lion Air passengers who have used self check-in machines at Juanda International Airport. Intended to understand the phenomena experienced by research subjects such as behavior, perception, motivation, action, etc, specifically by utilizing various natural methods. This research was conducted from June 2024 until July 2024 at Juanda International Airport, Surabaya. In order to this research to be as expected, the research limits the scope of research

on self check-in machines belonging to Lion Air airlines.

This research uses primary data and secondary data. Primary data in this study were obtained from informants based on the results of interviews and observations with customers who use Lion Air airline self check-in machines at Juanda International Airport. Secondary data was obtained through field observations, data provided by Lion Air employees, interviews and documentation. In the interviews, we have a list of questions that we will observe from various responses obtained from customers using self check-in machines.

4. Result and Discussion

4.1 Research Object

This research was conducted at Juanda International Airport, Surabaya, East Java with the area owned by Juanda Airport, the facilities provided must also be adequate and meet customer needs, for example, such as self check-in machines that can make it easier for customers to print tickets in a short period of time so that it is very efficient and makes it easier to get tickets because there is no need to queue at the check-in counter to get tickets, because the considerable time difference between self check-in machine users and counter check-in makes self check-in machine users more optimal and efficient than counter check-in users. This modern facility is available in Terminal 1A with 4 units and Terminal 1B with 7 units located in the departure lobby area. While in Terminal 2 as many as 5 units are positioned in the check-in area after checking travel documents by Aviation Security (Public Relations of Juanda International Airport 2018).



(Picture of Juanda International Airport)

4.2 The Result of The Research

users of the self check-in machine facility by Lion Air passengers at Juanda International Airport.

INFORMANT 1

The self check-in machine is very practical to use if you don't have luggage because you don't have to queue. If you use a self check-in machine, the data input and printing process is carried out directly by the passenger so it is safer and more practical, however if you are at the check-in counter you have to queue and have to prepare an ID card which is prone to being left behind or lost so it is less safe. Using a self check-in machine only takes a maximum of 3 minutes and its use is easy to understand if there is a sign or instructions

provided. Very satisfied with the self check-in machine technology because it makes the check-in process easier and faster.

INFORMANT 2

Self check-in machines can save queuing time and make a difference in terms of speed of service time because using a self check-in machine only takes 3 minutes but sometimes problems occur such as system errors, the touch screen has to be re-touched, the network is disconnected and various other problems. , but this problem did not last long and made the self check-in machine still faster than the check-in counter and had features that were easy to understand because the menu display had the airline logo available and all you had to do was select the airline you were using, then enter the booking code and select your seat. and printed boarding pass. Very satisfied with the self check-in machine because it makes the check-in process easier and faster.

INFORMANT 3

Using airport/airline facilities such as self check-in machines really makes things easier for customers because they don't have to queue and are more comfortable because they can choose a seat and of course the facilities provided are more modern than check-in counters. The check-in service time is the difference between a self check-in machine and a check-in counter because if you use a self check-in machine it only takes around 4-5 minutes while at a check-in counter it can take up to 7-8 minutes, especially if you have one. There are so many queues that the self check-in machine is superior in terms of speed of time and features that are easy to understand, so I am very satisfied with this technology because it can speed up time and not queue so that elderly people don't get tired of queuing.

INFORMANT 4

The self check-in machine is faster than the check-in counter, because it only takes around 1-2 minutes to print a ticket. Moreover, the features provided are very easy to understand, but sometimes they experience problems such as loss of signal which makes the process a little longer and hampered but with this it is not a big problem because even though there are a few problems using the self check-in machine it can actually be faster than queuing at the check-in counter so I am very satisfied with the machine facilities provided and always make it another alternative not to queue at the check-in counter.

INFORMANT 5

The self check-in machine is very fast, easy and practical because there is no need to queue, and it only takes about 2 minutes to print a ticket, while the features available are very easy to understand because there are instructions and officers around the self check-in machine area who can help to complete the self check-in process so that it is easier for older people to understand how the machine works which airport staff can help with, so they are very satisfied with the existence of this very useful self check-in machine facility.

INFORMANT 6

The self check-in machine is very practical and efficient because the time difference is very large, if you use the self check-in machine it only takes around 2 minutes but if you use the check-in counter then the time needed can be more than 5 minutes especially if the queue is long It can take a lot of time and is inefficient for customers, so having this self check-in machine facility is very helpful and of course you feel very satisfied because the check-in process can be made easier and you can rest using the remaining time.

INFORMANT 7

Self check-in machines are more practical and easy to use and what differentiates between self check-in machines and check-in counters is that they are served directly and indirectly,

so this can add an interesting new experience for passengers who use them, the time required. It's also very fast, around 1 minute because the features provided are very easy to understand so that passengers who have just used the self check-in machine can do it quickly without any problems. With this machine, you will definitely feel very satisfied because it can speed up and make the check-in process easier and get plane tickets quickly.

INFORMANT 8

Choose to use a self check-in machine because the airport offers extraordinary convenience and efficiency. With this technology, passengers can check-in independently without having to wait in line, this not only saves time but also provides a more flexible, personalized experience. In addition, self check-in machines are equipped with additional features such as seat selection and direct boarding pass printing, which increases comfort and reduces stress when traveling. With this technology passengers feel more connected and involved in the check-in process and it is a very memorable and valuable experience. Self check-in machines and check-in counters have their respective advantages, but there are some significant differences between the two. Self check-in machines offer convenience and speed and allow users to check-in independently, avoiding long queues and long queue times. On the other hand, the check-in counter provides interaction between passengers and crew that may be needed for special handling or further assistance, such as baggage problems or special requests. Overall, self check-in machines promote efficiency and convenience by reducing the time, interaction required while check-in counters remain essential for personal service and direct support. The time needed to use the self check-in machine is very fast, between 1-3 minutes because the features available are very easy to understand so that passengers can get boarding pass tickets more quickly without waiting a long time, so with this technology passengers feel very satisfied with facilities provided by airports and airlines.

INFORMANT 9

Choosing to use a self check-in machine is of course because it makes check-in activities faster and easier and get boarding pass tickets easily without having to wait in long queues like at check-in counters, the most differentiating thing between self check-in machines is time, if at the check-in counter it can take around 10-15 minutes and maybe more if the queue is very long and the procedures at the check-in counter are longer than using a self check-in machine, then if you use a self check-in machine We can carry out the process quickly which only takes around 1-3 minutes, which is very far when compared to its efficiency, with the availability of features that are easy to understand, it can make it easier for passengers to use this technology so they don't need the help of officers to complete the check-in process. The existence of self check-in machine technology is certainly very satisfying for customers because of its sophistication.

INFORMANT 10

Using the self check-in machine is very easy and very fast so it doesn't take much time to get a boarding pass ticket, while the remaining time can be used for resting, shopping, eating and various other activities that can be done with the remaining time available by using the machine Self check-in only takes around 3 minutes to complete the process, because the

features available are very easy to understand and the officers have also provided a guide around the self check-in machine area so that passengers can do it easily with the help of the existing guide, with The completeness of the self check-in machine technology is very satisfying because the facilities provided are very helpful and make things easier for passengers.

4.3 Data Analysis

According to Sofian Effendi, the purpose of data analysis is to simplify data into a form that is easier to read and interpret. Data analysis will be easier to understand by using the triangulation method to ensure data validation.

Triangulation is a qualitative cross-validation. it assesses the sufficiency of the data according to the convergence of multiple data sources or multiple data collection produces (William Wiersma, 1986) triangulation in credibility testing is interpreted as checking data from various sources in various ways and times. triangulation can be done by checking the results of research, from researchers with data collection tasks.

In this study, researchers used Source Triangulation, Method Triangulation and Theory Triangulation.

1. Source Triangulation

Source triangulation to check the credibility of data is done by checking the data that has been obtained through several informants.

Table 2. Source Triangulation

1. Why do you choose to use a self check-in machine?

INFORMANT 1	INFORMANT 2
<i>Practical if without luggage and without queuing</i>	<i>Save queue time</i>
INFORMANT 3	INFORMANT 4
<i>No need to queue, more comfortable when choosing a seat and more modern</i>	<i>Already used to it</i>
INFORMANT 5	INFORMANT 6
<i>Fast and practical</i>	<i>Practical and efficient</i>
INFORMANT 7	INFORMANT 8
<i>Faster</i>	<i>More efficient and time saving</i>
INFORMANT 9	INFORMANT 10
<i>Easier</i>	<i>No need to queue for a long time</i>

2. What do you think distinguishes a self check-in machine from a check-in counter?

INFORMANT 1

*Self check-in machines input process
Passenger data and ticket printing are done
directly by passengers so it is safer and more
practical.*

INFORMANT 2

*Check in counters must queue and must
prepare ideas that are prone to being left
behind or lost so it is less secure.*

INFORMANT 3

*The difference from the speed of time and
queuing*

INFORMANT 4

*Check-in service time is the reason for the
difference between self check-in machines and
check-in counters*

INFORMANT 5

Self check-in is faster than counter check-in

INFORMANT 6

*No need to queue if using a self check-in
machine*

INFORMANT 7

Difference in usage time

INFORMANT 8

Ease of access

INFORMANT 9

Save time

INFORMANT 10

Considerable time difference

3. How long does it take to check-in using the machine?

INFORMANT 1

-+ 3 minutes

INFORMANT 2

3 minutes

INFORMANT 3

4-5 minutes

INFORMANT 4

1-2 minutes

INFORMANT 5

2 minutes

INFORMANT 6

2 minutes

INFORMANT 7

1-2 minutes

INFORMANT 8

3 minutes

INFORMANT 9

1-2 minutes

INFORMANT 10

2 minutes

4. In your opinion, are the available features easy to understand?

INFORMANT 1

Easy to understand if there is a signboard / instruction

INFORMANT 2

Easy to understand because the menu display already has the airline logo and all you have to do is select the airline you want to use, enter the booking code, select your seat and your boarding pass will be printed.

INFORMANT 3

Easy to understand

INFORMANT 4

Very easy

INFORMANT 5

Very easy to understand

INFORMANT 6

Easy to use

INFORMANT 7

Very easy to use

INFORMANT 8

Very easy to understand

INFORMANT 9

Easy to understand

INFORMANT 10

Very easy

5. How satisfied are you after using the self check-in machine?

INFORMANT 1

very satisfied because it simplifies and speeds up the check-in process

INFORMANT 2

Very satisfied because it can save time

INFORMANT 3

Very satisfied because it speeds up time and does not queue so it does not make old people not tired.

INFORMANT 4

Very satisfied

INFORMANT 5

Very satisfied

INFORMANT 6

Very satisfied because it saves time

INFORMANT 7

Very satisfied because it is fast and does not queue

INFORMANT 8

Very satisfied because it is faster and more efficient

INFORMANT 9

Very satisfied because it saves time and energy

INFORMANT 10

Very satisfied because it is more efficient

2. Triangulation method

Triangulation method is a method to check the results of research with various data collection techniques, such as interviews, observation and documentation so that it is very reliable and can be said to be valid. Researchers use all data collection techniques to strengthen the validity of the data obtained

Table 3. Triangulation Method

1. Why do you choose to use a self check-in machine?

INTERVIEW

The travel experience is more comfortable and efficient without queues, especially if you don't have luggage. Several points emphasized the speed, convenience in choosing a seat, as well as the fact that many people are already familiar with the system. Overall, this approach is considered more practical and time-saving.

OBSERVATION

Choosing to use a self check-in machine can cut down time in our check-in process when we want to travel anywhere using air transportation services.

2. What do you think distinguishes a self check-in machine from a check-in counter?

INTERVIEW

The use of self check-in machines is safer and more practical compared to conventional check-in desks. The process of data input and ticket printing is done directly by the passenger, reducing the risk of lost items. Self check-in machines also

OBSERVATION

With self check-in machines, people no longer need to wait in long queues at the check-in counter which takes up a lot of time that could be used for other things.familiar with the system. Overall, this approach is considered more practical and

save time and avoid queues, making them a time-saving. faster and more accessible option. The significant time difference between the two methods is the main reason to choose self check-in.

3. How long does it take to check-in using the machine?

INTERVIEW

The time taken for a particular process varies between 1 to 5 minutes. Most opinions noted a time of around 1-3 minutes, with some estimates reaching 4-5 minutes. Overall, the commonly mentioned time is 2 to 3 minutes.

OBSERVATION

The estimated usage time of the self check-in machine itself can be said to be 5 maximum with normal kiosk conditions without any delay in touching the screen.

4. In your opinion, are the available features easy to understand?

INTERVIEW

The process of using a particular system is considered very easy and understandable. Many emphasized that the presence of signs or instructions, as well as the clear display of menus with airline logos, made it very intuitive. Overall, the majority opinion was that the system was very easy to understand.

OBSERVATION

With the system's start-up guide and the self check-in machine itself being easy to understand, the majority of people were able to use it practically.

5. How satisfied are you after using the self check-in machine?

INTERVIEW

High levels of satisfaction with the new check-in system. Many are very satisfied as it speeds up the process, saves time, and reduces the need to queue, thus making travel more convenient, especially for the elderly. Overall, efficiency and saving time and energy were the main points of satisfaction.

OBSERVATION

It is undeniable that with the existence of renewable technology such as self check-in machines, users very quickly

3. Theory Triangulation

Theory triangulation is where the final result of qualitative research is a formulation of information or thesis statement. The information is then compared with relevant theoretical perspectives to avoid individual researcher bias in the findings or conclusions produced.

table 4. Theory Triangulation

1. Why do you choose to use a self check-in machine?

RESEARCH RESULT

because it can optimize the time used, by utilizing the facilities provided by Juanda International Airport.

THEORY

- *IATA 2019 (International Air Transport Association) Self check-in machines are automated kiosks that allow passengers to carry out the check-in process, including seat selection and boarding pass printing, and are often equipped with the ability to print baggage tags and accept payment for baggage addition*
- *(Parasuraman & Zeithaml, 1988) stated that physical facilities are one of the five dimensions of service quality, which include aspects that can be seen, touched, felt, or expected by customers.*
- *(Nurrohman, 2017) optimization is an effort to improve performance in a work or personal unit related to the public interest, in order to achieve satisfaction and success from carrying out these activities.*

2. What do you think distinguishes a self check-in machine from a check-in counter?

INTERVIEW

If using a self check-in machine we don't need to queue because there are many machine facilities that we can use while checking in counters we have to queue to get

OBSERVATION

- *According to Parasuraman et al. (1991), a quick response to customer requests shows the company's attention to their needs.*

the ticket, then for the time difference is quite far because if using a self check-in machine only takes 1-5 minutes but for check-in counters it can be more than 15 minutes according to the length or shortness of the queue, so using a self check-in machine is more efficient and can optimize the facilities provided.

- *it has been found that 80% of the passenger delay at airport is due to waiting for check-in (Takakuwa and Oyama (2003), Parlal et al. 2013))*
- *Based on the regulation of the minister of transportation of the republic of Indonesia PM No. 185 of 2015 check-in counter is the process of reporting prospective passengers to air transportation business entities to carry out flights.*
- *Checking in using a self check-in machine requires a period of under one minute, and will take longer when checking in at the airport counter (Nining, Walid 2023).*

3. How long does it take to check-in using the machine?

INTERVIEW

The time needed is about 1-5 minutes more efficient and easy to use, saving energy not to queue and more modern technology

OBSERVATION

- *Reliability is related to the company's ability to provide the promised service accurately and reliably. Berry et al. (1985) state that reliability is the most important dimension of service quality because customers expect companies to deliver on promises.*
- *This dimension refers to the physical appearance of the facilities, equipment, employees, and communication materials used by the company. According to Parasuraman et al. (1988), the appearance of physical facilities and personnel plays an important role in creating an initial impression of service quality.*
- *Modern Technology refers to the convergence of computing and networking, which empowers users with decentralized control over*

advanced equipment and the knowledge essential to its use. AI-generated definitions based on: International Encyclopedia of Social & Behavioral Sciences, 2001.

4. In your opinion, are the available features easy to understand?

INTERVIEW

The features provided are very easy to understand because in the menu display the airline logo, so all you have to do is select the airline logo and enter the booking code, besides that there are also new usage instructions available, it is not difficult to use the machine, the facilities provided are very concerned about customer satisfaction and are very helpful.

OBSERVATION

- *Facilities are the physical tools, infrastructure and services needed to support operational activities in an organization. (Robbins & Coulter, 2012). (Kotler & Keller, 2020) Facilities are physical resources that exist before services can be provided to consumers.*
- *(Saladin, 2003) customer satisfaction is a person's feeling of disappointment that comes from a comparison between their impression of how a product works and their expectations.*
- *According to Kotler and Keller (2016) features are a competitive means of differentiating a company's products from competitors' products.*

5. How satisfied are you after using the self check-in machine?

INTERVIEW

Very satisfied with this latest innovation, because the self check-in machine facility is very helpful and speeds up the check-in process so that it doesn't waste time, so that customers can optimize their time well so that they don't rush and don't queue for tickets.

OBSERVATION

- *Sutarno (in Putra, 2019: 22), innovation is the transformation of knowledge into new products, processes, and services, the act of using something new While Suryani suggests that innovation in a broad concept is actually not only limited to products.*
- *The performance and*

competitiveness of companies are affected by the service reliability and productivity of their equipment and machinery (Fleischer: 2006).

- *Technology is the application of knowledge to carry out certain tasks / activities more effectively, in this case the definition of technology by (Rosenzweig, 2000)*

4.4 Discussion

4.4.1 The use of Self Check-in Machines operator performance at Juanda Internasional Airport



In this modern era, IATA (International Air Transport Association) proposed a common standard for check-in terminals. This initiative resulted in the development of Common Use Self Service (CUSS) which allows multiple airlines to use the same kiosk to provide check-in facilities for passengers. CUSS kiosks (Self Check-In Machines) were widely deployed in 2005 and continue to grow today. However, the reality on the ground proves that the Self Check-in Machine facility has not been optimally implemented by all Lion Air passengers.

This is due to several problems such as internet networks, slow-responding machines, system errors and various other problems that may occur.

The following is data on users of self check-in machines at Juanda Airport

4.4.2 Use of Passenger Data at Juanda Internasional Airport

Table 6. Graph of Passenger Reports Using Self Check-in Machines in Juanda, June 2024

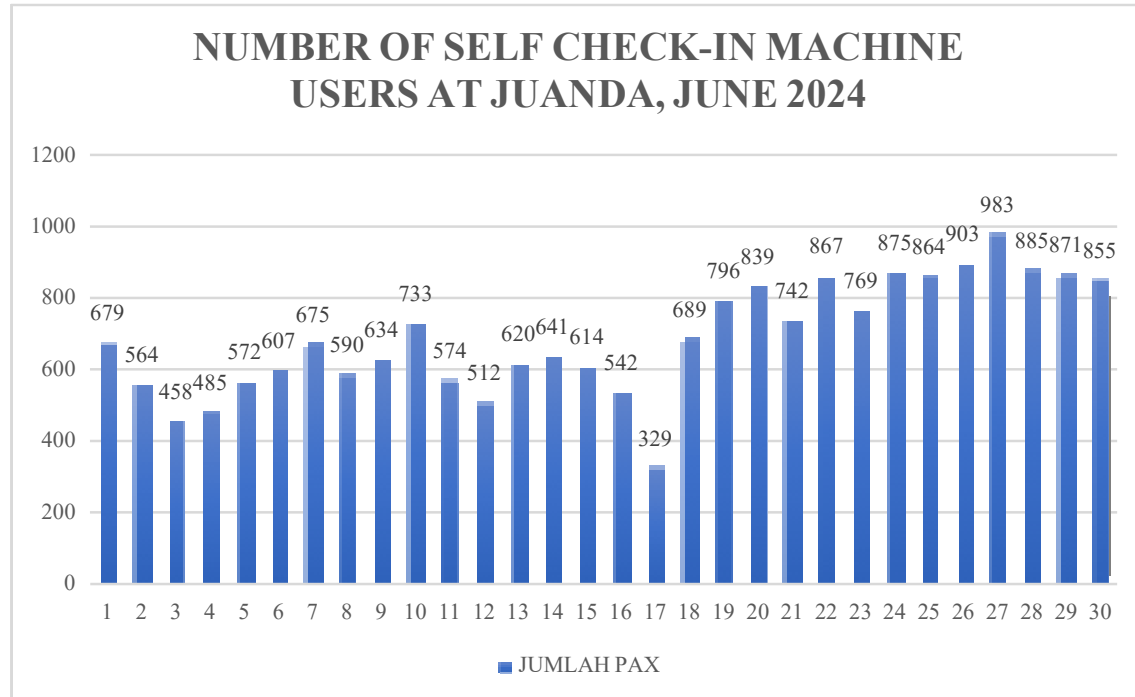


Table 7. Graph of Passenger Reports Using Lion Air Self Check-in Machines

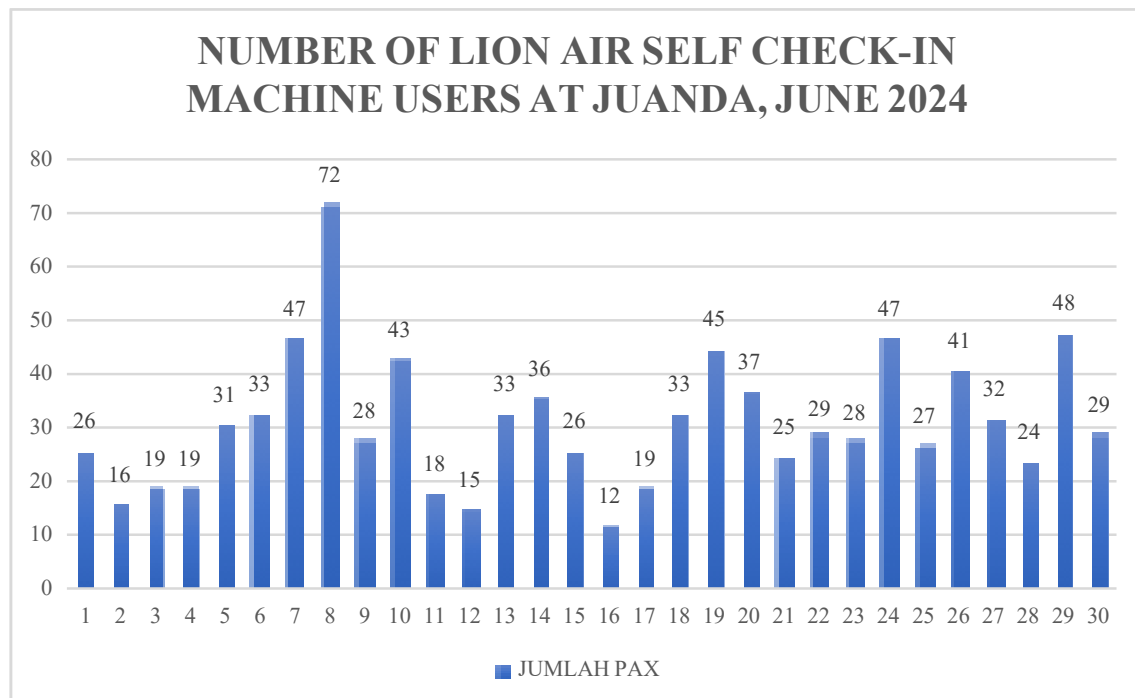


Table 8. Number of Domestic Passengers at Juanda International Airport, June 2024.

Airport	Month	Number of Domestic passengers
Juanda	June	448073

Table 9. Comparison Table of Total Number of Passenger at Juanda International Airport

Total Customer at Juanda Internasional Airport	Total Self Check-in Machine Customers at Juanda Internasional Airport	Total Lion Air Customers Using Self Check-in Machines at Juanda Internasional Airport in Juni 2024
448.073 Passengers	20.767 Passengers	938 Passenger

5. Conclusion

Based on the results of interviews with ten informants who have used self check-in machines at Juanda International Airport, it can be concluded that self check-in machine technology is generally very popular with users. This satisfaction is mainly driven by the time efficiency offered by this technology, where the check-in process can be completed in just 1-5 minutes, much faster than counter check-in which can take 10-15 minutes. Even though there are several technical problems that occur, such as errors in the system and problems with the touch screen, users tend to focus more on the main benefits offered by self check-in machines, namely the speed and ease of the check-in process.

The available features, such as seat selection and boarding pass printing, are also considered very easy to understand and use. However, self check-in machines do not completely replace check-in counters, which are still needed by passengers who need luggage, special needs or who want personal interaction with officers. However, overall, self check-in machines succeed in providing a more modern, efficient and flexible experience for passengers and are highly appreciated as a faster and more convenient alternative to the airport check-in process.

6. Implications

Self Check-in Machine: The implementation of facilities with Self Check-in Machine technology in conducting the check-in process is in accordance with customer needs and supports more modern facilities. Self Check-in Machine technology allows customers to get tickets faster without long queues and the time required is shorter, thus improving the quality of service of the airport itself.

Queue Reduction: Self check-in machines can reduce long queues at check-in counters so that customers do not need to rush and do not get tired to queue, especially so that elderly customers do not feel tired to queue to print tickets.

Improved Airport Service Quality: With the latest adequate technology, Juanda Airport has a good brand image and can provide innovations for airports that do not provide self check-in machine facilities.

Based on the information above. The following implications are obtained. Optimizing the quality of self check-in machine services at Juanda Airport: The results of this research show that Juanda Airport prioritizes optimizing the quality of self check-in machine services. To improve the quality of airport services, perhaps the airport should pay more attention to the features available on self check-in machines, many of which provide suggestions regarding service quality, especially on the sensitivity of the machine's touchscreen. We as researchers suggest that the airport improve the system and responsiveness of the self check-in machine. Carrying out machine cross checks periodically and providing special training to officers who can help passengers when they want to print tickets on self check-in machines because young people understand or are more up to date while those over fifty years of age do not understand or can adapt to the machines. the. By paying attention to these aspects. Juanda International Airport is expected to be able to optimize the quality of services available.

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